

1. APFED MESSAGE TO THE WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

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1. We, the members of Asia-Pacific Forum for Environment and Development (APFED), reviewed the environment and development issues facing the region and identified five major issues that require priority attention, namely freshwater resources, renewable energy, trade, finance, and urbanization.
2. At the outset, we state our conviction that poverty alleviation lies at the core of our pursuit for sustainable development. We believe that fundamental changes in the world's consumption and production patterns are critical to achieving sustainability. We also believe that good governance and capacity building are overarching concerns on which hinge our success in addressing the particular sustainable development challenges we face. Concrete and clearly benchmarked actions must be taken to make sustainable development a reality.
3. We present the following recommendations for the consideration of the World Summit on Sustainable Development (WSSD).

I. RECOMMENDATIONS ON KEY ISSUES

A. FRESHWATER RESOURCES

- (1) Formulate comprehensive water policies and effective implementation mechanisms at the national and local levels**
 - formulate water policies and implementation mechanisms in conjunction with other areas such as land use, food security, pollution control, water supply and sanitation, conservation of ecosystems and poverty alleviation
 - involve the local community, particularly women and the poor, in water policies
 - water policies should give due consideration to the interlinkages between freshwater resource management and the protection of coastal areas and marine environments from negative impacts of land-based activities
 - develop integrated water resource management (IWRM) plans by 2005
 - the international community should, through bilateral and multilateral cooperation, provide support to those countries lacking the capacity for water resource management planning
 - support the outcomes of the International Conference on Freshwater held in Bonn in 2001 and maintain its momentum to the 3rd World Water Forum to be held in Japan in March, 2003, followed by concrete time-bound actions to implement its outcomes, with the support of enhanced access to environmentally sound technologies and technology transfer
- (2) Promote comprehensive monitoring and assessment in river basins and groundwater catchment areas**

- promote, in addition to water quantity and quality, assessment of socio-economic activities, such as water consumption patterns, for better water demand management
- promote capacity building for monitoring and assessment techniques as well as on utilization of data obtained for policy formulation
- promote and support international cooperation in the above efforts

(3) Formulate cooperative mechanisms in shared freshwater resources to avoid conflicts

- ensure that water-sharing agreements are based on fair and equitable water distribution, recognizing the needs of all stakeholders, in particular of women and the poor
- share the experiences of regional cooperative mechanisms, such as the Mekong River Commission, within the region as well as with the rest of the world

B. RENEWABLE ENERGY

(1) Encourage use of renewable energy systems and services in communities

- build partnerships amongst developed and developing countries by developing markets for renewable energy products and services, using funding and other mechanisms
- decentralize renewable energy systems through effective dissemination programs involving local people in rural areas
- facilitate the raising of awareness and spread of knowledge about renewable energy amongst all sectors, in order to remove institutional, technical and financial barriers
- support capacity building in communities for the use, efficient installation and maintenance of such technologies
- strengthen national efforts towards energy efficiency and conservation
- promote mechanisms for sharing experiences on Renewable Energy Technologies (RETs) amongst stakeholders
- aim towards establishment of an International Consultative Group on Renewable Energy

(2) Optimize the use of pertinent renewable energy products and services in ways appropriate to the conditions of each locale

- optimize the use of RETs based on biomass, solar, wind, micro-hydro and geothermal energy to suit local conditions
- formulate national energy policies that include targets for renewable energy installation
- redirect subsidies that currently support fossil fuel based technologies towards development of RETs
- involve local communities in the choice of the RETs

C. TRADE

(1) Build capacity in trade-environment policy analysis and implementation

- strengthen capacities of developing countries for negotiations relating to trade and environment and for assessing the economic, social and environmental implications of trade policies and multilateral agreements
- enhance capacity-building initiatives already launched by international organizations such as the United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Asian Development Bank (ADB), United Nations Conference on Trade and Development (UNCTAD), World Bank and World Trade Organization (WTO) to promote active participation of the countries in this region

- establish a capacity building network on trade and environment in the region amongst government policy makers, experts and other stakeholders for the purpose of setting up databases and models for assessing impacts of trade liberalization on sustainability

(2) Promote environmentally sound technologies (ESTs) by rewarding small and medium sized enterprises (SMEs) who use them

- encourage developing countries to adopt appropriate technologies that are not only environmentally friendly, but are also cost-effective and easy to use and maintain
- make ESTs and RETs widely available and accessible, especially to SMEs, and explore creative approaches in lieu of intellectual property rights (IPR) protection by, for example, rewarding and encouraging innovation
- protect the exclusivity of local ownership of sustainable indigenous knowledge and practices, including genetic resources, while ensuring their wide dissemination for the benefit of all humankind
- recognize that demand-side as well as supply-side factors significantly affect the promotion of ESTs

(3) Ensure that trade acts as a tool for sustainable development

- give priority to addressing imbalances and inequities in the world trading system
- developing countries should formulate trade policies that take into account the quality, timing, sequencing and scope of liberalization, especially import liberalization
- remove unfair protectionism and trade discrimination, including those in the guise of environmentalism
- harness information technology to give small producers full access to the global markets and to market information
- support partnerships amongst civil society, government and business to develop new markets and to promote participation by all in international trade

D. FINANCE

(1) Make the best use of official development assistance (ODA) and domestic resources

- developed countries should make concrete efforts towards the Rio target of 0.7 percent of GNP for ODA
- developing countries should mobilize domestic resources for sustainable development from all possible sources, according to their capacities, and ensure the most efficient utilization of external funds and ODA
- remove distorting subsidies and incentives and allocate national resources to reflect commitment towards sustainable development
- translate the Monterrey Consensus into concrete initiatives for the benefit of developing countries
- promote and support South-South cooperation
- developed countries should improve access of developing countries to their markets to enable them to mobilize additional resources through enhanced export earnings
- pursue debt-for-nature, debt-for-poverty-reduction and debt-for-education swaps especially for least developed countries (LDCs)

(2) Increase the contribution of private capital to sustainable development

- promote expansion of the contribution of private capital, including the role of domestic banks and foreign direct investment, to sustainable development

- promote socially responsible private investments, particularly in areas of relevance to sustainable development, including water, renewable energy and energy efficiency
- support developing countries to improve the capacity of their financial institutions
- governments, international financial institutions and businesses should take concrete measures for greater stability of the international financial system, in particular with regard to short-term capital flows
- enhance the role of export credit agencies to promote sustainable development

(3) Enable the full effects of existing and additional international funding mechanisms

- strengthen and replenish global environmental financial mechanisms, including the Global Environment Facility (GEF)
- additionally, establish and promote a new regional environment facility (REF), to deal with environmental needs and overarching issues, such as poverty reduction
- encourage initiatives in the region for the establishment of a fund to improve the management of the environment and natural resources for poverty reduction, initiated by regional financial institutions such as the ADB
- ratify the Kyoto Protocol and accord high priority to the implementation of the Clean Development Mechanism (CDM)
- renew efforts towards the introduction of global financial mechanisms such as a global tax on economic activities which adversely impact sustainable development

E. URBANIZATION

(1) Encourage countries in the region to take an integrated approach to manage urbanization

- integrate land use planning; infrastructure and services development; recycling of solid wastes; promotion of economic efficiency in production and services; human and natural resources management; and environmental conservation as well as rural/urban linkages in policy formulation to manage urbanization
- develop a proper institutional framework to promote responsibility and accountability, as well as participation and partnerships amongst a wide range of stakeholders at national and local levels

(2) Strengthen local initiatives in the management of urban environments

- enhance the capacities of local governments, civil society, community groups and the private sector and strengthen initiatives and partnerships to solve urban environmental problems
- promote inter-city cooperation to encourage transfer of successful policy and technology measures, know-how packages and sustainable urban development models, such as through the Kitakyushu Initiative for a Clean Environment

II. RECOMMENDATIONS ON OVERARCHING ISSUES

A. GOOD GOVERNANCE

(1) Facilitate devolution of power and empowerment of stakeholders

- promote education and awareness building through effective information sharing amongst governments and civil society stakeholders and through adequate financial support
- recognize the value of decentralized actions, local knowledge, and appropriate representation of stakeholders, in decision-making processes at all levels

- empower women through strengthened participation in decision making processes
- (2) **Create and optimize partnerships both within and across borders**
- establish formal mechanisms for multi-stakeholder participation in the development process, such as national and local councils for sustainable development
 - promote regional multi-stakeholder mechanisms, such as a network of national councils for sustainable development (NCSDs) or a regional council for sustainable development, to serve as a venue for sharing experiences and good practices, forging common agendas and coordinating actions for sustainable development
 - strengthen governance systems for corporations and international institutions

B. CAPACITY BUILDING

- (1) **Take a well-financed and structured approach to capacity building**
- undertake institutional and human resource capacity building in an integrated and systematic manner at both national and local levels
 - direct capacity building efforts to all stakeholders, particularly for the empowerment of women, strengthened with focused and coordinated international assistance

III. APFED'S COMMITMENTS

4. We, the members of APFED, will take the actions possible within our capacities, to see the realization of the recommendations put forth above.
5. APFED will launch the following partnership initiatives, which will be included in the Type II outcome of the WSSD:
 - (a) APFED will launch a new initiative to collect and analyze **best policy practices (BPP)** related to the actions recommended above, in close collaboration with the scientific community and other stakeholders. This will be compiled by the end of 2004 for use as a common asset for policy makers in Asia and the Pacific region.
 - (b) APFED will continue its work to compile a final report with policy recommendations by the end of 2004. As a part of APFED's final outcomes, APFED will develop, in close collaboration with relevant international and/or inter-governmental organizations, a **network of researchers and research institutions (NetRes)**. One of the important functions of this network will be to develop policy recommendations to put into practice the APFED recommendations in the final report on governmental policies and measures in the region.
 - (c) APFED will make an **inventory of capacity building programs (CBP)** in Asia and the Pacific region and disseminate the information to those needing training.

IV. FINAL STATEMENTS

6. We believe that successfully dealing with these environmental and developmental issues, along with operationalizing existing regional initiatives such as the Phnom Penh Regional Platform on Sustainable Development for Asia and the Pacific, will contribute significantly to poverty alleviation and sustainable development in the region.
7. We reiterate that what the world needs now is meaningful change, change that begins with ourselves. We need a framework to serve as the basis and impetus for such change. We urge the global community to adopt the Earth Charter and support its implementation.
8. We submit that most of what needs to be done is by now well known and has been well discussed in various fora. What remains missing is the political will to effect meaningful change through decisive actions that break new ground and build on partnerships. We therefore call on all leaders to exercise such political will, even as we pledge our own commitment as global citizens to be active partners in putting the WSSD results into concrete action.

ANNEX

I. BACKGROUND: ENVIRONMENT AND DEVELOPMENT CHALLENGES IN ASIA AND THE PACIFIC

1. Asia and the Pacific region have experienced tremendous economic growth in recent years. Annual growth of GDP per capita between 1975 and 1995 in the region was 3.09 percent, as compared to 1.17 percent for the world. While economic growth, fuelled by industrialization and international trade, has been accompanied by some improvement in human development, it has added much strain on the environment and has on the whole negatively affected sustainable development of the region. Some of the many environmental challenges that the region experiences include ozone depletion, water shortages, air and water pollution, depletion of natural resources, biodiversity loss and land degradation, including the depletion of forests. Global warming is also a serious problem, particularly as it pertains to small island states and other vulnerable countries in Asia and the Pacific region.
2. In recent years, particularly since the United Nations Conference on Environment and Development (UNCED), many efforts have been made to deal with these environmental and sustainable development-related issues. However, numerous challenges still remain. One emerging issue that has significantly affected sustainable development in recent years is globalization.
3. Economic impacts of globalization have deeply affected Asia and the Pacific region. Although globalization has both positive and negative impacts, the negative aspects of globalization, such as the imbalance of power in the WTO, the inability of small- and medium-sized companies and economies to overcome the formidable barriers to full participation in regional and global markets, and unsustainable production and consumption patterns, have affected the poor disproportionately. Because the poor and the LDCs are the most vulnerable, globalization's adverse impacts have further intensified poverty.
4. At present, poverty constitutes the largest challenge to sustainable development. While the number of people living in absolute poverty has decreased in East Asia, numbers for the rest of the region are increasing. South Asia suffers from the same level of poverty as that of sub-Saharan Africa. The magnitude and diversity of poverty in Asia and the Pacific region, where approximately 800 million, or 70 percent, of the world's poor people live, call us to view poverty alleviation as an utmost priority.
5. In addition to poverty, inequity—the uneven and unequal distribution of wealth, uneven rates of human development and the increasing gap between the haves and have-nots, especially when gender is taken into account—is a challenge that is at the focus of our attention. Equity, or the lack thereof, in the region has special implications as it relates to unsustainable urbanization patterns. Rapid urbanization has resulted in the expansion of slums, aggravating poverty in urban areas. Moreover, development focusing on urban areas has also created differences in progress in terms of human development between urban and rural areas.
6. It is thus clear that the development patterns currently being pursued in Asia and the Pacific region have not succeeded in alleviating poverty and inequity. Furthermore, we recognize that the current development patterns constitute an important threat to environmental security, which is in itself a threat to global security.

7. The world community needs to change the current development patterns from unsustainability to sustainability. We believe that success in achieving sustainable development in the region will determine success for the rest of the world. In this context we declare our commitment as the members of APFED, and call on other organizations and governments in the region to demonstrate tangible commitments to poverty alleviation and the achievement of sustainable development.

II. KEY ISSUES AND PRIORITIES CURRENTLY ADDRESSED BY APFED

8. During 2001 and 2002 we have discussed five issues, namely freshwater resources, renewable energy, trade, finance and urbanization. Our discussions focused on these five key issues, as we believe that effective management of natural resources such as freshwater and energy, and appropriate handling of social and economic issues such as trade, finance and urbanization, are the keys for sustainable development.
9. Freshwater resources have reached a critical condition in most parts of Asia and the Pacific region, with regard to both quality and quantity. Due to the growing imbalances between water availability and demand, conflict over water resources is predicted to increase at all levels, and may eventually threaten peace in the region. The impacts of this water crisis—such as insufficient food provision, unsafe water supply, poor sanitation, natural disasters such as flood and drought, and environmental degradation—particularly affect the poor. Taking into consideration the region's ongoing growth in both population and economic activity, actions for sustainable water management should be taken, with special consideration to the diversity of water-related issues in the region, so that the water crisis will not constitute a major constraint to sustainable development here. Actions should be taken in line with the outcomes of the International Conference on Freshwater held in Bonn in 2001, keeping in mind the International Year of Freshwater in 2003 and the 3rd World Water Forum to be held in Japan.
10. Energy demand in Asia and the Pacific region is expected to soar with the rapid economic growth that the region is experiencing. Considering that renewable energy resources are suitable for many decentralized communities in Asia, with effective policies and governance to promote their use, the region has high potential to lead the world in the use of renewable energy. To meet the increase in energy demand in a sustainable way, actions should be taken now to promote the use of promising renewable energy resources such as biomass, wind and solar energy in the region and to further develop and invigorate the market for RETs. Such action would also greatly reduce the emission of greenhouse gases and the intensity of global warming and climate change.
11. With a new round of multilateral trade negotiations expected to take place under the WTO, and as a result of regional and subregional trade negotiations such as through ASEAN (Association of South East Asian Nations), trade liberalization is expected to expand in Asia and the Pacific region. While increasing trade could lead to economic growth in the region, it may also bring more stress on the environment and widen the gap between the rich and the poor within and amongst countries in the region. Therefore, a real challenge for the region is to ensure that trade liberalization is harmonized with the environment and that people in all the economies of the region, particularly the poor, are able to reap the benefits from trade liberalization.
12. The Asia and the Pacific region has emerged as the largest recipient in the developing world of private capital flows, in particular, foreign direct investment. However, within the region, globalization has resulted in two categories of developing countries: those which have not been able to attract much private capital, such as LDCs, land-locked countries and small island states, for which ODA remains the primary source of external funding; and those countries that have

seized new opportunities from globalization. Actions for financing sustainable development should take into consideration the difference between these two categories of countries.

13. Increasing urban migration is escalating the pressures on urban infrastructures. This trend is becoming unsustainable in many instances because urbanization is concentrated in a few large cities. With nine of the world's fourteen megacities located in Asia and the Pacific region, critical issues to be addressed include traffic congestion; inadequate waste management; air, noise and water pollution and their associated health hazards; poor sanitation; and deficient infrastructure and services. Actions should be taken in line with the Kitakyushu Initiative for a Clean Environment, adopted at the Ministerial Conference on Environment and Development, 2000. Efforts should aim in particular at strengthening urban environmental management through information exchange and the sharing of best practices.

2. OUTCOME OF THE APFED COMMITMENT

2.1 Best Policy Practices (BPPs)

2.1.1 Background and purpose

(1) APFED Commitment to BPPs

At the Second APFED Substantive Meeting held in May 2002, the Asia-Pacific Forum for Environment and Development (APFED) approved the creation of a BPP database as one of the commitments contained in the APFED Message to the World Summit on Sustainable Development (WSSD), in the following terms:

APFED will launch a new initiative to collect and analyse best policy practices related to the actions recommended in the Message, in close collaboration with the scientific community and other stakeholders. The outcome of BPP should be a common asset for policymakers in the Asia-Pacific region.

(2) APFED 3

The Third APFED Substantive Meeting held in January 2003, discussed key issues regarding BPPs. Major points of discussion included: the importance of developing clear criteria for “excellent” practices, the usefulness of learning from failures, and the need to make the scope of BPP broad enough to cover all of the issues to be addressed in the APFED Final Report. The Chairperson of APFED concluded that *APFED would collect a wide range of BPPs considered useful by APFED members, and that APFED would have more detailed discussions at its fourth meeting, based on the BPPs collected.*

(3) APFED 4

In March 2003, the APFED Secretariat requested that the APFED Members submit BPPs using the BPP Information Form provided to them. By 15 April, APFED received 23 BPPs. To continue to collect BPPs, the Fourth APFED Substantive Meeting held in August 2003 discussed the criteria for collecting BPPs, and these were established as follows:

Criteria for collecting BPPs

Each BPP could provide different lessons for each individual user. APFED BPPs should, therefore, be selected based upon one principal criterion: the extent to which the practice provides useful lessons, rather than how good the case is. Thus, failed cases from which lessons can be learnt are to be included in BPP, if submitted.

(4) APFED 5

In May 2004, the APFED Secretariat presented the prototype version of the BPP database system. The APFED Members, in principle, welcomed the database system but also made several suggestions such as inclusion of the implementation level (local, national, subregional, and regional levels) as a new search function.

2.1.2 BPP collection processes

(1) Overview

The APFED Secretariat has been collecting BPPs since March 2003:

- a) In March and October 2003, the Secretariat requested that the APFED Members contribute to the collection of BPPs, using the BPP Information Forms.
- b) Environmental experts nominated by the APFED Members gave presentations on BPPs in their respective countries, at **the BPP Workshop** in December 2003 (Box 1).
- c) The Secretariat also collected BPPs from online sources.

(2) BPP Workshop

The BPP Workshop was convened from 11-12 December 2003, at the headquarters of the Institute for Global Environmental Strategy (IGES) in Kanagawa, Japan, welcoming environmental experts nominated by the APFED Members. The workshop was intended to promote the collection of BPPs and enable a discussion of elements of the BPP database development, such as the target audience, focus, and features of the database, collection criteria, and incentives for information sharing.

BOX 1: Summary of the BPP Workshop

1. PURPOSE OF THE WORKSHOP

The Best Policy Practices (BPP) Workshop was convened from 11-12 December 2003, at the headquarters of the Institute for Global Environmental Strategy (IGES) in Kanagawa, Japan. The BPP workshop was intended to promote the collection of BPPs and to enable a discussion of ways to effectively utilise the BPPs collected. The workshop encouraged the experts nominated by the APFED members to actively participate in the discussions of the collection of BPPs and the database development.

2. PROGRESS REPORT

The workshop started with a brief introduction on APFED and its latest developments. The APFED Secretariat (IGES) informed the participants about the availability of the preliminary draft of the APFED Final Report, which was currently under revision, to be finalised in 2004. The status of BPP collection was also reported, noting that the Secretariat had received 81 from APFED members. The BPPs collected so far had been classified by sectoral (freshwater, renewable energy, urbanisation, chemicals, and ocean), and cross-sectoral issues (environmental governance, innovative environmental finance, trade and environment, human capacity building, environmental information, and environmental technologies).

3. BPP PRESENTATIONS

The first presentations given were those on BPPs from selected Asia-Pacific countries, as well as on cases included in the Research on Innovative and Strategic Policy Options (RISPO) Good Practices Inventory (GPI). The presentations revealed that the basis on which BPPs were selected varied from person to person. The criteria used were both socio-economic and environmental, including economic efficiency, financial autonomy, public-private partnerships, joint capacity building, community revitalisation, applicability to other communities and countries, third-party authorisation (awards and prizes), leadership, and environmental impact. Inclusion of economic development in the criteria was questioned by several participants, as there is a possibility that practices in municipalities that have implemented good environmental policies but have not achieved certain rates of growth would be left out. Whereas the discussion highlighted the importance of setting the criteria, some participants

advocated that the decision on what is “best” is rather contextual and should be based on regional characteristics.

Inquiries made in the Q&A session included the criteria used for the BPP database and the differences between the BPP database and GPI. In the case of APFED’s BPP database, the same set of criteria was used as for GPI because there is the possibility of combining the two in the future.

4. DISCUSSION ON BPP DATABASE DEVELOPMENT

The BPP presentations were followed by an open discussion looking at ways to make the BPP database user-friendly. The participants were requested to comment on the essence of useful BPPs to be collected by APFED so that all member countries can benefit from the database.

(1) Targeted Audience

The discussion commenced with the clarification of potential target users (audience). The participants noted that the targeted users of the BPP database should be defined clearly, whether these are policymakers or other stakeholders. They stressed, and the Secretariat acknowledged, that the users should not be limited to government policymakers, but should include civil society, the private sector, and local communities. Some claimed that if the database is targeted at a wide range of stakeholders, the name BPP is confusing since best practices are as important as best policies. Given the array of potential users, the participants and Secretariat agreed that both policies and practices would be included in the BPP database, and the other datasets (Capacity Building Programme or CBP, database, etc.) would be linked and integrated into a single system.

(2) Focus of the Database

The participants went on to discuss the focus of the BPP database. It was agreed that both contemporary and traditional approaches should be used. Three key policy instruments—social, economic, and physical—were first recognised as possible focuses for the database. The regulatory instrument, although rather conventional, outdated, and more often than not, replaced by more decentralised ways of problem-solving, was also included, as it is effective under certain conditions.

(3) Features of the Database

The participants then looked at the features of the BPP database and requested that the database be more value-added and interactive. Some participants pointed to the lack of a communication network for information-sharing and the need for a linkage among other existing databases. They explained that existing databases do not explain the limitations that would be encountered when duplicating similar practices in their respective countries. Considering that the focus of the database is entirely dependent on APFED for the moment, the participants asked APFED to identify a niche that would make the BPP database unique by identifying and fulfilling the gaps in the existing databases. Some participants commented that such a niche would make it easier to define the criteria for BPP selection. The Secretariat responded that they would conduct a brief survey of other existing databases to complement the focus of the BPP database. In addition, it was suggested that reference should be made to the database of the United Nations Education, Scientific and Cultural Organisation (UNESCO).

Several recommendations were made with regard to ensuring the database is beneficial and interactive. The first was that users should be given direct contact access to the persons who actually developed the

BPP cases, and that a mechanism should be developed to allow users themselves to submit cases to the webmaster for uploading. Another recommendation was that policy analysis should be conducted and researchers' comments attached to make the database more comprehensive in scope. Other suggestions included: the screening of information by the Secretariat and/or APFED members; stakeholder dialogues via a policy expert network; and launch of a grant system for students on Master and Doctor courses to collect additional BPPs to update the system (the grant system would be upgraded to become an award system).

(4) Collection Criteria

As for the BPP collection criteria, some participants argued that it is necessary to define the required selection criteria for BPPs, but also suggested that the APFED recommendations described in the final report should be followed. The Secretariat also recognised the urgency of establishing a set of criteria that would serve as a guarantee for good quality. The Secretariat affirmed that the criteria would be as broad as possible, but would be refined after the review of other existing databases. The participants and the Secretariat agreed that although BPP collection would be based on sectoral and cross-sectoral issues, the decisive factors should be kept simple and serve as a clue for information providers. Suggested collection criteria included: innovativeness, positive impacts, lessons learned, applicability/adaptability, sustainability, participation, and effectiveness/efficiency.

(5) Incentive for Information-Sharing: Award System

The Secretariat proposed that an award system be established to give small incentives to those who submit potential BPPs. The Secretariat believed that such an award system would improve the database, involving all stakeholders in the Asia-Pacific region. The Secretariat also stated that all stakeholders in the region were eligible for the awards, bearing in mind that Southeast Asia, Central Asia, Northeast Asia, South Asia, and the Pacific subregions would be invited as extended APFED members. One major obstacle, however, is that the system depends largely on funding for its existence.

Many of the participants praised the award system as a means to update the database and to recognise good, outstanding, and popular cases. They further commented that a grant system separate from the award system would supplement it. However, some of the participants suggested that mere recognition of the cases would suffice rather than initiating an award system. Many participants expressed the wish that the database provide incentives for information-sharing among the stakeholders, and commented that the selection of award winners should be based on a set of criteria that would include access figures and votes from viewers. Some participants also expressed that it would be ideal if APFED could propose a model of equitable and sustainable development for policymakers.

2.1.3 Report of the collection of data

(1) Current Status of the BPPs

As of 6 August 2004, a total of 163 BPPs were identified as the dataset to be integrated into the prototype of the BPP Database.

The APFED Members contributed 82 practices in total, of which 27 represented national initiatives from countries such as Australia, the Philippines, India and Sri Lanka, and 23 were implemented region-wide (involving at least three countries). The Secretariat acknowledges the importance of broadening the geographical distribution of BPPs to highlight good environmental practices of the region, and intends to

fill this gap by collecting additional BPPs.

A summary of the BPPs collected is shown in Figure 1. Analysis reveals that about 40 per cent were associated with *Renewable Energy*, followed by *Urbanisation, Freshwater, Oceans, Coastal and Marine Resources* (indicated as “Oceans” in the table below) and then *Chemicals* (including agricultural chemicals, plastics, and other hazardous chemicals).

Figure 1: Statistical Summary of BPPs for the Prototype of the BPP Database

Category	APFED	Secretariat	TOTAL
Freshwater	21	10	31
Renewable Energy	6	57	63
Urbanisation	38	10	48
Chemicals	7	7	14
Oceans	9	10	19
Others	1	8	9
Total	82	102	184
Repeated BPPs			-21
TOTAL			163

Figure 2 summarises the BPPs classified by sectoral issues and innovative instruments. It indicates that BPPs, in most cases, were designed to empower and build the capacity of the parties involved and to raise awareness and promote technology. Considering that there were also BPPs classified as *Partnership, Design, Planning and Management, Technologies, and Participation*, it is probable that heightened awareness and capacity building are compatible with institutional, social and technological developments, as well as with collaborative efforts.

Figure 2: BPPs Classified by Sectoral Issue and Innovative Instruments¹

	Fresh-water	Renewable Energy	Urbanisation	Chemicals	Oceans	Total
Regulations	6	8	12	5	4	35
Standards	2	5	3	1	1	12
Guidelines	1	2	3	2	2	10
Tax	0	0	2	0	0	2
Charges	1	1	2	0	0	4
Subsidies	1	4	3	0	0	8
Private financial mechanisms for infrastructure development	3	6	1	0	0	10
Participation	12	10	21	3	8	54
Awareness	14	45	23	5	8	95
Partnership	10	19	17	8	12	66
Empowerment	8	14	20	3	6	51
Information and communication	5	9	14	5	6	39
Self-regulation	0	0	4	2	1	7
Organisational arrangement	7	28	15	1	1	52
Capacity building	20	51	26	12	10	119
Technology	13	62	9	7	3	94
Design, planning, and management	13	46	21	3	4	87
Total	116	310	196	57	66	745

¹ Most BPPs are cross-listed; they include more than one sectoral issue.

2.1.4 Development of the BPP Database

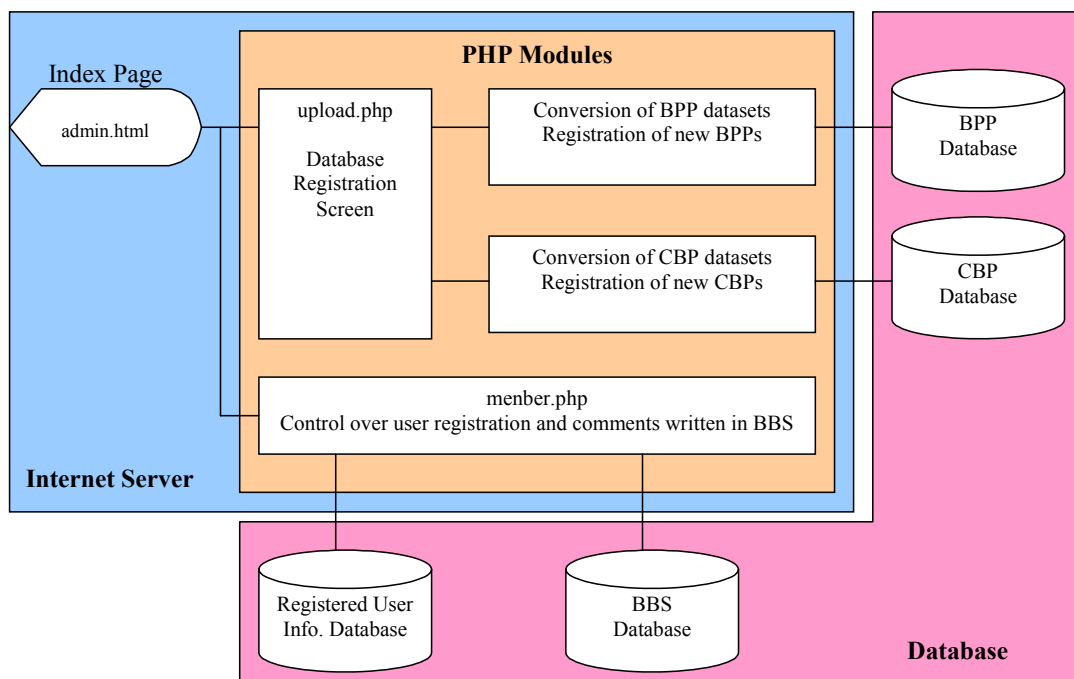
Since November 2003, the APFED Secretariat has been preparing the BPP Database, which enables all policymakers and environmental practitioners in the Asia-Pacific, as well as those in other regions, to read stories and learn lessons from the practices recommended by the APFED Members and the Secretariat.

(1) Overview of the BPP Database

The website to be established for the BPP and CBP databases will host the databases themselves, accompanied by a BBS (Bulletin Board System), a bulletin board intended to encourage the registered users to exchange information and discuss the issues associated with sustainable development (Figure 3). The databases will be available to all website visitors, but those who wish to access the BBS must register to get a user ID and password.

The BPP Database operates with PostgreSQL, database software, and is programmed with PHP, a computer language that sends messages to PostgreSQL when searching information.

Figure 3: Overview of the APFED BPP/CBP Databases



The BPP datasets, prepared in Microsoft Excel, will be installed in the database server, where users will be able to search the data using PostgreSQL. The data requested will be translated into PHP for onscreen display.

The administrator can update the datasets in the database at anytime: the administrator manages the database by accessing the menu (admin.html) prepared for their sole use.

The BPP database is structured in a simple manner with the following advantages:

- Low-level workload for the client's computer, through the introduction of a server computer search system (Internet browsers are used solely for display)
- Easy update of datasets with database application software (PostgreSQL)
- Excellent cost performance

2.1.5 The usage of the database

The BPP database has search functions such as:

- a) Free keyword search
- b) Search by sectoral and cross-sectoral issue (select from a pull-down menu)
- c) Search by actors involved in the practice (select from a pull-down menu)
- d) Search by innovative instruments (select from a pull-down menu)
- e) Search by country (select from a pull-down menu or an interactive geographic map)
- f) Search by implementation level (select from a pull-down menu)²

Users can use single or multiple keywords in the keyword search function. Advanced searching is made possible by combining this with other search functions as pull-down menus. The keyword search function extracts all BPPs in the dataset that contain the keywords.

The pull-down menus allow users to specify the required information from the lists of sectoral/cross-sectoral issues, actors involved, innovative instruments, and implementation level. The database also allows users to search BPPs by country and region. For the names of the countries and regions used for data search (countries are numbered with the country codes used under the United Nations system), see Section 3.1.

² This function will be added in a few months.

Image Views of the BPP Database

BPP Homepage

The screenshot shows the APFED Best Policy Practices Database homepage. At the top, there is a banner with the text "APFED Best Policy Practices Database" and a navigation path: "Home > Database > BPP". Below the banner, there is a geographic map of the world with a list of countries to its right. The countries listed are: Afghanistan, American Samoa, Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, Hong Kong, Taiwan, Cook Islands, East Timor, French Polynesia, Fiji, India, Indonesia, Iran, Japan, Kazakhstan, Kiribati, Kyrgyzstan, and Lao PDR. Below the map and list, there are several search filters: "Implementation level:" (all), "Sectoral Issues:" (all) with a "Definition" link, "Cross-Sectoral Issues:" (all), "Actors Involved:" (all), and "Innovative Instruments:" (all) with a "Definition" link. There is also a "Keyword:" search box. At the bottom, there are "Search" and "Reset" buttons, and a footer that reads "All rights reserved by Secretariat" and "Home".

APFED
Best Policy Practices Database

Home > Database > BPP

Click on the geographic map and the country of your choice will be highlighted.

(all)

- Afghanistan
- American Samoa
- Australia
- Bangladesh
- Bhutan
- Brunei Darussalam
- Cambodia
- People's Republic of China
- Hong Kong
- Taiwan
- Cook Islands
- East Timor
- French Polynesia
- Fiji
- India
- Indonesia
- Iran
- Japan
- Kazakhstan
- Kiribati
- Kyrgyzstan
- Lao PDR

*Press Ctrl+Enter for multiple country search.

Implementation level: (all)

Sectoral Issues: (all) [Definition](#)

Cross-Sectoral Issues: (all)

Actors Involved: (all)

Innovative Instruments: (all) [Definition](#)

Keyword:

Search Reset

All rights reserved by Secretariat

Home

Presentation of the Individual BPPs

Title	Rainwater Harvesting and Utilization in Urban Areas	
Country	Japan	
Area	Sumida Ward, Tokyo	
Province		
Implementation level	Local level	
Duration/Year	1982 - ongoing	
Contact Person (1) Focal Point for Enquiry Contact	Name	Dr. Makoto Murase, Chief, Environmental Promotion Section
	Affiliation	Department of Environmental Protection, Sumida Ward
	Address	Sumida City Hall, 1-23-10 Azumabashi, Sumida-ku, Tokyo 130-8640 JAPAN
	TEL	+81-3-5608-6209
	FAX	+81-3-5608-6934
	E-mail	kankyou@city.sumida.tokyo.jp
Sponsor(s)	1) Amount: Unknown 2) Sources of funds: Expenses associated with the installation of rainwater storage and utilisation facilities are covered by the facility owners. In other words, the facilities in public buildings are financed by the Ward while individuals and local businesses cover the costs on their own. Rainwater utilisation is enhanced by a subsidy program set up by the Ward in 1995, which aims to further promote rainwater utilisation in the municipality. Tokyo Municipal Government has also provided financial assistance (amounts unknown).	
Actors involved	Local Government Private Sector Non-governmental organisations	
SectionA:Background & Objectives	Sumida Ward is one of the 23 wards in Metropolitan Tokyo that encompasses an area of 13.75 sq. km and has 225,935 residents (as of December 2001). With high rainfall and geography (the ward is surrounded by the Sumida and Arakawa Rivers), Sumida residents have often suffered from floods but paradoxically had concerns on inadequate water supply. Water resource management for disaster relief was also an issue for Sumida residents. In 1923, the Great Kanto Earthquake hit Sumida Ward and 48,400 residents died in a huge fire. Again, in 1945, the ward was completely burnt by bombing raids during the Second World War.	

2.1.6 Future challenges

The BPP Workshop participants made certain suggestions on ways to further develop the BPP Database:

(1) Target Users

- The targeted users of the BPP Database should not be limited to government policymakers, but should also include civil society and the private sector.

(2) Target Practices

- Given the diversity of potential users, the suggestion was made to include both policies and practices in the BPP Database and to establish links with the other datasets (CBP and NetRes), aiming towards one single system.

(3) Collection Criteria of BPP

- The participants and the Secretariat agreed that although BPP collection would be based on sectoral and cross-sectoral issues, the selection criteria should be made simple for the benefit of information providers. Suggested collection criteria include:
 - Innovativeness
 - Positive impacts
 - Lessons learned
 - Applicability/adaptability
 - Sustainability
 - Participation
 - Effectiveness/efficiency

(4) Key Instruments for Successful BPP

- On selection of BPPs, both contemporary and traditional instruments should be considered as innovative instruments. In addition to social, economic, and physical instruments, all of which had been identified prior to the Workshop, the regulatory instrument was also acknowledged as a focus of the database, although it is rather conventional and is often replaced by more decentralised ways of problem solving.

(5) Future Function of BPP Database

- The Workshop participants proposed that the database should be beneficial and interactive (i.e., it should inform users of the direct contact address of the personnel involved in the BPPs and include a mechanism that allows the users themselves to submit examples to the webmaster for uploading).

(6) Incentives for Collection of BPPs

- There was general consensus among the workshop participants that an award system should be used as a means to update the database and to recognise good, outstanding, and popular practices. Many of them expected the database to provide incentives for information-sharing among the stakeholders, and commented that the selection of award winners should be based on a set of criteria (i.e., numbers of access and votes from the viewers).

2.2 Capacity Building Programmes (CBPs)

2.2.1 Background and purpose

(1) APFED Commitment to CBPs

At the Second APFED Substantive Meeting, held in May 2002, it was decided that an inventory of CBPs would be established as one of the commitments contained in the APFED Message to the WSSD, in the following terms:

APFED will develop an inventory of capacity building programmes (CBPs) in Asia and the Pacific region and the information will be disseminated to those needing training.

(2) APFED 3

Based on the comments provided at APFED 3 and the associated multi-stakeholder meeting, the APFED Secretariat considered steps to be taken in the completion of the CBP, including collection methodologies and dissemination of the results.

(3) APFED 5

In May 2004, the APFED Secretariat presented the prototype version of the CBP database system. The APFED Members, in principle, welcomed this database system.

2.2.2 CBP collection processes

The APFED Secretariat requested that the APFED Members provide CBPs in accordance with the CBP Information format.

In addition, the Secretariat collected CBPs inventory candidates from various sources. The Secretariat reviewed the websites of various United Nations agencies, international aid agencies, universities, research institutes, industries, and organisations committed to investing in human resource development, as well as online resource libraries such as the listing of environmental education and training opportunities prepared by the United Nations Environment Programme, or UNEP (<http://www.unep.org/Training>).

2.2.3 Report of collection of data

(1) Collection Criteria

The collection of CBPs was based on the following set of rules:

- Training programmes on the following subjects covered in the APFED Final Report.

Sectoral Issue

- Freshwater
- Renewable Energy
- Urbanisation
- Chemicals (agricultural chemicals, plastics, other hazardous chemicals)
- Oceans, coastal and marine resources

Cross Sectoral Issue

- Environmental Governance
- Innovative Environmental Finance
- Trade and Environment
- Human Capacity Building
- Environmental Information
- Environmental Technologies
- Training programmes that target people of developing countries in the Asia-Pacific region.
- Training programmes provided by non-profit-based bodies (i.e., government, official development assistance, or ODA, organisations, international organisations, universities, non-profit institutes, and non-governmental organisations, or NGOs).

(2) Current Status of CBP Collection

As of 6 August 2004, 35 institutions/organisations were selected to be included in the CBP Database (Figure 4), of which 10 were proposed by the APFED Members, and the remaining 25, by the Secretariat.

There are a number of CBPs in which Asian environmental experts can participate. They are conducted in various parts of the world, including the Asia-Pacific, Europe, and the United States. In-country programs are also available. Many of them are open to individuals from developing countries, in general; however, some are designed specifically for Asian nationals.

Figure 4: Statistical Summary of CBPs

Providers	Number of Programmes
International organisations	6
Government (including national institutes and aid agencies)	4
Private sector	2
Non-governmental organisations	6
Academics (including research institutes)	13
Partnerships (provided by a group of actors)	4
Total	35

2.2.4 Progress report of the CBP database development

Initially, the Secretariat focused on preparing a list of specific training courses/programmes and acquiring detailed information (such as course outlines, fees, and application procedures) of great relevance to environmental experts. However, in the process of developing the CBP inventory, the Secretariat realised that course/programme information is updated frequently, which, in turn, requires frequent updating of the CBP Database. For this reason, the Secretariat shifted its focus to identifying the programmes/institutions that provide training courses periodically.

The Secretariat used the CBP information already gathered by highlighting the characteristics of training programmes and categorising them by training providers. Thus, the CBP database provides a basic list of institutions conducting training courses on the environment, with information on the outline of their programmes. Users are able to search for the latest information through a link function built into the CBP database.

Overview of the CBP Database

Systematically, the CBP Database is identical to the BPP Database. It operates with PostgreSQL and is programmed with PHP. The CBP datasets are prepared in Microsoft Excel and are uploaded to the database server, where the data requested by users is sought using PostgreSQL. The data requested is then translated into PHP and displayed on the computer screen (Figure 3).

2.2.5 The usage of the database

The CBP Database has the following search functions:

- a) Free keyword search
- b) Search by sectoral and cross-sectoral issue (select from a pull-down menu)
- c) Search by target group (select from a pull-down menu)
- d) Search by programme type (select from a pull-down menu)
- e) Search by skills to be acquired upon completion (select from a pull-down menu)
- f) Search by country (select from a pull-down menu)

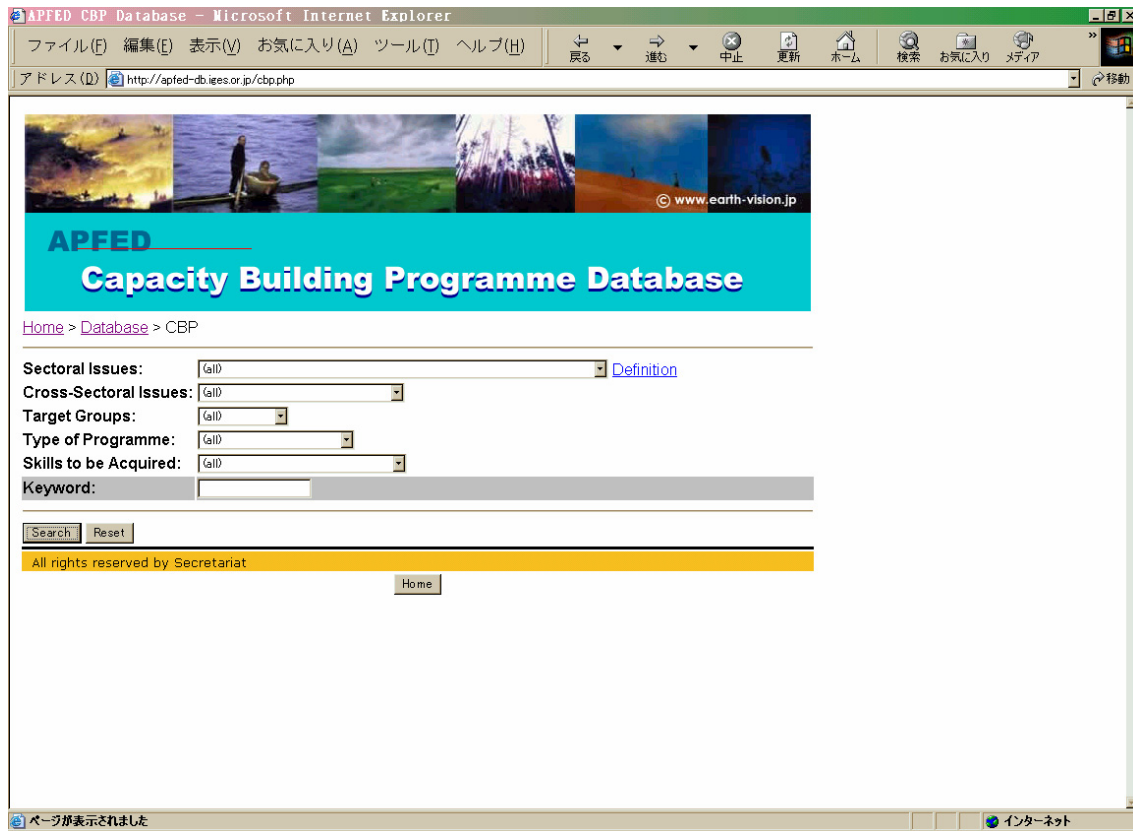
The users can use the keyword search function using single or multiple keywords. Advanced searching is made possible by combining the keyword search function with other pull-down menus. The keyword search function extracts all CBPs in the dataset that contain the keywords.

The pull-down menus allow the users to specify the required information from the lists of sectoral/cross-sectoral issues, actors involved, and innovative instruments (shown in Section 3.2).

The database also allows users to search CBPs by country and region. For CBPs, the geographic area where training programmes are conducted is not limited to the Asia-Pacific. The names of the countries and regions used for the data search (countries are numbered with the country codes used under the United Nations system) are shown in Section 3.2.

Image Views of the CBP Database


CBP Homepage



Presentation of the Individual CBPs

DETAIL - Microsoft Internet Explorer

アドレス (A) http://apfed-db.ies.or.jp/dt/cbcp.php?no=7



Home > Database > CBP > Result > Detail

Organiser(s)	Clean Air Initiative for Asian Cities (CAI-Asia)	
Name of the Programme	Clean Air Training Network (CATNet)	
Sectoral Issues	Renewable Energy Urbanisation	
Cross-Sectoral Issues	Environmental Governance Human Capacity Building Environmental Information	
Others	urban transport	
Name of Places (countries) Where the Training is Conducted	Asia	
Nationality of Participant	Asia	
Target Group(s)	Government Business	
Skills to be mastered in the programme	Policy Design and Management Project Planning and Management Corporate Management Technologies Public Communication	
Type of Programme	Seminar On the Job Training Others	
Contact Person (1) Focal Point for Enquiry Contact	Name	Charles Melhuish, Lead Transport Sector Specialist
	Affiliation	Asian Development Bank (ADB)
	Address	6 ADB Avenue, Mandaluyong City, 0401 Metro Manila, PHILIPPINES
	TEL	+63-2-632-6463
	FAX	+63-2-636-2198
	E-mail	cmelhuish@adb.org

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インターネット

2.2.6 Future challenges

(1) Collection of Supplemental Information on Existing CBPs

In the course of preparing the database, the Secretariat found that many of the CBPs required that more specifics be included in the dataset. Such an information gap made the Secretariat's task more troublesome as many of them had no online references. To fill this gap, the Secretariat contacted the information providers and/or the programme managers by mail or fax and requested them to fill in the CBP Information Form.

(2) Mechanism for Updating the CBP Information

It is essential to regularly review and update the CBP information (especially the organisation and programme names) as the institutions/organisations included in the CBP database change the focus of their training programmes frequently, based on the socio-economic and environmental conditions in the Asia-Pacific countries. This requires that the Secretariat assign a member of staff to check and modify the dataset to provide a useful, reliable database.

2.3 Network of Researchers/Research Institute (NetRes)

2.3.1 Background and purpose

(1) APFED Commitment to NetRes

At the Second APFED Substantive Meeting, held in May 2002, it was decided that a network of researchers and research institutions would be developed as one of the commitments contained in the APFED Message to the WSSD, in the following terms:

APFED will continue its work to compile a final report with policy recommendations by the end of 2004. As part of APFED's final outcomes, APFED will develop, in close collaboration with relevant international and/or intergovernmental organisations, a network of researchers and research institutions (NetRes). One of the important functions of this network will be to develop policy recommendations to put into practice the APFED recommendations in the final report on governmental policies and measures in the region.

APFED should develop a strategic grand design of NetRes by the end of 2004, which will subsequently be established as a follow-up mechanism to the APFED recommendations.

Because the scope of NetRes is closely linked to the APFED recommendations, NetRes should be designed in conjunction with the drafting process of the Final Report. Such an approach will ensure that NetRes functions effectively as a driving force to facilitate the implementation of the APFED recommendations.

(2) APFED 4

Designing Concept of NetRes

In the Fourth APFED Substantive Meeting, held in August 2003, the design concept of NetRes was identified as follows:

Key elements for effective network

- | |
|--|
| <ol style="list-style-type: none">1. Clear mandates and timelines2. Appropriateness of constituents<ul style="list-style-type: none">- Existence of a capable coordination body that can take leadership- Expertise of members suitable to the mandate of the network- Certain degree of capacity of members to formulate policy recommendations- Utilisation of expertise outside of the region3. Mechanisms that facilitate the flow of useful information<ul style="list-style-type: none">- Keep up with the needs of users and participating members- Keep the information up-to-date- Encourage capacity development of members and users through collaborative research and/or implementation of joint projects4. Sustainable funding |
|--|

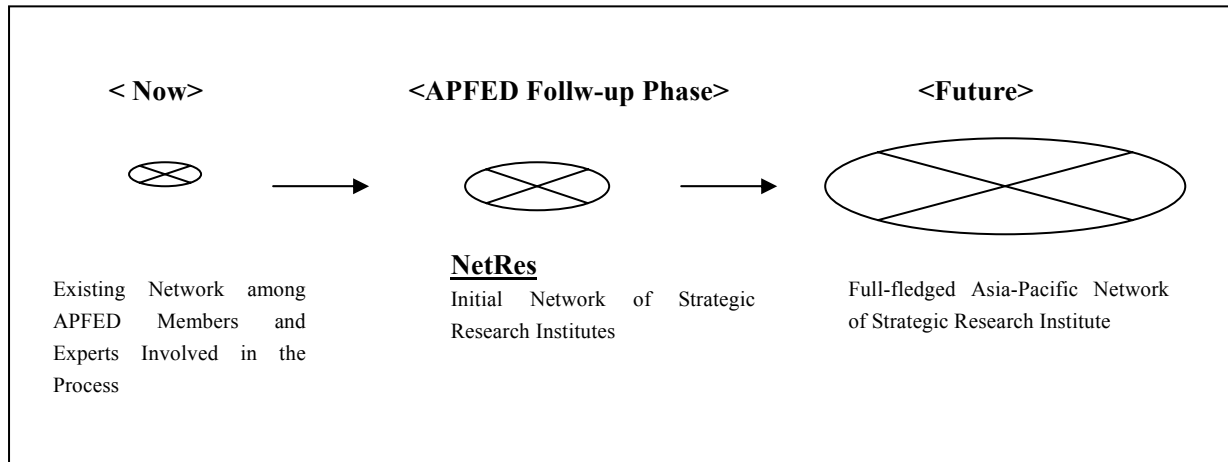
2.3.2 Establishment of NetRes (Proposal)

Part 2 of the main report has enhanced the “Multi-Stakeholders Partnership,” and noted the necessity of the “Asia-Pacific Network of Strategic Research Institutes” and the “Asia-Pacific Knowledge Centre for Sustainable Development” as institutions to technically support the multi-stakeholders partnership. The APFED Action Plan also proposes to set up the “Asia-Pacific Network of Strategic Research Institutes” as a key component of the “Sustainable Development Knowledge Initiative.”

Currently, there is a network that developed during the APFED process among APFED members and experts involved in the process.

NetRes will be established on a small scale in the APFED follow-up phase, based on the current network. It will subsequently be developed through joint research and other joint activities into the full-fledged Asia-Pacific Network of Strategic Research Institutes (Figure 5).

Figure 5. Evolution Process of the Network



(1) Asia-Pacific Network of Strategic Research Institutes

a) Purpose

The Asia-Pacific Network of Strategic Research Institutes will initially be established on a small scale to promote strategic and synthetic research on sustainable development, taking into account the natural, socio-economic, and cultural diversities of the region.

b) Examples of strategic research

- Joint research on trade and environment
- Joint research on Asia-Pacific Priorities for Sustainable Development
- Joint research on Innovative Policy based on the BPPs collected

(2) Asia-Pacific Environment Knowledge Centre

In the process of enriching and expanding the Asia-Pacific Network of Strategic Research Institutes, the Asia-Pacific Knowledge Centre for Sustainable Development will be established as a coordinate body of the network, and will conduct the following activities:

- Coordination of joint research
- Support of the development of environment statistics in each country
- Collection of best policy, and integration of the related databases

3. COLLECTED DATA

3.1 BPP

Search Functions of the BPP Database

Sectoral Issues

- 1: Freshwater
- 2: Renewable Energy
- 3: Urbanisation
- 4: Chemicals (agricultural chemicals, plastics, other hazardous chemicals)
- 5: Oceans, coastal, and marine resources

Cross-Sectoral Issues

- 1: Environmental Governance
- 2: Innovative Environmental Finance
- 3: Trade and Environment
- 4: Human Capacity Building
- 5: Environmental Information
- 6: Environmental Technologies
- 7: Others

Actors Involved

- 1: International Organisation
- 2: Central Government
- 3: Local Government
- 4: Private Sector
- 5: Non-governmental organisations

Innovative Instruments

- 1: Regulatory Instruments
 - 1.1: Regulations
 - 1.2: Standards
 - 1.3: Guidelines
- 2: Economic Instruments
 - 2.1: Tax
 - 2.2: Charges
 - 2.3: Subsidies
 - 2.4: Private financial mechanisms for infrastructure development
- 3: Social Instruments
 - 3.1: Participation
 - 3.2: Awareness
 - 3.3: Partnership
 - 3.4: Empowerment
 - 3.5: Information and Communication

- 3.6: Self-Regulation
- 3.7: Organisational Arrangement
- 3.8: Capacity Building
- 4: Physical Instruments
 - 4.1: Technology
 - 4.2: Design, Planning, and Management

Implementation level

- 1: Local level
- 2: National level
- 3: Subregional level
- 4: Regional level

Country Codes

Code	Country
4	Afghanistan
16	American Samoa
36	Australia
50	Bangladesh
64	Bhutan
96	Brunei Darussalam
116	Cambodia
156	China
344	<i>Hong Kong, China</i>
158	<i>Taiwan Province of China</i>
184	Cook Islands
408	Democratic People's Republic of Korea
258	French Polynesia
242	Fiji
356	India
360	Indonesia
364	Islamic Republic of Iran
392	Japan
398	Kazakhstan
296	Kiribati
417	Kyrgyzstan
418	Lao People's Democratic Republic
458	Malaysia
462	Maldives
584	Marshall Islands
583	Federated States of Micronesia
496	Mongolia
104	Myanmar
520	Nauru
524	Nepal

Code	Country
540	New Caledonia
554	New Zealand
586	Pakistan
585	Palau
598	Papua New Guinea
608	Philippines
410	Republic of Korea
643	Russian Federation
882	Samoa
702	Singapore
90	Solomon Islands
144	Sri Lanka
762	Tajikistan
764	Thailand
626	Timore-Leste
776	Tonga
795	Turkmenistan
798	Tuvalu
860	Uzbekistan
548	Vanuatu
704	Viet Nam
649	Asian Development Bank (ADB) Members 4; 36; 50; 64; 116; 156; 184; 242; 344; 356; 360; 398; 296; 410; 417; 418; 458; 462; 584; 583; 496; 104; 520; 524; 554; 586; 585; 598; 608; 882; 702; 90; 144; 158; 762; 764; 626; 776; 795; 798; 860; 548; 704
998	Pacific Island Countries 16; 184; 242; 296; 520; 548; 583; 584; 585; 598; 882; 90; 776; 798
999	Asia = all

Examples of BPPs

Title		Capacity Building of the Native Land Trust Board in Preparing Land Maps and Establishing Land Boundaries
Country		242
Province		
Area		
Implementation Level		2
Duration/ Year		1 year
Contact Person/ Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment), Pacific Department
	Affiliation	Asian Development Bank (ADB)
Contact Information	Address	6 ADB Avenue, Mandaluyong City, Manila, THE PHILIPPINES
	Tel	+63-2-632-4444
	Fax	+63-2-636-2444
	Email	information@adb.org; dponzi@adb.org
Contact Person (2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	Email	
Sponsor(s)		1) Amount: \$140,000 2) Source of funds: ADB Technical Assistance Special Fund (TASF)
Actors involved		1; 2
Description of the Practice	Section A: Background & Objectives	In view of the great importance of land to the socio-economic development of the Fiji Islands and to address the mounting problem on land tenure and disputes, the Government of the Fiji Islands sought the assistance of ADB to strengthen its Native Land Trust Board (NLTB) in producing land maps and establishing land boundaries. NLTB is in charge of administering a big portion of land classified as native. It is confronted with problem considering that many Fijian land-owning units (LOU) are requesting the return of their land for their own use at the expiration date of the Agricultural Landlord and Tenant Act (ALTA). While there are some Fijian LOUs who are willing to extend the leases, the tenants, however, who are mostly small-scale farmers of Indian origin, are hesitant to invest further in agricultural development because of tenurial uncertainties. The Government is well aware of the repercussion of this impasse to the sugar industry and the best solution is to fast track the identification of land boundaries and the preparation of corresponding maps. As a result, a small-scale technical assistance

		(TA) for capacity building of NLTB was implemented.
Description of the Practice	Section B: Outline of Practices/ Actions	<p>1) Objective of the practice</p> <p>The TA aimed to develop and build the capacity of NLTB in carrying out land surveys as well as undertake rapid and cost effective mapping and transfer this capacity to the other sectors (like forestry, agriculture, lands, fisheries, power, communication, water, etc.) using transferable, scalable, affordable and sustainable technology. It also aimed to produce maps where boundaries are established in order to assist landowners and land-owning units (LOUs) clearly define ownership of the area.</p> <p>2) Outline of the practice</p> <p>The TA has the following components: (i) establish and make operational the NLTB GPS (Global Positioning System) base station and associated hardware and software at the headquarters; (ii) undertake selected field visits with appropriate NLTB staff and other relevant Government sectors (such as Forestry and Lands) and, in consultation with the landowners and land-owning units, establish and survey boundaries using mobile GPS units; (iii) enhance maps through integration of satellite imagery for improved visualisation; and (iv) build capacities in NLTB and other relevant Government departments to continue establishing boundaries and produce maps.</p> <p>To meet the above objectives and components, the following activities were undertaken: (i) purchase of equipment; (ii) conduct of an introductory workshop; (iii) training of NLTB-Headquarters' staff in integrating satellite images into mapping; (iv) training of field staff through on-the-job training while surveying demonstration areas detailed in this report; and (v) conduct of a demonstration workshop.</p>

	Section C: Results/ Outcomes	<p>1) Improvement / Changes</p> <p>The mapping performance recorded in the NLTB internal reports shows that staff working with the new equipment became highly motivated after undergoing trainings on the new mapping scheme.</p> <p>The workshops in the Western and in the Northern Division drew an overwhelming enthusiasm from the divisional NLTB management when the field staff demonstrated the new scheme in map production. During the workshop at the Central Division, most organisations present were impressed by the high-resolution GIS (Geographic Information System) backdrop and the technical method of screen digitising from the backdrops, thus avoiding digitising from maps on digitising tables, which are sensitive in tropical environment. This also applied to the handling of tabular data in Microsoft Access database and linking this tabular data through a common field rather than importing the complete table into the GIS (Geographic Information System)software.</p> <p>One to two maps of land parcels were produced daily by the teams who were trained and transferred to NLTB Headquarters. Maps were accompanied by field reports, which provided information on: (i) additional documentary information of the x, y position of the markers indicating the boundaries, (ii) the distance in meters between the markers, and (iii) the position of the houses on the land parcels.</p>
	Section C: Results/ Outcomes	<p>The spatial information of land parcels is stored in the divisions and centralized at NLTB Headquarters, which are made ready for transfer to other government departments when requested. The workshop carried out in the three divisions demonstrated that NLTB personnel are now capable of undertaking mapping about 10 times faster than before.</p> <p>2) Problems remain to be solved Commitment of the Government to continue the work is there, but the question of sustainability remains to be seen.</p> <p>3) Unexpected positive impacts to date NLTB staffs are highly inspired and motivated by the newly acquired technology on mapping which provided a lot of ease in their work.</p>
Keys for success (cause of failure)		Full support and the technical capability of the implementing agency, South Pacific Applied Geoscience Commission (SOPAC), played a significant role in making the TA a success.
Evaluation		NLTB can now realistically present an image of a professional and modern organisation capable of using sophisticated mapping methods in the execution of their daily mapping work.
Applicability		The technology used by SOPAC in implementing the TA is not that complicated. In fact, it can be easily learned even without formal academic background in GIS/GPS operations. This makes the technology quite easy to replicate in another area where similar problem on land mapping and boundary delineation is present.

Reference		http://www.adb.org
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5; 6
Instruments		3.8; 4.1; 4.2
Provider of this information	Name	Daniele Ponzi
	Organisation	Asian Development Bank (ADB)
	Job Title	Senior Economist (Environment), Pacific Department
	Contact Address	6 ADB Avenue, Mandaluyong City, Manila, THE PHILIPPINES
	Tel	+63-2-632-4444, 632-5734
	Fax	+63-2-636-2444
	Email	information@adb.org; dponzi@adb.org

Title		National environmental action plan for sustainable development of the Republic of Kazakhstan (NEAP)
Country		398
Province		
Area		
Implementation level		2
Duration/Year		1997 - 1998
Contact Person/ Focal Point for Enquiry	Name	Mr. Vladimir Bogachev, Project Manager
	Affiliation	The Regional Environmental Centre for Central Asia (CAREC)
Contact Information	Address	40, Orbita-1, 480043, Almaty, REPUBLIC OF KAZAKHSTAN
	Tel	+7-3272-296646
	Fax	+7-3272-705337
	Email	Vbogachev@carec.kz
Contact Person (2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	Email	
Sponsor(s)		1) Amount: 900,000 USD 2) Source(s) of funds: WB, UNDP 3) Efforts to raise/sustain funds for implementation (if any): regular donors meeting, donors participation on the process
Actors involved		1; 2; 3; 5
Description of the Practice	Section A: Background & Objectives	<p>The environment in Kazakhstan is very critical. As a result of anthropogenic loads on the natural environment of Kazakhstan, an ability to ensure future economic and social development has been violated practically in the entire territory of country. Its raw material resource policy does not take into account the ecological and natural capacities of the territories, and thus, was the main reason for the low efficiency of the economy. A sharp reduction of financing ecological arrangements from the governmental budget took place.</p> <p>A hard macroeconomic policy during the transition period has put forward urgent social and economic problems, but put off solutions to environmental issues. Such a situation has resulted in the need for identifying the most urgent feasible arrangements and measures of 'non-risk' strategy in the economy sectors, allowing to get both environmental and social economic benefits.</p>

<p>Description of the Practice</p>	<p>Section B: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice</p> <ul style="list-style-type: none"> - Identifying the priority environmental problems on the basis of the analysis of the environmental state, transparent criteria and taking into account the process participants - Identifying the economically effective feasible actions on solving the priority problems including a complex of institutional and investment transformations, and analysis of the costs and benefits <ul style="list-style-type: none"> -Identifying the time framework and total costs of the Action Plan and development of the strategy for its financial implementation - Designing an organisational structure and coordination mechanism required for fulfilment of the Action Plan - Involving the main stakeholders for creating a political and social support of the coordinated actions. <p>2) Outline of the practice</p> <p>At the first stage of the NEAP development, thematic working groups led by different ministries (economy, health, etc.) were formed out of national experts for the analysis of the environmental issues of Kazakhstan. All the problems were broken down into seven blocks and each group carried out their analysis taking into account the causes and consequences interconnections. Summarised and systematic information on the state of Kazakhstani environment was handed over to expert groups for analysis and evaluation, and then presented at the national workshops to identify the priority problems and actions.</p> <p>3) Stakeholders involved, decision making process</p> <p>More than 2,000 participants representing the public, NGOs, scientists, academicians, the central and local governments, sector ministries, worked together at this workshop and tackled a wide range of environmental issues.</p>
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	Section C: Results/ Outcomes	<p>1) Improvements/changes Initiatives, proposed for NEAP/SD, have been included in the National development strategy and Governmental programme, including several loans and many grants. Kazakh NEAP was indicated as one of the best NEAPs in NIS region. It includes proposals important for regional policy, on developing the Central Asian Regional Environmental Action Plan, and establishing the Regional Environmental Centre for Central Asia. Many NEAP projects were implemented and many still are in the process of implementation.</p> <p>2) Problems that remain to be solved 1. National governance system should be changed to integrated and environmental governance 2. National economic indicators should be integrated with SD indicators 3. National capacity building for environment and SD should be increased</p> <p>3) Unexpected positive/negative impacts to date <Positive> - Several NGOs started to work from the NEAP process; - Neighbour countries used this experience; - Kazakhstan's climate change initiative to be part of the annex 1 of UNFCCC; - Others sectors in Kazakhstan used the same approaches</p>
Description of the Practice		<p><Negative> - Short-term projects are not effective in long-term perspective; - Big expectations from donors</p>
Keys for success (cause of failure)		<p>1. One management NEAP centre and very clear and simple methodology on selection of environmental priorities, used simultaneously at the national and local levels 2. Trainings and capacity building parallel programmes (more than 200 national experts were trained for ZOPP technology and log frame analysis), effective management of NEAP team of professional expert groups 3. Broad public participation process (more than 2,000 participants) 4. Stakeholders and donors involving in each step</p>
Evaluation		<p>Monitoring programmes and revisions of the plan helped to achieve results and maintain pace and continuity of the initiated nature protection actions. Analysis of the Implementation of Nature Protection Strategic Plans of Oblast of Kazakhstan allowed amendments to the oblast development programmes to support priority projects at local level.</p> <p>The system allows for the efficient supervision of the planning and implementation of nature protection programmes and other projects. It allows for the timely introduction of amendments to the nature protection strategies. It allows concentration of financial resources to increase efficiency of investments and achievement of environmental priorities.</p>
Applicability		<p>The experience gained could be used by other regions interested in developing national programmes and strategies for SD and would allow cooperation of all stakeholders at the unified platform.</p>

Reference		NEAP publications: The National Environmental Action Plan for Sustainable Development, RK Ministry of Ecology and Natural Resources, 1998. Evaluation of progress in development and implementation of national environmental action programs in countries of Central and Eastern Europe, CIS, OECD, 1998.
Sectoral Issues		3
Cross-Sectoral Issues		1
Instruments		1.3; 3.4; 3.5; 3.7
Provider of this information	Name	Alexander Nikolayenko
	Organisation	The Regional Environmental Centre for Central Asia (CAREC)
	Job Title	Information Manager
	Contact Address	40, Orbita-1, 480043, Almaty, REPUBLIC OF KAZAKHSTAN
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	Fax	+7-3272-705337
	Email	Anikolayenko@carec.kz

Title		The Sustainability of Groundwater Supplies
Country		36
Province		
Area		Anangu Pitjantjatjara aboriginal lands, South Australia
Implementation level		1
Duration/ Year		Ongoing
Contact Person/ Focal Point for Enquiry	Name	Sandy Dodds
	Affiliation	Department of Water, Land and Biodiversity Conservation, South Australian State Government
Contact Information	Address	PO Box 80, Glen Osmond, South Australia 5064 AUSTRALIA
	Tel	+61-8-8338-2753
	Fax	N/A
	Email	Jsdodds@senet.com.au
Contact Person (2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	Email	
Sponsor(s)		1) Amount: \$500,000 2) Source(s) of funds: Australian State and Federal Governments, through ATSIC (the Aboriginal and Torres Strait Islander Commission), itself Federal Government Funded
Actors involved		3; 5
Description of the Practice	Section A: Background & Objectives	Aboriginal Communities had water supplies provided by the South Australian State Government, but these tended to fail without warning, leaving a community with insufficient supplies until further groundwater resources could be found. This could take many months, with the search for potential well sites, drilling, testing, and installation of infrastructure. The area is isolated (500 km from Alice Springs and 2,000 km from Adelaide), and it was necessary to bring in personnel and equipment (hydrogeologists, drillers, drill-rigs, pump-testing equipment, etc.) from either or both of these places. Although roads in the Aboriginal Lands are good, they are unpaved and can be closed in wet weather. Seven-year droughts are not uncommon, and longer periods are possible.

Description of the Practice	Section B: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <p>The main objective is to understand the parameters affecting the water supply at each well and thereby to be able to predict, to a greater or lesser extent, the sustainability of the supply and the factors affecting the sustainability. The water level may rise as a result of local rains, but is this happening and how much rain is required to cause recharge of the aquifer? Or is the groundwater supply a fossil, rather than a renewable, resource. The water level may fall as a result of extraction or because of natural drainage of water away from the area. In the latter case, the sustainability of the well may be unaffected by the rate of extraction. Does the extraction of water from one well affect the water level in a nearby well?</p> <p>A secondary objective is to understand the general groundwater distribution in each area to assist future water search. Most of the aquifers in the area are in fractured rock, but a few may be sedimentary layers. This understanding also facilitates a prediction of the total groundwater resource available and its dependence on regular, if infrequent, recharge.</p> <p>2) Outline of the practice</p> <p>Each producing water-well was fitted with equipment to record hourly the rate of water extraction and the water level. One well in each community was also fitted with a rain gauge. Data loggers were downloaded at 6-monthly intervals. The data were studied for short- and long-term trends, in conjunction with knowledge of the area from geology, topography, air-photographs, satellite imagery, etc. The questions outlined in 1) above were answered in biannual reports showing the gradual improvement in the confidence and precision of the conclusions.</p> <p>3) Stakeholders involved, decision-making process</p> <p>The results were fed back to those responsible for providing the water supplies for immediate action if required. Additionally, a study was done to come up with a water management strategy, involving community and government discussion.</p>
	Section C: Results/ Outcomes	<p>All communities now have predictable sustainable water supplies within the constraints of highly variable rainfall patterns. Continued monitoring will predict any forthcoming failures well ahead of time. Management of limited water supplies remains to be resolved. This is a delicate issue, involving much discussion between the stakeholders, principally the community dwellers who use the resource and the government departments who manage the supply. The policy must be politically acceptable while encouraging a reasonable and sustainable use of a fragile resource.</p>
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Monitor data quality: monitoring technology was highly unreliable at the start of the project, but was improved by close interaction with manufacturers and by in-house development and maintenance. - Acquire data from as many wells as possible: passive as well as pumped. Passive wells give a better assessment of the aquifer water balance. - Look at whole groundwater picture, especially recharge (rainfall and penetration) and both surface and sub-surface drainage. Both local and regional pictures may be significant. - Study water usage priorities and conservation.

		- Incorporate all points of view - providers, users, and managers.
Evaluation		<ul style="list-style-type: none"> - Reliable groundwater supplies were successfully established and assessed as sustainable at each community, within the constraints of low-yielding aquifers and very erratic recharge events. At the very least, these limitations were understood and explained. - Overall water quality was good, but some areas had minor impurities which would be injurious to health if taken over a long time. Evaluation of water quality was successful, but provision of water at WHO standards to all communities was not achieved. - The costs of maintaining and downloading the system are considerable, and a fair proportion of data is still lost to equipment malfunction between downloads. A remote way (telemetry) of monitoring the performance might be of benefit.
Applicability		<ul style="list-style-type: none"> - Every environment is different. This technique applies particularly to groundwater supplies in arid areas. - Even in arid areas the particulars will vary according to local conditions and needs - rainfall distribution, aquifer type, community size and cultural development (subsistence, agricultural, degree of industrialisation). Techniques described are for "primitive" communities lacking in technical skills, but would be easier to manage in more developed communities.
Reference		<ul style="list-style-type: none"> - Dodds A.R., Hostetler S D., & Jacobson G. (2001). Community water supplies in the Anangu Pitjantjatjara Lands, South Australia: sustainability of groundwater resources. Department of Agriculture Fisheries & Forestry Australia. - Dodds, A.R. and Sampson, L.. (2000). The sustainability of water resources in the Anangu Pitjantjatjara lands, South Australia. South Australian Department for Water Resources report. South Australia. Department of Primary Industries and Resources. Report Book, 2000/027. - Dodds, A.R. and Sampson, L.. (2001). Hydrogeological report on water well monitoring in Aboriginal lands - October 2000 to April 2001. South Australia. Department for Water Resources. Report, DWR 2001/012.
Sectoral Issues		1
Cross-sectoral Issues		6
Instruments		3.8; 4.1
Provider of this information	Name	Sandy Dodds
	Organisation	Department of Water, Land and Biodiversity Conservation, South Australian State Government
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	Fax	N/A
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3.2 CBP

Search Functions of the CBP Database

Sectoral Issues

- 1: Freshwater
- 2: Renewable Energy
- 3: Urbanisation
- 4: Chemicals (agricultural chemicals, plastics, other hazardous chemicals)
- 5: Oceans, coastal & marine resources

Cross-Sectoral Issues

- 1: Environmental Governance
- 2: Innovative Environmental Finance
- 3: Trade and Environment
- 4: Human Capacity Building
- 5: Environmental Information
- 6: Environmental Technologies
- 7: Others

Target Groups

- 1: Government
- 2: Civil Society
- 3: Business
- 4: Academic
- 5: Others

Type of Program

- 1: Seminar
- 2: Schooling
- 3: E-learning
- 4: Correspondence Course
- 5: On the Job Training
- 6: Others

Skills to be Acquired

- 1: Policy Design and Management
- 2: Project Planning and Management
- 3: Corporate Management
- 4: Technologies
- 5: Public Communication
- 6: Monitoring/Evaluation
- 7: Education/Public Awareness
- 8: Others

Country Codes

Code	Country
4	Afghanistan
16	American Samoa
36	Australia
50	Bangladesh
64	Bhutan
96	Brunei Darussalam
116	Cambodia
156	China
<i>344</i>	<i>Hong Kong, China</i>
<i>158</i>	<i>Taiwan Province of China</i>
184	Cook Islands
408	Democratic People's Republic of Korea
208	Denmark
258	French Polynesia
242	Fiji
246	Finland
276	Germany
356	India
360	Indonesia
364	Islamic Republic of Iran
392	Japan
398	Kazakhstan
296	Kiribati
417	Kyrgyzstan
418	Lao People's Democratic Republic
458	Malaysia
462	Maldives
584	Marshall Islands
583	Federated States of Mirconesia
496	Mongolia
104	Myanmar
520	Nauru
524	Nepal
528	Netherlands
540	New Caledonia
554	New Zealand
586	Pakistan
585	Palau
598	Papua New Guinea
608	Philippines

Code	Country
410	Republic of Korea
643	Russian Federation
882	Samoa
702	Singapore
90	Solomon Islands
144	Sri Lanka
762	Tajikistan
764	Thailand
626	Timor-Leste
776	Tonga
795	Turkmenistan
798	Tuvalu
826	United Kingdom
840	United States
860	Uzbekistan
548	Vanuatu
704	Viet Nam
998	Pacific Island Countries 16; 36; 184; 242; 296; 520; 548; 554; 583; 584; 585; 598; 882; 90; 776; 798
999	Asia (= all)

■ Examples of CBPs

Organiser(s)		Dresden University of Technology, United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) FRG, and Federal Environmental Agency (UBA), FRG, and Technische Universität Dresden (TU Dresden), FRG
Name of the Programme		UNEP/UNESCO/BMU International Training Programme on Environmental Management for Developing and Emerging Countries
Sectoral Issues		1; 2; 3; 4
Cross-Sectoral Issues		1; 4; 5; 6; 7
	Others	Biodiversity
Name of Places (countries) Where the Training Is Conducted		276
Nationality of Participants		999
Target Group(s)		1; 2; 3; 5
Skills to be mastered in the programme		1; 2; 8
Type of Programme		2
Contact Person	Name	
	Affiliation	Center for International Postgraduate Studies of Environmental Management (CIPSEM)
Contact Information	Address	Technische Universität Dresden, UNEP/UNESCO/BMU International Postgraduate Training Programme on Environmental Management D - 01062 Dresden, GERMANY
	Tel	+49-351-497-9910
	Fax	+49-351-495-1215
	Email	unep@mailbox.tu-dresden.de
Website		http://www.tu-dresden.de/cipsem
Financial Assistance		Dresden University of Technology, United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) FRG, and Federal Environmental Agency (UBA), FRG, and Technische Universität Dresden (TU Dresden), FRG

<p>Description of the Programme</p>	<p>CIPSEM is offering various courses on environmental management. All are conducted in the English language. One main course on integrated environmental management of 6-month duration covers a broad range of environmental relevant aspects. Besides this course, there are several Short Courses of about 2 to 4 weeks duration on specific topics (e.g., water management, waste management, etc.) of special concern for developing and emerging countries.</p> <p>The course curricula concentrate on a broad and interdisciplinary conveyance of knowledge and acquisition of skills. Professors and experts from the various faculties of Technische Universität Dresden as well as from other German governmental and non-governmental environment related institutions, the German business sector but also experts from abroad are invited to convey and to share their knowledge and experience with the course participants. A Curriculum Committee of TU Dresden guarantees the high level of education.</p>
<p>References</p>	

Organiser(s)		Japan International Cooperation Agency (JICA)
Name of the Programme		Technical Training of Overseas Participants
Sectoral Issue		3; 5
Cross-Sectoral Issue		1; 2; 3; 4; 5; 6
	Others	Support for economic development (infrastructure)
Name of Places (countries) Where the Training Is Conducted		392
Nationality of Participants		999
Target Group(s)		1; 2; 4
Skills to be mastered in the programme		1; 2; 3; 4; 5; 6; 7; 8
Type of Programme		1; 2; 5
Contact Person	Name	
	Affiliation	Japan International Cooperation Agency (JICA) Headquarters
Contact Information	Address	6-13F, Shinjuku Maynds Tower 1-1, Yoyogi 2-chome, Shibuya-ku, Tokyo 151-8558x JAPAN
	Tel	+81-3-5352-5311
	Fax	N/A
	Email	jicampi@jica.go.jp
Website		http://www.jica.go.jp/english/activities/schemes/01tec.html
Financial Assistance		Government of Japan
Description of the Programme		<p>Since its establishment, the Japan International Cooperation Agency (JICA) has supported socio-economic and human resource development in order to facilitate the autonomous, sustainable development of developing countries, as one of Japan's Official Development Assistance (ODA) implementing bodies. The JICA is mainly responsible for implementing technical cooperation for developing countries.</p> <p>The JICA invites engineers (and skilled workers) and government officials from developing countries to Japan for training in a variety of fields. To developing countries, the JICA dispatches experts with the skill and knowledge suited to the country's needs. It provides the equipment needed to transfer technology appropriately and effectively. It also sends various study groups to draw up development plans for developing countries and regions.</p> <p>The technical training of overseas participants program is targeted at key administrators, technicians and researchers in developing countries and regions. It involves the transfer of knowledge and technology required by specific countries through the medium of training conducted by the JICA in Japan and in developing countries with their collaboration. This is the most fundamental</p>

	<p>“human development” programme implemented by the JICA.</p> <p>The programme has grown steadily in scale, diversity, and sophistication since its launch in 1954. In fiscal 1999, 7,722 people from 145 countries and regions took part in this programme in Japan, while a further 8,454 people participated in developing countries.</p> <p>In addition to training activities in Japan, there is also an “overseas training” programme that involves organisations in developing countries fostered through Japanese technical cooperation providing training for people from their own or neighbouring countries. Depending on the type of skill to be taught, the overseas training is the most effective training method because it is conducted in a developing country with similar technical levels and social conditions. Training provided to participants in their own countries is referred to as “local in-country training” (second-country training), while training aimed at participants in neighbouring countries is known as “third-country training. “ Use of these training methods in accordance with specific situations is likely to enhance the effects of Japanese technical cooperation.</p>
References	

Organiser(s)		The Regional Community Forestry Training Center for Asia & the Pacific
Name of the Programme		RECOFTC Courses and Study Tours
Sectoral Issue		1; 3
Cross-Sectoral Issue		1; 4; 5; 7
	Others	Tourism
Name of Places (countries) Where the Training Is Conducted		764
Nationality of Participants		999
Target Group(s)		1; 2; 4
Skills to be mastered in the programme		1; 2; 5; 6; 8
Type of Programme		2; 6
Contact Person	Name	
	Affiliation	The Regional Community Forestry Training Center for Asia & the Pacific (RECOFTC)
Contact Information	Address	PO Box 1111, Kasetsart University, Bangkok 10903, THAILAND
	Tel	+66-2-940-5700
	Fax	+66-2-561-4880
	Email	contact@recoftc.org
Website		http://www.recoftc.org/03region/courses/intro.html
Financial Assistance		Biodiversity Research and Training Program, Danish Cooperation for Environment and Development (DANCED), Department of International Development (DFID), Indonesia, Food and Agriculture Organisation (FAO), Ford Foundation, World Conservation Union (IUCN), The Keenan Institute, Ministry of University Affairs, Royal Government of Thailand, Petroleum Authority of Thailand, SMRP, MRC-BMZ (Germany), Swedish International Development Cooperation Agency (SIDA), Swiss Agency for Development and Cooperation (SDC), The Toyota Foundation
Description of the Programme		<p>The Regional Community Forestry Training Center for Asia & the Pacific (RECOFTC) offers training courses on community forestry related topics. Courses use field-tested methodologies and processes in community forestry and build upon experiential learning techniques to provide participants with the necessary skills to carry out community forestry activities. RECOFTC provides both skill and competency based courses as well as topical training courses.</p> <p>Courses to be offered in 2004 include:</p> <ul style="list-style-type: none"> - Community-based Tourism for Conservation & Development - Participatory Watershed Management - Community Forestry: Principles and Practices Today - Participatory Action Research for Community-Based Natural Resource Management
Reference		http://www.recoftc.org/03region/courses/registration.asp

2-a BPP Data File

Title		(i) TA 2944-PAK: Industrial Environmental Management, (ii) TA 4193-PAK: Industrial Environmental Management - Capacity Building, (iii) proposed loan for Industrial Efficiency and Environmental Management
Country		586
Province		
Area		
Implementation level		2
Duration /Year		(i) 2003-2004, (ii) 2004-2006, (iii) 2004-2009
Contact Person /Focal Point for Enquiry	Name	Samuel Tumiwa, Renewable Energy Specialist, South Asia Regional Department, Energy Division
	Affiliation	Asian Development Bank (ADB)
Contact Information	Address	6 ADB Avenue, Mandaluyong City, 0401 Metro Manila, PO Box 789, 0980 Manila, PHILIPPINES
	Tel	+63-2-632-4444
	Fax	+63-2-636-2338
	E-mail	stumiwa@adb.org
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: (i) \$700,000, (ii) \$1.0 million, (iii) \$150 million 2) Source(s) of funds: (i) ADB, (ii) NORAD Cofinancing, (iii) ADB
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Industrial environmental management capacity is currently limited in Pakistan. However, it is especially critical because, beginning on 1 January 2005, the World Trade Organisation (WTO) will require all countries exporting to WTO's member countries to meet environmental guidelines.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <p>ADB is assisting the Ministry of Environment, Pakistan Environmental Protection Agency (Pak-EPA), and the Provincial EPAs on:</p> <p>(i) policy and institutional reforms to promote industrial environmental management,</p> <p>(ii) draft regulations and guidelines for the implementation of new market-based incentives and policies for industrial environmental management,</p> <p>(iii) strengthening the institutional capacity and technical capability of Pak-EPA, Provincial EPAs, and local governments and other organisations involved in promoting industrial environmental efficiency,</p> <p>(iv) developing environmental action plans for industries to establish a baseline of their current environmental performance and set benchmarks for future performance,</p> <p>(v) train financial institutions to appraise cleaner production and environmental management investments, and</p> <p>(vi) design, implement and finance an investment package of 4 common effluent treatment plants and 2 toxic waste handling facilities.</p> <p>2) Outline of the practice</p> <ul style="list-style-type: none"> - Introduction of market based incentives - Promotion of cleaner production - Sector specific EMS- Strengthening of a Self-Monitoring and Reporting Tool (SMART) - Financing for industrial environmental management - Establishment of 4 common effluent treatment plants and 2 toxic waste handling facilities <p>3) Stakeholders involved, decision making process</p> <ul style="list-style-type: none"> - Government of Pakistan at the federal, provincial, and local levels - Industries and industry associations - Communities around industrial estates
	SectionC: Results/ Outcomes	The initiatives are just beginning. No results to be reported to date.
Keys for success (cause of failure)		The initiatives are just beginning. No results to be reported to date.
Evaluation		The initiatives are just beginning. No results to be reported to date.
Applicability		The initiatives are just beginning. No results to be reported to date.
Reference		N/A
Sectoral Issues		3
Cross-sectoral Issues		1; 3; 4; 6

Instruments		1.1; 3.7; 3.8; 4.2
Provider of this information	Name	Samuel Tumiwa
	Organisation	Asian Development Bank (ADB)
	Job Title	Renewable Energy Specialist, South Asia Regional Department, Energy Division
	Contact Address	6 ADB Avenue, Mandaluyong City, 0401 Metro Manila, PO Box 789, 0980 Manila, PHILIPPINES
	Tel	+63-2-632-4444
	Fax	+63-2-636-2338
	E-mail	stumiwa@adb.org

Title		100% Renewable Energy Islands
Country		998
Province		
Area		
Implementation level		3
Duration /Year		May 1 May 2003 - April 30 2013
Contact Person /Focal Point for Enquiry	Name	K. Raghavan, Project Manager
	Affiliation	Forum for Renewable Energy Islands
Contact Information	Address	Museumvej 1, 8305 Samsø, DENMARK
	Tel	+45-2031-8057
	Fax	+45-8659-2311
	E-mail	kr3dk@yahoo.com
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount : N/A 2) Source(s) of funds: United Nations Industrial Development Organisation (UNIDO), United Nations Development Programme - Global Environment Facility (UNDP-GEF), European Union, Japan (expected)
Actors involved		1; 5
Description of the Practice	SectionA: Background & Objectives	To assist island states to meet 100% of their energy requirements from Renewable Energy Sources (RES) by helping them with the preparation & planning, organisation and all the inputs required for implementation of 100% RES plan.
	SectionB: Outline of Practices/ Actions	
	SectionC: Results/ Outcomes	The island states will get 100% of their energy supply from RES, for all energy needs except for transportation within 5 years by 2008 and for all energy needs including transportation within 10 years by 2013.

Keys for success (cause of failure)		Coordination by Forum for Renewable Energy Islands (FREI) and supervision by the Project Steering Committee composed of members of all involved actors.
Evaluation		N/A, on-going project.
Applicability		Replicable to other regions
Reference		WSSD website: http://webapps01.un.org/dsd/partnerships/search/partnerships/158.html
Sectoral Issues		2
Cross-sectoral Issues		
Instruments		3.2; 3.3; 3.7; 3.8; 4.1
Provider of this information	Name	
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		A Plastic Solar Water Purifier with High Output
Country		36; 90; 626
Province		
Area		
Implementation level		4
Duration /Year		N/A
Contact Person /Focal Point for Enquiry	Name	Mr. John Ward, Research Director
	Affiliation	Thamesford Pty Ltd
Contact Information	Address	3 Bedford Street, Kensington Park, SA 5068, AUSTRALIA
	Tel	+61-8-8285-4099
	Fax	+61-8-8285-4099
	E-mail	sundialmarg@kern.com.au
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		Not known at this stage
Actors involved		4; 5
Description of the Practice	SectionA: Background & Objectives	The development of a man-portable device which converts bore, sea, arsenic laced water into potable water. No filters, electronics or cleaning needed. Ideal for use in any sunny Third World countries.
	SectionB: Outline of Practices/ Actions	The device enables virtually any source of contaminated water to be easily and cheaply converted into pure, drinking water.
	SectionC: Results/ Outcomes	If needed, individual units can be linked to produce larger volumes of pure water. Funding would be welcome to enable a prototype, large output system to be installed for community use. Any location with impure water and sunshine would be suitable.
Keys for success (cause of failure)		A humanitarian desire to provide clean drinking water for many people on Earth.
Evaluation		The device has been tested to WHO standards. Strength and weakness include: to date no funding from government. Rotary International buys units and donates them to deserving societies worldwide.
Applicability		The current production scale mitigates against low cost. Some funding could drastically change this.

Reference		There is a paper by the Inventor describing the SOLAR WATER PURIFIER. It will be published worldwide in a special edition of the journal SOLAR ENERGY. This reference will be posted to the Secretariat, plus some photographs.
Sectoral Issues		1
Cross-sectoral Issues		6
Instruments		4.1
Provider of this information	Name	John Ward
	Organisation	Thamesford Pty Ltd
	Job Title	Research Director
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	Tel	+61-8-8285-4099
	Fax	+61-8-8285-4099
	E-mail	sundialmarg@kern.com.au

Title		Afulilo Hydroelectric Power Project
Country		882
Province		
Area		
Implementation level		2
Duration /Year		1990 - 1993 (4 years)
Contact Person /Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment) (in lieu of P.N. Fernando, Senior Energy Specialist, who originally supervised the implementation of the TA)
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	Affiliation	
Contact Information	Address	
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Sponsor(s)		1) Amount: \$32.47 million 2) Source(s) of funds: ADB, World Bank, European Community, and Samoa's Electric Power Company
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	A principal objective of the long-term energy policy of the Government of Western Samoa has been to reduce the country's dependence on imported fuels through development of indigenous renewable energy sources. The Afulilo Hydroelectric Project was formulated in line with this policy to assist the country develop its hydroelectric resources and thereby displace diesel-electric power generation and also supplement electricity generation from run-of-river hydropower stations.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objective of the practice To provide 4 MW of firm hydro-generating capacity and 24GWh of hydro energy per annum through the utilisation of water stored during the wet months in the Afulilo reservoir.</p> <p>2) Outline of the practice The Project has provided the following: (i) a concrete dam with two un-gated spillways on either side of a central column including sluice and intake; (ii) a headrace running through two tunnels (0.5 km and 0.4 km long, respectively); (iii) a surge chamber and a high-pressure penstock, (iv) a powerhouse with provision for three 2-MW turbo generator sets and three transformer bays; (v) two 2-MW turbine-generators, auxiliary equipment, step-up transformers and switchgear; (vi) power transmission lines; (vii) consulting services; and (viii) the services of a technical review expert (TRE).</p> <p>3) Stakeholders involved, decision making process About 8,000 families and operators/owners of about 1,200 businesses and establishments.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>Improvement/Changes</p> <ul style="list-style-type: none"> - The Project helped save foreign exchange by limiting the need to import equipment, diesel oil and spare parts for diesel power plants. In terms of diesel oil use displaced, the Project saved the country about US\$1.6 million per annum in foreign exchange. - Beneficiaries included about 8,000 families and about 1,200 businesses and other establishments on Upolu Island. - The Project has provided greater access to electricity as well as greater security of electricity supply with hydro generating plant which is more reliable than diesel generating plant. - The Project provided much-needed employment for local labour, estimated at 3,000 staff-month, during construction period. The project also resulted in 20 permanent jobs for operating and maintaining the power plant.
<p>Keys for success (cause of failure)</p>		<p>Strong support from affected communities and owners/operators of businesses and establishments dependent on electricity.</p>
<p>Evaluation</p>		<p>The Project was successful. It met the major objective of displacing diesel electricity based power generation by adding 4 MW of storage-based hydro power generation and thereby helped the Government to develop its indigenous energy sources and reduce its reliance on imported diesel oil.</p> <p>Despite the cost and time overruns encountered in implementation, the Project was still found economically and financially viable with re-evaluated EIRR and FIRR at 9.7 percent and 7.4 percent respectively.</p> <p>It was recommended that in undertaking power expansion plan, further feasibility study, however, must still be done, as well as the carrying out of an in-depth environmental impact assessment.</p> <p>Likewise, the institutional capacity of the Electric Power Company must be strengthened further.</p>
<p>Applicability</p>		<p>Worth replicating.</p>
<p>Reference</p>		<p>N/A</p>
<p>Sectoral Issues</p>		<p>1; 2</p>

Cross-sectoral Issues		1; 6
Instruments		3.7; 3.8; 4.1
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Title		Aldinga Arts EcoVillage
Country		36
Province		
Area		Aldinga (near Adelaide) South Australia
Implementation level		1
Duration /Year		2002 - ongoing
Contact Person /Focal Point for Enquiry	Name	Mr. John Maitland
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Contact Information	Address	
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Sponsor(s)		<p>1) Amount N/A</p> <p>2) Source(s) of funds Sale of Land Parcels ('Lots')</p> <p>3) Efforts to raise funds for implementation Community Corporation applies levies to Lot owners</p>
Actors involved		3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>A very big project, but it has a water focus.</p> <p>1) SA Water (the company which provides water to the community in South Australia) was going to charge an augmentation levy to provide water to every Lot. So it was decided to change the system.</p> <p>2) Prior to implementation the site was used for horse-training and as a farm. It is adjacent to a small town. There is a creek at the boundary which only flows during high rainfall events, and excess water then runs down onto the nearby beach and into the sea. Rainfall is about 500mms per annum on average.</p> <p>3) Thus there is minimum water availability, and minimum funds available. But there was a strong desire from the participants to conserve water use anyway.</p>

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice The eco-village is to be served with its water needs in a manner both conservative, and best use of resources available. Minimising use of municipal water. Maximising use of naturally occurring water. Reduction in loss of naturally occurring water to the sea. Provision of water for villagers, as well as raising the awareness of water issues in the general population.</p> <p>2) Outline of the practice Municipal water was sought through a single 20mm diameter domestic meter feed to an 80,000 gallon storage tank Stormwater storage ponds for ground runoff were developed in series. An 'aquifer storage and recovery system' (ASR) is planned in the future to collect additional flows of stormwater, as well as from the creek along the boundary. Rules were agreed by the Lot-owners to harvest and use rainwater on each Lot. All sewage is to be collected and treated on site, with reclaimed effluent used for irrigation.</p> <p>3) Stakeholders involved, decision-making process Village was developed out of funds raised from sale of Lots. Council, municipal water supplier, Lot owners, and the developer are stakeholders.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>1) Improvements/changes Site was farmland, now fully developed. All infrastructure was new.</p> <p>2) Problems that remain unsolved Public Liability Insurance requires all ponds to be fenced. This has not been budgeted for, nor implemented yet. Insufficient storage to allow site to become independent from municipal water supply. Willunga Creek (at the boundary) is not running enough to provide adequate water without dams, or costly ASR.</p> <p>3) Unexpected positive/negative impacts to date Benefits are expected. PL Insurance requirement for fencing was unexpected. This would have a negative on amenity. Future of system yet to be tested.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Awareness-raising. - Water stored, and used in Common areas. - Community galvanised around water issues, sign of development of community. - Voluntary planting of vegetation added to community involvement. - Engagement of municipal water supplier in 'partnership exercises'. - Sharing of information with Local and State Government bodies, as examples for potential future developments. - Reduction of costs of water to residents, and model for broader community.

Evaluation		Project not yet occupied by residents, and outcomes not readily visible as yet.
Applicability		This is a simple process, related to local characteristics, and is transferable to places of similar climate conditions. The principles are transferable anywhere, with simple levels of advice. It uses low level technologies, expertise and cost, which are readily available. It is a system which could encourage local implementation.
Reference		No specific publications are yet available. Brochures, awards submissions, and the like, have been prepared for specific sales purposes.
Sectoral Issues		1
Cross-sectoral Issues		1; 2; 4; 6
Instruments		2.4; 3.1; 3.2; 3.3; 3.4; 3.8; 4.1; 4.2
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Title		Alternate Energy (Renewable Resources Development Project)
Country		356
Province		
Area		
Implementation level		1
Duration/ Year		1992 - 2000
Contact Person /Focal Point for Enquiry	Name	
	Affiliation	Indian Renewable Energy Development Agency Limited (IREDA)
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	E-mail	
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$450.0M 2) Source(s) of funds: GEF Grant \$26.0M, Cofin Amount \$424.0M
Actors involved		1; 2; 5
Description of the practice	SectionA: Background & Objectives	
	SectionB: Outline of Practices/ Actions	1) Objectives of the practice This project promotes and commercialises investment in wind farms and solar photovoltaic power systems through the provision of below-market loans to investors in these systems, primarily from the private sector. Popularises renewable technologies through public education programs that explain their functions and capacity. 2) Outline of the practice The project comprises: (a) the financing through the Indian Renewable Energy Development Agency Limited (IREDA) of private sector investments in renewable energy subprojects, namely, irrigation-based small hydros, wind farms, and solar photovoltaic system; (b) expansion of the Tamil Nadu Newsprint and Papers Limited's bagasse-based paper mill; and (c) technical assistance for institutional development of IREDA and promotion of renewable energy technologies.

	SectionC: Results/ Outcomes	The project has achieved good overall progress toward its objectives.
Keys for success (cause of failure)		N/A
Evaluation		The outcome is rated satisfactory
Applicability		
Reference		UNDP-GEF Portfolio, World Bank Project Database IND 76 http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000009265_3961219142413
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.8; 4.1; 4.2
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Title		Aquifer Storage and Recovery
Country		36
Province		
Area		
Implementation level		1
Duration /Year		1992 - ongoing
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$4 million 2) Sources of funds: Australian government, private sector, research grants
Actors involved		3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Declining groundwater levels and increasing salinity in groundwater areas, insecurity for farmers and waste of stormwater and treated effluent. At the same time, conventional sources of water are stressed (eg. River Murray and Mt Lofty water supply catchments) due to degradation and overuse.
	SectionB: Outline of Practices/ Actions	1) Objectives of the practice - To harness otherwise wasted waters and saline aquifers to create irrigation water supplies. - To determine conditions under which these methods produce a sustainable supply of potable water. 2) Outline of the practice Water is injected into an aquifer for further passive treatment during storage and subsequently recovered when needed for water supplies. 3) Stakeholders involved, decision making process Local government., landholders, state government., water supply utilities, researchers, universities and catchment water management boards adopting water conservation policies.

	SectionC: Results/ Outcomes	<p>1) Improvements/changes 1 M cu. m/yr stormwater harvested and reused, growing to 4 M cu. m/yr in 3 years in Adelaide, and more cities expected to adopt.</p> <p>2) Problems that remain to be solved - Economics for low value crops unfavourable. - Groundwater management policies need to include capacity for demand reduction as well as enhanced recharge.</p> <p>3) Unexpected positive/negative impacts to date - Dual well systems for stormwater ASR to produce potable supplies are looking very positive. - A series of new measurement methods developed. - Success with clogging management has been excellent.</p>
Keys for success (cause of failure)		National Water Quality Management Strategy enabled the work to commence.
Evaluation		<ul style="list-style-type: none"> - Effectiveness: Extensive monitoring (journal papers) - Cost benefits: Performed evaluation (thesis) - Sustainability: Extensive monitoring (journal papers) - Degree of integration of social, economic, environmental and cultural aspects: Immature at this stage but growing as catchment based planning drives - Transparency/accountability: Reporting to Environment Protection Agency. - Strengths and weaknesses: Risks documented and published and local meetings held.
Applicability		<p>Similar groundwater policies can be implemented in semi-arid areas where there are issues on groundwater overuse saline intrusion, and water scarcity.</p> <p>Concept behind this project is simple - implementation requires investigation, design, management monitoring and maintenance.</p>
Reference		
Sectoral Issues		1
Cross-sectoral Issues		4; 6
Instruments		4.1; 4.2
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Title		Asaza Project
Country		392
Province		
Area		
Implementation level		1
Duration /Year		2000-ongoing
Contact Person /Focal Point for Enquiry	Name	Hiroshi Iijima, Director General
	Affiliation	Nonprofit Organisation Asaza Fund
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1)Amount: ¥3.4billion (2001-2002) 2)Source of fund: Ministry of Land, Infrastructure and Transport
Actors involved		2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Lake Kasumigaura is the second only to Lake Biwa in the area (220 sq. km) and is first in total shoreline (250 km) from among all Japanese lakes. For the purpose of water utilisation and flood control, the Kasumigaura Development Project surrounded the lake with a concrete revetment, which devastated the ecosystem by depleting the lake-wide vegetation zones. The concurrent works, such a construction of the river sluice gate and the catchment basin development, as well as eutrophication rapidly aggravated the lake water quality.

	SectionB: Outline of Practices/ Actions	<p>1)Objective of the practices</p> <p>There has been a widely spread acknowledgement that a better lake environment requires a coalition of separately conducted projects under a catchment-wide comprehensive strategy. The Asaza Project was initiated in 2000 as a participatory public works project approved by the Ministry of Land, Infrastructure and Transport. It aims to resurrect Lake Kasumigaura and its catchment basin as well as serve as a local community revitalisation programme and an area-wide environmental education programme.</p> <p>2) Outline of the practices</p> <p>This project uses native water plants in the lake such as vulnerable asaza (floating heart or <i>Nymphoides peltata</i> of Menyanthoideae), as their name indicates, make a large community by forming their numerous heart-shaped leaves on the lake surface, and this community absorbs the force of lakeshore-washing waves, serving as breakwater to protect the reed field at the shoreside from wave erosion.</p> <p>Most important is that anyone can participate in the project through various activities, such as raising and planting seedlings. The elementary schools in the catchment area take initiative of floating hearts' seedlings cultured for planting in the lake. As an outcome, the environmental remediation and the environmental education are integrated.</p> <p>3) Stakeholders involved, decision making process</p> <p>Coordinated by a non-profit organisation the Asaza Fund, the Project is the first public works project implemented by a partnership network of more than 70,000 people from public and private sector. Stakeholders include: the Ministry of Land, Infrastructure and Transport (MLIT), Ministry of Agriculture, Forestry and Fisheries (MAFF), Ibaraki Prefectural Government, local governments, community members, NGOs, Tsukuba University, more than 170 elementary schools, agriculture, forestry and fisheries industries, corporations and research institutes.</p>
	SectionC: Results/ Outcomes	
Keys for success (cause of failure)		The cooperation of various kinds of supporters has made the Project a highly citizen-initiated public works that makes it different from any other conventional public works project.
Evaluation		The Asaza Project was introduced in the Quality of the Environment in Japan 1998 published by the Environmental Agency (currently Ministry of the Environment) as a forward-looking example toward a total and careful, community-initiated watershed management from the headwaters to the lake. The White Paper on Construction for the same year also named the Project as a 'Citizen-Initiated Public Works'.
Applicability		Although this project is in progress, Lake Kasumigaura has an environment similar to those in developing countries in Asia or Africa, since it is located at the most downstream part of a river system. Lessons learned and products achieved by the Asaza Project are therefore expected to be effectively applied to environmental conservation efforts in developing countries.
Reference		http://www.kasumigaura.net/asaza
Sectoral Issues		1
Cross-sectoral Issues		4; 6
Instruments		3.1; 3.2; 3.3; 3.5

Provider of this information	Name	APFED Secretariat
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Title		Asia CDM Capacity Building Initiative
Country		156; 356; 360; 458; 608; 764; 704
Province		
Area		
Implementation level		4
Duration /Year		2002 - 2005
Contact Person /Focal Point for Enquiry	Name	Soichiro Seki, Director of Global Environmental Affairs Office
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	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: Ministry of Economy Trade and Industry (METI)
Actors involved		2
Description of the Practice	SectionA: Background & Objectives	CDM projects potential in Asia need to be realised through institutional streamlining, wide spread expertise knowledge, national strategy on promising areas, and support by industrial sector. CDM-related capacity building program is to address these agenda by utilising Japanese experience and tools of international cooperation and energy policy.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice Same as Section A.</p> <p>2) Outline of the practice Actions in the program are as follows: - Strengthening expertise knowledge and fostering understanding on CDM - Cooperation on capacity building of the government sector - Joint research programs on CDM potential areas - Case studies on model projects</p> <p>3) Partners involved New Energy and Industrial Technology Development Organisation (NEDO), Japan Overseas Development Corporation (JODC), Association for Overseas Technical Scholarship (AOTS), and Japan International Cooperation Agency (JICA).</p>
	SectionC: Results/ Outcomes	The project envisions the smooth start of CDM projects will be foreseen/encouraged and greenhouse gas emission reduction, and eventually, contributes to sustainable development in host countries.
Keys for Success (cause of failure)		N/A
Evaluation		N/A
Applicability		Similar efforts can be made by countries interested in CDM project development.
Reference		WSSD List of Partnerships for Sustainable Development http://www.johannesburgsummit.org/html/sustainable_dev/p2_managing_resources/1508_asia_cd_m_japan.pdf
Issues		
Cross-Sectoral Issues		1; 3; 4; 5
Instruments		3.2; 3.3; 3.5; 3.8
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Title		Asia Pacific Initiative
Country		999
Province		
Area		
Implementation level		4
Duration /Year		4 years, initially from 2002 to 2006
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Contact Person (2) /Focal Point for Enquiry	Name	
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	E-mail	
Sponsor(s)		1) Amount: US\$380,000 (in 2002-2003) 2) Source(s) of funds: In-kind contribution from project partners. 3) Efforts to raise/sustain funds for implementation (if any): Ongoing
Actors involved		1; 5
Description of the Practice	SectionA: Background & Objectives	Recognising that Internet penetration in the Asia Pacific region (a 4.5% of the total population) is below the global average (8%) and building on the calls for action at the Asia Pacific Regional Conference of the World Summit on the Information Society held in Tokyo in January 2003, the Asia Pacific Initiative (API) will implement various activities designed to promote collaboration in bridging the digital divide in Asia-Pacific, and between the region and the rest of the world. The central focus on the API is on the production of online content related to environmental sustainability in the region.

<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice (aim, target audiences)</p> <ul style="list-style-type: none"> - Creation of an open platform to support the exchange of open content on environmental and development related issues in Asia-Pacific. - Promotion of multimedia broadcasting (video over IP) via a networked virtual organisation of partner institutions. - Adoption and integration of new technologies to enhance joint capacity development and research activities with a strong policy focus, involving a blended approach of field-based, face-to-face and online education. - Exploration of innovative approaches to grounded (field-based) open content development (e.g. courses, case studies and learning objects) that promotes multi-lingualism, interoperability and exchange between partner ICT systems, development new e-learning tools and promotion of innovative use of database, archive and asset management systems database. - Implementation of online joint degree programmes at the Masters level in collaboration with partner universities in the region. <p>2) Outline of the practice</p> <p>In 2002-2003, three training sessions were organised in Okinawa and Iwate (Japan) and in Bangkok (Thailand). Themes covered in training programmes include Nature Conservation and Environmental GIS, Sustainable Urbanisation, and Energy and Sustainable Local Development. Development of e-case study based on the Water Pollution Auyquilla River, Mexico. Will be applied to other case studies in Asia Pacific. Establishment of a Media Studio in collaboration with Keio University, LEAD and CISCO (Japan). UNU Keio University FASID Online Course implemented the UNU Campus (Tokyo) dealing with Sustainable Development in Asia Pacific.</p> <p>3) Stakeholders involved, decision making process</p> <p>Main stakeholders involved include a network of universities in the Asia-Pacific including Keio University, Asian Institute of Technology, University of Hawaii, Griffith University and a number of NGOs including LEAD, the Television Trust for the Environment and the Institute for Sustainable Energy Policies.</p>
<p>SectionC: Results/ Outcomes</p>	<p>As the API moves from prototype development to full operation, the main results would include the creation of an extensive network of partner institutions in the region linked together and sharing content seamlessly via the Internet. The main outcomes include the following:</p> <ul style="list-style-type: none"> - Joint research projects initiated by members of API; - Video over IP and a range of field based experiments; - Prototype e-learning technologies/tool boxes; - Knowledge bases, video archives and project databases; - Online courseware; - E-case studies; - Database of learning objects; - Standard compliant and interchangeable modules. <p>Considerable progress has been made in the development of the basis methodologies in a number of these areas. However, the problems still to be resolved relate to the design and implementation of a technological platform that can support the exchange of content between partners in the region. This would involve the use of satellite technology, broadband, cache servers and a digital asset management system.</p>

Keys for success (cause of failure)		<ul style="list-style-type: none"> - Use of ICT and the Internet as a tool to enhance of collaborative research activities and communication between among different stakeholders (universities, NGOs, local communities and business). - Experimentation with new institutional networking and resource sharing designed to help bridge the digital divide. - Building up capacities in the partner institutions in the countries of the South, especially the universities. - Introduction of new and affordable technology for online learning.
Evaluation		<p>The extensive use of the Internet as a communication tool on environmental issues in the Asia-Pacific has the potential to function as effectively as commercial equivalents such as CNN. In turn, this could result in considerable cost-benefits in terms of the ability to easily replicate content for use by different partners with an Open Content framework. The creation of a strong network of partners is the key to ensuring sustainability of this initiative and the primary benefit of working across the entire Asia Pacific region is that this will ensure some degree of social environmental and cultural aspects of the project. In particular, the API will function as a project to promote multiculturalism and multilingualism. The main weakness is that this is a content driven initiative in an area where most funding tends to be focused mainly on technology and infrastructure. This is also a strength since it is also indicative of the uniqueness of this initiative.</p>
Applicability		<ul style="list-style-type: none"> - The development of an affordable prototype system for media development and communication within an e-learning context can be replicated throughout Asia and the Pacific, with experience transferred to South America and Africa. - The API experience with the use of satellite technology to support the communication on environmental issues will also be transferable to Africa where geography impedes the transfer of knowledge between different parts of the region.
Reference		N/A
Sectoral Issues		1; 3; 5
Cross-sectoral Issues		4; 5
Instruments		3.3; 3.5; 3.8; 4.1
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Title		Asia Toolkit Project on Inventories of Dioxin and Furan Releases
Country		96; 608; 704
Province		
Area		
Implementation level		3
Duration /Year		2001- ongoing
Contact Person /Focal Point for Enquiry	Name	N/A
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
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	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Sources of funds: United Nations Environment Programme (UNEP), International Labor Organisation (ILO)m Food and Agriculture Organisation (FAO), World Health Organisation (WHO), United Nations Industrial Development Organisation (UNIDO) and Organisation for Economic Co-operation and Development (OECD).
Actors involved		1; 2

Description of the Practice	SectionA: Background & Objectives	<p>Dioxins (Polychlorinated dibenzodioxins) and Furans (polychlorinated dibenzofurans) are unintended by-products from any industrial and domestic activities such as bleaching of pulp and paper with chlorine gas, incineration of all types of wastes, production of steel or non-ferrous metals, cement-making, and but are also released via automobile exhausts or cooking with fuels such as wood or coal. Dioxins and furans are included in the persistent organic pollutants (POPs) being addressed by the Stockholm Convention on POPs whose text was concluded in May 2001 with the aim to protect human health and the environment from POPs.</p> <p>Asia Dioxin Toolkit is part of the capacity building programme of the United Nations Environment Programme (UNEP) to assist countries in implementing the Stockholm Convention. The Asian Toolkit Project supports 5 participating countries (Brunei Darussalam, Philippines, Vietnam, Jordan and Lebanon) to develop their first inventories of releases of polychlorinated dibenzodioxins and polychlorinated dibenzofurans and to test the Dioxin/Furan Toolkit. The Toolkit had been developed by UNEP Chemicals to assist countries in undertaking inventories of dioxin and furan releases, and to do so in a harmonised and rigorous manner.</p>
	SectionB: Outline of Practices/ Actions	<p>The project serves several purposes: at a national level, to raise awareness on dioxin and furan issues within governments, industry, academia, and the public; capacity building on dioxin and furan inventory; and the capacity to meet reporting obligations under the Stockholm Convention.</p> <p>The project started in October 2001 with a kick-off workshop in Hanoi, where country experts were trained on the Toolkit. The five countries then developed their inventories using the Toolkit. The country experts came together again at a second workshop in Bandar Seri Begawan; Brunei Darussalam, 17-19 December 2002, to discuss their preliminary inventories. The experience gained and the conclusions from the workshop are contained in 'Report - Inventory Evaluation Workshop for the Asia Toolkit Project on Inventories of Dioxin and Furan Releases, Bandar Seri Begawan, Brunei Darussalam, 17-19 December 2002.'</p>
	SectionC: Results/ Outcomes	<p>The experiences gained and the constructive comments provided by the countries have contributed to the improved Toolkit, published in May 2003.</p>
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		The inventory can be applied to any countries or regions suffering from the issues associated with POPs.
Reference		<p>UNEP (2003). Asia Toolkit Project on Inventories of Dioxin and Furan Releases: National PCDD/PCDF Inventories. http://www.pops.int/documents/guidance/Toolkit_Inv.pdf</p>
Sectoral Issues		4
Cross-sectoral Issues		1; 4; 5
Instruments		3.3; 3.5; 3.8

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Title		Best practice Guidelines for Implementation of Wind Energy Projects
Country		36
Province		
Area		
Implementation level		2
Duration /Year		2001 -
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Sponsor(s)		1) Amount Au\$88,000 2) Source(s) of fund Commonwealth Government Renewable Energy Industry Development Grant through AGO
Actors involved		2
Description of the Practice	SectionA: Background & Objectives	Situation and problems faced - Lack of guidance to project designers and wind energy developers as to the technical, environmental and social issues they need to address to get all the approvals necessary and to successfully build wind farms in Australia. - Problems from lack of awareness by developers, financiers and planners/regulators of issues associated with a relatively new technology, and the likely delays with approval or shortcuts by developers. - Project developed by the Australian Wind Energy Association with wide consultation with the industry, government and environmentalists.
	SectionB: Outline of Practices/ Actions	- Objective to assist the efficient and sound development of renewable energy installations - 100-page book prepared covering requirements and best practice methods from site selection through design, construction, operation and decommissioning.

	SectionC: Results/ Outcomes	<ul style="list-style-type: none"> - High quality document produced by consultants - Achieved wide acceptance as an industry standard of good practice - Demonstrated need for further work by individual States with regard to their planning approval, and more detailed protocols for the protection of birds and bats
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Enhancement of collaboration among stakeholders - Competent technical lead consultant who is prepared to consult widely with diverse range of stakeholders - Preparation of a document that is not too technical to be understood by a wide range of people
Evaluation		<ul style="list-style-type: none"> - No formal evaluation in place, but awareness through dealing with industry and regulators that some areas need further detailed work - This was anticipated in relation to State and local government planning approval which is not uniform through Australia - Visual impact and bird strike measurement have been identified for further work
Applicability		The Australian document could be adapted to use in other countries. It is expected that regulation may be less strict in some countries, but the guidelines would provide an indication of the standards that are possible and what can be reasonably expected.
Reference		The Australian best practice guidelines can be downloaded from the AusWEA website at http://www.auswea.com.au or ordered from The Australian Wind Energy Association PO Box 1004 GPO Canberra ACT 2601 AUSTRALIA
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		1.3; 3.3; 3.4; 3.8; 4.1; 4.2
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Title		Bio fuel development and consumption in Thailand
Country		764
Province		
Area		
Implementation level		2
Duration /Year		2000 - 2003
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Sponsor(s)		2) Source(s) of funds: Mekong Environment and Resource Institute (MERI)
Actors involved		2; 4; 5

Description of the Practice	SectionA: Background & Objectives	<p>The natural sources of petroleum in Thailand are scarce, especially fuel used for transportation. The consumption of diesel fuel has reached the rate of 43 million liters per year or 40 percent of total fuel consumption in country since 2000. This volume is twice of the consumption of gasoline in the country. Compare to the total consumption, the fuel from petroleum produced in Thailand is less than 3 %. The rest is imported. This situation remains no change till nowadays. Thus, part of Thai economics depends significantly on the prices of the fuel imported, which are rising up continuously, particularly diesel and gasoline prices. The rise of fuel prices increases transportation cost in industrial production and cost of living as well. This situation affects the national economics as a whole.</p> <p>Meanwhile, the National Energy Commission reports that fuel from fossil in Thailand is running low. This includes crude oil and natural gas. Base on today's consumption rate, the crude oil reserved in natural sources is expected to be only 17,000 million tons left.</p> <p>There must be a way to solve this problem. Since Thailand is an agricultural country so biofuel, utilising agricultural products, is one of the way out. Starting around 1976 when fuel crisis occurred in the country and caused the rapid rise of fuel prices, the 'ethanol' project was carried out to produce biobenzene, using sugarcane as a raw material. But the continuity of the project stopped in 1987 when the fuel prices returned to normal. No eye-catching progress was observed until the time that economical crisis occurred in Thailand when the government brought this issue back to live again. On October 16, 2001 the National Ethanol Committee was setup to study the possibility of producing ethanol and the trend of future utilisation, both in the short and long run. At present, much of the progress had been done by government and private sectors.</p>
	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <ul style="list-style-type: none"> - to trace the progress of the biofuel produced for agricultural and transportation uses - to observe the activities involve in production technology and the roles of concerned organisations at present <p>2) Outline of the practice</p> <ul style="list-style-type: none"> - Increased agricultural productivity by introduction of new technology - Increased income by using local resources that had not been used - Improved local environment by enhancing public awareness - Utilised natural resources more effectively by introducing new rules - Decreased the fuel cost in agricultural production and transportation by introducing local resources into fuel production - Increased income by utilising surplus agricultural products- increased cooperation between government and private sectors. <p>3) Stakeholders involved, decision making process</p> <p>Ministry of Energy, Ministry of Natural Resources and Environment, Ministry of Agriculture and Cooperatives, Ministry of Sciences and Technology, Bang Chak Petroleum Public Co., Ltd., PTT Public Co., Ltd., Thailand Ethanol - Biodiesel Renewable Energy Foundation</p>

	SectionC: Results/ Outcomes	<p>1) Improvements/Changes The biofuel produced from agricultural products, known as gasohol, ethanol, and biodiesel, are improved and applied to small farm engines, farm trucks, light trucks and some passenger cars with lower prices, compare to ordinary gasoline and diesel in local market.</p> <p>2) Problems that remain to be solved The main problem to be solved at present is a limited supply of the products. Especially biobenzene. Originally, sugarcane is used to produce ethanol but the production cost is high and the volume produced is low since the main purpose of growing sugarcane is for sugar production. So cassava, which is a common crop grown in Thailand, is a second target for ethanol production. Some volume of biobenzene known as 'gasohol' is now in market. While coconut oil and a local plant called 'black soap' are materials to produce biodiesel. Results and progress of the product, using coconut oil, is considered satisfaction in some parts of the country.</p>
Keys for success (cause of failure)		<p>The main key to success is the cooperation between government and private sectors. But, at this moment, it seems that the private sector, mainly agricultural sector, is ahead of the government in research and development of the biodiesel using coconut oil and its application to agricultural engines and vehicles, while the government aims to the production of biobenzene for small passenger vehicles. And just recently that the Ministry of Agriculture started the research on the use of 'black soap' oil on diesel engines with good results. But the volume produced is too small for merchandise.</p> <p>The reason that the production of ethanol (or ethyl alcohol) cannot be done in commercial scale is because the transportation of large quantity of alcohol is prohibited by law. Thus, revision of laws concerned is needed that the delivery of ethanol from distilling plants to fuel production plants and to gas stations is legal.</p>
Evaluation		<p>The consumption of bio fuel commercially in Thailand is still a long future. At present, there are only two pilot plants to produce ethanol. One belongs to the Royal project (the King's Project) and the other belongs to the Ministry of Science and Technology. Although the raw materials are locally produced, but the production cost is higher than ordinary gasoline and diesel fuel. Now there are only two or three gas stations in Bangkok that carry small amount of ethanol to sell to public. The volume is less than 0.1 % of the total fuel consumption in Bangkok while the need is much greater. Biodiesel produced from coconut oil is well accepted in some part of the country to use on farm engines and small trucks. The tests of both bio-benzene and biodiesel fuel show no important affects to environment.</p>
Applicability		<p>The process of biodiesel production using coconut oil is so simple that it is applicable to all the tropical countries where coconut groves are available in commercial scale. The process of production is so simple and needs no complicated technology. No modification is needed for engine to use this kind of fuel.</p>
Reference		See attached PDF doc.
Sectoral Issues		2
Cross-sectoral Issues		6
Instruments		1.2; 3.2; 3.8; 4.1

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Title		Biomass Energy for Rural India (BERI)
Country		356
Province		
Area		Karnataka
Implementation level		2
Duration /Year		1999 - (5years)
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Sponsor(s)		1) Amount: \$8.819M 2) Source(s) of funds: GEF Grant \$4.213M, Cofin Amount \$4.606M
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	Primary energy use in India is dominated by coal followed by fuelwood and petroleum fuels. The share of fossil fuels is projected to increase from around 60% during 1995-96 to 74% of total energy use by 2010. This growth in fossil fuel consumption will result in enhanced greenhouse gases (GHG) emissions. Increased dependence on fossil fuels and fuelwood (in rural areas) is likely to lead to local and regional environmental problems (such as air and water pollution, and land degradation). The development objective of the project is to reduce CO2 emissions through the promotion of bioenergy as a viable and sustainable option to meet the rural energy service needs in India.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <p>The immediate objectives of the project are: i) to provide a decentralised bioenergy technology package for the provision of good quality rural energy services for lighting, drinking water supply, cooking gas, irrigation water supply, and milling; and ii) to remove barriers to large-scale adoption and commercialisation of this bioenergy technology package.</p> <p>2) Outline of the practice</p> <p>The project goals will be achieved through (i). Demonstrating the technical feasibility and financial viability of bioenergy technologies on a significant scale, (ii). Building capacity and developing appropriate mechanisms for implementation, management and monitoring of the project; (iii). Developing financial, institutional and market strategies to overcome the identified barriers for large-scale replication of the bioenergy package for decentralised applications; and (iv). Disseminating the bioenergy technology and information package on a large scale.</p>
	SectionC: Results/ Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		GEF Project List INDIO, Biomass Energy for Rural India Project Website: http://nitpu3.kar.nic.in/bioenergyindia/index.htm
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.5; 3.8; 4.1; 4.2
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Title		Biomass-based Power Generation and Co-generation in the Malaysian Palm Oil Industry, Phase I
Country		458
Province		
Area		
Implementation level		2
Duration /Year		2001- (5years)
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Sponsor(s)		1) Amount \$14.84M 2) Source(s) of funds GEF Grant \$4.025M, Cofin Amount \$10.815M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The increasing demand and consumption of fossil fuels in Malaysia, which in the near future could lead to a growing dependence on fuel imports, poses one of the major challenges for the government of Malaysia. An increasing dependence on fossil fuels, particularly in the power sector, will result in rapid increase in GHG emissions in the country. To contribute further to the reduction of GHG emissions, the government intends to supplant part of the fossil fuel use in power generation with renewable energy (RE) resources, particularly biomass residues from the palm oil industry.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <p>The project's main goal is the reduction of the annual growth rate of GHG emissions from fossil fuel fired combustion processes and unutilised biomass waste, through wide spread application of biomass-based power generation/CHP technology.</p> <p>2) Outline of the practice</p> <p>The immediate objectives of this project are:</p> <p>(a) Design and implementation of a biomass energy technology information services and awareness enhancement programme;</p> <p>(b) Conduct and implementation of policy studies and institutional capacity building in the area of biomass energy technology;</p> <p>(c) Design and implementation of financing assistance programme for biomass energy projects;</p> <p>(d) Development and implementation of demonstration schemes for biomass-based power generation and CHP; and,</p> <p>(e) Implementation of a biomass energy technology development programme.</p>
	SectionC: Results/ Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		UNDP-GEF Portfolio, GEF Project List
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		1.1; 3.2; 3.5; 3.7; 3.8; 4.1; 4.2
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Title		BioTrade Facilitation Programme for Biodiversity Products and Services (BTFP; BIOTRADE Initiative)
Country		360; 608; 704
Province		
Area		
Implementation level		3
Duration /Year		2003 - 2008
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Sponsor(s)		1) Amount: \$10.5 million (estimate) 2) Sources of funds: United Nations Foundation/United Nations Fund for International Partnerships (UNFIP), Andean Development Corporation, Governments of the Netherlands, Norway and Switzerland.
Actors involved		1; 2; 4; 5

Description of the Practice	SectionA: Background & Objectives	<p>Many developing countries are endowed with rich and diverse forest and marine biodiversity resources. These resources provide the basis for a wide range of products and services, such as nuts, fruits, perfumes, natural dyes, oils, medicinal plants, biochemical compounds, ecotourism, watershed protection and carbon sequestration. Most of these products are used by local populations to make a living, while others have served as an important source of innovation for the pharmaceutical, biotechnology or cosmetic industries.</p> <p>Countries rich in natural resources are losing their biodiversity at alarming rates. The search for short-term economic gains, unsustainable practices, population growth, and poverty among local populations are at the root of this environmental loss. To give an idea, approximately 24% of the world's mammals and 12% of the world's bird species are globally threatened. Forests have almost disappeared in 25 countries, and during the last two decades of the 20th century, deforestation was estimated at 15 million hectares yearly - mainly in the tropics. In Philippines, for example, forest cover have decreased from more than 50% to less than 24% over a period of 40 years.</p> <p>In this context, the challenge is to find ways and means to use biodiversity as a basis for sustainable development. United Nations Conference on Trade and Development (UNCTAD) launched the BIOTRADE Initiative in 1996 during the third Conference of Parties of the Convention on Biological Diversity (CBD). Its mission is to stimulate trade and investment in biological resources to further sustainable development in line with the three objectives of the CBD: the conservation of biological diversity; sustainable use of its components; and fair and equitable sharing of the benefits arising from the utilisation of genetic resources.</p>
	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <p>The Initiative has established a number of partnerships with national and regional organisations with the aim of setting up programmes that enhance the capability of developing countries to produce value-added products and services derived from biodiversity, for both domestic and international markets. These partner organisations, in turn, have their networks of local organisations working in the field, which allows them to address all aspects of the value chain of natural products in a cost-efficient manner.</p> <p>2) Outline of the practice</p> <p>The BIOTRADE Initiative encompasses from Latin America, Africa to Asia. The implementation of the Initiative is based on an integrated approach comprising (1) country and regional programmes, (2) policy development and trade facilitation, and (3) internet services.</p> <p>3) Partners involved</p> <p>This partnership is linked to relevant programmes of: International Trade Centre UNCTD/WTO (ITC), Programme Bolsa Amazonia (Brazil), Dutch Centre for Promotion of Imports from Developing Countries (CBI), Swiss Import Promotion Programme (SIPPO), Swiss State Secretariat for Economic Affairs (SECO), Andean Development Corporation (CAF), particularly its biodiversity programme (BIO-CAF), and Andean Community (CAN).</p>

	SectionC: Results/ Outcomes	<p>The BIOTRADE Initiative is to achieve the following:</p> <ul style="list-style-type: none"> - Developing countries will have accessed new markets and, therewith, diversified their production base in a sustainable manner. - Capacity for the sustainable development of biodiversity products and services will have been built up among local and international service organisations and institutions through innovative collaborative arrangements. - As a result of BTFP technical assistance at local, national and international levels and the support to national service organisations, local SMEs, will have entered the market or have strengthened their market position. - The BTFP will have benefited numerous families living in areas with rich biodiversity resources that are involved in wild collection, forest garden production or small-scale cultivation. It will also have contributed to sustainable use of biodiversity, reduced pressure on biodiversity and provided an incentive to biodiversity conservation. - The BTFP will be a tested example of how sustainable trade can benefit the environment and help conservation of biological diversity with local population's support. - The BTFP experiences will have had strategic implications on public and private sector strategies towards poverty alleviation and local livelihood development in biodiversity-rich areas.
Keys for success (cause of failure)		N/A
Evaluation		<p>Lessons learned by the BIOTRADE Initiative include:</p> <ol style="list-style-type: none"> (1) Involving all stakeholders, (2) Building on partnerships, (3) Importance of integrated approach, (4) Importance of the pre-assessment studies, (5) Importance of information systems, (6) Integration and organisation of the private sector, (7) Enhancing the integration of local and indigenous communities, (8) Effective trade promotion, (9) Viable enterprises, and (10) Improving access to finance.
Applicability		The lessons learned from the BIOTRADE Initiative could support the efforts of countries engaged in the sustainable use and trade of products and services derived from biodiversity as means to achieve sustainable development.
Reference		<p>WSSD List of Partnerships for Sustainable Development http://www.un.org/esa/sustdev/partnerships/trade/biotradefacilit.pdf UNCTAD BIOTRADE website http://www.biotrade.org</p>
Sectoral Issues		
Cross-sectoral Issues		3; 4; 5
Instruments		3.2; 3.3; 3.4; 3.5; 3.8; 4.2

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Title		Capacity Building for the Rapid Commercialisation of Renewable Energy
Country		156
Province		
Area		
Implementation level		2
Duration /Year		DEC.1998 - DEC.2003
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Sponsor(s)		1) Amount \$27.692M 2) Source(s) of funds GEF Grant \$8.852M, Australia \$3M, Holland \$2.53M, Chinese Gov't \$11.5M, Others(UNDP, Donor Parallel financing)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	This project is designed to promote the widespread adoption of renewable energy technologies in China by removing a range of barriers to increase market penetration of the technologies.
	SectionB: Outline of Practices/ Actions	1) Objectives of the practice The project will develop market-based institutions and instruments to attract new players in the renewable energy industry and increase investments in the sector. 2) Outline of the practice It will undertake activities to improve the local policy environment for renewable energy and initiate activities to demonstrate or strengthen the capabilities in several renewable energy technology fields.
	SectionC: Results/ Outcomes	The project will strengthen local institutions working on renewable energy to be able to provide information and services to potential entrepreneurs and investors seeking to initiate renewable energy activities in China.

Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		UNDP-GEF Portfolio Project Document CPR261
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		1.2; 3.2; 3.5; 3.7; 3.8; 4.1; 4.2
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Title		Capacity Building for Urban Planning and Management
Country		882
Province		
Area		
Implementation level		1
Duration /Year		1 year
Contact Person /Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment) (in lieu of Michel D. Latendresse, Principal Project Specialist, who originally supervised the implementation of the TA).
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Sponsor(s)		1) Amount: \$500,000 2) Source of funds: ADB Japan Special Fund (JSF)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	<p>Apia is located on one of the two main islands that constitute the Samoan archipelago. It is the only major urban centre in the country. While it has not yet reached a crisis point in urban planning and management, Apia is experiencing rapidly increasing social, economic and environmental challenges as a result of population growth and development pressures. Over the past decade, the growth of economic activities has accelerated population migration to Apia where the bulk of the industries, commerce and services such as tourism are located, and where better education and health services are available.</p> <p>There were no formal administrative machinery for managing urban growth and changes. Apia had no urban growth and infrastructure plans and no integrated legal and administrative system for putting such plans in place. There was little formal coordination between services and development control agencies and no formal framework for defining urban development plans, policies and management.</p>

	<p>This technical assistance (TA) was designed to build capacity and strengthen the skills base by preparing an urban management framework and determining its procedural, regulatory and legislative implications. It aimed to develop a consensus on urban development and management issues through a consultative process involving all stakeholders.</p>
<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objective of the practice</p> <p>The TA aimed to improve: (i) the economic, social and physical environment of Apia by facilitating and guiding the development of an integrated framework for urban planning and management; (ii) the management of urban institutions and infrastructure through the provision of processes to effectively and efficiently address urban growth challenges; (iii) the quality of air, water, and soil in Apia; (iv) the Government's institutional capacity to undertake urban planning and management, and access to basic urban services and infrastructure for the disadvantaged and vulnerable urban households.</p> <p>Specifically, the TA was to assist in the preparation of: (i) a policy plan identifying the urban planning and development issues, needs and aspirations of Apia and Samoa in general; (ii) a draft procedural, regulatory and legislative framework for the establishment of an urban management system paying special attention to mechanisms for agency coordination, development assessment, strategic planning and policy making, resolution of land issues, enforcement, village and community participation; and (iii) a strategic plan for the development and implementation of the most appropriate institutional and legislative structures and arrangements to achieve the proposed management system.</p> <p>2) Outline of the practice</p> <p>The TA was formulated with a strong consultative approach in mind to enhance stakeholders' participation, commitment and ownership to the proposed conceptual, legislative, and institutional changes to be introduced.</p> <p>A number of workshops were held with a wide range of stakeholders throughout TA implementation. This led to a clear identification of the issues and challenges to be addressed, a better understanding of the priorities, and an awareness and stronger commitment by the Government and stakeholders towards achieving the goals and objectives of the TA.</p> <p>Three tripartite meetings were held during the course of the project. The TA team prepared clear and thorough issue papers to guide the decision process. Comprehensive interim and a final report were prepared and will serve as reference material for future work in the sector. Special emphasis was placed on training of and skill transfer.</p> <p>3) Stakeholders involved, decision making process</p> <p>The Steering Committee which was formed for this TA assumed a particularly active role in providing vision and guidance to the TA team. Senior Government level commitment to the TA enhanced confidence with the stakeholders. Counterpart staff was well qualified and exceptionally dedicated.</p>

	SectionC: Results/ Outcomes	<p>1) Improvement/Changes Senior officials of concerned Government agency have repeatedly expressed their satisfaction with the project. Through its strong consultative approach, the project has been able to achieve a consensus on an urban management institutional framework that reflects the cultural and institutional needs of Samoa. As result of recommendations of the TA Team, a new integrated urban planning and management system will be implemented. At the heart of this system, the Government has agreed to set up a new Planning and Urban Management Agency (PUMA) with a high level representative Planning and Urban Management Board (PUMB) to provide leadership in policymaking and implementation of urban development. Counterpart staff were effectively encouraged to take initiatives and to lead parts of the studies. This aspect was very successful and the skills and confidence of counterpart staff were significantly enhanced in the process.</p> <p>2) Problems remain to be solved Institutional strengthening or PUMA is still necessary.</p>
Keys for success (cause of failure)		<p>Consultative process is very important to achieve stakeholders' participation, commitment and ownership. Both the Government and the stakeholders have shown exemplary commitment to the project and significant momentum has been built in the community towards the establishment of the proposed legislative and institutional framework as a result of this consultative process.</p> <p>Good performance of the consulting team also contributed to the success of the project.</p>
Evaluation		<p>The consultative process with stakeholders yielded a proposed framework for urban planning and management that reflects well the socio-cultural environment in Samoa. The institutional, legislative and administrative arrangements, which were proposed following consultations, were adopted by the Government. A strategic plan was developed which clearly identify urban management priorities and actions for the next 5 years. This strategic plan centres on the establishment of a PUMA to be responsible for the functional requirements of planning and urban management. Overall the TA was considered to have achieved all and exceeded a number of its objectives and was considered successful.</p>
Applicability		<p>The participatory consultation mechanism employed in this TA can be replicated in other areas of similar situation and condition.</p>
Reference		N/A
Sectoral Issues		3
Cross-sectoral Issues		1; 4
Instruments		1.1; 3.7; 3.8; 4.2
Provider of this information	Name	Daniele Ponzi
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Title		Capacity Building of the Native Land Trust Board in Preparing Land Maps and Establishing Land Boundaries
Country		242
Province		
Area		
Implementation level		2
Duration /Year		1 year
Contact Person /Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment), Pacific Department
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	E-mail	information@adb.org; dponzi@adb.org
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$140,000 2) Source of funds: ADB Technical Assistance Special Fund (TASF)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	In view of the great importance of land to the socio-economic development of Fiji and to address the mounting problem on land tenure and disputes, the Fiji Government sought the assistance of ADB to strengthen its Native Land Trust Board (NLTB) in producing land maps and establishing land boundaries. NLTB is in charge of administering a big portion of land classified as native. It is confronted with problem considering that many Fijian land-owning units (LOU) are requesting the return of their land for their own use at the expiration date of the Agricultural Landlord and Tenant Act (ALTA). While there are some Fijian LOUs who are willing to extend the leases, the tenants, however, who are mostly small-scale farmers of Indian origin, are hesitant to invest further in agricultural development because of tenurial uncertainties. The Government is well aware of the repercussion of this impasse to the sugar industry and the best solution is to fast track the identification of land boundaries and the preparation of corresponding maps. As a result, a small-scale technical assistance (TA) for capacity building of NLTB was implemented.

<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objective of the practice The TA aimed to develop and build the capacity of NLTB in carrying out land surveys as well as undertake rapid and cost effective mapping and transfer this capacity to the other sectors (like forestry, agriculture, lands, fisheries, power, communication, water, etc.) using transferable, scalable, affordable and sustainable technology. It also aimed to produce maps where boundaries are established in order to assist landowners and land-owning units (LOUs) clearly define ownership of the area.</p> <p>2) Outline of the practice The TA has the following components: (i) establish and make operational the NLTB GPS base station and associated hardware and software at the headquarters; (ii) undertake selected field visits with appropriate NLTB staff and other relevant Government sectors (such as Forestry and Lands) and in consultation with the landowners and land-owning units establish and survey boundaries using mobile GPS units; (iii) enhance maps through integration of satellite imagery for improved visualisation; and (iv) build capacities in NLTB and other relevant Government departments to continue establishing boundaries and produce maps.</p> <p>To meet the above objectives and components, the following activities were undertaken: (i) purchase of equipment; (ii) conduct of an introductory workshop; (iii) training of NLTB-Headquarters' staff in integrating satellite images into mapping; (iv) training of field staff through on-the-job training while surveying demonstration areas detailed in this report; and (v) conduct of a demonstration workshop.</p>
<p>SectionC: Results/ Outcomes</p>	<p>1) Improvement / Changes The mapping performance recorded in the NLTB internal reports shows that staff working with the new equipment became highly motivated after undergoing trainings on the new mapping scheme.</p> <p>The workshops in the Western and in the Northern Division drew an overwhelming enthusiasm from the divisional NLTB management when the field staff demonstrated the new scheme in map production. During the workshop at the Central Division, most organisations present were impressed by the high-resolution GIS backdrop and the technical method of screen digitising from the backdrops, thus avoiding digitising from maps on digitising tables, which are sensitive in tropical environment. This also applied to the handling of tabular data in Microsoft Access database and linking this tabular data through a common field rather than importing the complete table into the GIS software.</p> <p>One to two maps of land parcels were produced daily by the teams who were trained and transferred to NLTB Headquarters. Maps were accompanied by field reports, which provided information on: (i) additional documentary information of the x, y position of the markers indicating the boundaries, (ii) the distance in meters between the markers, and (iii) the position of the houses on the land parcels.</p> <p>The spatial information of land parcels is stored in the divisions and centralised at NLTB Headquarters, which are made ready for transfer to other government departments when requested. The workshop carried out in the three divisions demonstrated that NLTB personnel are now capable of undertaking mapping about 10 times faster than before.</p> <p>2) Problems remain to be solved Commitment of the Government to continue the work is there, but the question of sustainability remains to be seen.</p> <p>3) Unexpected positive impacts to date NLTB staffs are highly inspired and motivated by the newly acquired technology on mapping which provided a lot of ease in their work.</p>

Keys for success (cause of failure)		Full support and the technical capability of the implementing agency, South Pacific Applied Geoscience Commission (SOPAC), played a significant role in making the TA a success.
Evaluation		NLTB can now realistically present an image of a professional and modern organisation capable of using sophisticated mapping methods in the execution of their daily mapping work.
Applicability		The technology used by SOPAC in implementing the TA is not that complicated. In fact, it can be easily learned even without formal academic background in GIS/GPS operations. This makes the technology quite easy to replicate in another area where similar problem on land mapping and boundary delineation is present.
Reference		http://www.adb.org
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5; 6
Instruments		3.8; 4.1; 4.2
Provider of this information	Name	Daniele Ponzi
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Title		Capacity Building to Remove Barriers to Renewable Energy Development
Country		608
Province		
Area		
Implementation level		2
Duration /Year		Dec. 2001 - (5years)
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	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$23.774M 2) Source(s) of funds GEF Grant \$5.448M, Cofin Amount \$18.326M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	In order for the Philippines, a) to reduce a growing dependence forecast on fossil fuels; b) to meet ambitious targets for reliable, economic supplies of grid electricity; and, c) to realise widespread electrification and poverty relief in remote communities, new and renewable energy (NRE) sources of energy will have to be tapped over the next ten years.
	SectionB: Outline of Practices/ Actions	1) Objectives of the practice This project removes key market, policy, technical and financial barriers to renewable energy. 2) Outline of the practice a) Strengthening the capacity of government agencies to enact and implement sound renewable energy policies; b) providing information for targeted audiences to build an renewable energy market; c) creating a 'one-stop-shop' market service centre for preparing and promoting renewable energy projects; d) increasing coordination among organisations concerned with renewable energy; e) assisting the market penetration of renewable energy in remote, off-grid communities by providing incentives for innovative market delivery and financing mechanisms; f) improving the quality of renewable energy technologies and systems through assistance with standard setting.

	SectionC: Results/ Outcomes	N/A
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		
Reference		UNDP-GEF Portfolio Project Documents PHI1264
Sectoral Issues		2
Cross-sectoral Issues		1; 2; 4; 6
Instruments		1.2; 3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Capacity-building for Pacific Island Countries in Oceans Policy Implementation
Country		36; 16; 242; 296; 520; 585; 882; 90; 776; 548
Province		
Area		
Implementation level		4
Duration /Year		2002 - 2007
Contact Person /Focal Point for Enquiry	Name	Bernadette O'Neil
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source of funds: National Oceans Office, Australia
Actors involved		2
Description of the Practice	SectionA: Background & Objectives	<p>This initiative is closely linked to the Pacific Islands Oceans Initiative (2003-2007), which aims to assist with the implementation of the Pacific Islands Regional Oceans Policy, to harmonise and build upon ongoing oceans-related programmes implemented within the region, and to identify and implement coordinated programmes of action that will address all priority aspects of the policy.</p> <p>Australia is also engaged in implementing a broad oceans policy, Australia's Oceans Policy, which provides the framework for integrated ecosystem-based planning and management for all of Australia's marine jurisdictions. The policy is currently being implemented, primarily through the development of regional marine plans.</p> <p>Australia, through its National Oceans Office, would like to learn from and offer advice and guidance to CROP and the Pacific island countries and territories in relation to the implementation of the Pacific Islands Regional Oceans Policy. Australia recognises that many of the lessons learnt and challenge faced in the development and implementation of regional marine plans and other elements of Australia's Oceans Policy would be of interest to the Pacific.</p>

	SectionB: Outline of Practices/ Actions	Information exchange (ongoing) - Australia's National Oceans Office (NOO) to host representatives from the South Pacific to share information and experiences and assist in the implementation of the Pacific Islands Regional Oceans Policy; - At the invitation of CROP, NOO to contribute to discussions of the Regional Ocean Strategic Action Plan (SAP) (November /December 2002) and to the Pacific Islands Oceans Forum (mid-2003); - Technical input during the implementation phase of the Pacific Island SAP (2004-07).
	SectionC: Results/ Outcomes	The project is expected to: - increase regional capacity in sustainable, integrated oceans management; - promote regional cooperation and partnerships.
Keys for Success (cause of failure)		
Evaluation		
Applicability		
Reference		Johannesburg Summit Website: http://www.johannesburgsummit.org/html/sustainable_dev/p2_managing_resources/oceans_policyimplementation.pdf
Sectoral Issues		5
Cross- Sectoral Issues		1
Instruments		3.1; 3.3; 3.8; 4.2
Provider of this information	Name	Bernadette O'Neil
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Title		Christie Walk Project
Country		36
Province		
Area		Adelaide, South Australia
Implementation level		1
Duration /Year		December 2000 - completion stage 1 July 2002; completion stage 2 December 2003. Commencement stage 3 January 2004, completion December 2004.
Contact Person /Focal Point for Enquiry	Name	Dr. Paul Francis Downton
	Affiliation	Urban Ecology Australia Inc. Ecopolis Architects Pty Ltd
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount - Stage 1: \$900,000; Stage 2: \$1,600,000 2) Source(s) of funds: Private investment and ethical borrowings from Bendigo Community Bank. 3) Efforts to raise/sustain funds for implementation: Ongoing: sale of properties, personal investments, personal (unsecured) loans, ethical investment borrowings.
Actors involved		4; 5
Description of the Practice	SectionA: Background & Objectives	2000 square-metre. inner-city site with derelict houses and semi-industrial land use. The Christie Walk project in Adelaide's southwest quarter was designed to test and demonstrate the processes, plans and principles contained in the 'ecological city' vision of the non-profit environmental education association Urban Ecology Australia Inc (UEA). It is part of a conceptual strategic framework for mapping the southwest quarter of the city as a future piece of ecocity. A key aspect of this project is its inner-city location. It is situated in the most mixed-use, least wealthy and most culturally diverse part of the City of Adelaide requiring the design to address complex inner-urban contextual demands. That context supplies solutions as well as challenges -transport energy use is minimised by the site's walkable proximity to all major urban facilities and the closeness of public transport.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice Objective was to develop a mixed, medium-density community housing project that maximised lifestyle options and minimised environmental impact for similar cost to conventional inner-urban development, with very low energy bills. The brief demanded energy efficiency, healthy environments and high ecological performance for an urban demonstration project in which user participation and ethical investment funding was vital.</p> <p>2) Outline of the practice The overall design strategy was, regardless of orientation, to use high internal mass within highly insulated skins with multiple user-controlled ventilation options and thermal flues. Solar exposure and control was to be varied according to orientation options and overshadowing impacts of adjacent structures. The final design of dwellings for stages one and two is for a block of four linked three-storey townhouses with full solar orientation, a three storey block of six apartments with east-west orientation, and four standalone two-storey cottages, one of which possesses an attic third storey and is situated on Russell Street.</p> <p>A variety of construction methods are employed in the various buildings including load-bearing autoclaved aerated concrete, poured low-strength concrete (earthcrete), steel framing, and timber-framed strawbale. Non-toxic construction and finishes are used throughout with a policy of avoiding formaldehyde and minimising the use of PVC. All timbers are plantation or recycled. All dwellings have solar hot water, photovoltaic panels are being mounted on pergolas over the apartment block roof garden, sewage is treated on-site (thanks to a 'Coast and Clean Seas' grant) and stormwater is captured for use on site. Landscaping is based on low water use (xeriscape) plantings that favour native and indigenous species with pavings, carports and feature elements constructed from recycled materials including bricks, stone, steel and timber retrieved from demolition of the few pre-existing structures on the site.</p> <p>3) Stakeholders involved, decision making process Clients were represented by a development cooperative, Wirranendi Inc., created by a non-profit group Urban Ecology Australia Inc. The cooperative structure provided a means for people to build in urban environments where single house blocks are rarely available. The clients included first-time homebuyers, investment purchasers, experienced home owners seeking the advantages of an urban lifestyle and older people wanting to retire in an active, mixed community.</p> <p>This has been a community based development heavily reliant upon voluntary effort in its early stages. It was initiated by UEA (run by volunteers) which created a non-profit co-operative developer Wirranendi Inc, and a building company - EcoCity Developments Pty Ltd - to work in association with Wirranendi. The high level of community self-reliance in the project has tested the proposition that innovation and ecological development can be largely sustained by the non-government sector. The project contains many elements of experimentation but a government/industry grant has been necessary to include the provision of on-site sewage treatment system.</p>
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	<p>SectionC: Results/ Outcomes</p>	<p>This was intended to be a medium budget project designed to provide housing for an equivalent purchase cost to conventional local inner-city development. Building costs ended up being reasonably competitive in the medium-high range, but site development costs were inflated by time lags in the early part of the programme that resulted, to a significant extent, from inexperience in development processes on the part of the original cooperative members. A substantial degree of innovation and environmental performance, very high levels of insulation and substantial construction (e.g. avoidance of toxic materials, thick external walls and high internal mass) contributed to high costs that were otherwise ameliorated by the non-profit structure of the developer body. This non-profit structure enabled re-investment in the development in lieu of profit-taking as a means of covering the additional cost of construction associated with building considerably in excess of code requirements and with a full gamut of environmental technologies. The project has been as much a research and educational programme as it has been about urban development and it has carried costs associated with this role. The builder was configured on a conventional company structure and all sub-contractors have provided services in line with conventional contractual and financial practice.</p> <p>Christie Walk is currently perhaps Australia's only example of a fully featured and integrated inner-city environmental housing development and it has been identified as an exemplary urban ESD project by the Lord Mayor of the City of Adelaide, by the government of South Australia and by the Australian federal government.</p> <p>Lessons learned from the community based development process are now being adopted in a joint venture approach between Wirranendi Inc and a private company, EcoCity Pty Ltd, in the third stage of developing the project.</p>
<p>Keys for success (cause of failure)</p>		<p>Participation in the design process was managed on the basis of individual consultation on dwelling layouts within an overall framework set by the architect for the site and approved by semi-formal processes internal to the developer organisation. These processes were formalised as the project developed. An interdisciplinary team was set up to co-ordinate services and engineering with the architectural and urban design demands. This team became less effective as the development time was distended and co-ordination was eventually directly managed by the architect and a new project manager brought in to help complete the project in a timely and cost efficient way. Design workshops for landscaping began prior to construction and have continued sporadically through the development of the entire site, fitting in around the building programme.</p> <p>A number of rarely used environmentally responsible construction approaches were introduced to South Australian inner-urban development through this project and the sewage mining technology is innovative.</p> <p>Lessons learned from the community based development process are now being adopted in a joint venture approach between Wirranendi Inc. and a private company, EcoCity Pty Ltd, in the third stage of developing the project. This is proceeding on a more directly managed and pragmatic basis than the broader community structures of the early project history but maintains the community structures and environmental goals as core to the programme. The role of volunteers was critical to the establishment of the project and maintenance of community and environmental ethics, including issues of gender equity and social inclusion.</p>

Evaluation		<p>The project has been effective in introducing a radical and uncompromising approach to community and environmental issues to inner-city development. That approach has been dependant on a strong community of support and preparedness to share risk.</p> <p>Cost benefits are hard to assess but the project has shifted expectations at a number of levels. As a one-off it is unlikely to be economically efficient but as a prototype is has trailed a number of ideas and processes that are now being refined and applied in new projects.</p> <p>It has addressed all the core issue of sustainability and provided a rare example of this in an inner-urban context.</p> <p>The level of integration of social, economic, environmental and cultural aspects has been very good, although there always remains room for improvement.</p> <p>The level of transparency and accountability has been high, with open, democratic institutions underscoring the entire programme.</p> <p>The strengths of the project have been to do with the powerful sense of community that underpinned its very existence and its capacity to engage many people at many levels, each establishing a stake in the ideas and processes of urban ESD. The weaknesses derive, ironically, from the same source, with decision-making and management made more complicated and time-consuming than could easily be supported within the financial constraints of urban development.</p>
Applicability		<p>The volunteer base could be adopted anywhere as a means of initiating such development and engaging the wider community.</p> <p>A degree of financial capacity is needed that is not always available, but the support of ethical investment and funding bodies (in this case Community Aid Abroad Ethical Investment Trust, then Bendigo Community Bank) should be replicable elsewhere.</p> <p>Good project management is essential and, it was learned, could be matched with community interests. This is replicable and needs further consideration and development for other places and cultural contexts.</p> <p>The process of implementation was simple in principle and complex in practice. That complexity is very much a consequence of principles meeting 'on the ground' political and regulatory conditions. This will vary in other contexts.</p>
Reference		<p>Various case studies, papers and reports, including PhD thesis.</p> <ul style="list-style-type: none"> - 1999 Downton, P.F., 'From Greenhouse to Green Houses' in Greenhouse Living (1) May pp.10-11. - 2000 Downton, P.F., 'A Strawbale in the CBD' in Greenhouse Living (5) Winter (Southern Hemisphere) pp.44-45. - 2001 Downton, P.F., 'Step Into Christie Walk' in Greenhouse Living (10) Spring (Southern Hemisphere) pp.48-49. - 2001 Downton, P.F., 'Step Into an Ecocity' in Greenhouse Living (11) Summer (Southern Hemisphere) pp.30-31. - 2002 Downton, P.F., 'Making Place in an Urban Sense' in Artlink (2) Vol 22 pp.48-51. - 2001 Reardon, C. et al, Medium Density -Christie Walk case study in 'Your Home', Commonwealth of Australia, section 7.3 pp.1-6. See also: http://www.greenhouse.gov.au/yourhome/technical/fs73.htm - 1982 Szokolay, S. Climatic Data and Its Use in Design, RAIA Education Division, Canberra. - Updates on the progress of Christie Walk are posted periodically on the Urban Ecology Australia website: www.urbanecology.org.au Brochures and further information on the project are available from Urban Ecology Australia Inc. (see links).

Sectoral Issues		3
Cross-sectoral Issues		1; 4
Instruments		1.2; 3.1; 3.4; 4.1
Provider of this information	Name	Dr. Paul Francis Downton
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Title		Cleaning up of Singapore River and Kallang Basin
Country		702
Province		
Area		
Implementation level		2
Duration /Year		1977-1986
Contact Person /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount S\$200 million</p> <p>2) Source(s) of funds Government of Singapore</p> <p>3) Efforts to raise/sustain funds for implementation N/A</p>
Actors involved		2; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>Singapore River and Kallang Basin catchments cover about one-fifth of Singapore's total land area. Since the founding of Singapore in 1819, Singapore River had been the life line of trading and business activities. With rapid population growth and urbanisation over the years, the waterways leading to the Singapore River and Kallang Basin degenerated into an open sewer and rubbish dump as all forms of waste were indiscriminately discharged into them.</p> <p>The main sources of water pollution in the rivers were squatter colonies, backyard industries, street hawkers and vegetable wholesalers, and pig and duck farms. There were sewerage facility for these premises and wastewater was discharged directly into the river. There were also people living on board lighters in the river. Wastes from these lighters were dumped into the river.</p> <p>By 1977, the water in the Singapore River was black, foul smelling and devoid of aquatic life. The river was dead.</p>

<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objective of the practice To clean up the rivers such that clean water can flow in our rivers and support aquatic life.</p> <p>2) Outline of the practice The Ministry of the Environment drew up an Action Plan in 1977. The plan included resettlement of more than 16,000 families living in squatter colonies into public housing estates served by public sewerage system and waste storage and removal facilities, and the relocation of 2,800 pollutive backyard trade industries to new industrial workshops in new industrial estates. About 5,000 street hawkers were relocated into food centres premises provided with public sewer and waste disposal facilities. Some 610 pig farms and 500 duck farms were either phased out or relocated to other areas. Pollutive industries and trades were also resisted to other areas with proper pollution control facilities. In addition, extension and provision of sewer facilities were extended to the entire Singapore River and Kallang Basin catchment.</p> <p>After the sources of pollution were removed, work was started to improve the physical appearance of the rivers. The river was dredged to remove tonnes of bentonite deposit at the riverbed. Quay steps and rubble along the river waterfront that had deteriorated were repaired. The riverside walkway along the Singapore River were tiled, turfed and filled with bushes to add colour and greenery to the riverside scene.</p> <p>Physical improvements to the 3km stretch of the beach along the Kallang Basin were also carried out. Facilities such as river walls, piers, shelters and benches were provided to turn the surrounding area into a riverside park.</p> <p>3) Stakeholders involved The project was spearheaded by the Ministry of the Environment. Action Programmes were formulated and submitted to Cabinet for approval. A high-level Working Committee comprising various government ministries and statutory boards was set up to look into the implementation and monitoring of the action programmes. Besides government agencies, the 10-year project of Cleaning up Singapore River and Kallang Basin involved grassroots and civic organisation, business community and NGOs.</p>
<p>SectionC: Results/ Outcomes</p>	<p>Singapore and Kallang Basin were cleaned up by 1987. The foul odour from Singapore River is history. Aquatic life has returned to the rivers. The next task was to manage and control pollution. Because of the high degree of urbanisation, problems such as littering and sullage water discharge still remain. To keep the rivers clean, engineering measures were adapted to minimise pollution of the rivers. Vertical gratings were installed at selected outlet drains leading to main canals and rivers to prevent litter and debris inside the drains from entering the canals and rivers. In addition, float booms were installed at strategic locations in rivers and canals to prevent litter and debris in the rivers and canals from entering the Kallang Basin and Singapore River. The debris trapped by the gratings and booms are removed for disposal daily. Programmes were also carried out to educate the public against littering and the discharge of wastes in to the rivers.</p> <p>Another key factor in water pollution control is the effective enforcement of legislation. Regular inspections are conducted to ensure that all wastewater is discharged into the sewerage system and trade effluent treatment facilities installed by industries are properly and efficiently operated and maintained.</p>

Keys for success (cause of failure)	<p>The success of the project can be attributed to the following factors:</p> <ul style="list-style-type: none"> i) introduction of an environmental management strategy - i.e. prevention, enforcement, monitoring and education ii) implementation of land use planning - i.e. ensure that developments are properly sited and are compatible with surrounding land uses to achieve a quality environment iii) putting in place comprehensive environmental infrastructure, such as the sewerage system and refuse collection system iv) putting in place legislative instrument and enforcement measures as well as monitoring programmes v) cultivating an environmentally conscious population through environmental education vi) cooperation amongst the various government agencies implementing the various programmes e.g. provision of public housing and industrial workshops, relocation of farms, etc. vii) ownership of Singapore River and Kallang Basin by the 3P (People, Private and Public) sectors. <p>Above all, the critical factor for the success of cleaning up of Singapore River and Kallang Basin is the political will of the government.</p>
Evaluation	<p>After 10 years of cleanup, the project was finally completed in 1987. A cleaner environment, cleaner water and the return of aquatic life are what we have achieved after the cleanup.</p> <p>The clean rivers have now been harnessed for recreational uses, and the land along the rivers has been developed for commercial and residential uses. Several areas along the rivers have become interesting recreational areas for both tourists and locals.</p> <p>With careful land use planning, land for various uses is safeguarded to achieve social and economic development and to maintain a quality environment. Environmental controls have been factored into the land use planning to help ensure that developments are properly sited and are compatible with surrounding land uses.</p> <p>To ensure sustainability of clean water in the rivers, Singapore continues to plan, coordinate and implement programmes to prevent pollution from entering into the rivers. In addition, Singapore launched the Singapore Green Plan 2012 (SGP 2012) in 2002 to set down clear targets to enable Singapore to strive for environmental sustainability.</p>
Applicability	<p>The project can be used as a model for the rapidly developing and urbanised cities. It contains many case studies ranging from social, economic and environmental issues that these cities can adopt or modify to suit their needs.</p> <p>The project was a complex and massive one that planned 10 years.</p>
Reference	Clean Rivers - produced jointly by the Ministry of the Environment and the Ministry of Education
Sectoral Issues	1; 2
Cross-sectoral Issues	1
Instruments	1.1; 1.2; 1.3; 3.1; 3.2; 4.2

Provider of this information	Name	Prof. Simon Tay
	Organisation	
	Job Title	
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	Tel	
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	E-mail	

Title		Coastal Greenbelt Project
Country		50
Province		
Area		Southern and southeastern coastal region
Implementation level		2
Duration /Year		July 1995 - December 2002
Contact Person /Focal Point for Enquiry	Name	Mr. Iklii Mondal, Project Director
	Affiliation	Forest Department, Ministry of Environment and Forests
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount: US\$29.3 million 2) Source(s) of funds: Asian Development Bank (\$23.4 million) and the Government of Bangladesh (\$5.9 million)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	A proposal to establish an extensive greenbelt in the southern and south-eastern coastal region of Bangladesh has evolved since 1980s and took shape after the devastating cyclone in April 1991. A dense coverage of palms and trees against tides and cyclonic wind have long been recognised in the region.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice To protect and improve the coastal environment by increasing the vegetative cover, and to help reduce local poverty by creating supplementary income opportunities.</p> <p>2) Outline of the practice</p> <ul style="list-style-type: none"> - Establishment of strip plantations along 6,020 km of river-facing embankments, roads, and railroads - Establishment of 500 ha of trial foreshore plantations spread over 50 locations - Distribution of up to 10 million high quality palm and tree seedlings to about 500,000 households - Distribution of about 20 million seedlings to institutions - Establishment of new or upgrade nurseries in about 150 locations - Research on (i) preparation of planting models, (ii) layout and design for planting on mounds and dikes in the foreshore areas, and (iii) species trials for foreshore and embankment planting - Training for 1,420 staffs of the Forest Department, 3,000 other Government and NGO staffs, and 18,000 community leaders and villagers - Public awareness campaign, including production of multi-media campaign materials <p>3) Stakeholders involved, decision making process Forest Department within the Ministry of Environment and Forests, local communities, and NGOs.</p>
	SectionC: Results/ Outcomes	In total, 8,934 km of strip plantations and 665ha of foreshore plantations have been established. 3,132 km maintenance of embankment plantation raised by the Forest Department with active participation of beneficiary groups. Other targets were also mostly achieved. Participatory benefit sharing agreements have been signed by concerned parties of 96% of communities involved in the project. Maintenance of the plantings is a remaining issue.
Keys for success (cause of failure)		Strong commitment of the implementing agency and participation of beneficiary communities.
Evaluation		Evaluation is yet to be done. A completion review is scheduled in 2004.
Applicability		The project is rather country-specific.
Reference		N/A
Sectoral Issues		5
Cross-sectoral Issues		4
Instruments		3.1; 3.2; 3.3; 3.4
Provider of this information	Name	Takashi Matsuo
	Organisation	
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Title		Coastal Resource Management Project
Country		144
Province		
Area		East and south coast
Implementation level		2
Duration /Year		June 2000 - December 2005
Contact Person /Focal Point for Enquiry	Name	Mr. G. Piyasena, Acting Project Director
	Affiliation	
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Sponsor(s)		1) Amount: US\$80 million 2) Source(s) of funds: Asian Development Bank (\$40.0 million), Government of the Netherlands (\$12.8 million), and the Government of Sri Lanka (\$27.2 million)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	- Serious erosion of the coastal line, especially in areas with concentrated economic activity or vital infrastructure - Unmanaged fishing in coastal and offshore areas - Pollution and uncontrolled exploitation of lagoons and estuaries, coral reefs, mangrove swamps, sea grass beds, other wetlands, and dune systems - Widespread poverty among the coastal population

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice To establish integrated management of coastal resources to improve their sustainability.</p> <p>2) Outline of the practice - Coastline stabilisation in seven stretches with total length of 210 km, which will address the problem of coastal erosion and develop proactive/preventive management schemes, - Coastal environment and resource management, which will address problems of coastal resource degradation and include activities intended to reduce pollution in lagoons and relieve pressure on coastal resources, and - Fisheries resource management and quality improvement, including construction of two fishery harbours and rehabilitation of two anchorages, which will aim at sustainable coastal fisheries management supported by the construction of harbours, anchorages and ancillary facilities that will allow the improvement of fish quality and the reduction of handling losses.</p> <p>3) Stakeholders involved, decision making process Institutional capacities of the Ministry of Fisheries and Ocean Resources, other concerned agencies, and community organisations are strengthened in coastal and fisheries resource management.</p>
	SectionC: Results/ Outcomes	Physical activities has just started in 2003.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		5
Cross-sectoral Issues		1; 4
Instruments		3.3; 3.8; 4.1
Provider of this information	Name	Takashi Matsuo
	Organisation	
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	E-mail	

Title		Coastcare
Country		36
Province		
Area		Nationwide
Implementation level		1; 2
Duration /Year		Began informally during the 1980s under various different names including 'Dunecare.' Government support was formalised in 1996/97 when Coastcare was included as a funding program under the Natural Heritage Trust.
Contact Person /Focal Point for Enquiry	Name	Mr. Brian Scarsbrick, Chief Executive Officer
	Affiliation	Landcare Australia Ltd
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Contact Person (2) /Focal Point for Enquiry	Name	
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Contact Information	Address	
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Sponsor(s)		<p>The Federal government has invested millions of dollars in Coastcare since 1996 under the Natural Heritage Trust. In the 2001 Federal Budget, the Government announced an additional \$AUS 1 billion for the Natural Heritage Trust (of which Coastcare is a part), extending the funding for five more years. Landcare Australia has raised more than \$AUS 2.4 million dollars for Coastcare since 1995 from corporate sponsors and the media. Coastcare on-ground actions funded. The main Coastcare program priority is on-ground remedial action. This priority is indicated in the Coastcare funding patterns shown below.</p> <ul style="list-style-type: none"> - On-ground works were the main activity for 59% of projects. Many projects encompassed a range of activities, for example, where on-ground work to control access was frequently complemented by community education signage. - Education or training was the main activity for 16% of projects, targeting specific groups who use the coast to protect specific sites or to change their behaviour (see Coastcare Case Study 2). - Planning and monitoring each accounted for 11% of projects. - Project support accounted for 3%.
Actors involved		2; 3; 4; 5

Description of the Practice	SectionA: Background & Objectives	<p>Background to Coastcare</p> <p>A mere two centuries of European occupation in Australia has seen major losses of soil productivity and biodiversity, including the extinction of many species; the development of several massive regional salinity problems; the decline of remnants of indigenous vegetation; the emergence of innumerable weed and pest animal infestations; and greatly reduced water quality through soil erosion and nutrient addition.</p> <p>These problems are not limited to farming areas. Australia's coasts, estuaries and marine areas have also suffered from major problems including the deteriorating water quality of coasts and estuaries, loss of biodiversity, how to conserve unique coastal habitat including wetlands and estuaries which are vital for fish breeding. The coastal environment is important to the culture and lifestyle of both Australians and visitors. Current projections are for increased populations along our coasts that will place greater pressure on them and on coastal resources.</p> <p>During the 1970s and 80s community groups formed in an ad hoc manner to care for coastal areas. In NSW these groups became known as 'Dunecare', though there were many groups under other names around the country doing the same kind of work.</p> <p>From around 1995 the Federal Government decided to include Coastcare under its Natural Heritage Trust as a funding programme to build on the strengths of both existing community efforts to repair and protect coastal areas, and the successful landcare model operating in farming areas. A key difference between landcare and Coastcare is that landcare work happens mainly on private property, while Coastcare work usually takes place on public property.</p> <p>The Coasts and Clean Seas Initiative</p> <p>Coastcare is a program under Coasts and Clean Seas, a Natural Heritage Trust initiative that addresses major coastal and marine management problems identified in the Resource Assessment Commission Coastal Zone Inquiry Final Report (1993) and the State of the Marine Environment Report (1995). It is firmly grounded in ecologically sustainable development principles and as such contributes to Australia's international commitments under the Commission for Sustainable Development. Coasts and Clean Seas provides a powerful suite of programme tools with which to meet the challenge of repairing and protecting our coasts.</p> <p>Objectives of Coastcare</p> <p>The formal objectives of the Coastcare programme are:</p> <ul style="list-style-type: none"> - To engender in local communities, including local industries, a sense of stewardship for coastal and marine areas; - To provide opportunities and resources for residents, volunteers, business and interest groups to participate in coastal management; - To support community identification of natural and cultural heritage resources; - To facilitate interaction between the community and bodies with responsibility for managing coastal areas.
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	<p>SectionB: Outline of Practices/ Actions</p>	<p>Practices of Coastcare</p> <p>Coastcare's actions and activities include:</p> <ul style="list-style-type: none"> - The formation of local, voluntary community groups for community members to restore degraded coastal and marine areas and help manage them sustainably for the future. - Resourcing these groups through government Coastcare funding, provision of trained local and regional coordinators, and corporate funding raised by Landcare Australia. - Providing funding for activities including: protecting or rehabilitating dunes, estuaries and wetlands; rehabilitating coastal and marine habitats; removing threats to coastal environments; monitoring beach conditions, and coastal flora and fauna; helping to develop and implement local management plans; education and training activities that raise community awareness, knowledge or skills on coastal and marine conservation issues. <p>Coastcare funding has supported a wide range of community projects such as: dune revegetation; beach access and boardwalk construction; weed control; reef and marine species monitoring; coastal habitat protection and community education. Coastcare has also funded a national network of Coastcare Facilitators and Coordinators to help the community become involved in Coastcare; national community awareness, promotion and sponsorship of Coastcare; and remote or difficult Coastcare projects. Since the inception of Coastcare in 1995, over 2,000 projects have been funded around Australia.</p> <p>Objectives of Landcare Australia in relation to Coastcare Landcare Australia aims to assist Coastcare by:</p> <ul style="list-style-type: none"> - raising corporate sponsorship for the Coastcare movement; and - raising community awareness of Coastcare. <p>Landcare Australia's practices</p> <p>With such a broad target audience, Landcare Australia has to use imaginative ways to get its message across. The mainstream print and electronic media continue to be vital, but the company also used the Coastcare logo and messages on breakfast cereals, mineral water bottles and of course the web to get its message across. Landcare Australia has built partnerships with the corporate sector, with media personalities/celebrities and with governments, bringing them all together with the community Coastcare movement.</p> <p>Involvement of stakeholders Coastcare aims to form partnerships where possible between stakeholders at all levels. It provides a practical way that volunteers, land managers, councils, governments and others can work together on projects to repair and protect coastal areas.</p>
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	<p>SectionC: Results/ Outcomes</p>	<p>Improvements/changes from the landcare movement</p> <ul style="list-style-type: none"> - There are approximately 2,000 Coastcare groups around Australia, involving around 60,000 volunteers. - At a local level Coastcare is bringing people together to find solutions to local problems. - Coastcare coordinators and facilitators have reported that strong relationships are developing between communities, local councils and state agencies. - Coastal vegetation is being regenerated, coastal access is being improved and controlled, weeds and feral pests eradicated, important marine species such as sea dragons are being monitored and community awareness of coastal values and issues is being raised. - Indigenous communities are involved in 12% of all projects. - Effort is being made to involve ethnic communities. A particularly successful project in Victoria, involving Fisheries Victoria and the Vietnamese community, has led to a major change in fishing practice by that community, with infringements of shellfish and fishing regulations dropping by over 80%. - Protocols are being developed for community and local government participation in monitoring of estuarine areas and indicators for State of the Environment reporting. - Program wide data on Coastcare projects demonstrates a focus on on-ground actions, high involvement of community groups and high levels of interaction with local management agencies. - NHT funding of Coastcare through the Coasts and Clean Seas program has had a catalytic effect on investment. For example, \$4.8 million approved funding for Coastcare projects in 97/98 and 98/99 generated projects with a total value of \$28.4 million. - Coastcare project outcomes have increased community awareness about the need to manage coastal and marine environments. <p>Improvements/changes from Landcare Australia</p> <p>Since 1989, Landcare Australia's efforts have resulted in:</p> <ul style="list-style-type: none"> - Over \$2.4 million being raised since 1995 for landcare from corporate and media partners, comprising cash, in-kind support and the equivalent advertising value of media coverage. - Public awareness of Coastcare is now at 48% (number of people surveyed who had heard of it before). <p>Problems that remain to be solved for Coastcare</p> <ul style="list-style-type: none"> - The future administration and funding of Coastcare is somewhat unclear at the present. - Sustainability and longer term maintenance of Coastcare works have been seen as an issue for future consideration. - In some circumstances, facilitators and project proponents have reported barriers to working with local management agencies, where community groups had difficulties engaging with local government in community driven projects, and sometimes found agencies inflexible. - Another barrier occurred where one agency supported the project while other agencies were fast tracking damaging coastal developments, resulting in cynicism in community groups. - State/Territory managers in Western Australia and the Northern Territory considered the CCS guidelines too complex and the language inappropriate for people in remote communities. - Some Coastcare Facilitators have been concerned about low numbers of marine and estuarine projects. An estimated 10-20% of projects nationally were in the marine or estuarine area, with variations between regions. Development of marine focused projects was often difficult due to limited expertise in community groups, the time required to train volunteers, and in some cases pressure from scientists to leave work such as monitoring to the 'experts.'
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	<ul style="list-style-type: none"> - Delays in payment of Coastcare funds were a significant problem for projects undertaking tasks dependent upon the season, and could lead to delays until the following year. This was the case both with the wet season in northern Australia and planting times in other locations, especially for revegetation work where plants have to be ordered and grown in advance, or are only able to be planted in the right season. - Facilitators have reported that the issues of concern for community groups were not always the most pressing environmental problems. Experienced facilitators address this mismatch by negotiating priorities with groups and increasing community awareness of environmental issues. - The interest and enthusiasm of Coastcare volunteers is essential to the success of projects. Facilitators commonly believed that community projects are implemented effectively when the group has a clearly identified leader(s) and the group members maintain good relations with each other. Where these factors are not present the group is more likely to experience problems and diminishing energy levels. - In some circumstances, reliance on volunteers can also be a barrier to project implementation, especially when community groups lose membership or volunteers are unable to continue working on projects. A widespread view held by State/Territory managers and facilitators was that fewer volunteers are willing to be involved in projects due to 'burn-out' and 'application fatigue.' - Facilitators suggested that this problem could be overcome with more Coastcare events and feedback to project proponents and increased training and professional development opportunities available to community groups and community leaders. - Another barrier to continuing volunteer participation is financial demands, such as paying for petrol and telephone usage. Coastcare volunteers are often seniors with limited income who cannot afford these contributions. Some facilitators suggested providing small amounts of funding to help cover these costs.
<p>Keys for success (cause of failure)</p>	<p>Coastcare has achieved positive outcomes because:</p> <ul style="list-style-type: none"> - The Coastal and Marine Planning Program stimulates partnerships across governments, industry and the community to promote sustainable agriculture and natural resources management outcomes through quality integrated planning processes. CCS programs are consistent with agreed national strategies. In particular, the MOU endorse the principles of Ecologically Sustainable Development and ensure that all CCS projects are consistent with Commonwealth and State/NT Coastal Policies. - Coastcare promotes community participation in coastal management activities that contribute to environmental protection, biodiversity conservation and sustainable natural resources management. - Responsibility for coastal zone management is shared between the three spheres of government. Successful coastal zone management also requires a strong commitment from local communities. Consequently Coasts and Clean Seas (the program under which Coastcare is delivered) places a strong emphasis on partnerships. The initiative has been delivered cooperatively by the Commonwealth, States/Northern Territory and Local Government and key stakeholders are strongly encouraged to form consortia to develop and implement projects. - The Coasts and Clean Seas Memoranda of Understanding (MOU) have provided an effective framework for cooperation between the three spheres of government. The inclusion of Local Government as a partner in the MOU has been a significant strength. - At the program level, Coastcare projects are jointly funded by the Commonwealth and States/Northern Territory, with the Commonwealth providing funding for Coastcare facilitators, hosted by State and Local Government who contribute to their running costs. Commonwealth funding is acting as a catalyst to bring the key stakeholders together to participate in this process on an equal footing to develop a shared vision for their region and agreed actions to achieve this vision. - Coastcare facilitators have played a key role in the success of the program. These positions were given multiple year funding which added certainty to these positions and increased the capacity to attract and retain experienced officers.

		<ul style="list-style-type: none"> - The success of many Coastcare projects depends on facilitators drawing together a diverse range of affected stakeholders and agencies to develop and implement projects <p>Landcare Australia has achieved sponsorship outcomes for Coastcare because:</p> <ul style="list-style-type: none"> - It has carefully identified its role and focused its efforts strategically on raising awareness and raising funds. - It has specialised in building partnerships between Coastcare and the corporate sector. - It ensures that corporate supporters are treated as partners, not as philanthropists. All partnership projects must deliver specific benefits to corporate sponsors as well as benefits to Coastcare. - It has been able to recruit well known celebrities to support the Coastcare cause - for example tennis player Pat Rafter.
Evaluation		<p>Coastcare has been evaluated comprehensively as part of the evaluation of the Coasts and Clean Seas programme between 1997 and 1999 (Mid Term Evaluation) and the material in this form has been taken from that report. The final review is not yet complete.</p> <p>The purpose of that evaluation was to provide, at a mid-point in the implementation of Coasts and Clean Seas, information on its achievements to date, and to identify areas for improvement and possible future directions. The aim of the evaluation was to assess the effectiveness, efficiency and appropriateness of Coasts and Clean Seas.</p> <p>Because of this focus on programme improvement, the evaluation was conducted through a consultative approach. The majority of the report's recommendations related to refinements in programme delivery. Members of the Intergovernmental Coastal Reference Group (ICRG) were consulted throughout the evaluation and they reviewed and provided input into the final report.</p> <p>The main methods of data collection were:</p> <ul style="list-style-type: none"> - surveys of key informants including interviews with key stakeholders (from the Commonwealth, State/Territory, Local Government and external agencies), - a mail survey of 1997-98 project proponents, - data on approved projects for 1997-98 and 1998-99, - case studies of projects, and programme documentation. <p>The evaluation found that the CCS programmes were funding projects that were aligned with the objectives, intended outcomes and strategies of each element. This conclusion was clearest for Coastcare, which had been established longer than the other programmes. Programme-wide data on Coastcare projects demonstrated the focus on on-ground action, high involvement of community groups and high levels of interaction with local management agencies.</p> <p>The complete evaluation report can be found on the Natural Heritage Trust website at:http://www.nht.gov.au/review/mtrfinrpt/pubs/coasts.pdf.</p>
Applicability		<p>Coastcare is a relatively simple concept, based on involving voluntary community groups in coastal and marine rehabilitation, supported by government funding, technical advice, professional coordinators/facilitators and partnerships between agencies, businesses and communities involved with coastal areas. The term Coastcare refers primarily to a Commonwealth Government funding program rather than specifically to a community movement. These principles should be applicable elsewhere, in the same ways landcare has proved to apply in other countries. As yet there are no examples that this author is aware of.</p>
Reference		<p>http://www.nht.gov.au/nht1/programs/coastcare/ (official government Coastcare website. www.landcareaustralia.com.au) (Landcare Australia's website) http://www.nht.gov.au/review/index.html the web site containing the mid term review of the Natural Heritage Trust.</p>

Sectoral Issues		5
Cross-sectoral Issues		1; 4
Instruments		3.1; 3.2; 3.3; 3.4
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Title		Commercialisation of Renewable Energy Technology - A Unique Institution to Finance New and Renewable Energy in India
Country		356
Province		
Area		
Implementation level		2
Duration /Year		1987-
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount: By March 2003, Rs . 53,000 million loan committed for 1550 projects; Rs. 27,000 million loan disbursed
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>There is a global recognition that fossil fuel reserves are limited. The impacts of consumption of fossil fuel are visible to the environmental, in particular global warming. Energy input from renewable energy sources and the exploitation of these resources are important factors to consider to ensure a high level of security and a proper energy mix towards the sustainable development. While the need for large-scale adoption of renewable energy is recognised, there are several obstacles which impede their wider adoption at this stage. They include:</p> <ul style="list-style-type: none"> - Limited access to financial resources and the high initial cost of the technologies; - Uncertainty regarding the efficiency and durability of technologies; - Difficulty in commercialising renewable energy technology on account of subsidies (open and hidden, direct and indirect) given to fossil fuel technologies; - Absence of appropriate policies and institutions (government and non-government) to foster and nurture renewable energy use.

	<p>India has attached great attention to address the obstacles above. One of its solutions was to establish Indian Renewable Energy Development Agency Limited (IREDA) in March 1987. India now is one of leading countries in the world in terms of the installed capacity from renewable energy sources. This is largely come from IREDA's operation during the last 15 years. The renewable energy sector has contributed about 3.5% of the total installed power generating capacity in India.</p> <p>As a Public Sector Enterprise, under the administrative control of Ministry of Non-conventional Energy Sources (MNES), IREDA has been adhering the mission to ensure 'Energy for All' by designing and implementing suitable financing arrangements for new and renewable energy (NRSE) development. Over the years, it has become a premier financial institution in the area of NRSE in India with more than 1,600 projects sanctioned. The main objectives of IREDA are:</p> <ul style="list-style-type: none"> - To operate a revolving fund for promoting and developing new and renewable sources of energy; - To assist in the rapid commercialisation of NRSE technologies, systems and devises; - To assist in upgrading of technologies in the country; - To extend financial support to energy efficiency and conservation projects and schemes. <p>The Mission of IREDA is to be a pioneering, participant friendly and competitive institution for financing and promoting self-sustaining investment in energy generation from renewable energy sources and energy efficiency for sustainable development.</p>
SectionB: Outline of Practices/ Actions	<p>IREDA is a unique financial institution devoted entirely to the development and promotion of NRSE in India. It addressed the key issues and mobilised financial resources for NRSE by providing financial assistance through loans, by attracting international assistance and private sector participation, and by promoting renewable energy among all stakeholders. Also, rural energy is addressed by IREDA through the focus on decentralised stand-alone applications in its lending schemes. A major role of IREDA is to provide renewable energy users, manufacturers and producers with credit that initially features concessional terms but progressively approaches commercial market rates as the technology gains wider acceptance. By financing new ventures in renewable energy, IREDA helps create performance track records for NRSE technologies, facilitating their transition from novelty to mainstream status.</p> <p>In order to meet the demand and requirement, IREDA has reviewed its financing policies regularly so as to maintain its competitiveness in the market. It has strengthened the networking arrangements with Business Associates for identifying entrepreneurs and generating more business. This makes IREDA a profitable institution while providing special concessions in the lending norms to NRSE projects.</p> <p>During the period of IREDA grown-up, all the stakeholders played a key role. The government set the ball rolling by having the policy framework for rapid commercialisation of renewable energy technology in place. There is an arrangement, usually a Memorandum of Understanding (MoU) between MNES and IREDA based on the annual audited figures for evaluation of IREDA's performance.</p> <p>IREDA operates a financial model based on cost recovery principles to ease the removal of such barriers. IREDA encourages entrepreneurship development through its entrepreneur development programmes and also gives due importance for women entrepreneurs. Dedicated to the mainstreaming gender issues, IREDA has taken a number of initiatives for empowering women development through renewable energy programmes. IREDA also gives due importance for women entrepreneurs. In order to encourage greater participation of women entrepreneurs, special concessions in the lending norms are provided.</p>

	<p>IREDA has also made special efforts by providing concessional lending to assist the promotion of NRSE in rural and remote areas where grid power supply is not accessible.</p> <p>IREDA supports a number of NGOs and cooperatives set up in rural areas to take up various promotional activities on behalf of IREDA. IREDA also builds up technical manpower to strengthen the existing infrastructure as in the case of solar power where a number of training courses are conducted for the technicians and market developers in the rural areas. Private sector investment was sought in a big way while IREDA encouraging manufacturers and private entrepreneurs to set up energy stores in different parts of the country to facilitate a wide market network for renewable energy products, for spares and services, in both the rural and urban areas.</p>
<p>SectionC: Results/ Outcomes</p>	<p>Commercially viable technologies in solar, biomass, hydropower, wind energy and cogeneration are already making rapid progress in the country. Besides international assistance, enhanced budgetary support and wide-ranging incentives offered to private sector energy entrepreneurs have created the incentives to accelerate the development of NRSE.</p> <p>IREDA has approved 1,610 projects as on 31 March 2003. The committed capacity is 2113.88 MW in total and expected replacement of conventional energy at 1,054 million MTCR /yr.</p> <p>The financial achievements in terms of loan commitment and disbursement were Rs 6,528 crore and Rs 3,365.25 crore respectively.</p> <p>The achievements of IREDA in the renewable energy sector and its past tract record have attracted many international investors. Renowned multilateral and bilateral agencies have come forward to join hands with IREDA in the renewable energy movement for sustainable development. International resources mobilised are given below:</p> <ul style="list-style-type: none"> - Asian Development Bank: 100 million US\$ - Danida: 15 million US\$ - GEF grant: 5 million US\$ - Government of the Netherlands: 18 million Dutch guilders - Kfw Germany: 120 million DM - World Bank: 130 million US\$ - World Bank/GEF/SDC: 145 million US\$ <p>The domestic resources raised is Rs. 2,562.65 crore as on 31 March 2003.</p>
<p>Keys for success (cause of failure)</p>	<p>One of keys for success for IREDA is the collaboration among the different stakeholders with sufficient support from the Government. Its journey started with a commitment from the government to meet the financial needs of the new growing sector. During the last 15 years, government, private sector and NGOs as well as international communities are actively involved in mobilisation of resources to meet the growing demand for renewable energy sector.</p> <p>As a part of the business strategy to reach out to remote areas and promote micro lending operations, IREDA has been networking with Business Development Associates (BDAs) and Financial Intermediaries (FIs). A total of 51 BDAs have been registered by the end of December 2002, which comprise 16 technical consultancy organisation; 12 state nodal agencies, 2 local productivity councils; 16 private enterprises and 5 NGOs. It is estimated that for the commercial segment every single Rupee invested by the Government would have leveraged an investment of eight times by the private sector.</p>

Evaluation		<p>The experience gained by IREDA during the last decade by financing projects for new and renewable sources of energy now enables itself to march ahead and finance more projects, e.g. energy efficiency projects as well. IREDA has been earning profit since inception.</p> <p>However, how to maintain and manage its unique mechanism by providing concessional funding to the NRSE projects and minimise the risks is very important to the future development of IREDA. Meanwhile, the human resources development for IREDA to improve the skills of staff should be placed on the top priorities.</p>
Applicability		<p>With sufficient political support, the IREDA programme could be implemented in other countries to enhance the application of renewable energy resources and technologies.</p> <p>However, it may be noted that no single solution or institutional model becomes a universal solution for accelerated commercialisation of renewable energy technologies. Models have to be devised based on the needs and local conditions. Therefore, a multiple approach based on the social, political, economic and cultural situation in the country where the programme is being implemented is necessary.</p>
Reference		Brochures/information provided by IREDA.
Sectoral Issues		2
Cross-sectoral Issues		2
Instruments		3.3; 3.8; 4.1
Provider of this information	Name	Hongpeng LIU
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Community Landcare Movement
Country		36
Province		
Area		
Implementation level		1; 2
Duration /Year		1989 - ongoing
Contact Person /Focal Point for Enquiry	Name	Brian Scarsbrick, Chief Executive Officer
	Affiliation	Landcare Australia
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: More than \$100 million since 1989 2) Sources: Australian federal government (Natural Heritage Trust), corporate sponsors and media
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>A mere two centuries of European occupation in Australia has seen major losses of soil productivity and biodiversity, including the extinction of many species; the development of massive regional salinity problems; the decline of remnants of indigenous vegetation; the emergence of innumerable weed and pest animal infestations; and greatly reduced water quality through soil erosion and nutrient addition.</p> <p>From 1940 to 1985, when Australian farmers and rural scientists and administrators thought or talked of incentives, they largely had in mind financial support for soil conservation, or sometimes tree growing, on a paddock- or farm-scale, provided to individuals. These financial schemes, well run but labour-intensive, were backed by free extension advice, mainly from State government staff. However, despite the commitment of finance, time and considerable human resources and energy, these programmes generated little real community support.</p> <p>The evolution of the multi-disciplinary landcare movement across Australia over the 1990s changed this, involving scores of thousands of people aggregated into local and regional groups, who brought in fresh ideas on how to better manage rural land through government and community efforts and incentives.</p>

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice Community landcare began informally during the 1980s. Government support formalised in 1989, with the 1990s being declared the Decade of Landcare, and Landcare Australia was formed by the Federal Government in 1989.</p> <p>The objective of the Decade of Landcare was to halt the degradation of Australia's natural resources. It planned to do this by forming 2,000 community landcare groups by the year 2000. Through these groups, farmers would adopt sustainable farming techniques and repair land degradation. Landcare Australia is aimed to develop the landcare ethic among all Australians. Its core objectives are to:</p> <ul style="list-style-type: none"> - raise corporate sponsorship for the landcare movements, and - raise community awareness of the landcare ethic. <p>2) Outline of the practice Landcare's activities are many and diverse. They include:</p> <ul style="list-style-type: none"> - The formation of local, autonomous, voluntary community groups for farmers and land managers to restore degraded resources and increase sustainability. - Resourcing these groups through government funding programmes, provisions of trained local and regional coordinators, and corporate funding raised by Landcare Australia. - Involving as many landowners as possible, creating an environment of trust, emphasising local planning and decision making, promoting ready sharing of information between scientists and land managers. - Members focusing on areas wider than their own properties: at local, catchment and regional scales. - Groups working on large-scale regional projects. - Having an inclusive philosophy. <p>3) Partners involved National Farmers Federation (NFF) and individual farmers, land managers, State peak bodies, community-based landcare associations and networks, Australian Landcare Council (a committee that feeds advice and recommendations to the Ministers involved with landcare), Australian Conservation Foundation, Secretariat for International Landcare, and National Landcare Facilitators among others.</p>
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	<p>SectionC: Results/ Outcomes</p>	<p>Improvements/changes from Landcare Australia and the landcare movement:</p> <ul style="list-style-type: none"> - Three independent surveys now confirm that 40% of practicing farmers are members of a landcare group. - Public awareness of landcare was improved at 85% thanks to corporate and media partners. - Landcare became popular among consumers through marketing campaigns; 67% would change to a brand which donated a percentage of its proceeds to landcare projects. - Thousands of ordinary urban Australians actually participated in landcare projects particularly the Angry Anderson Challenge (10,000 volunteers) and Olympic Landcare (40,000 volunteers). - Landcare has become the primary delivery mechanism for government funding for natural resource management on a local level. - The landcare ethic has been developed in its successful 'sister' movements including Coastcare, Dunecare, Bushcare, Rivercare, etc., which often focus on works on public land rather than private land. <p>Problem that remain to be solved:</p> <ul style="list-style-type: none"> - How to keep landcare in the public awareness in the long term, in the face of a myriad of competing issues. - How to sustain the interest and support of urban communities with issues that are not always 'warm and fuzzy.' - How to develop a viable 'carbon sinks' program that opens up opportunities for corporations to fund large-scale vegetation projects in return for credits against their greenhouse gas emissions.
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - The Australian landcare movement is a groundbreaking example of a participatory sustainable development effort that involves stakeholders, from the local to the national level, to improve natural resource management. <p>Solutions are developed with full involvement of those expected to implement them; conservation and production aspects are considered together:</p> <ul style="list-style-type: none"> All relevant stakeholders have a seat at the table and an equal opportunity to contribute; Local communities have a fair degree of ownership of both problems and solutions; Constructive partnerships/balance are fostered between: scientists and non-scientists; government and non-government; 'top down' and 'bottom-up' approaches; urban and rural; and young people and adults; Problems are examined and solutions developed at a scale relevant to the issue at hand; Costs of any sustainability investment are equitably shared among the beneficiaries of that investment.

Evaluation		<p>Both Landcare Australia and the landcare movement are evaluated comprehensively and in an ongoing manner. It is not possible to draw out the details of evaluations due to the number and complexity of them, thus the evaluation of Landcare Australia will be discussed below.</p> <p>Landcare Australia sets strategic goals every 3 years with input from various stakeholders and measures its successes against these goals. Its efficiency and effectiveness was formally evaluated by a consultant appointed by Agriculture, Fisheries and Forestry Australia (AFFA) several years ago to assist the department in its resource allocation decisions. Landcare Australia evaluates its specific projects (i.e. Olympic Landcare, the publication of the national magazine Australian Landcare Journal) against specific evaluation criteria set at the beginning of the project (i.e. aiming for certain numbers of participants or certain levels of media coverage or certain funds raised). The company evaluates public awareness of landcare every year through surveys with the Roy Morgan Research Centre.</p>
Applicability		The Landcare movement has become a model for similar programmes in other countries, including New Zealand, South Africa, the United States, Iceland and Canada. The Secretariat for International Landcare works with interested countries and governments to provide training and study tours to assist other countries in drawing upon landcare's experiences to develop suitable programmes for themselves.
Reference		Johannesburg Summit 2002 Business Action for Sustainable Development http://basd.free.fr/initiatives/viewproject.php.436.html
Sectoral Issues		3
Cross-sectoral Issues		1; 2; 4; 5
Instruments		2.3; 3.1; 3.2; 3.3; 3.4; 3.5; 3.6; 3.7, 3.8; 4.2
Provider of this information	Name	Brian Scarsbrick
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Title		Community-Based Water Supply and Sanitation Project
Country		524
Province		
Area		21 Districts in Midwestern and Far Western Development Regions
Implementation level		2
Duration /Year		January 2004 to 31 December 2009
Contact Person /Focal Point for Enquiry	Name	Mr. Shree Ram Shrestha, Director General DWSS
	Affiliation	Department of Water Supply and Sewerage, Ministry of Physical Planning and Works
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	Fax	+977-1-441-9802
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		<p>1) Amount: US\$ 35.7 million</p> <p>2) Source(s) of funds: Asian Development Bank (US\$24.0 million); Government of Nepal (US\$7.7 million); local authorities (US\$ 0.4 million); beneficiaries (US\$ 10 million)</p> <p>3) Efforts to raise/sustain funds for implementation (if any): bilateral donors have expressed interest in supporting the sector wide approach to rural water supply and sanitation. Committed funds will then be channelled through a sector account directly to the local authorities and beneficiaries.</p>
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Historically underserved communities whose access to rural water supply and sanitation is limited due to gender, caste or ethnicity. Country's harsh terrain makes access to water supply difficult for many segments of the population. Lack of water impacts on the lowest income groups, especially women and children who spend as much as 4-5 hours a day fetching water from distant water sources. These groups suffer significantly from waterborne diseases due to the use of water unfit for human consumption and from high cost of health care due to illness.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice To expand the coverage of improved water supply and sanitation facilities to underserved populations, especially to poor and remote areas, and to improve health and hygiene practices related to waterborne and sanitation diseases.</p> <p>2) Outline of the practice The Project will (i) strengthen participating communities' capacity and capability to plan, cofinance, implement, manage, operate and maintain improved water supply and sanitation facilities; (ii) increase the participation of castes, ethnic minorities, and women; (iii) increase hygiene education through awareness campaigns; (iv) develop the capacity and capability of a wide range of sectoral support organisations, such as nongovernmental organisations/community-based organisations, to provide efficient and cost-effective support to communities and local authorities so as to improve rural water supply and sanitation (RWSS) service delivery; (v) support the implementation of the National Water Supply Sector Policy 1998 and the Rural Water Supply and Sanitation Sector Strategy and Action Plan; and (vi) support and strengthen the Government decentralisation efforts by focusing project activities and decision making at the local authorities and community levels.</p> <p>3) Stakeholders involved, decision making process All sectoral ministries, local authorities, NGOs, CBOs, multilateral and bilateral donor agencies, district development committees, village development committees, private sector and communities.</p>
	SectionC: Results/ Outcomes	The policy dialogue and consensus building process is ongoing. The sector stakeholder group is to meet in November to finalise the Rural Water Supply and Sanitation Sector Strategy and Action Plan before its approval by the Parliament. The main problem in Nepal currently is the political instability which may impede the Project reaching the communities in the remote areas.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		The strong consensus building process, involving all stakeholder for the formulation of the Rural Water Supply and Sanitation Sector Strategy was successful and resulted in strong support in the sector by Government, beneficiaries, donors, and NGOs. This is a method that could be applied for the development of rural water sector policy in other countries.
Reference		N/A
Sectoral Issues		1
Cross-sectoral Issues		1; 4
Instruments		3.1; 3.2; 3.4; 3.7; 4.2
Provider of this information	Name	Eva Mayerhofer
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Coral Reefs and Fisheries Network
Country		998; 764; 360; 608
Province		
Area		
Implementation level		4
Duration /Year		2003 - 2005
Contact Person /Focal Point for Enquiry	Name	Mr. Glenn Hurry
	Affiliation	Agriculture, Fisheries and Forestry, Australia
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		Funding sources are currently being identified for project start up. The project has been designed to be self funding after three years.
Actors involved		2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	This project aims to build an Asia-Pacific region-wide network that provides a forum for collaboration and information exchange to link and build capacity among coastal communities, coral reef organisations and industries, working to ensure long-term sustainable livelihoods from healthy and well managed coral reefs and fisheries.
	SectionB: Outline of Practices/ Actions	Specific targets set in this project are: - Jan 2003 - Start Project, establish Principle Node, design and implement web/database content - March/December 2003 - Facilitating development of collaborative programmes - May 2003 - Establish First Regional Node - June 2003 - Inaugural workshop of Coral Reefs and Fisheries Network Partners - January 2004 - Review of project, review research programmes - February 2004 - Preparation of Annual workshop of network partners - Ongoing - production of newsletter and update of web content

	SectionC: Results/ Outcomes	The Coral Reef and Fisheries Network will result in a broader understanding and information base on the economic, environmental and trade issues affecting coral reefs in this region, leading to: <ul style="list-style-type: none"> - Sustainable use and conservation of coral reefs and fisheries; - Enhanced business (including SMEs) investment in sustainable coral reef industries and trade; - Improved knowledge of the trade and market links for coral reef industries (e.g. the live reef fish trade); - Improved standards and codes of practice for individuals and businesses involved in coral reef industries; - Improve the range and quality of products derived from coral reefs, thereby safeguarding.
Keys for Success (cause of failure)		
Evaluation		
Applicability		
Reference		Johannesburg Summit Website: http://www.johannesburgsummit.org/html/sustainable_dev/p2_managing_resources/2008_coral_reefs.pdf
Sectoral Issues		5
Cross-Sectoral Issues		1; 4; 5
Instruments		3.3; 3.4; 3.5
Provider of this information	Name	Mr. Glenn Hurry
	Organisation	Agriculture, Fisheries and Forestry, Australia
	Job Title	
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Title		Creation of environmental Model City
Country		156
Province		
Area		
Implementation level		2
Duration /Year		1997-
Contact Person /Focal Point for Enquiry	Name	Ms. YU Fei
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount N/A 2) Source(s) of funds N/A 3)Efforts to raise/sustain funds for implementation Raised by the participated cities themselves
Actors involved		2; 3
Description of the Practice	SectionA: Background & Objectives	To create environmental model cities is a specific embodiment of the implementation of the urban sustainable development. This activity aims to create a group of model cities where the economy, society and environment are well coordinated and of which the environmental quality is good, the urban infrastructure is complete and the landscape is clean and beautiful and urban ecology is sound, with the purpose of achieving the sustainable development of the cities. This activity has a role in guiding the cities towards sustainable development.

	SectionB: Outline of Practices/ Actions	With the principle of voluntary participation, various cities will examine their basic condition and indicators of environmental quality according to the indicators for examining the national environmental model cities, and thereafter they present and application to SEPA. Then SEPA will organise a panel review and examination and collect comments from various sectors and the public. Based on the panel views and the comments received, SEPA will examine the application. If the qualification of the applying city has been proven to have met the standards, the city will be given the title of 'National Environmental Model City'. However, this title is not once for all, SEPA will reexamine the city every three years and sometimes organise sample examination. If the city is found unqualified again after the improvement, the title will be cancelled.
	SectionC: Results/ Outcomes	Now, there are 30 cities have been awarded the title of 'National Environmental Modes Cities'. The good results as follow: 1) Improving the urban environmental quality 2) Accelerating the economic development 3) Expanding the opening 4) Adjusting the industrial structure and improving the economic benefit
Keys for success (cause of failure)		Pay attention to win-win of environmental protection and economic development.
Evaluation		To creating the Environmental Model Cities is the initiate practice of creating the new urban culture with richness lives and sound ecology. It builds the stability basis for the coordination of social, economy and environment and sustainable development. It has been proved that the activity aims to improve the urban environmental quality and promote the economic development. This activity made the layout of urban function area more reasonable improved the visage of the cities and the living quality of people. It is the affective measure to promote the sustainable development of China.
Applicability		This activity can be introduced to other countries or areas. They can make their own criteria system according with their conditions of social, economic, cultural and environmental conditions.
Reference		
Sectoral Issues		3
Cross- sectoral Issues		1; 5
Instruments		3.1; 3.2; 3.6; 3.8; 4.2
Provider of this information	Name	Ms. Gao Tong
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Title		CREED - China Rural Energy Enterprise Development
Country		156
Province		
Area		Yunnan Province
Implementation level		1
Duration /Year		
Contact Person /Focal Point for Enquiry	Name	Aki Maruyama
	Affiliation	Division of Technology, Industry and Economics, UNEP
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	Fax	+33-1-44-37-14-74
	E-mail	aki.maruyama@unep.fr
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		Total CREED support to a company typically ranges from \$10,000 to \$150,000 CREED seed capital : \$1M
Actors involved		1; 4; 5
Description of the Practice	SectionA: Background & Objectives	The area centred in Northwest Yunnan is one of great ethnic diversity. The majority of inhabitants are ethnic minorities, including the Tibetan, Naxi, Yi, Bai, Lisu, Nu, Dulong, Pumi, Ahang and Muoso peoples. Ethnic groups in NW Yunnan represent unique cultural systems with a wealth of languages, knowledge, beliefs, technologies, art, and music. Ethnic minorities are generally poorer, with lower economic development levels than the Han Chinese and there are wide differences among the groups. Current methods of meeting rural energy needs in these areas also have large, direct, and adverse consequences for millions of people. The rigors of collecting fuelwood fall disproportionately on women and children while the use of open fires leads to horrible indoor air quality and consequent high levels of respiratory ailments and disease. Indoor coal briquette use is also common. These practices act as a drag on the development of the area and contribute to the general poverty of its inhabitants. The China Rural Energy Enterprise Development Initiative (CREED) project seeks to create a sustainable energy development path for rural people in these areas.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice CREED will invest in new small entrepreneurs to offer energy services to rural customers based on energy technologies and practices that are environmentally more sustainable than current approaches.</p> <p>2) Outline of the practice CREED offers a range of services, including: a) Training and tools to help entrepreneurs start and develop clean energy businesses; b) Enterprises start-up support such as business planning, structuring and financing; c) Seed capital for early stage enterprise development; d) Support for consumer credit programmes and the creation of micro enterprise and income generation opportunities linked to clean energy; e) Partnerships with banks and NGOs to facilitate rural energy development.</p>
	SectionC: Results/ Outcomes	CREED is designed to channel new and existing enterprise support and finance programs towards rural energy services, which can enable poor families to purchase and use cleaner forms of energy. CREED also funds consumer credit and income generation opportunities as a means to combine clean energy services with economic development.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		UNEP Project CREED Website: http://www.uneptie.org/energy/projects/REED/creed/
Sectoral Issues		2
Cross-sectoral Issues		4; 6
Instruments		3.3; 3,4; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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Title		Development and Validation of Phycotoxin Analytical Methods, Standards and Reference Materials for Seafood Product Certificate and Safety
Country		158
Province		
Area		
Implementation level		2
Duration /Year		2002 - 2003
Contact Person /Focal Point for Enquiry	Name	Dr Gwo-Dong Roam, Director General
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: US\$451,800 2) Sources of funds: Asia-Pacific Economic Cooperation (APEC) and by project implementers
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	This project facilitate trade of seafood products between APEC Economies and to protect public health by: (1) Validating appropriate methods for routine monitoring of seafood for contamination by principal and emerging marine algal toxins; (2) Developing certified calibration standards for analysis of principal and emerging marine algal toxins; (3) Developing certified reference materials for quality assurance of marine algal toxin analysis; (4) Creating databases of analytical methodologies, bibliographic references, and APEC analytical expertise; (5) Facilitating the introduction of validated analytical methods, supported by certified standards and reference materials, into seafood product testing and certification agencies of APEC economies.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>This project is a major initiative contributing to implementation of the Action Plan for Sustainability of the Marine Environment, supporting the key objective of sustainable management of marine resources, employing all three central tools identified within the action plan. The project supports APEC Economic Leaders' priorities, especially promoting environmentally sustainable growth, harnessing technologies of the future, developing and strengthening human capital.</p> <p>This project will strengthen trade in seafood products through an increase in the value, volume and diversity of seafood products that can be safely certified for export, while continuing to ensure the sustainability of the resource. Output from the project assist APEC member economies in the establishment of domestic regulatory frameworks with respect to seafood product safety that are transparent and based on legitimate, performance-based criteria for the analysis and certification of products (Osaka Action Agenda Part 1, Section 10 - Deregulation).</p> <p>More specifically, the project has looked into the following aspects:</p> <p>(1) PSP Toxins:</p> <ul style="list-style-type: none"> - Complete work on the validation of quantitative NMR procedures for determination of toxin purity and implement procedures in participating laboratories. - Complete development of LC-MS methodology for determination of PSP toxins in plankton and shellfish. - Validate existing standards for PSP toxins (STX, NEO, GTX2/3, GTX1/4) for accuracy. - Produce additional calibration standards for dcSTX, dcNEO, dcGTX2/3, dcGTX1/4, GTX5 and C1/2. - Measure mouse toxicity values (full dose response curves, intraperitoneal) for the individual toxin standards using different mouse strains. - Conduct an AOAC International inter-laboratory validation of improved mouse bioassay procedures for determination of PSP toxins in shellfish - Produce a certified reference material for PSP toxins - Conduct an initial inter-laboratory validation of a new immunoassay method for rapid screening of PSP toxins in shellfish and possibly plankton. - Conduct an inter-laboratory study of a cell bioassay method for determination of PSP toxins in plankton <p>(2) ASP Toxin:</p> <ul style="list-style-type: none"> - Conduct an AOAC International inter-laboratory validation of the LC method for determination of domoic acid in shellfish. - Conduct an inter-laboratory validation of an immunoassay method for rapid screening of shellfish tissues for domoic acid. <p>(3) DSP Toxins:</p> <ul style="list-style-type: none"> - Conduct an inter-laboratory validation of a cell bioassay method for determination of DSP toxins in shellfish. - Conduct an inter-laboratory validation of a phosphatase inhibition assay method for determination of DSP toxins in shellfish.
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		<p>(4) Fast Acting Toxins:</p> <ul style="list-style-type: none"> - Produce calibration standards for spirolides (1 or 2). - Produce a calibration standard for gymnodimine - Test the mouse toxicity values (full dose response curves, both oral and intraperitoneal) of spirolides mice and rats. - Complete development of LC-MS methodology for determination of fast-acting toxins in plankton and shellfish. <p>(5) NSP Toxins:</p> <ul style="list-style-type: none"> - Conduct an inter-laboratory validation of a cell bioassay method for determination of brevetoxins in shellfish. <p>2. Complete development of LC-MS methodology for determination of brevetoxins in plankton and shellfish.</p> <p>(6) Run a workshop on toxin analysis methods at the end of the project.</p>
	SectionC: Results/ Outcomes	<p>Final deliverables for the three-year project are:</p> <ul style="list-style-type: none"> - Validated commercial rapid test kits for PSP, ASP, DSP and NSP toxins, to allow for their introduction and use by the aquaculture industry and other parts of the seafood industry in APEC economies; - New instrumental methods for PSP, NSP and 'fast acting' toxins, to allow for their introduction and use by regulatory agencies responsible for seafood product testing and certification; - Substantial increase in the range of certified standards and reference materials (PSP toxins and 'fast acting' toxins) available to enable regulatory agencies to meet performance specifications for their seafood testing methods; - Increased understanding of the relative toxicities of various PSP and 'fast acting' toxins; - A workshop for presentation of scientific results from the project and demonstration/training of test kits; and - A report on the project and the workshop, which could serve as a guideline for implementation of methods into a regulatory framework.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		Expertise and knowledge gained in this project can be shared to ensure the safety and quality of seafood product exports in other countries.
Reference		APEC Project Summary http://www.cawthron.org.nz/Assets/APEC_Project_Summary.pdf
Sectoral Issues		5
Cross-sectoral Issues		3; 4; 5

Instruments		1.2; 3.5; 4.1
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Title		Development of an International Fisheries Agreement for the Conservation and Management of the Tuna Resources in the Western and Central Pacific Ocean.
Country		998
Province		
Area		
Implementation level		3
Duration /Year		2 years
Contact Person /Focal Point for Enquiry	Name	Thomas Gloerfelt-Tarp, Natural Resources Specialist, Pacific Department
	Affiliation	Asian Development Bank (ADB)
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$698,000 2) Source of fund: Technical Assistance Special Fund (TASF)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	In June 1998, the South Pacific Forum Fisheries Agency (FFA) requested ADB assistance in the ongoing multilateral high-level conference (MHLC) negotiations for the establishment of an international agreement to conserve and manage the highly migratory fisheries in the western and central Pacific Ocean. The approach taken for the technical assistance (TA) provided was to undertake a general analysis of the issues and concerns, and follow up with regional discussions and workshop as input to the negotiations.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objective of the practice: The objectives of the TA were: (i) assist the Pacific Developing Member Countries (PDMCs) to analyse the legal, fisheries management, economic, and development policy implications of the proposed international agreement to conserve and manage the Pacific tuna stocks, and (ii) assist to develop consensus among the PDMCs, thus strengthening their negotiating positions; and help conclude the international agreement. The TA involved the following activities:</p> <p>(i) investigate and analyse the long-term implications for participation, monitoring, control and surveillance arrangements, and the impact on existing sub regional fisheries arrangements, (ii) assist the PDMCs to improve understanding of the issues of the MHLC process, and the impacts on fisheries management and development, through regional cooperation, and (iii) develop options and assist the PDMCs in developing national and, where appropriate, regional positions.</p> <p>2) Outline of the practice Four workshops were held. The first workshop in Noumea, August 1999, considered the various management approaches used in other tuna commissions and concluded that most of the measures required allocations of catch and/or effort. The catch allocation criteria under the draft Convention were reviewed. A number of key requirements emerged from these discussions, including the need for further study of alternative management measures and that all tuna catches within the exclusive economic zone (EEZ) comprise the catch history of the coastal state for allocation purpose.</p> <p>The second workshop focused on the establishment of the allowable catch, managing national allocations, and monitoring compliance-surveillance. The outcomes of this workshop were: (i) changes to the draft Convention to better reflect the views of the PDMCs and ensure flexibility to allow for different types of management regimes, and (ii) identification of work to be done to support PDMCs' position at MHLC negotiations and further options for long-term management of the fishery under national regimes.</p> <p>The third workshop consisted of core fisheries management issues (total allowable catch/allocations, technical management measures, and data collection), monitoring-compliance-surveillance, and legal framework. It resulted in consensus building on a number of issues including the appropriate mix of coastal state and Commission jurisdiction for the new management regime. The workshop concluded that the catch allocations for the PMDCs would be the most important issue in the management of the tuna resources. Therefore, a review of the Palau Arrangement (dealing with number of purseseiners fishing in the western and central Pacific) was undertaken. This review helped to clarify the multitude of issues involved, as well as the practical considerations prior to engaging in catch allocations among the PDMCs.</p> <p>The fourth workshop on the Palau Arrangement concluded that a sub regional limit on the number of purse seine fishing days should be established and transferable country catch allocations should be made.</p> <p>3) Stakeholders involved, decision making process Concerned government officials, policymakers, and concerned individuals/groups in PDMCs participated in the workshops.</p>
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	SectionC: Results/ Outcomes	<p>1) Improvement/Changes</p> <p>This TA has provided the PDMCs with information on the nature of alternative Convention Area management and catch allocation options. The degree of PDMCs' understanding of the various management options has increased substantially. Areas in which the TA has made a significant contribution are:</p> <p>(i) the countries are aware that their own actions in managing their fisheries within the EEZs could have a significant influence on Convention Area management arrangement which may be adopted in the future by the Commission;</p> <p>(ii) the workshops have been highly successful in identifying and expanding on those topics of long-term benefits;</p> <p>(iii) lessons learned from tuna management arrangements in other parts of the world; and</p> <p>(iv) consensus building amongst the PDMCs. The TA has prepared the PDMCs for negotiations on many management and catch allocation issues which have been deferred to the Commission.</p> <p>2)Problems remain to be solved</p> <p>It is too early to judge the assistance the PDMCs will need once the Commission is established. However, it is fair to predict that the positions of the PDMCs will be hardened, especially regarding the issue of tuna catch allocations within the EEZs based on recorded historic catches. Given that fisheries is the biggest renewable resource in the PDMCs and that it contributes more than 9 percent to the GDPs, it is a sector that deserves more attention. ADB, as a multilateral institution, should be prepared to provide assistance if requested.</p>
Keys for success (cause of failure)		There was a strong and active participation of concerned government officials and key stakeholders in the workshops which spelled the success of the TA.
Evaluation		The originally envisaged timeframe for the MLHC process, at the time of ADB's involvement, was too optimistic. The western and central Pacific region is unique in respect to number of countries and the EEZ areas they control. There is a long history of perceived - or real - injustice regarding the economic benefit the PDMCs receive from their tuna resources. Thus, it was perhaps not surprising that the representatives from the PDMCs called for a number of extra meetings in order to be familiar with all the consequences of a future agreement. The extra meetings in the MLHC process contributed partly to the delays in project implementation. Another factor was the time needed to get some of the reports finalised and be made ready for publication.
Applicability		Activities undertaken focused mainly on workshops and this approach was found effective and easy to implement in meeting objectives like the ones set for this TA. The simplicity in approach makes it very easy to replicate in other areas when implementing similar endeavour.
Reference		N/A
Sectoral Issues		5
Cross-sectoral Issues		1; 3; 4

Instruments		3.1; 3.3; 3.8
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Title		Direct Micro Expelling (DME™) of coconut oil
Country		998
Province		
Area		Implemented in most South Pacific countries
Implementation level		1
Duration /Year		1994 - ongoing
Contact Person /Focal Point for Enquiry	Name	Dr. Dan M. Etherington, Managing Director
	Affiliation	Kokonut Pacific Pty Ltd
Contact Information	Address	PO Box 88, Hawker, ACT 2614, Australia
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Contact Person (2) /Focal Point for Enquiry	Name	–
	Affiliation	–
Contact Information	Address	–
	Tel	–
	Fax	–
	E-mail	–
Sponsor(s)		<p>1) Amount AU\$ 500,000</p> <p>2) Source(s) of fund Company shareholders, Australian National University, CSIRO & Aid agencies</p> <p>3) Efforts to raise/sustain funds for implementation Local applications to aid agencies (Canada Fund, NZ, UK ODA, EU, Commonwealth Secretariat, AusAID); Fiji Coconut Board and recycling funds raised by sale of equipment.</p>
Actors involved		2; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>The coconut palm is called the 'Tree of Life' because it can meet so many basic human needs - for food, shelter, and fuel. This palm produces nuts all the year round. As a low maintenance, subsistence crop it is so much a part of the tropical scene that it is often taken for granted.</p> <p>However, as a commercial crop, it is in trouble. The main 'cash crop' is copra. This is the dried white flesh of the nut. Copra is dried in a wood-fuelled kiln, or in the sun, over a period of a few days. It is time-consuming, dirty, lonely, arduous, fuel-intensive and low-paying work. Many farmers consider it a form of modern slavery.</p>

	<p>Copra (coconut) oil extraction requires large scale, high pressure, and expensive, energy-intensive equipment. Unhygienic copra means that the resultant oil is normally of low quality with a Free Fatty Acid (FFA) level of 3% or more. [FFA is one measure of rancidity of oil]. Thus copra oil requires refining, bleaching and deodorising to create a commercially acceptable (RBD) product. The refining process uses hydrochloric acid, solvents and steam to strip out the contamination. Some residual solvents remain in the oil. The process also removes the natural volatiles and anti-oxidants that give pure coconut oil its unique flavour and aroma. The total process from farm to refined oil can take many months.</p> <p>The residual copra-meal is only suitable as animal feed but care is required because it can be contaminated with carcinogenic aflatoxins.</p> <p>Copra producers in most South Pacific islands never see the commercial oil their nuts produce. They are dis-empowered from using one of the most versatile of all vegetable oils. Furthermore, they are faced with the economic hazard that world market price of copra oil fluctuates more than any other primary commodity.</p>
<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice Kokonut Pacific developed the Direct Micro Expelling (DME™) process for on-farm production of virgin coconut oil to overcome the problems with copra and increase the incomes of rural communities. DME could help stem youth rural-urban migration.</p> <p>2) Outline of the practice Direct Micro Expelling uses a totally different approach to coconut processing compared to the copra industry. DME takes [small scale] processing to the nuts rather than taking the nuts (in debased form) to a [large scale] factory. A consequence is the production of a virgin coconut oil of vastly superior quality to copra oil.</p> <p>The DME process concentrates on small, manageable, daily batches instead of producing large batches of copra which take many weeks to ship and process. The DME process depends upon simple, easily learned skills, rather than sophisticated equipment. Families really enjoy working together on DME Oil production, whereas they typically describe the making of copra as a form of slavery.</p> <p>The DME process produces pure virgin oil at the farm/household level within 1 and half hours of opening the coconuts. It involves 4 basic steps:</p> <ol style="list-style-type: none"> 1. Collect and de-husk coconuts; 2. Finely great fresh, mature, coconut kernel with small motorised graters; 3. Dry this material (in < 1 hour) on the DME, all-weather, solar-thermal drier fuelled by coconut husk and shell; and, 4. Press out the oil with a robust manual press using inter-changeable stainless steel cylinders. <p>DME gives regular meaningful employment to teams of 3 to 5 women and/or men of all ages. A team can work on the process more-or-less whenever it suits them - whether it be 2 hours a day on 2 days per week or 10 hours a day for 6 days a week - it could even (shudder the thought) be operated on a shift basis all day and all night. Production can take place all year round and in virtually any weather.</p> <p>It gives direct local employment in rural areas in nut collection and oil production, and it has multiplier income-and employment-effects where the oil is packaged locally or used as an input by local cosmetic, soap and detergent producers. Also, the residue goes for baking and livestock.</p> <p>In general, the gross return from the DME system is about 3 times (net 4 times) that of copra. Average daily production is typically 20 to 50 litres, with skilled operators obtaining an oil extraction efficiency (OEE) of over 85% (of available oil).</p>

	<p>3) Stakeholders involved, decision-making process</p> <p>Many tropical coastal communities are the custodians of unique endangered cultures, languages, reefs and rainforests. The coconut is the most sustainable agricultural resource of these communities. DME bypasses arduous copra making and provides rural people with meaningful employment, a regular income and enhanced living standards.</p>
<p>SectionC: Results/ Outcomes</p>	<p>Kokonut Pacific moved into commercial production of the DME process in 1997. In the following 6 years about 100 units have been installed. We have learnt a great deal and made continuous improvements to the equipment to make it more robust within the marine environment where it is used.</p> <p>Some successful examples are given on our website.</p> <p>Each farm-based DME unit should be seen as a module in a DME System. Economies of scale are obtained through having a whole System in place. As a general rule we recommend a three tier system with a headquarter's Base, regional Service Centres and then the actual production units.</p> <p>We emphasise the System because we have found that 'institutional weakness' is typical in many situations in which the DME units have been introduced. In Fiji, the Solomon Islands and Papua New Guinea, copra interests saw DME as competitive rather than complimentary. Coup attempts, civil unrest and the commercial collapse of copra marketing boards may bring in a new era.</p> <p>Whether a site, or set of sites, is successful or not depends critically on the institutional backup. Isolated (orphan) sites can have difficulties as they manage the new technology and try to market the oil but do not have qualified personnel to call on when they have problems. The most successful operations are where the individual producers are served by an effective 'extension' service with trained personnel who visit regularly to check on progress, undertake QA (quality assurance) tests, collect the oil and pay the producers. As each of these necessary functions is removed, so the task of the producer becomes more difficult and the likelihood of failure is increased. Furthermore there are the other institutional inputs to consider such as the marketing chain and credit and/or leasing arrangements for the equipment.</p> <p>We are currently working with a very large rural co-operative and with UNFAO in Asia to establish a 'model' set-up not unlike a milk collection operation for smallholder dairy farmers.</p>
<p>Keys for success (cause of failure)</p>	<p>The DME process works extremely well from a technical point of view. However, there is a long way to go before we fully achieve the objective of having a fully sustainable and robust system in place. So far, most units are operating in an 'orphan-like' mode where they have to develop their own markets as well as producing the oil.</p> <p>There is an enormous potential for import-substitution for cooking oil, soap, cosmetics (baby oil) and fuel. It is well nigh impossible for individual farm families to do this. However, in Tonga, an entrepreneur has very successfully focussed attention on the local and expatriate Tongan market for high quality, fragranced, 'Lolo Tonga'.</p> <p>In Kiribati, units attached to, or near, boarding High Schools, have found excellent local marketing opportunities.</p> <p>In Samoa, the Women in Business Foundation has led in the introduction of DME and provided significant backup. However (in our view), too much emphasis has been placed on the export market (and obtaining Organic Certification) rather than initially building a sound domestic base. Similarly, in Fiji, the focus on marketing the superior DME virgin oil to the tourist industry became a problem when the tourists stayed away because of the coup attempt.</p>

		In Papua New Guinea, a very successful unit has been established under the 'withdrawal' program of a gold mining company. Royalty funds have been used by the local community to buy the unit but the mine's Business Development Manager has had a crucial role in checking on quality assurance and developing local markets.
Evaluation		<p>Direct Micro Expelling works beautifully as a process. It is an all-weather technology that makes effective use of an existing, sustainable, renewable rural resource that produces throughout the year. The oil produced is of very high quality. It is a final product with a long (2+ years) shelf life. It has many potential direct medicinal (the oil has anti-viral & anti-bacterial properties), cosmetic, edible and fuel uses. In addition it can be processed into many downstream products. In the case of soap, this too can be a local industry. It is the only bio-fuel that can be used directly in a diesel engine without modifying the engine or altering the oil. The residual meal can be used in local cooking (as a defatted desiccated coconut) but (in the SP) is primarily used as a stock feed (mainly for pigs).</p> <p>Operators of the DME units enjoy working with it because it is gender neutral and allows for teamwork.</p> <p>We believe that the key to its effective long-term success is the development of effective institution backup.</p>
Applicability		Since 95% of coconut production in the World is in the hands of smallholder farmers, the DME system has the potential to be used throughout the wet coastal tropics. However, to realise this potential, policy makers need to understand the requirements for the implementation of DME systems.
Reference		<p>Articles by Dr Dan, Etherington on aspects of Direct Micro Expelling</p> <p>1994 'Farm-Level Coconut Oil Production: A Brighter future for Remote South Pacific Locations.' Invited paper for the XXXI COCOTECH Meeting of the Asian and Pacific Coconut Community, Changmai, Thailand, 18-22 July 1994. Coconut Industry into the 21st Century. Proceedings of the XXXI COCOTECH Conference. (Jakarta, Asian & Pacific Coconut Community) December, pp. 197-211.</p> <p>1995 'Enhancing the sustainability of tropical island communities by improving self-sufficiency in liquid fuel supplies'. Contributed paper at 39th Australian Agricultural Economics Conference, University of Western Australia, Perth, 13-16th February 1995.</p> <p>1996 'Research, Development and Technology Transfer of Direct Micro Expelling Coconut Oil - the Fiji experience'. Paper commissioned for Coconut Industry into the 21st Century (Proceedings of the XXXIII COCOTECH Meeting of the Asian and Pacific Coconut Community, Kuala Lumpur, Malaysia, 15-19 July 1996. Published September). Pp. 197-211.</p> <p>1998 and Mahendrarajah, S. 'Economic benefits of Direct Micro Expelling coconut oil in the South Pacific'. Trees of Life - the Key to Development: Proceedings of the International Cashew and Coconut Conference, Dar-es-Salaam, 12 - 21 February 1997. Pp. 457 - 468. (Edited by C.P. Topper, P.D.S. Caligari, A.K.Kullaya, S.H. Shomari, L.J.Kasuga,, P.A.L. Masawe and A.A. Mpunami. Published by BioHybrids International Ltd, Reading, UK).</p> <p>1999 and Zegelin, S., and White, I. 'Oil Extraction from Grated Coconut: Real-time Moisture Content Measurement and its Impact on Oil Production Efficiency'. Tropical Science, 38, pp. 10 - 19.</p>

		<p>2000 and Mahendrarajah, S. and Kennedy, O. 'Biofuel energy from coconut for South Pacific island economies: technology, economics and institutions.' Proceedings New and Alternative Energy Technologies Symposium. XIX Pacific Science Congress, Sydney 5 - 9 July 1999. Pp. 69 - 90.</p> <p>2001 An international panel of jurors selected the DME Project as an ecologically sustainable World Project for display during EXPO2000, in Hanover, Germany.</p> <p>2001 and Mahendrarajah, S. 'Reclaiming the Tree Of Life: Coconut in the South Pacific' The Future of Perennial Crops: Investment and Sustainability in the Humid Tropics Conference Yamoussoukro, Cote d'Ivoire 5-9 Nov 2001. Pp. 10</p> <p>2001 Dan Etherington, Roland Lubett and Chris Maina, Coconut Oil: Direct Micro Expelling Trainer's Manual 6th Edition. (Canberra, Kokonut Pacific Pty Ltd, Sept 2001). Pp. 69</p>
Sectoral Issues		2
Cross-sectoral Issues		4; 6
Instruments		2.4; 3.1; 3.2; 3.3; 3.4; 3.8; 4.1
Provider of this information	Name	Dr. Dan M. Etherington
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Title		Efate Geothermal Project
Country		548
Province		
Area		
Implementation level		1
Duration /Year		N/A (Project Concept filed in Mar. 2001)
Contact Person /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$13.095M 2) Source(s) of funds: GEF Grant \$2.025M, Cofin Amount \$11.07M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	Vanuatu is totally dependent on imported hydrocarbon fuels to maintain its electric power system. The country has no indigenous fuel resources of its own, with the exception of various forms of biomass. However, because of the volcanic origin of Efate, its major power market, there apparently exists a substantial geothermal resource, which could be exploited to supplant a significant proportion of the imported hydrocarbon fuels.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice This project explores geothermal energy source for as a suitable source of electricity generation in the Island of Efate.</p> <p>2) Outline of the practice Currently, a US\$25,000 GEF PDF Block A grant is helping to partially finance the power purchase negotiations between the developer and the island's power utility, UNELCO. Once a satisfactory power purchase agreement has been signed, a GEF PDF Block B grant of up to US\$350,000 may be requested to partially support the estimated US\$745,000 program for initial thin-hole exploration and development drilling. If this program is successful, a GEF-funded partial risk-sharing contingent financing facility, with possibly some grant component may be requested, to undertake a full-scale exploration and well development program.</p> <p>3) Stakeholders involved, decision making process Inter-governmental organisation, central government, and private sector.</p>
	SectionC: Results/ Outcomes	<ul style="list-style-type: none"> - Greenfield development of a new, renewable and environmentally benign energy resource for power production on the Island of Efate. - Permanent conversion of possible future power plant developments from hydrocarbon-based technology to geothermal. - Long-term and permanent reduction in the real costs of electricity generation.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		GEF Project List Project Concept http://www.gefweb.org/Projects/Vanuatu_Efate_Geothermal.pdf
Sectoral Issues		2
Cross-sectoral Issues		6
Instruments		4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
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Title		Elements of the next generation of water market policies which are socially equitable and ecologically sustainable within rural communities
Country		36
Province		
Area		Southern part of the Murray-Darling Basin
Implementation level		2
Duration /Year		Water trading in Australia started in the mid 1980s. In 2003, new projects are under development to continue the project for another three years.
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Contact Person (2) /Focal Point for Enquiry	Name	–
	Affiliation	–
Contact Information	Address	–
	Tel	–
	Fax	–
	E-mail	–
Sponsor(s)		<p>1) Amount Total funding for three project A\$550,000</p> <p>2) Source(s) of funds First two projects were funded by Land and Water Australia. The third project is funded by the Australian Research Council and ten industry partners</p> <p>3) Efforts to raise/sustain funds for implementation NA</p>
Actors involved		2; 4

Description of the Practice	SectionA: Background & Objectives	Prior to the introduction of trade water was appurtenant to land and could not be traded separately. As water resources became fully committed this became an impediment to new developments as no new water entitlements could be issues to new high value and efficient irrigation project. In many instances water was allocated to low value production using inefficient irrigation technologies on inappropriate soils and locations. This resulted in low value generation from the limited resource, environmental problems and social hardship in many rural communities. To break this deadlock, it became necessary to break the nexus between land and water and introduce a separate market for water resources so that water could move from these inefficient low value users to new efficient high value producers. This process was perceived to increase the financial position of individual farmers as well as increase economic activity in irrigation communities since most high value uses are also more labour intensive both in the field, and in packaging, processing, transport and service industries within the communities. At the same time more efficient water use was likely to reduce the negative environmental impact of irrigation farming and the market process would offer some financial compensation for the inefficient low value farmers exiting the industry to help them in through the transition process.
	SectionB: Outline of Practices/ Actions	Over the last 20 years, water market policies has slowly evolved and developed within the three southeastern states in Australia in an adaptive manner and property rights in water and land have now been formally separated within most jurisdictions. Trading was initially seen with scepticism within most irrigation communities. While a high level of scepticism still exists toward market for the transfer of permanent entitlements in water with the result that trading within that area still is quite subdued, markets in annual rights to access water have been widely adopted by most irrigation communities and efficient mechanism to facilitate this trade has emerged rapidly (readings in attached publication list discusses these processes in depth). New legislation also introduced a planning framework within which balances have to be struck between water extraction for consumptive use and in-stream environmental uses. These planning processes also include some public participation in the decision-making processes and capacity-building processes. The quality and extent of these processes, however, varies between jurisdictions.
	SectionC: Results/ Outcomes	Analyses of activities in these markets have clearly shown that water has moved to more efficient and higher valued users in more suitable locations. As a result, the economic outcome of irrigation has been increased and negative impacts of irrigation have been reduced. However, there is also some evidence of negative environmental impacts and some socio-economic inequities. (the readings in the attached publication list argue this extensively). Significant impediments to the wider adoption of the trading in the underlying long term entitlements in water still exists and new and more flexible instruments needs to be developed and implemented in order to maximise the benefits from trade while protecting environmental and third party interests.
Keys for success (cause of failure)		<p>- The success of the market in achieving the above discussed outcomes has been facilitated by the regulatory framework within each jurisdiction and the development of flexible and reliable market mechanisms such as Water Exchanges. The use of more efficient irrigation techniques has not only been driven by the buyers best economic interest but also be regulation requiring such techniques to be used in order to obtain permission to buy water. Similarly trade into certain areas has been discouraged by the requirement to pay a levy per megalitre of water traded into a certain area to finance structural work to alleviate any future negative impact of increased water application within that area. Similarly water trade out of certain areas was encouraged by a premium paid by the government above the market price to the irrigators selling out of designated high impact areas. Also trade into designated high impact areas was prohibited, likewise trade of water to be applied to soils classified with a high salinity content was prohibited.</p> <p>- Water pricing policies introducing full cost recovery prices was also introduced at approximately the same time as water trading. This policy instrument was considered to be an incentive for the low value inefficient irrigators to take the opportunity to sell the water provided by the introduction of water markets.</p>

Evaluation		Generally the introduction of water markets has been successful even though improvements still need to be made. Especially the markets in annual access to water has been very efficient in recent years and have significantly assisted irrigation communities to cope with a six year period of severe drought. Irrigators have repeatedly stated that without water markets the industry could not have maintained and in some instances even increased production during this period of water scarcity and both communities and individual farmers would have suffered more than they have. There are still calls for systems to be more transparent and efficient but the evolution process is continued in an adaptive manner.
Applicability		Water markets have been introduced in other countries around the world by the Australian water markets are generally acknowledged as being on the forefront of this development. Markets in the permanent entitlements in water have great requirements to institutional and property rights institutions and therefore require a high level of social capacity and will therefore take time to introduce in many developing countries. On the other hand markets in temporal access to water has been more widely adopted in developing countries in Southeast Asia and elsewhere. In a recent paper presented on the 3rd World Water forum and published in a book by Kluwer Academic Publishers. I have argued some elements for an institutional framework for water management in developing countries including water markets.
Reference		Publication (among others): - Bjornlund, H. (2002): Are Water Markets Maturing. Paper presented at the 4th Pacific Rim Real Estate Society Conference, Christchurch January 21-23, http://www.business.unisa.edu.au/prres - Bjornlund, H. (2001): Water Policies and Rural Land Values. Proceedings from the 7th Pacific Rim Real Estate Society Conference, Adelaide January 21-24, http://www.business.unisa.edu.au/prres - Bjornlund, H. NS O'Callaghan, B. (2003): Valuation and Lending Implications of the separation of land and water rights. Paper to be presented at the 9th annual conference of the Pacific Rim Real Estate Society, Brisbane 19-22 January. http://www.business.unisa.edu.au/prres - Bjornlund, H. (2002): The Adoption, Perception and Impact of the New Water Policy Paradigm within Two Australian States. Proceedings from the Conference 'Irrigation Water Policies: Micro and Macro Consideration' Agadir, Morocco, June 15-17, Vol 1, 147-163. Also: http://www.worldbank.agadirconference.com
Sectoral Issues		1
Cross-sectoral Issues		1; 3; 5
Instruments		1.1; 3.1; 3.5; 3.8; 4.2
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Title		Enhanced Application of Climate Prediction in Pacific Island Countries Project
Country		242; 90; 776
Province		
Area		
Implementation level		3
Duration /Year		2002 - 2005
Contact Person /Focal Point for Enquiry	Name	Yvonne Green, Program Officer, Regional Pacific Section
	Affiliation	AusAID
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$2.2 million (estimate) 2) Sources of funds: AusAID
Actors involved		2
Description of the Practice	SectionA: Background & Objectives	Australia is committed to helping Pacific islands, all too often battered by storms and severe weather, with a special project to improve their seasonal climate forecasting. This project will assist Pacific Island countries to establish or improve what are their meteorological services by sharing the climate knowledge and forecasting experiences of the Australian Government's Bureau of Meteorology.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objectives of the practice This partnership developed from the SPREP (South Pacific Regional Environment Programme) Pacific Meteorological Services Needs Analysis Project. Australia has selected a proposal to increase Pacific Island countries' capacity to produce and integrate climate forecast information. The goal is to strengthen Pacific Island Countries' (PICs) capacity in climate prediction by expanding and enhancing the prudent use of climate prediction by PICs in both national meteorological services (NMSs) and Client planning departments.</p> <p>2) Outline of the practice The first activity was an NMS workshop in Fiji which aimed to coincide with the SPREP-organised annual regional meteorological services directors meeting. Over the next 3 years, the NMSs capable of higher level participation in the project shall be trained in their own country in climate prediction; assisted in improving their client base; pilot industry-specific applications for climate prediction, and review the performance of the project at a joint workshop on one island.</p> <p>More specifically, the project will contribute to capacity building of the PICs by:</p> <ul style="list-style-type: none"> - Developing capacity of national meteorological services through the provision of software and training in its use, - Providing training for senior planners in industry, government and the media that focuses on the causes of climate variability and how to interpret and make use of climate probability forecast information, and - Once the information is incorporated into planning and decision- making in a risk management context across a number of agencies and organisations, the wider community will benefit from improved planning, and the application of informed decision-making. <p>The implementing organisation will assess the basic software program demonstrated to the NMS operators and clients and will agree with the various stakeholders on rationalising their requirements to arrive at a standard package. This standard software shall preferably possess sufficient formats and report generating capabilities to allow the one package to be standardised across the participating PICs. Translation of reports into local languages may vary, however, the basic package shall be interchangeable wherever possible - so as to provide backup and the possibility of emergency support of one NMS by another - either through software and hardware or staff sharing.</p> <p>3) Partners involved Governments: AusAID, Australian Bureau of Meteorology, national meteorological service (NMS) agencies in several Pacific island countries.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>The project is expected come up with the following conclusions:</p> <ul style="list-style-type: none"> - Enhanced NMS climate prediction capability and strengthening NMS comprehension of identified client groups' climate prediction needs. - Customised climate probability predictions produced by NMSs and Client groups working together through enhanced NMS and client capacity to develop and pilot predictive software.
<p>Keys for success (cause of failure)</p>		<p>N/A; the project is in progress.</p>
<p>Evaluation</p>		<p>N/A; the project is in progress.</p>
<p>Applicability</p>		<p>N/A</p>
<p>Reference</p>		<p>Johannesburg Summit Business Action for Sustainable Development http://www.un.org/esa/sustdev/partnerships/climate_change/pics_climateprediction.pdf Australian Government Department of the Environment and Heritage Media Release http://www.deh.gov.au/minister/ps/2003/psmr01sep03.html</p>

Sectoral Issues		4
Cross-sectoral Issues		1; 5; 6
Instruments		3.3; 3.5; 3.7; 3.8; 4.1; 4.2
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Title		Enhancing Access through Off-grid Electrification
Country		356
Province		
Area		Rajasthan
Implementation level		1
Duration /Year		Not Yet Approved
Contact Person /Focal Point for Enquiry	Name	N/A
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Contact Information	Address	
	Tel	
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$60.0M 2) Source(s) of funds GEF Grant \$15.0M, Cofin Amount \$45.0M
Actors involved		1; 3; 4
Description of the Practice	SectionA: Background & Objectives	Provision of electricity access to people in rural areas is critical for economic development and the improvement in quality of life in Rajasthan. The present approach to rural electrification is environmentally and financially unsustainable. The alternative approach through off-grid electrification pursued to a modest degree has established the resource availability and technical viability of renewable energy based technologies. However, policy, institutional and financial barriers impede sustained off-grid electrification development in the state. Elimination of these barriers is important for enhancing the share of renewable energy based off-grid electrification in rural electrification. This project aims to develop off-grid electrification business models for renewable energy market development in Rajasthan.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice</p> <p>The core objective of this project is to wean renewable energy projects away from government support and develop sustainable business models. The proposed project will actively engage the private sector in commercially sustainable activities in order to reduce long-term implementation costs, and offer strong potential for learning and replication.</p> <p>2) Outline of the practice</p> <p>The project being proposed will have two components: technical assistance and investment. The investment component would include electrification of approximately 250 villages to meet the electricity needs pertaining to lighting, pumping and other necessary needs. Technical assistance in the renewable energy project will focus on capacity building of various stakeholders to facilitate market development.</p>
	SectionC: Results/ Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A, not yet started
Applicability		
Reference		UNDP-GEF Portfolio Project Concept IND 1210
Sectoral Issues		2
Cross- sectoral Issues		4; 6
Instruments		3.2; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
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Title		Environmental Action Plan of the Ishikawa Zoo
Country		392
Province		
Area		
Implementation level		1
Duration /Year		2001-2003 Some medium or long-term approaches are valid until 2010.
Contact Person /Focal Point for Enquiry	Name	Yasuo Yamamoto, Director
	Affiliation	The Ishikawa Zoo
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1)Amount: N/A 2)Source(s) of funds: N/A
Actors involved		4
Description of the Practice	SectionA: Background & Objectives	The Ishikawa Zoo in Ishikawa Prefecture has been actively taking eco-friendly measures based on its environmental action plan with a vision to reduce its environmental impact and provide opportunities for environmental education. The staff of the zoo believe that the zoo can be a replication of natural environment, by transforming itself into an 'eco-zoo' through the implementation of an environmental action plan.
	SectionB: Outline of Practices/ Actions	1) Objective of practice To reduce impacts on the environment and serve as a resource for environmental education. 2) Outline of practice For environmental protection and conservation, the zoo uses rainwater that has collected in the reservoir for cleaning animal cages and lavatories and watering plants. Animal waste and leftovers are recycled as organic fertiliser at a composting plant. The zoo also gathers its CO2 and NOx emission data, and trying to reduce its emissions by using solar-powered clocks and electric cars. As for the environmental education is one of the concept of this plan, the animals are kept in environments that closely resemble their own natural habitats, and make visitors can get a closer look at the natural behaviour of lively animals.

	SectionC: Results/ Outcomes	To carry out this plan, the zoo concerns to set a promotion group and build a checking system to verify if the plans are conducted.
Keys for success (cause of failure)		The zoo places great emphasis on environmental education. Environmental education programmes are provided on both formal and informal bases, providing opportunities for students to learn about the animals and their habitats, the work of zookeepers, and the zoo's efforts to improve environmental efficiency.
Evaluation		N/A; the project is in progress.
Applicability		This is the case where the zoo integrated the environmental management system into their planning. Similar strategies can be developed by the zoos in other countries as well as other entities that plans to formulate environmental action plans.
Reference		Ishikawa Zoo: http://www.pref.ishikawa.jp/zoo/eco_plan/ http://www.japanfs.org/db/database.cgi?cmd=dp&num=596&dp=data_e.html
Sectoral Issues		3
Cross-sectoral Issues		5; 6
Instruments		3.1; 3.2; 3.5; 3.7;
Provider of this information	Name	APFED Secretariat
	Organisation	
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Title		Environmental Awareness, Legislation and Database
Country		242
Province		
Area		
Implementation level		4
Duration /Year		3 years
Contact Person /Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment) (in lieu of A.H. Ruthenberg, who originally supervised the implementation of the TA).
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	Fax	+63-2-636-2444
	E-mail	information@adb.org; dponzi@adb.org
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$450,000 2) Source of funds: ADB Technical Assistance Special Fund (TASF)
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	In April 1993, the Government of Fiji Islands adopted the National Environmental Strategy (NES), a broad-based programme of action that had the objective to place the country firmly on the path of sustainable development. The NES called for enhancing environmental awareness and education of the general public and to inform them of the benefits of environmental management and conservation, elevating the capacity of the country's institutions mandated with environmental management, and strengthening of environmental legislation. Environmental management in Fiji has been highly sectoralised with the line ministries being responsible for environmental management in their respective sectors. This has led to duplication of activities and inconsistent environmental policies across sectors. The need to consolidate environmental management and policies was recognised with the establishment of the Department of Environment (DOE) under the Ministry of Housing, Urban Development and Environment in 1993, as a result of the NES. However, with the establishment of the institutional framework for environmental management, it became apparent that the newly formed DOE would require significant institutional strengthening assistance in addition to a legislative mandate in order to perform its assigned tasks.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>1) Objective of the practice The objective of this advisory technical assistance (TA) was to assist the Fiji Government to implement selected recommendations and projects identified in the NES. To achieve this objective, the TA consisted of three components: (i) strengthening the institutional capability of the DOE to enable it to undertake public awareness and educational programmes as far as environmental issues are concerned; (ii) preparation of comprehensive environmental legislation including formalisation of the environmental impact assessment process in the country's laws; and (iii) development of an environmental information system.</p> <p>2) Outline of the practice Consultation workshops and meetings were held. Radio programs were aired and other information dissemination strategies were also applied to increase the level of awareness of concerned individuals and groups on the importance of environmental protections, conservation and management.</p> <p>3) Stakeholders involved, decision making process Consultation process involved more than 9,000 individuals, nongovernmental organisations, industry organisations, private sector, church groups, and traditional leaders. They all participated in crafting the Sustainable Development Bill, which is one of the major accomplishments of the TA.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>1) Improvement / Changes The TA has enhanced environmental awareness in Fiji as a result of several awareness campaigns as well as the public debate that emanated from the preparation of the Sustainable Development Bill. The TA has strengthened the DOE and has succeeded in establishing an environmental database within the DOE. However, given the technical limitation of DOE staff in managing a computerised environmental database, the system introduced may not be operated sustainable without external assistance. Despite the drafting of the Sustainable Development Bill, the TA failed to meet one of its main objectives, viz. the enactment (or passage by congress) of said Bill.</p> <p>2) Problems remain to be solved Sustaining the management of environmental database.</p> <p>3) Unexpected positive / negative impacts to date Delays in the enactment of the Sustainable Development Bill continue to expose the physical environment as well as the natural resources of Fiji Islands to massive exploitation and unregulated use, which threaten the life support systems of these resources.</p>
<p>Keys for success (cause of failure)</p>		<p>Some of the factors that led to the delay and relatively partial success of the TA are: (i) non-availability or lack of counterpart staff from DOE; (ii) differences of opinions and views of Government officials relative to the enactment of the Sustainable Development Bill.</p> <p>Other felt that the Bill would intrude into their functions and would provide DOE an overly strong mandate.</p>
<p>Evaluation</p>		<p>The preparation of comprehensive environmental legislation like the Sustainable Development Bill is complex as it involves consensus building among a large numbers of stakeholders, political commitment and highly qualified legal experts. Further, the preparation of environmental legislation to be undertaken in a consultative and participatory process is time-consuming and cost-intensive. As a result, this TA closing date had to be extended 6 times and TA completion took two years longer than originally envisaged. TAs that involved the preparation of legislation is review-intensive and also requires close supervision by the ADB. The engagement of local legal experts is mandatory for such TA to become successful.</p>

Applicability		The enormity of problems encountered in the implementation of the TA makes it less replicable in other areas where similar objectives will be sought.
Reference		http://www.adb.org
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5
Instruments		1.1; 3.7; 3.8; 4.2
Provider of this information	Name	Daniele Ponzi
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	Fax	+63-2-636-2444
	E-mail	information@adb.org; dponzi@adb.org

Title		Environmental Management for Australia's Aid Program 2003
Country		999
Province		
Area		The Australian aid program is concentrated in East Asia, PNG and the Pacific Island Countries, with selective engagement in South Asia, Africa and the Middle East.
Implementation level		4
Duration /Year		Ongoing
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Contact Person (2) /Focal Point for Enquiry	Name	–
	Affiliation	–
Contact Information	Address	–
	Tel	–
	Fax	–
	E-mail	–
Sponsor(s)		
Actors involved		2

Description of the Practice	SectionA: Background & Objectives	<p>The Environmental Management Guide describes AusAID's Environmental Management System, outlines the steps to be followed in environmental assessment of activities, and the procedures for managing potential environmental impacts. It replaces the 1996 Guidelines as the source of information about AusAID's environmental policy frameworks and legal obligations:</p> <ul style="list-style-type: none"> - In terms of policy frameworks, the 2002 Ministerial Statement on Australia's aid program, Australian Aid: Investing in Growth, Stability and Prosperity, emphasises five guiding themes that link AusAID's overall strategy for reducing poverty with individual aid activities. Sustainable resource management and the promotion of sustainable approaches to managing the environment is one of those themes. - In terms of legal obligations, the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999, requires that AusAID ensure that all activities likely to have environmental impacts are properly assessed and managed. <p>AusAID's Environmental Management System aims to provide the means for the organisation to meet these policy and legal obligations, to continuously improve environmental performance in aid activities and to demonstrate the agency's commitment to sound environmental management practices. Its central objective is to ensure that all activities AusAID undertakes or funds in partner countries are environmentally sound.</p>
	SectionB: Outline of Practices/ Actions	<p>AusAID's Environmental Management System is an integral part of its overall management system. The framework is explicitly linked to AusAID's project cycle and puts forward the key steps to be undertaken in effective environmental impact assessment and management.</p> <ul style="list-style-type: none"> - The first step is to understand and identify the policy and legal setting in which aid activities are being implemented. A good understanding of these settings is crucial for assessing and managing the environmental impacts of aid activities and for promoting environmentally sustainable development. - The second step is environmental assessment and management planning. This includes identifying the range of environmental impacts that could result from particular projects, discussions with relevant community and government stakeholders, and deciding how environmental sustainability will be monitored and reported against. - The third step is implementation. This involves ensuring that AusAID, our contractors and partners are aware of their respective responsibilities to ensure effective environment management and sustainability. - The fourth step involves monitoring and evaluating the environmental impacts of our aid activities. This includes identifying and addressing unexpected environmental issues or impacts. It also aims to generate valuable 'lessons learned' that can guide continual improvement. - The final step is periodic Executive reviews by the agency to ensure that AusAID's Environmental Management System continues be suitable, adequate and effective.
	SectionC: Results/ Outcomes	<p>The Guide has developed over a period of several years and provides an effective, 'best practice' model that describes:</p> <ul style="list-style-type: none"> - The importance of effective environmental impact assessment and management. - The roles and responsibilities of AusAID, contractors, non-government organisations and our developing country partners. - Actions to be taken during the environmental management process. - The relationship between environmental management and each stage of AusAID's aid project cycle.

Keys for success (cause of failure)		<p>The Environmental Management Guide rests upon a number of important principles that ensure successful environmental management is a key aspect all of our aid activities. These include:</p> <ul style="list-style-type: none"> - Drawing clear linkages between poverty, environment and development. - Drawing clear linkages between AusAID's aid project cycle and environmental management processes. - Ensuring that wide and effective stakeholder consultation and participation is a key aspect of our environmental planning and management. - Explicitly drawing from internationally recognised 'best practice' examples in environmental management. - Establishing logical checklists and procedures and clarifying roles and responsibilities in clear, common-sense language.
Evaluation		<p>The Environmental Management System was recently part of an audit by the Australian National Office (ANAO) which was undertaken to evaluate the performance of various government Departments in meeting their obligations under the Environmental Protection and Biodiversity Conservation Act (1999).</p> <p>This evaluation found that the Environmental Management System represented an effective and 'good practice' mechanism for implementing AusAID's obligations under the Act and ensuring sustainable approaches to environment management and planning in all of its projects.</p>
Applicability		<p>Part 2 of the Environmental Management Guide contains guidelines for integrating environmental issues into program and sectoral policies and identifying, assessing and managing potential environmental impacts. As a best practice set of guidelines, the framework is applicable to:</p> <ul style="list-style-type: none"> - NGOs undertaking aid work for AusAID or other donor countries/organisations. - Contractors undertaking aid work for AusAID or other donor countries/organisations. - Expert teams examining environmental problems in particular developing countries. - Partner governments and local communities in developing countries attempting to develop environmental management and planning systems.
Reference		<p>The Environmental Management Guide for Australia's Aid Program can be found at AusAID's website: http://www.ausaid.gov.au</p>
Sectoral Issues		
Cross-sectoral Issues		1; 5
Instruments		1.3; 3.1; 3.2; 3.5; 3.8; 4.2
Provider of this information	Name	Simon Buckley
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Title		Environmental Technology Network for Asia (ETNA)
Country		156; 356; 360; 410; 458; 608; 702; 144; 764
Province		
Area		
Implementation level		4
Duration /Year		1993 - ongoing
Contact Person /Focal Point for Enquiry	Name	Kim Mihalik
	Affiliation	US-Asia Environmental Partnership, Environmental Technology Network for Asia
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	Fax	+1-202-835-8358
	E-mail	N/A
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: U.S. Agency for International Development
Actors involved		2; 4
Description of the Practice	SectionA: Background & Objectives	Established in 1993, ETNA is an initiative of the United States-Asia Environmental Partnership (US-AEP) and the Global Technology Network of the United States Agency for International Development. ETNA provides key technical information to the US-AEP field staff and alerts U.S. environmental businesses to opportunities in Asia, with the end goal of transferring knowledge and technologies that will ultimately make a positive environmental impact in Asia.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>The following is the ETNA's general services:</p> <p>(1) Facilitating the Transfer of Technology The biggest advantage of ETNA's business network is its ability to pinpoint the right technologies for the right applications. The most important aspect in creating this initial relationship is providing the appropriate technical and business-related information. ETNA works with US-AEP's field offices to assure that both the Asian users of technologies and the U.S. providers of technologies can have access to the types of information that they need. This may come in the form of:</p> <ul style="list-style-type: none"> - Providing state-side follow up on projects/activities - Providing objective technical research for field staff; - Providing information on the range of technology solutions to a problem; and - Preparing technical fact sheets and briefs. <p>(2) Assisting Asian and U.S. Environmental Companies US-AEP's Country Managers meet regularly with Asian decision-makers in industry and government to identify environmental concerns and propose technology solutions. These technology transfer opportunities are forwarded to ETNA, where they are matched with a database of over 5,000 registered U.S. companies. Matched notices are then emailed to those companies providing the requested technology or service.</p> <p>In addition, ETNA:</p> <ul style="list-style-type: none"> - Investigates effective and appropriate environmental technologies; - Acts as an interface between the US-AEP field offices and U.S. technology providers; - Provides engineering expertise and support at US-AEP partner events; and - Actively networks with U.S. companies to inform them know about Asian technology transfer opportunities.
	<p>SectionC: Results/ Outcomes</p>	<p>More than 2,400 U.S. companies are registered.</p>
<p>Keys for success (cause of failure)</p>		<p>N/A</p>
<p>Evaluation</p>		<p>N/A</p>
<p>Applicability</p>		<p>Matchmaking with American companies would largely depend on regional needs although similar schemes can be developed among any countries.</p>
<p>Reference</p>		<p>US-AEP website: http://www.usaep.org/programs/tech_tran/etna/etna.html</p>
<p>Sectoral Issues</p>		
<p>Cross- sectoral Issues</p>		<p>3; 5</p>

Instruments		3.3; 3.8; 4.1
Provider of this information	Name	APFED Secretariat
	Organisation	
	Job Title	
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	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		Environmental, social and cultural implications of a ship-breaking industry
Country		356
Province		
Area		Alang-Sosia, Gujarat
Implementation level		1
Duration /Year		1999 -
Contact Person /Focal Point for Enquiry	Name	Prof. H. C. Dube, Life Science Department
	Affiliation	University of Bhavnagar
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of Funds: UNESCO and Government of Gujarat
Actors involved		1; 2; 3; 5

Description of the Practice	SectionA: Background & Objectives	<p>Ship-breaking is an important activity along the west coast of India, especially in Gujarat, the state with the longest coastline. Alang, a small coastal town in Gujarat, houses the world's largest ship-breaking yard. Forty-five thousand workers break down about 200 ships in this yard each year. This produces 2.6 million tons of scrap steel per year, equivalent to 15 percent of the country's total steel production.</p> <p>The ship-breaking industry, however, creates numerous hazards for the coastal and marine environment. Ship-breaking releases a large number of dangerous pollutants, including toxic waste, oil, poly-chlorinated biphenyls, and heavy metals, into the waters and seabed. While most of the oil is removed before a ship is scrapped, sand used to mop up the remaining oil is thrown into the sea. High concentrations of oil and grease are then found in the coastal waters, choking marine life. Solid waste strewn on the shore, 45 tonnes on any given day according to a study by the Central Pollution Control Board, also finds its way into the sea. Adding to the stress on coastal waters, the organic load from the thousands of workers living in cramped conditions with little or no sanitary facilities results in unacceptably high levels of BOD.</p> <p>Campaigners led by Greenpeace, the Basel Action Network, and the International Transport Workers' Federation have joined forces with Indian trade unions and local environmentalists in efforts to reduce the detrimental impacts of the ship-breaking industry on both human and marine ecosystem health. The Indian government was urged to demand the decontamination of ships prior to their arrival on India's shores for scrapping, and to develop and enforce adequate measures to prevent further environmental degradation. Mark Dickinson of the International Transport Workers' Federation has called on the International Maritime Organisation to 'take the lead to ensure that owners are held liable for their ship's disposal and that ships are decontaminated prior to export to industrialising countries. We will push for this by involving the International Labour Organisation and the United Nations Environment Programme.'</p>
	SectionB: Outline of Practices/ Actions	<p>The goal of this project is to develop preliminary wise practices for sustainable living in the Gujarat coastal area, based on surveys of socioeconomic conditions and natural resources in the villages around the Alang-Sosia Ship Breaking Yard (ASSBY), before and after the setting up of the ASSBY.</p> <p>An interdisciplinary project team comprising social and natural scientists undertook surveys and key data collection in the following areas:</p> <ol style="list-style-type: none"> (1) Status and availability of natural resources (incl. flora, fauna and water) prior and subsequent to the setting up of the ASSBY in order to determine the impact of the ASSBY, (2) Socio-economic and cultural conditions of the village communities, including the status of infrastructure facilities and basic amenities in the study area, and (3) Changes in the lifestyles of local communities subsequent to the setting up of the ASSBY, including the impact of the influx of an heterogeneous community of immigrant workers on the local communities.

	SectionC: Results/ Outcomes	<p>Major findings of the surveys prior and subsequent to the set-up of the ASSBY were:</p> <p>(1) Inadequate provision of water facilities and the ever-increasing population in the study area has meant increased biotic pressure on the village ponds and rising levels of organic and chemical pollution in these ponds.</p> <p>(2) There has been some destruction of coastal vegetation, including mangroves, in the wider area around ASSBY.</p> <p>(3) A noxious exotic weed, Parthenium, has spread in the area, as in other parts of India. (Its spread is not directly related to the ASSBY).</p> <p>(4) Increased economic activity due to the ASSBY has given rise to a construction boom which has led to encroachment on community grazing lands and increased pressure on fodder and fuel wood plants and 'weed' plants used in traditional medicine.</p> <p>(5) Work at the ASSBY is economically more viable for pastoralists and subsistence farmers, who are drifting towards the ASSBY for alternate employment. Agricultural laborers have become scarce and more expensive; however, farmers who adopted improved farming techniques are doing well.</p> <p>(6) Women are experiencing greater economic and political freedom.</p> <p>(7) Overall, economic conditions, education and literacy have improved, but health facilities and awareness have shown only marginal improvement.</p> <p>(8) There is greater social and cultural openness, caste-based rules are becoming less rigid. There is increasing consumerism and traditional values are being replaced by materialism.</p> <p>(9) Antisocial activities are on the rise, immigrant labourers have not found acceptability among the natives. They are believed to indulge in drinking, drug abuse, homosexuality and the hiring of prostitutes.</p> <p>(10) The existing infrastructure facilities are inadequate for the ever rising immigrant population and this statement is also true for the resident population in the entire region.</p>
Keys for success (cause of failure)		Public participation was encouraged since little well-documented data on the pre-ASSBY situation was available, the research team had to depend on the oral knowledge of the villagers.
Evaluation		<p>A set of preliminary wise practices were formulated:</p> <p>(1) Regeneration of fodders and fuel wood resources through NGO intervention programmes.</p> <p>(2) People's participation in rainwater harvesting projects and deepening of village ponds with the help of government aid.</p> <p>(3) Making agriculture a more viable livelihood by improving agricultural techniques and skills through extension programmes with the help of the local agricultural institution and the initiation of agro-industries.</p> <p>(4) Heightening the level of awareness of the local communities about their changing environment and ways to manage the changes, and sensitising them to the exposure to urban and materialistic values resulting from the influx of immigrant workers. Religious discourses with the help of NGOs and local religious bodies may be an approach to be considered.</p>
Applicability		N/A
Reference		UNESCO Field Project Summary in the Environment and Development in Coastal Regions and in Small Islands http://www.unesco.org/csi/act/india/summary_1.htm
Sectoral Issues		4; 5

Cross-sectoral Issues		1; 4
Instruments		3.1; 3,2; 3.6
Provider of this information	Name	Prof. H. C. Dube
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	Fax	+91-278-519824, 426706
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Title		ETT Access Patloc - Public access terminals
Country		36; 554
Province		
Area		
Implementation level		3
Duration /Year		1999 - ongoing
Contact Person /Focal Point for Enquiry	Name	Mr. Tom Hardy, System Programmer
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		Public Company, listed on the Stock Market in Australia
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	Tackling the lack of affordable access to internet and other information services for low income citizens and tourists. The system uses a prepaid card model.
	SectionB: Outline of Practices/ Actions	<p>The objective is to provide access to low cost internet access through the use of 'Public Access Terminals' for people with a low income and tourists.</p> <p>The terminals can be located anywhere that there is a reasonably priced 'Internet Service Provider' and electricity. A great advantage for this technology, especially in remote area, is that the electricity can be sourced from renewable sources, solar, wind and biomass. Terminals can be put into shops, information centres; anywhere there is approximately 1.5x1.5 metres of space for comfortable use of each terminal. A revenue share exists between the owner of the space where the terminal is located based on numerous parameters.</p> <p>People purchase the prepaid card and use the pin number to access the terminal. For poor people in developing countries funding could be sources from the GEF, UNDP special funds, or other similar grants, and the private sector.</p>

	SectionC: Results/ Outcomes	<ul style="list-style-type: none"> - Engage trade in real-time without the need for a postbox - Markets could be searched and found for trade in handcrafts and other income-producing initiatives. - Communicate with people around the world - Value added service that an existing business can offer - Produce documents and print them out - Regional tourists to access email
Keys for success (cause of failure)		<ul style="list-style-type: none"> - cost effective sharing of new technology and communications among many people - enhancement of trade possibilities - service for local tourism
Evaluation		<ul style="list-style-type: none"> - Each terminal can be used by a dozen or more people per day, depending on how long each person uses - The system is very affordable to deploy and for people to use - Each terminal has a normal life time of around 5 years - Each Terminal is multipurpose, email, word processing, printing, teaching - The system is centrally administered in Sydney with a redundant server in Auckland
Applicability		<ul style="list-style-type: none"> - Computers and the internet are worldwide phenomena - The system is very easy and quick to deploy and use; and can be used as a tool for teaching people about computers and the internet
Reference		http://www.ettaccess.com
Sectoral Issues		
Cross-sectoral Issues		5, 6
Instruments		3.1; 3.4; 3.5; 4.1
Provider of this information	Name	Mrs Barbara Hardy
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	Fax	+61-8-8296-7338
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Title		Expanded Rural Electrification Program in the Philippines
Country		608
Province		
Area		Poor, remote and unelectrified barangays
Implementation level		2
Duration /Year		2003- 2006
Contact Person /Focal Point for Enquiry	Name	Ms. Mylene Celestino Capongcol
	Affiliation	Director, Electric Power Industry Management Bureau (EPIMB), Department of Energy
Contact Information	Address	Energy Center, Merritt Road, Fort Bonifacio Taguig, Metro Manila, PHILIPPINES
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: Government budget, International aid etc.
Actors involved		1; 2; 3; 4

<p>Description of the Practice</p>	<p>SectionA: Background & Objectives</p>	<p>In the year 2000, the Government of the Philippines launched a new rural electrification programme, called 'O-ILAW'-Program. Through this program, the government expects to bring electricity even in the remotest barangays and help uplift the economic condition of Filipinos for alleviation of poverty. The ambitious programme aims to enhance the quality of life of Filipinos, especially those in rural areas, by providing them with adequate and sustainable energy services, which could increase their opportunities to engage in livelihood and income generating activities.</p> <p>The 'O-ILAW'-Program is a rural electrification pro-poor flagship of the Department of Energy (DOE). It adopted a 'multisectoral approach' to accelerate and achieve total electrification by 2006. Although the former electrification policy achieved success in connecting most of the national area with access to the national electricity grid system, it was getting obvious that electrification of the poor and remote barangays demanded new ways and strategies for fulfilling its aims. Setting up several broad based initiatives and involving all relevant actors found this new strategy.</p> <p>Due to its 'multisectoral approach' the 'O-ILAW'-Program has integrated all rural electrification initiatives of the DOE, the National Electrification Administration (NEA), the National Power Corporation (NPC) and Philippine National Oil Company-Energy Development Corporation (PNOC-EDC). The 'O-ILAW'-Program has also encouraged the greater participation of private organisations, business communities including Independent Power Producers (IPPs) and civic organisations in the electrification of marginal barangays.</p> <p>Thus, the 'O-ILAW'-Program hosted various programmes under its ambitious target. During its implementation an enormous number of barangays got energised and the level of barangay electrification in 2002 reached 87.1%, compared to 76.90% in 1999. The accelerated pace of electrification was due to active participation of all players in the sector and the support extended by various institutions, non-governmental organisations and the private sector.</p> <p>Yet in spite of the good performance of the 'O-ILAW'-Program managing to meet its objectives, it became obvious that some improvements are inescapable to fulfil the aim of total electrification until 2006 and that the variety of programmes were lacking coordination. Also, given poorer and more remote target barangays, scarce financial resources and a rapidly changing electricity industry, in April 2003, the DOE decided to re-examine its approach to rural electrification and rely even more heavily on the private sector to fulfil its goals.</p> <p>As a result, the government reviewed its policy, created a new private-sector-involvement strategy and placed all the various parties and programmes under a unified team - The Expanded Rural ('ER') Electrification Team. The 'O-ILAW'-Program was transformed into the Expanded Rural Electrification Program ('ER'). Accordingly, the DOE created the ER-Team to manage effectively and integrate the country's rural electrification programme. The objective of the ER-Team (among others) are:</p> <ul style="list-style-type: none"> - To accelerate electrification through enhanced public/private-partnership - To promote cost-effective uses of new and renewable energy for the provision of electricity in remote and unviable areas - To integrate all efforts and initiatives to achieve 100 percent barangay electrification by 2006 and 80 percent household electrification by 2017.
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	<p>SectionB: Outline of Practices/ Actions</p>	<p>In order to accelerate electrification through enhanced public/private-partnership, the government adopted 'multisectoral approach' with a restructured power industry and an increase in private sector participation which is enhanced by the 'Electric Power Industry Reform Act (EPIRA).' The advent of the EPIRA has impacted the Philippine Rural Electrification Industry, as the entire power sector is restructuring. The reform has led to many benefits to the Rural electrification sub-sector. Greater transparency of subsidies, more direct private sector participation and public/private partnerships as well as a consolidation of electrification efforts have made their impact already. EPIRA mandates the provision of electricity in remote and unviable areas that the franchised utilities are unable to serve will be opened to the private sector.</p> <p>The DOE set a new strategy and mechanism to get the private sector involved, based on the assumption that greater transparency of subsidies and high initial subsidies are some of the preconditions for more direct private sector participation and public/private-partnership. The new policy is based on a broad variety of measures to set incentives for the private sector to invest in rural electrification, which relies mainly on an innovative subsidy scheme.</p> <p>In the regard to promote the use of renewable energies the Renewable Energy Service Company (RESCO) Concept was introduced as an effective instrument. RESCO is a business entity delivering application-based renewable energy products and/or services at market prices over a specific period of operation, to consumers isolated from the normal energy supply network.</p> <p>Besides this concept, there are some other grant assistance for Solar PV Systems. Under the ER-Program, grants from the Global Environment Facility (GEF) will be made available to participating companies for eligible PV products sold to consumers. The Government subsidy is also available for PV systems.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>Under the management of the ER-Team a total of 798 barangays were energised for the period January and August 2003, which mean an increase of the barangay electrification by the end of August 2003 to 89%.</p> <p>As one of its major objectives to accelerate electrification through enhanced public/private-partnership, the ER-team was able to source funds for the electrification of 399 barangays and 149 sitios from several IPPs/stakeholder. As a result, the number of un-energised barangays continued to decline over the past years.</p>
<p>Keys for success (cause of failure)</p>		<p>The privatisation and restructuring of the Philippine electricity sector presents both opportunities for change and new challenges in meeting the commitment to missionary electrification. Therefore new approaches are necessary. By rationalising the processes by which private sector investors and other stakeholders can participate in electrification initiatives, the government should be able to tap efficiencies, expertise and capital that traditionally have not been available to government entities.</p> <p>Clear rules and incentives for governing private sector investment in rural electrification will be essential and one of the key factors for the success of the public/private-partnership policy. Transparent and participative decision-making processes are promotional as well as a reduction of bureaucracy. The ER-Program as a coordinating entity provides the suitable framework to meet these requirements.</p> <p>A well-designed subsidy policy has an enormous impact as a 'take-off' initiative. A key factor for success is a broad based and multi-sectoral approach. Therefore not only the involvement of all stakeholders and especially private sector involvement is worth to mention, but also that the electrification strategy doesn't put grid based rural electrification in competition with alternatives. But as history shows, various programmes should not lack coordination.</p>

Evaluation		<p>The low population densities in rural areas result in high capital and operating costs for electricity companies. Consumers are often poor and their electricity consumption is quite low. In addition to that, the geographical situation of the Philippines makes electrification efforts more difficult. Some barangays are located in inaccessible grid-areas so that access of electricity can be solely provided by the use of renewable energies.</p> <p>Yet in spite of all of these problems the Philippines have been successfully providing electricity to their rural areas.</p> <p>The 'O-ILAW'-program discovered new ways in providing rural and remote areas with electricity by starting several initiatives and involving all relevant actors of crosscutting sectors. But to reach the ambitious aim of total electrification up to 2006, it was getting obvious that the process has to be speeded up and combining efforts must be given more emphasise. Therefore the newly created team under the 'Expanded Rural Electrification Program' is targeting on the coordination and tries to channel new financial resources through an advanced subsidy scheme for enhancing and improving the existing programs.</p>
Applicability		<p>Due to the fact that the Philippines Reform Program is integrated in the overarching electrification policy which is aligned for the Philippines need, makes it difficult to translate the whole program or separate parts of a tuned strategy. Nevertheless, there are basic principles existent which are likely to work as guidelines for other cases.</p> <p>To meet the need of energy and fulfil the aim of electrification, a restructuring of the power sector in terms of greater sector involvement seems in many cases a fitting solution. But as the Philippine policy demonstrate a comprehensive 'multi-sectoral' approach is of great importance, not only in the way of financing but also in respect of used energy resources.</p>
Reference		Information provided by the Department of Energy, Government of the Philippines
Sectoral Issues		2
Cross-sectoral Issues		1
Instruments		3.8; 4.1
Provider of this information	Name	Regine Dietz
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Forest Resources Management Sector Project
Country		144
Province		
Area		17 of the 19 existing territorial forest divisions; remaining 2 divisions to be covered if security situation improves in these areas.
Implementation level		1; 2
Duration /Year		October 2000 - December 2007
Contact Person /Focal Point for Enquiry	Name	Mr. H.M. Bandaratillake, Project Director
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	Tel	+94-1-877293
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: US\$40 million 2) Source(s) of funds: Asian Development Bank \$27.0 million, Government of Sri Lanka \$10.0 million, Project Beneficiaries \$7.0 million
Actors involved		1; 2; 5
Description of the Practice	Section A: Background & Objectives	Increasing forest loss and degradation due to encroachment of impoverished communities living near traditional forest areas or plantations.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice Establish and operationalise participatory sustainable forest management of a spatially demarcated permanent forest estate for increasing forest protection and production, and enhance access of the local communities to gainful employment and human resource development opportunities.</p> <p>2) Outline of the practice - Participatory forest planning, management, and awareness through: (i) delineation, demarcation, surveying, and mapping; (ii) integrated management planning; and (iii) awareness and creation. -Sustainable forest resource development and management through (i) establishment and management of agro forestry plots; (ii) management and improvement of farmer woodlots; (iii) identification and management of encroached forest areas; (iv) enrichment planting and management of protection and other natural forests; (v) improvement, rehabilitation and management of degraded plantations; and (vi) private sector pilot leasehold management of state plantations. - Institutional strengthening for improvement sector performance through organisational strengthening, and human resources development.</p> <p>3) Stakeholders involved, decision making process Institutional capacities of the Ministry of Environment and Natural Resources, community-based organisations, NGOs and local communities are strengthened in forest resources protection and management.</p>
	SectionC: Results/ Outcomes	To be assessed during the midterm review in mid-2004.
Keys for success (cause of failure)		Impact of policy and legislative changes (i.e. reorganisation of the Forest Department, deregulation of timber and wood harvesting) to be assessed during midterm review.
Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		3
Cross-sectoral Issues		1; 4
Instruments		1.1; 3.1; 3.8
Provider of this information	Name	Takashi Matsuo
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Forestry Sector Project
Country		586
Province		
Area		North West Frontier Province (NWFP)
Implementation level		1
Duration /Year		March 1996 - December 2003
Contact Person /Focal Point for Enquiry	Name	Mr. Syed Kurshid Anwar, Project Director
	Affiliation	NWFP FSP
Contact Information	Address	NWFP Forestry Sector Project, Palosi Road, Amanabad, Peshawar, PAKISTAN
	Tel	+92-91-921-6251
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	E-mail	nwfpfsp@brain.net.pk
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: US\$56 million 2) Source(s) of funds: Asian Development Bank (\$28.5 million), Government of the Netherlands (\$14.1 million), and the Government of Pakistan (\$7.4 million), Beneficiary (\$.0 million)
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	During 1980s, total area of deforestation in Pakistan averaged about 76,700 ha annually, or 2% of the total forested area in the country.

	SectionB: Outline of Practices/ Actions	<p>1) Objectives of the practice Rehabilitation of forest and rangelands resources in major watersheds of NWFP.</p> <p>2) Outline of the practice - Afforestation in 70,000 ha - Establish 12,000 ha of farm forestry - Improvement of range management for livestock production on 28,000 ha - Promulgation of the New Forest Policy and Forest Commission Act in 1999, and the new Forest Ordinance in 2002 - Institutional reform of the Department of Forest of the provincial government.</p> <p>3) Stakeholders involved, decision making process An integrated planning framework was developed to institutionalise social forestry approach in the Forestry Department. The participatory planning envisaging operational plans and village plans were prepared.</p>
	SectionC: Results/ Outcomes	Project implementation has been delayed due to longer time needed for institutional reforms and legislation. By May 2003, an area of 36,400 ha has been afforested, 8,400 ha has been planted under the farm forestry program, and 7,000 ha of rangeland management has been implemented.
Keys for success (cause of failure)		Enhancement of awareness about institutional reforms within a government agency takes a long time.
Evaluation		Evaluation is yet to be done.
Applicability		Similar initiative could be applied in other countries, but different approach could be taken under different institutional environment.
Reference		N/A
Sectoral Issues		3
Cross-sectoral Issues		1; 4
Instruments		3.2; 3.7
Provider of this information	Name	Takashi Matsuo
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Garbage collection management in Carmona, the Philippines.
Country		608
Province		
Area		Municipality of Carmona
Implementation level		1
Duration /Year		
Contact Person /Focal Point for Enquiry	Name	Government of Nueva Vizcaya Province
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	The Municipality of Carmona, a third class municipality, more than doubled its income and gained the first class municipality status in just 2 years. It used to be a host of Carmona Landfill where tons of garbage were dumped everyday. When the landfill was closed, the municipality lost about US\$120,000 per year in dumping fees and a mountain-high garbage.
	SectionB: Outline of Practices/ Actions	
	SectionC: Results/ Outcomes	The income loss was offset by aggressive investment promotion and increased tax collection efficiency. The municipality established the Carmona organic demo farm.

Keys for success (cause of failure)		Efficient tax collection
Evaluation		
Applicability		
Reference		
Sectoral Issues		3
Cross-sectoral Issues		1; 2; 4
Instruments		1.1; 2.1; 3.2; 3.4
Provider of this information	Name	Ella S. Antonio
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Title		Global Lead Initiative
Country		356; 360; 608; 764
Province		
Area		
Implementation level		4
Duration /Year		2002-2005
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source of funds:
Actors involved		2; 5
Description of the Practice	SectionA: Background & Objectives	<p>The goal of the Global Lead Initiative is to catalyse expedited completion of leaded gasoline phase-out and to identify and eliminate other exposure sources, by achieving the following objectives:</p> <ul style="list-style-type: none"> - Institute a partnership process for implementation and monitoring, including the development of specific milestones and targets; - Build on progress and lessons learned by highlighting best practices, models of successful implementation of phase-out and prevention, in each region; - Coordinate disparate projects, technical assistance programmes, and other efforts being carried out by UN agencies, national governments, and NGOs, to avoid duplication of efforts; and - Maximise the benefits of phase-out and prevention by linking efforts to related environmental health objectives, such as clean fuels and healthy housing.

	<p>SectionB: Outline of Practices/ Actions</p>	<p>The Initiative will be based on the successful model provided by the Summit of the Americas Partnership for Pollution Prevention (PPP). The GLI establishes a formal process in order to make certain that all countries will advance leaded gasoline phase-out and will turn to addressing the multiple other sources of exposure in a systematic manner. Moreover, some formality is necessary in the process in order to coordinate activities with and among related initiatives and to monitor the progress of implementation. At the same time, the GLI envisages a flexible process that will take efficient advantage of opportunities for accelerated action. Whenever possible, the GLI will link to existing fora and structures, as well as to other related partnerships formed for the World Summit on Sustainable Development (WSSD). The process will consist of the following:</p> <p>National Action Plans - Governments will develop and implement national action plans for leaded gasoline phase-out and for assessing and addressing other sources of lead exposure according to practicable but expeditious timelines and milestones for action. Working groups will be instituted on a regional basis and consist of technical and policy experts from all sectors. Such groups will develop principles for inclusion in national action plans and the outline of regional projects to facilitate their implementation. Subsequently, working groups will monitor and evaluate implementation and make recommendations for improvements, as warranted. Each government will be asked to designate an individual as that country's national focal point for lead, who will be the key point of contact with the working group and multilateral institutions.</p> <p>Funded Technical Assistance Projects - We are currently seeking funding from governments, international organisations/financial institutions, foundations, and the private sector. Partners will be expected to contribute funding or other support (e.g., staff time or technical assistance). Partner responsibilities will be negotiated on a case-by-case basis.</p> <p>Civil Society Participation - Full civil society participation in the working groups and the project will be critical to the success of the GLI. The Global Lead Network - which links representatives of regional and international organisations, government agencies, research institutes, as well as NGOs - will facilitate the implementation of the GLI by providing a means for the exchange of best practices and for the coordination of efforts within regions.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>The Global Lead Initiative is expected to result in the completion of the global phase-out of leaded gasoline as soon as possible, with December 31, 2005 the latest acceptable completion date. The Global Lead Initiative also will prompt governments to address other sources of lead in the environment, with completion varying by region, source, and extent and nature of the lead poisoning problem, as specified in the National Action Plans.</p>
<p>Keys for success (cause of failure)</p>		<p>N/A; the project is in progress.</p>
<p>Evaluation</p>		<p>N/A; the project is in progress.</p>
<p>Applicability</p>		<p>The initiative is open to any parties interested in the issue.</p>
<p>Reference</p>		<p>Global Lead Network Website: http://www.globalleadnet.org</p>
<p>Sectoral Issues</p>		<p>4</p>

Cross-sectoral Issues		1; 5
Instruments		1.1; 3.2; 3.3; 3.5; 3.8
Provider of this information	Name	Laura Fudala
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Title		Global Village Energy Partnership (GVEP)
Country		999
Province		
Area		
Implementation level		4
Duration/ Year		Aug 2002 - 2012
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	E-mail	susan.mcdade@undp.org
Sponsor(s)		1) Amount : Phase I \$250,000 (May - September 2002) , Phase II \$15million (September 2002 - December 2005) 2) Source(s) of funds : Phase I: ESMAP, United Nations Development Programme (UNDP), the World Bank, UK Department of (DFID, USAID etc. ; Phase II: Donor governments, international organisations, foundations, financial organisations, and the private sector
Actors involved		
Description of the Practice	SectionA: Background & Objectives	
	SectionB: Outline of Practices /Actions	
	SectionC: Results /Outcomes	
Keys for success (cause of failure)		
Evaluation		

Applicability		
Reference		
Sectoral Issues		
Cross-sectoral Issues		
Instruments		
Provider of this information	Name	
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Green Gasifier Generator - A Micro Gasifer Turbine Development
Country		36
Province		
Area		Victoria
Implementation level		2
Duration/ Year		2001 - 2004
Contact Person/ Focal Point for Enquiry	Name	Dr. Paul Fung
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Contact Person(2)/ Focal Point for Enquiry	Name	—
	Affiliation	—
Contact Information	Address	—
	Tel	—
	Fax	—
	E-mail	—
Sponsor(s)		<p>1) Amount \$AUD 1 million (not incl. Consortium's funds or SEAV funding)</p> <p>2) Source(s) of fund AGO RECP3.</p> <p>3) Efforts to raise/sustain funds for implementation Funds for implementation-SEAV</p>
Actors involved		2; 4; 5
Description of the Practice	SectionA: Background & Objectives	Australia is highly dependent on fossil fuels because of our large reserves of coal, natural gas, oil and uranium. As a result, on a per-capita basis, Australia is the largest producer of GHG. The rural economy has been declining due to competition, shrinking export markets and the effects of salinity and drought on traditional farming. Rural unemployment has been rising with employment drift towards the capital cities.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice To develop an efficient system to convert wood to electricity in-situ to enable the local use of electricity through small electricity networks and the distribution of electricity into the existing main grid.</p> <p>2) Outline of the practice The gasifier turbine technology can efficiently convert wood energy into electricity, comparable on a small scale to that of large-scale coal-fired power stations using a traditional steam cycle. Farmers can grow fuelwood to generate electricity alongside traditional food agriculture to supply local power as well as selling excess electricity to cities. Sustainably produced fuelwood is GHG neutral and will help reduce GHG through fossil fuel substitution. Wood wastes from Forest-based industries such as sawmills and forest wastes can be utilised as fuel.</p> <p>3) Stakeholders involved, decision making process Stakeholders involved are engineering and equipment supply companies in the GGG consortium with CSIRO FFP, AGO and SEAV as Government funding bodies, the Forest Industries with a ready supply of wood wastes, farmers could also be involved in growing fast rotation fuelwood plantations which can serve a dual purpose of ameliorating salinity with tree plantings. This is a commercial development to produce a renewable energy technology which could ultimately be a viable alternative to traditional technologies based on fossil fuels.</p>
	SectionC: Results /Outcomes	<p>1. Improvements/changes: People can rely on locally available forest biomass as a sustainable energy source rather than be totally dependent on fossil fuels. In many cases, fossil fuels need to be imported.</p> <p>2. Apart from the current technology development, a whole new infrastructure of integrated fuelwood production and small electricity network distribution needs to be established.</p> <p>3. Positive impact is the general support for the concept particularly in the sustainable utilisation of trees for environmental plantings for salinity control and the profitable use of wood residues. Unexpected negative impact is the decline in support amongst green groups for general use of fuelwood as a renewable energy source.</p>
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Maintenance (and perhaps enhancement) of government incentives for the implementation of renewable energy such as MRET to allow the market to develop from a fledgling status. - Address the externalities in using fossil fuels. European countries have a Fossil Fuel Levy or Tax. - Encourage early adopters for new renewable energy through government subsidies of the new technologies to make these affordable. As more systems are produced, capital costs will reduce according to the learning curve.
Evaluation		<p>As the GGG project addresses most of the issues of effectiveness, socio-economic and environmental benefits and sustainability it can be rated highly. Provision of regional and remote electricity from local resources should help preserve cultural values as it is under the control of the communities themselves. Transparency and accountability is ensured through the provisions of government funding for the technology development. As the technology is based on micro-scale, implementation decisions can be made by small groups and even individuals with low, or negligible impact on others. Herein lies its strength. Its weaknesses however, is the production of the fuelwood which may require longer term planning unless external supplies are available. It is also a novel development and not available commercially. It is not technically proven at this point in time and will be addressed with the prototype development.</p>
Applicability		<ul style="list-style-type: none"> - Other countries with supplies of sustainable fuelwood with a need for electricity in the area of application can use this technology. - The principles of operation would need to be similar to Other methods of generation such as diesel or petrol generators. The fuel storage must be larger and space is required for materials handling. Where low cost labour is available, materials handling can be simplified with reduction to capital cost of equipment.

Reference		Paul Fung (CSIRO FFP) 'Green Gasifier Generator - A micro gasifier turbine development' Bioenergy 2001 Conference, 3-5 December 2001, Broadbeach Qld. Kerye Bradford (JC Smale & Co) 'Green Gasifier Generators, 30-200kW' Wood Wastes 2002 - Residues to Revenues Conference, 29 April 2002, Melbourne
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		1.1; 2.3; 3.1; 3.2; 3.4; 4.1; 4.2
Provider of this information	Name	Dr. Paul Fung
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Title		Green Tourism in the town of Ajimu, Oita Prefecture
Country		392
Province		
Area		
Implementation level		1
Duration/ Year		1996-ongoing
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	Affiliation	Ajimu Green Tourism Study Group
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
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	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Source(s) of fund: Unknown
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	<p>Ajimu is a town of 8,000 people located on the central-north of Oita Prefecture. Ajimu's economy has been and continue to be based on traditional agriculture, however, the town government as well as the residents has been seeking new ways for community development. Agriculture gave a negative impression particularly to the younger generations and thus the town has been isolated due to their migration to urban areas.</p> <p>The Ajimu Green Tourism Study Group, an informal study group of Ajimu farmers and residents established in 1997, has looked into the possibilities to incorporate the notion of 'green tourism' after conducting study tours to Germany. Thanks to the initiatives of the Ajimu Green Tourism Study Group, the Ajimu town government, announced the establishment of a green-tourism based community and formed a membership group of local farmers interested in home staying (farm-staying) to encourage the visits of urban dwellers.</p>

	SectionB: Outline of Practices /Actions	<p>1) Objective of practice To revitalise the community through public-private partnerships for the promotion of green tourism.</p> <p>2) Outline of practice Ajimu's green tourism is implemented on a voluntary basis. As of April 2004, 14 farmers contract out with the town government and host the visitors for sightseeing as well as agricultural and cultural experiences. Ajimu's green tourism does not have an overarching tourism development plan, but the activities are designed by the farmers themselves. Some keep vineland and poultry, while others grow vegetables and herbs. Many farmers provide cooking classes their produce. This allows the farmers to maintain their lifestyle and develop their identity.</p> <p>Green tourism furnish opportunities for cultural exchange, but also provides the farmers with economic incentives to maintain their agricultural business. Visitors pay fees for farm-stay and food, but the fees are also collected from nearby residents who participate in various one-day cooking classes.</p>
	SectionC: Results /Outcomes	<p>Ajimu's green tourism initiative has resulted in:</p> <ul style="list-style-type: none"> - first municipal government that announced the promotion of green tourism - the visits of more than 2,500 individuals (some visit the town as part of their school trips, while others come on private.) - deregulation and transformation of Oita Prefecture's and national Hotel Business and Food Sanitation Laws, which set lower requirements for restaurant businesses. - exchange of people, knowledge and culture.
Keys for success (cause of failure)		<p>One of the success factors is the presence and great efforts of Mr. Seiichi Miyata, President of the Ajimu Green Tourism Study Group. Being a farmer, Mr. Miyata recognises the challenges of agricultural sector and thus is well positioned to facilitate a public-private partnership for green tourism.</p> <p>In addition, Ajimu's green tourism is implemented in a decentralised way, encouraging participation of farmers and other residents. Such voluntary mechanism led to various opportunities for capacity building and information/knowledge sharing.</p>
Evaluation		<p>Ajimu residents have been discussing the way to maintain their green tourism activities. Despite financial deficiency and changes in town planning and municipal merger, the Ajimu residents considers such movement as an opportunity to further promote green tourism.</p>
Applicability		<p>Poverty eradication and rural development is a universal issue. Green tourism can be a vehicle for community development particularly in semi-urbanised area whose economy is based on agriculture.</p>
Reference		<p>Ajimu Green Tourism Study Group Website: http://www3.coara.or.jp/~ajimu/contentsFrameset.htm (only in Japanese)</p>
Sectoral Issues		3
Cross-sectoral Issues		1; 5; 7
Instruments		1.1; 3.1; 3.2; 3.3; 3.4; 3.5; 3.7; 3.8

Provider of this information	Name	APFED Secretariat
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	Job Title	
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Title		Improvement of the living conditions of the local population by implementation of a model of sustainable land use during increasing desertification conditions in the Ili-Balkhash region
Country		398
Province		
Area		Almaty Oblast
Implementation level		1
Duration/ Year		2002-2003
Contact Person/ Focal Point for Enquiry	Name	Dr. Kuralay Karibayeva, Director
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount - \$ 100,000</p> <p>2) Source(s) of funds: The Deutsche Gesellschaft fuer Technische Zusammenarbeit, Konventionsprojekt Desertifikationsbekaempfung (GTZ CCD-Project)</p> <p>3) Efforts to raise/sustain funds for implementation: The GTZ Project provided the basis for the application to GEF/SGP which has been awarded and now the project document is prepared and being implemented for 2003-2005 to sustain the Ili-Balkhash basin.</p>
Actors involved		2; 3; 5
Description of the Practice	SectionA: Background & Objectives	<p>Project area: Almaty Oblast, Balkhash region, Rural districts Balatopar, Topar, Jelturanga, total area is about 150,000 ha, or 1,500 sq. km. The project area encompasses the southern delta part of the Ili River and northern part of the Taukum sand desert. In the west, the Balkhash Lake is a natural border.</p> <p>It is a home to about 5,200 people, 1,100 families. The working population - 63%. There is no industrial production, including agricultural crop processing. Private enterprise is represented by farms dealing with livestock. The number of families involved into this kind of business is around 16% of the total number. At the same time, there is no lack of pasture areas to create farms. The rest of the population is also dealing with livestock breeding, which is economic basis for the local population. The livestock is used primarily for meat. The cattle is grazed on natural desert pastures practically all the year round. Major problems - lack of resources of the new independent state to address rural problems as well as difficult consciousness of villagers to transit to market economy.</p>

	<p>Major environmental problems, which put the region on the verge of ecological disaster are changes in hydrological conditions of the flood-lands of the Ili River, as well as environmental degradation and desertification followed by inadequate livestock grazing and ceasing distant-pasture livestock-breeding system; deforestation of desert forests for fuel (haloxylon); poor protection against fire; unsustainable water use and surface water pollution.</p>
<p>SectionB: Outline of Practices /Actions</p>	<p>1) The project goal: - Combating desertification and conservation of biodiversity, - Facilitating introduction sustainable land use by developing environmentally friendly activities - Improving of living standards and social and economic situation for the local population.</p> <p>2) The project objectives - Assessment of desertification degree and reducing land degradation by implementing nature protection activities; analysis of natural conditions and development of sustainable land use model; self-help of local population for sustainable farming and reduction of risks of socio-economic factors on natural ecosystems; improvement of local population's livelihoods and taking poverty alleviation activities.</p> <p>3) Outline of the practice Environmental activities: mapping of one rural district's area and assessment of environmental state of desert forest-pastures, vegetation, fodder lands and stocks is carried out; pasture management plan, which would promote sustainable use of plant resources and biodiversity conservation, is being developed; a demonstration plot of turanga (<i>Populus pruinosa</i>, Red Data Book of Kazakhstan) is fenced; to enhance protection against fire, rangers of local forest protection institution is provided with 10 sets of saddle facilities.</p> <p>Activities to improve livelihoods: Two rural schools are equipped with the facility for drinking water preparation (demineralisation and decontamination) with capacity of 150-200 liters/hour; training workshops on Methods of gathering, processing and applying medical plants, Production of home-made dairy products (cheese, cottage, yoghurt), Perspective for live-stock farming development conducted; alternative activities (beekeeping, poultry, ecotourism etc.) identified and justified; local administration enabled to create consumer service centres, provided with hairdresser and boot-repair equipment; veterinary consultancy ensured. In future, local communities will be provided with fruit-tree saplings for planting on the territory of villages and poor families.</p> <p>Activities to strengthen the role of participants and self-help of local population: to promote farmer's movement and enable poor families, mowing machines are purchased each For joint use in each village; to strengthen women activities in the region 5 sewing machines are provided and used; a matting group is established in Topar village (10 unemployed women), and in Jeltoranga vottage - blanket-making (8 women). Environmental education activities: environmental NGOs, project partner, are established in each village; each school has environmental class and equipped with TV and environmental video-tapes; the Topar school is provided with satellite equipment to watch ecological programmes and use in education process; all the schools held open lessons dedicated to local nature and drawing contest on ecological topics. Calendars with winner's drawings, booklets, and poster are published. Local and republican media published and broadcasted over 10 articles, a series of interview on TV programmes.</p> <p>4) Stakeholders involved, decision making process The project actions involved farmers and members of their families, local governance frameworks (Aksakal's, Women and Youth's Councils under Akimats - local administration), schools and young people, specialists of local Akimats and state environmental institutions.</p>

	SectionC: Results /Outcomes	<p>1) Improvements/changes</p> <ul style="list-style-type: none"> - Project expectations have been achieved in general. Rational use ways contributing conservation and rehabilitation of arid plants and animal breeding forage resources were developed and presented to local communities (and they are implemented in two representative farms). Local farmers and inhabitants in whole became to show more interest and initiatives in environmental and self-organisation problem solving. Local environmental NGOs with a staff of 8-14 persons begin to play a positive role. - Local authorities expressed their interest in project work, there was decision on fundraising to repair a road in the project territory. There are premises for the project representatives' offices in every village. <p>2) Problems that remain to be solved</p> <p>Among unsolved problems - the big part of farmers is still inert and do not fully understand the necessity to reconstruct traditional ways of housekeeping to new methods based on science and environmental safety recommendations. Alternative types of life support are used insufficiently. Additionally to subjective reasons (lack of starting capital, lack of such activity in people traditions and brain inertia, lack of skills and knowledge) the institutional aspect has a high profile. It is necessary to improve standard and legal base and also environmental protection legislation on enhancement of economic instruments of natural resources use control; to extend and to improve programmes on small business and rural economy crediting.</p>
Keys for success (cause of failure)		The project takes into account priorities of long-terms strategies for development of the Republic of Kazakhstan, programmes and plans at national and regional levels. Mutual understanding with local authorities and project support at all levels (village, district and oblast akimats) very largely helped to project success. Besides, it is necessary to point out the high professional level of international consultants, Kazakhstani project participants' considerable contribution, regular financing in accordance with established procedure.
Evaluation		Project executives evaluate its work as successful. Also Mr. Sh.Kulmakhnov, Akim of Almaty Oblast, to whom outcomes were reported, gave a high assessment to project.
Applicability		Primordially the project was considered and developed as a pilot one. Its outcomes show that it is possible to replicate received experience in regions with same environmental problems and social and economic situation. Additionally it is too important to achieve mutual understanding with local state authorities and to stir up local population self-consciousness and self-organisation for environmental problem solving and for living standard increasing
Reference		<p>Kazakhstan Informational Agency (Kazinform), 20.05.2003.</p> <p>'Panorama', republican newspaper, №19, 16 May, 2003.</p> <p>'Pribalkhashye', region newspaper (in Kazakh language), № 48, 30.12.2002.</p> <p>Electronic bulletin 'Environmental Herald', №11.01.2003</p> <p>Electronic bulletin <Environment and Human Rights >, №1056, 10.06.2003.</p>
Sectoral Issues		3
Cross-sectoral Issues		4; 5; 7
Instruments		1.2; 3.1; 3.2; 3.8
Provider of this information	Name	Anatoly Mishchenko
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Title		Improving the Provision of Sustainable Energy Services for Small Island Developing States
Country		998
Province		
Area		
Implementation level		3
Duration/ Year		December 2002 - December 2012
Contact Person/ Focal Point for Enquiry	Name	N/A
	Affiliation	
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount : N/A 2) Source(s) of funds : Global Environment Facility (GEF) and Clean Development Mechanism (CDM), and cost sharing of small island developing state governments.
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	
	SectionB: Outline of Practices /Actions	To increase provision of sustainable energy services for small island developing states (SIDS) over a ten years period, in order to reduce the outflows of foreign exchange and to protect the environment, in keeping with the Millennium Development Goals.
	SectionC: Results /Outcomes	Reduced dependence by SIDS on imported fossil fuels, increased availability of reliable cost effective and sustainable energy supplies, increased development of adequate human and institutional capacity to plan and manage the energy sector in SIDS, etc.
Keys for success (cause of failure)		
Evaluation		N/A
Applicability		Applicable to other regions.

Reference		WSSD website: http://webapps01.un.org/dsd/partnerships/search/partnerships/140.html
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.3; 3.8; 4.1
Provider of this information	Name	
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		India's Policy for Protecting the Coastal Environment for Sustainable Use
Country		356
Province		
Area		
Implementation level		2
Duration/ Year		Guidelines were issued from 1981 till 1991 in line with the policy and finally Notification was issued on 19 February 1991.
Contact Person/ Focal Point for Enquiry	Name	Relevant officials in the Ministry of Environment and Forests dealing with the implementation of the Coastal Regulation Zone Notification
	Affiliation	Ministry of Environment and Forests, Government of India
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	E-mail	N/A
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Source of funds: Government of India
Actors involved		2
Description of the Practice	SectionA: Background & Objectives	<p>The Ministry of Environment and Forests, Government of India, has created a statutory innovation in the form of a legal notification for the protection and planned development of coastal areas, including the reservation of areas in coastal zones set aside as No-Development Zones. The notification crystallises a fairly firm policy to protect coastal areas from unplanned and indiscriminate human activities.</p> <p>In addition to farming and fishing, the two major coastal industries, there are several development interests that show a marked preference for the coastal region. Industries wish to be located here for easy access to the sea for discharge of effluents; thermal power plants, for easy access to the enormous quantities of cooling water they need; tourism promoters want to use the beaches for building hotels. There are also activities for which foreshore facilities are essential, for example ports, harbours, jetties, wharves and quays. All these new development pressures are in addition to demands already being made by existing coastal inhabitants.</p> <p>The concentration of development activities on such a scale, in fact, threatens to destabilise the very resources that provide the possibilities of living in the coastal belt. The increased economic activities in the coastal region have led to the depletion of marine life due to overfishing in coastal waters, the levelling of sand dunes, the destruction of mangrove forests and coral reefs, and the ingress of saline water into adjacent freshwater aquifers. In addition pollutants and toxins are discharged daily into the coastal waters.</p>

	<p>The Coastal Regulation Zone (CRZ) Notification sought to regulate human activities in the area of 500 metres from the High Tide Line along the coastal stretches of the country. The CRZ came into immediate effect on 19 February 1991 and was made applicable to the entire 6,000km coastal belt of India and, in addition, to riverine stretches affected by tidal action.</p>
<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The objective of the Coastal Regulation Zone Notification is to protect the coastal areas from becoming degraded due to unplanned and/or excessive development which results in pollution and the eventual destruction of this highly prized, fragile and irreplaceable natural resource.</p> <p>2) Outline of the practice The Coastal Regulation Zone (CRZ) Notification was issued under the powers given to the Central Government under the Environment Protection Act 1986. Under the Notification, the coastal stretches of seas, bays, estuaries, creeks, rivers and backwaters, which are influenced by tidal action (in the landward side) up to 500m from the High Tide Line (HTL), and the land between the Low Tide Line (LTL), and the HTL, were identified as the Coastal Regulation Zone.</p> <p>Among the activities that are prohibited outright in CRZ areas are the following:</p> <ol style="list-style-type: none"> a. Setting up of new industries and expansion of existing ones. b. Manufacture, handling and storage or disposal of hazardous substances. c. Discharge of untreated waste and effluents from industries, cities, towns and other human settlements. d. Land reclamation, bunding or disturbing the natural course of sea water. e. Mining of sand, rocks, and other substrata minerals. f. Drawing of groundwater, using mechanical means. g. Dressing or altering sand dunes, hills and other natural features, including landscape changes, for beautification, recreation, etc. <p>All activities other than those expressly prohibited are sought to be strictly regulated in the CRZ and henceforth require the prior approval of the Government of India (especially if the investment exceeds 50 million rupees). The Government itself cannot grant approvals for projects in contravention of any of the restrictions imposed on coastal areas by the CRZ Notification.</p> <p>For purposes of planning and management of the coastal areas, the CRZ Notification classifies coastal areas into 4 zones depending on the intensity of protection that these areas require and also considering the extent of development that has already taken place in such areas. The 4 zones are:</p> <ol style="list-style-type: none"> a. CRZ I: Comprises those areas that are most fragile and consequently in need of absolute protection from any form of development. The zone comprises areas which are ecologically sensitive and vulnerable, such as mangroves, coral reefs, national parks, marine parks, sanctuaries, spawning grounds of fish and other marine life, areas rich in genetic diversity, areas of outstanding natural beauty, historical and heritage areas, areas likely to be inundated due to global warming and the foreshore area which lies between the LTL and the HTL.. No development whatsoever is permitted in this zone by the statute. b. CRZ II: Comprises areas that have already been developed up to or close to the shoreline. All cities and well-populated areas that are substantially built up and have roads and other infrastructural facilities such as water supply and sewerage mains would fall into this zone. In these areas, development is permitted only on the landward side of existing buildings or roads - the general idea being that since it is not economically and politically feasible to reverse the development that has already taken place, the least that can be done is to prevent further damage by restricting development to areas behind those that have already been developed.

	<p>c. CRZ III: Includes those areas that are relatively undisturbed and which do not fall under either CRZ I or CRZ II. This includes largely rural areas and also areas in legally designated urban areas that are substantially built up. In CRZ III zones, the area up to 200m from the HTL is a No-Development Zone and no construction/development is permitted in this stretch. Between 200m-500m, a concession has been made for the foreign exchange earning potential of the tourism industry and therefore hotels for tourism purposes are permitted, provided they comply with certain conditions. Among the conditions listed are the following:</p> <ul style="list-style-type: none"> (i) the hotel or resort buildings will not have more than two floors (ground plus one upper floor) and the total height of construction will not exceed 9m up to the highest ridge of the roof; (ii) groundwater will not be tapped by mechanical means in the area up to 500m from the HTL; (iii) there will be no extraction of sand or levelling of the sand dunes; (iv) the floor space index will not exceed 33%; (v) any green fencing or barbed-wire fencing that is put up within 200m of the HTL will not hamper public access to the beach; and (vi) the construction will be consistent with the surrounding landscape and local architectural style. <p>Recognising that the beach areas are an important arena of economic activity for the coastal communities comprising fisherfolk, and recognising also that beach areas form a valued recreational area for the vast majority of common folk, the Environment Ministry also gave much weightage to the question of public access to the beach.</p> <p>The law therefore stipulates that 'to allow public access to the beach at least a gap of 20m width shall be provided between any two hotels/beach resorts and in no case shall gaps be less than 500m apart.'</p> <p>d. CRZ IV: The zone comprises the coastal stretches of the Andaman and Nicobar Islands, Lakshadweep and other small islands. These eco-fragile regions have been treated as separate entities and special protection status has been accorded to them as a consequence.</p> <p>Under the Notification, the coastal states of the Indian union have been directed to prepare Coastal Zone Management Plans (CZMPs) which will identify the CRZ areas in each state, classify them into zones in accordance with the Notification and also indicate the scope of development planned or proposed therein. The different CZMPs of the various coastal states were prepared under the specific direction of the Supreme Court in 1996 and were also approved in the same year by the Ministry of Environment and Forestry. They now control or provide the framework for the sustainable development of India's coastal areas.³ Stakeholders involved, decision-making process Ministry of Environment and Forests of India drafted and issued the CRZ Notification. The Ministry's scientists had been working on a set of guidelines for the protection and development of coastal areas. Several meetings were organised by the Ministry with experts, NGOs and environmentalists to expand the fund of knowledge and expertise available in the Ministry on the coastal ecosystems. Finally a set of guidelines was drawn up and published in the form of a booklet and circulated to all coastal states.</p>
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	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/Changes</p> <p>The traditional fishing communities all along the west and east coasts of India have rallied solidly behind the CRZ Notification. The CRZ is protective of traditional livelihoods like fishing and toddy tapping.</p> <p>The 200m zone from the high tide line has continued to remain a largely No-Development Zone and this has resulted in many of the coastal areas being maintained in their original natural state. This itself is an attraction for tourists who want to escape from the concrete jungles of their own countries. Thus, in contrast to tourism development in countries like Spain or Malaysia, the coastal areas in India and their specific ecological endowments have been left largely intact and in their wild and natural state. India has conceded that nature also has its own right to be.</p> <p>2) Problems that remain to be solved</p> <p>There have been several problems encountered in the entire exercise of enforcing the CRZ Notification. Most of these resulted from pressures exerted by vested interests and development bodies who would like to have greater liberty in utilising the resources of the coastal areas for their own short-term private objectives. The tourism lobby was the most vocal of all and tried to sabotage the Notification by flouting it openly or by undermining it.</p> <p>Another obstacle to implementation of the CRZ Notification was the attitude of the state governments, which resented interference by the federal government in what they saw as their territorial fiefdoms. Some States tried to back CRZ violators by applying their own interpretations on the CRZ Notification.</p> <p>The main problem of the implementation of the Notification still remains - namely the political will on the part of the coastal states. Pressures continue to be exerted on the Federal Government to consider another round of amendments to the CRZ Notification on ground of economic development and because the Notification is alleged to be causing hardship to the common people.</p> <p>This is not true because the CRZ Notification specifically permits the traditional inhabitants of the area, namely the farmers and fisherfolk, to construct or renovate their dwellings within the CRZ while restricting outsiders from doing so.</p> <p>3) Unexpected positive/negative impacts to date</p> <p>The CRZ Notification turned the coastal areas into a major battleground with those who see them as an arena for unlimited opportunity and those who argue for restraint in the interests of ultimate survival and protection of the region on the other.</p> <p>However the necessity of implementing the Notification underlined by the Supreme Court judgement has led to enhance appreciation of the coastal environment, coastal ecosystem values and long-term sustainable development practices. Town planning authorities have been forced to think of alternative measures to dispose of coastal town wastes since the CRZ Notification has declared it illegal for the authorities to continue to use the oceans as dumping grounds for untreated wastes and effluents from industries, towns or cities and other human settlements. Shrimp aquaculture in the coastal areas have also suffered a setback with the Supreme Court declaring intensive and semi-intensive forms of prawn farming contrary to the Notification. This form of aquaculture, besides displacing the traditional rice/shrimp rotating aquaculture practiced by the local farming community, had also begun to pose a serious threat to the environment due to coastal pollution as effluents from the aquaculture farms were being discharged directly into coastal waters without any treatment. Chemicals and antibiotics injected into the feed to produce high yields of shrimp eventually find their way into the fragile coastal belt, threatening other fragile forms of marine life.</p>
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Keys for success (cause of failure)		The vigilance of environment NGOs and concerned citizens has forced the authorities to enforce the CRZ Notification and the statutory coastal management plans. The NGOs played an important role in ensuring that the CZMPs were prepared strictly in accordance with the Notification and would not turn out to be mere pieces of paper incapable of really protecting the coastal areas.
Evaluation		Progressive legislation such as the Policy described above form the basis for preservation and protection of the environment.
Applicability		Several aspects of the CRZ Notification and its features could be utilised by other statutory authorities in coastal countries for implementation under their own statutory laws. The CRZ can be a useful model in planning for the sustainable development of coastal areas in their countries.
Reference		<p>Publication:</p> <p>India's Policy for Protecting the Coastal Environment for Sustainable Use Good Practices & Innovative Experiences in the South (Volume 1): Economic, Environmental and Sustainable Livelihood Initiatives. Edited by Martin Khor and Lim Li Lin. 2001. Published by Zed Books, Third World Network, Special Unit for Technical Cooperation among Developing Countries, UNDP.</p> <p>Literature on the CRZ Notification is easily available in India in printed form. A book containing the CRZ Notification, the Supreme Court judgement upholding it and the approved CZMPs of all the coastal states in India can be obtained from The Goa Foundation at the address below.</p> <p>Research conducted by: Norma Alvares, Legal Adviser, Goa Foundation Address: Above Mapusa Clinic, Mapusa 403 507, Goa, India. Telephone: +91-832-226-3306, 225-6479 Fax: +91-832- 226-3305 Email: oibs@bom2.vsnl.net.in</p>
Sectoral Issues		5
Cross-sectoral Issues		1; 4; 5
Instruments		1.1; 3.2; 4.2
Provider of this information	Name	Mageswari Sangaralingam
	Organisation	Consumer's Association of Penang
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Title		INDONESIA FRENCH PUBLIC AND PRIVATE PARTNERSHIP TO DEVELOP MINI HYDRO POWER IN RURAL/REMOTE AREAS, ON A SUSTAINABLE BASIS
Country		360
Province		
Area		
Implementation level		2
Duration/ Year		2002 - 2007
Contact Person/ Focal Point for Enquiry	Name	M. Luluk Sumiarso, Director of Electricity and Energy Utilisation Cristphe Baulinet, Deputy General Director for Energy and Raw Material
	Affiliation	
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: N/A 2) Sources of funds From FFEM on a cost sharing basis
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The initiative aims to develop financial and institutional arrangements so that the private sector can invest on development of renewable sources, in relay of public funding, in developing countries.
	SectionB: Outline of Practices /Actions	
	SectionC: Results /Outcomes	To demonstrate that a private financial mechanism can make important contributions to sustainable development initiatives, through environmental, social and developmental as well as financial and economic perspectives. Concretely, a comprehensive framework will be developed and tested to mini-hydro power plants, financed on a Public Private Partnership (PPP) basis, to be gradually scaled up to a full programme.
Keys for Success (cause of failure)		Coordination by a Steering Committee
Evaluation		N/A, on-going project

Applicability		Applicable to many other renewable energy projects
Reference		WSSD Type II Partnership Information http://www.johannesburgsummit.org/html/sustainable_dev/p2_managing_resources/1408_in_donesia_energy_lpe_type2.pdf
Sectoral Issues		2
Cross-sectoral Issues		2; 4; 6
Instruments		1.1; 2.4; 3.2; 3.3; 3.8; 4.1
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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	E-mail	apfed@iges.or.jp

Title		Initiative to Lessen Marine Pollution in Indonesian Waters
Country		360
Province		
Area		
Implementation level		2
Duration/ Year		2002 - ongoing
Contact Person/ Focal Point for Enquiry	Name	Dr. Ir. Tjuk Sukardiman or Adriyanto Papuke
	Affiliation	The Directorate General of Marine Transportation, The Department of Transportation, Indonesia
Contact Information	Address	Gedung Karja, 8th floor, Jalan Merdeka Barat No. 8, Jakarta, INDONESIA
	Tel	+62-21-845-0788
	Fax	+62-21-845-0789
	E-mail	adriyanto@yahoo.com
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source of funds: International Maritime Organisation (IMO)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	<p>The diverse activities in Indonesian waters require intensive marine environmental protection, adequate resources and sufficient funds. Presently management of marine safety in Indonesia lacks sufficient coordination. For this reason, cooperation between related parties is essential for better management of preventing marine pollution. Thus the following activities are expected:</p> <ol style="list-style-type: none"> (1) Implementation to realise the concept of preventing marine pollution. (2) Community involvement in marine protection. (3) Formation of a committee for marine environmental protection and security, conducted as cooperation between related agencies and with other countries. (4) Creating an integrated marine environmental security system, in security and surveillance. (5) Cooperating to conserve and regulate marine biological resources. (6) Cooperating to protect marine resources. (7) Mechanism with other countries to realise a concept to minimise marine pollution. (8) An effective Search and Rescue Service. (9) Determining conservation measures in each country for fishing on open seas. (10) Information on agencies handling Maritime Safety and the responsibilities and activities of each. (11) System of sharing-responsibility in each related agency to maintain the safety of marine regions, including safety in port working areas and areas of ship loading and unloading.

	<p>SectionB: Outline of Practices /Actions</p>	<p>Specific Activities are:</p> <p>Short Term (1 years):</p> <ul style="list-style-type: none"> - Identifying agencies related to maritime safety - Identifying capability of each relevant agency in handling the problem of marine pollution. - Analysing policies related to marine pollution as well as the marine and coastal resource policies. - Developing the marine potential in efforts to eradicate poverty in coastal area communities. <p>Medium Term (3-5 years):</p> <ul style="list-style-type: none"> - Developing policies to encourage the socialisation process of maritime safety concept to communities living around coastal areas. - Developing marine and coastal resource policies that are able to safeguard and protect marine regions optimally. - Developing skills and capabilities of utilising technology in efforts to develop marine resources, which will not harm the marine environment. - Developing efforts to protect the marine environment such as coral reefs to support marine life. - Developing policies to regulate marine resource management, based on principles of maritime safety concepts. - Active community involvement in preventing marine pollution. <p>Long Term (Up to 10 years) :</p> <ul style="list-style-type: none"> - Developing and enforcing laws able to optimally protect marine resources. - Enhancing the quality of life for the coastal community through sustainable marine potential utilisation by applying concepts of maritime safety. - Fostering cooperation between the government, the private sector and the community in realisation of Maritime Safety. - Law enforcement for preventing marine pollution. - Promoting development of management policy system in the framework of protecting marine and coastal resources from destruction.
	<p>SectionC: Results /Outcomes</p>	<p>The expected results are:</p> <ul style="list-style-type: none"> - Strategies implemented to realise the concept of preventing marine pollution. - Community involvement in marine protection - Formation of a committee for marine environmental protection and security, conducted as cooperation between related agencies and with other countries. - Creating an integrated marine environmental security system, in security and surveillance. - Cooperating to conserve and regulate marine biological resources. - Cooperating to protect marine resources. - Cooperation mechanism with other countries to realise a concept to minimise marine pollution. - An effective Search and Rescue Service - Determining conservation measures in each country for fishing on open seas. - Information on agencies handling Maritime Safety and the responsibilities and activities of each. - System of sharing-responsibility in each related agency to maintain the safety of marine regions, including safety in port working areas and areas of ship loading and unloading.

Keys for Success (cause of failure)		
Evaluation		
Applicability		
Reference		Johannesburg Summit Website: http://www.johannesburgsummit.org/html/sustainable_dev/p2_managing_resources/marine_pollution_indonesian_1507.pdf
Sectoral Issues		5
Cross-sectoral Issues		1; 4; 6
Instruments		1.1; 3.1; 3.3
Provider of this information	Name	Albert Lopian and Adriyanto Papuke
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Title		Institutional Capacity Building of Sarvodaya Sharamadana Societies (SSS)
Country		144
Province		
Area		Implement in 6 provinces out of 8 provinces of the Sri Lanka. This covers 17 districts out of 24 districts of the country involving over 2,700 SSS, which has over 750,000 memberships.
Implementation level		4
Duration/ Year		2003 - 2006 (4 years); Project planning and initial stage started in 2002
Contact Person/ Focal Point for Enquiry	Name	Dr. Sunil Liyanage, Director
	Affiliation	Sarvodaya Management Training Institute (Training Division of Sarvodaya Economic Enterprises Development Services-SEEDS)
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: 100 million Euro (For whole project and about 5 % of the project funds may be spend on environmental components) 2) Source of fund: NOVIB 3) Efforts to sustains fund - A revolving fund will be developed through the contribution of NOVIB, SEEDS and SSS.
Actors involved		4; 5
Description of the Practice	SectionA: Background & Objectives	SSS are the village-based organisation attached to Sarvodaya Movement and SEEDS. These SSS are operating over 2-50 years duration and focused on developing 5 basic aspects of human life, social, economic, religious, spiritual and cultural. Development of these aspects makes a man with proper disciplines in those 5 aspects. Even though environment is not a specific aspect, it is an integral or cross cutting sections of all 5 aspects and development of that 5 aspects will enhance the living environment, microenvironment and village environment. However the changing scenario of the world, particularly the commercialisation and globalisation process drove these SSS to focused on economic aspects more, mainly financial services, neglecting or undermining other aspects. This has created many issues because economic development is not the only requirement of the members of SSS. Hence members who do not need financial services have become dormant or inactive members of SSS, which led to the SSS become inactive. In this background, the Capacity Development Project designed to include all aspects needed for human living including environmental conservation at village level.

	<p>SectionB: Outline of Practices /Actions</p>	<p>Practice-1. Awareness building Objectives of the programme to build awareness among members of SSS on importance of development of sustainable, environmentally friendly socio-economic development process to achieve the 5 aspects described above. Village based programmes design and implement by SSS with the guidance of SEEDS.</p> <p>Practice-2. Selection of micro enterprises for economic development After initial awareness building, it is necessary to encourage members of SSS to start micro enterprise for economic development. In the process, officers of SEEDS facilitate the selection of appropriate enterprise for each member of SSS. In this process, more focus is given to following enterprise/practices.</p> <ul style="list-style-type: none"> - Organic farming - Protected agriculture (Poly-tunnel farming) - Sustainable utilisation of local natural resources - Conservation of local natural resources - Minimise or prevention of environmental pollution - Adhere to national environmental regulations in enterprises - Energy savings in enterprises - Using renewable energy sources - Develop/enhance microenvironment for better living <p>SSS and its members responsible for designing, implementation process with the guidance of SEEDS.</p>
	<p>SectionC: Results /Outcomes</p>	<p>Since the project is about 1 year old, proper review is not done yet to assess the results, positive and negative aspects at present. However activities of the project generated huge interest among members of 2700 plus SSS. The results seen in the process are:</p> <ul style="list-style-type: none"> - increased awareness on sustainable utilisation of resources - increased environmental concerns - energy savings - fresh water conservation - increased use of solar power as a energy source at households - increased use of organic farming - increased use of protected agriculture - community involvement in village based environmental projects - restoration of micro habitats to enhance micro-environmental conservation <p>It has notice that project activities have enhanced the environmental conservation in overall scenario. However it is premature to present quantitative analysis at present. The annual review in the first quarter of 2004 will provide comprehensive evaluation on results of the project and the positive/negative impacts. However environmental concerns among the members have increased many folds and they consider conservation aspects and protection of village environment in any activity SSS is implementing.</p>
<p>Keys for success (cause of failure)</p>		<p>Following preconditions are the keys to the success.</p> <ul style="list-style-type: none"> - Building up adequate awareness - Voluntary participation for Sharmadana campaign (sharing labour for one day village programme) on environmental related project - Voluntary participation for Sharmadana campaign on community health project - Higher level of participation for SSS monthly meetings & collaboration for the success of SSS - SEEDS staff role of facilitation to ensure the equal status/role of every member without the limits of economic status, religion, ethic groups, social caste or gender - SEEDS staff role in attitude changing of SSS members to enhance the achievement of objectives - SEEDS staff contribution to the capacity building of SSS office bears, managers

		<ul style="list-style-type: none"> - SEEDS staff role in entrepreneurship skill development of members of SSS and building of an awareness on environmental regulations and standards - Introduction of alternative energy source - solar power - Introduction of new technologies - organic farming, protected agriculture, use of EM in compost manufacturing etc. - Provision of easy credit facilities for enterprises development - Continuous monitoring
Evaluation		<p>A short term Initial Action Plan (6 months) has developed for each SSS and Medium Term Action Plan (2 years) will develop to those SSS after the completion of initial plan. The implementation of the action plans closely monitor by Project Officers (PO) and Field Officers (FO) of SEEDS.</p> <p>To ensue the effective monitoring process a Monitoring Plan has included to above plans and District Managers will randomly check the monitoring process of PO & FO. SSS office bearers will do time-to-time monitoring of its activities in the monthly meeting.</p> <p>There is a comprehensive evaluation process after the completion of 6 months project. There is mid-term and final evaluation process of medium term action plan. Next action plan will develop based on evaluation of previous action plan. All the evaluation process is participatory. This process ensures the effective, sustainable, participatory process in the evolution. This ensures cost effectiveness, transparency, accountability and participation of members of SSS to evaluation.</p>
Applicability		Applicability of the project to other countries is possible because Sri Lanka society is much heterogeneous in economic, social, educational aspects. The only homogeneous characteristic is the religion in a given village. Hence applicability is very high, especially in developing countries.
Reference		Project Proposal is available with SEEDS and each SSS has Initial Action Plans at present. Initial plans have developed for 280 SSS up to now. Development of Initial plan for another 1000 SSS is in progress.
Sectoral Issues		3
Cross-sectoral Issues		1; 4
Instruments		3.2; 3.3; 3.4; 3.5
Provider of this information	Name	Dr. Sunil Liyanage
	Organisation	Sarvodaya Economic Enterprises Development Services (SEEDS)
	Job Title	Director-Training
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Title		Institutional Strengthening and Collection of Environment Statistics in Selected Developing Member Countries (DMCs)
Country		50; 356; 360; 458; 524; 586; 608; 882; 144; 548; 704
Province		
Area		
Implementation level		4
Duration/ Year		1995 - 2000 (5 years)
Contact Person/ Focal Point for Enquiry	Name	Bishnu D. Pant, Senior Statistician, Economics and Research Department
	Affiliation	Asian Development Bank (ADB)
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	Tel	+63-2-632-4444
	Fax	+63-2-636-2444
	E-mail	information@adb.org or bpant@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$ 900,000 2) Source of funds: ADB Technical Assistance Special Fund (TASF)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The management of the deteriorating environmental situation in the Asian and Pacific developing countries requires the development of broad based environmental management policies for these countries. This will require collection of reliable environment statistics and development of indicators for formulating appropriate environment policies and for monitoring the state of environment. However, there is paucity of environment statistics in some of ADB's developing member countries (DMCs). Availability of conceptual framework that could be used as guide in identifying what environment data to collect is lacking. Methodologies for collecting environment statistics are not well developed. And most importantly, there is no agency principally responsible for the promotion and collection of environment statistics. A systematic approach in retrieving and storing environmental data and statistics is therefore needed to enable DMCs to develop and equip their capacity in overall environmental planning and management. Hence, this is a regional technical assistance (RETA) project.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objective of the practice The major objectives of the RETA were to: (i) establish institutional linkages and strengthen institutional capacity for the collection, compilation and dissemination of environment statistics; (ii) formulate a framework for the development of environment statistics (FDES); and (iii) assist in preparing compendia of environment statistics (CES) based on country-specific FDES by organising environment statistics that are already available through existing sources.</p> <p>2) Outline of the practice ADB provided financial assistance amounting to \$ 25,000 each to all eleven participating countries namely: Bangladesh, India, Indonesia, Malaysia, Nepal, Pakistan, Philippines, Samoa, Sri Lanka, Vanuatu and Viet Nam for developing the environment statistics. This amount covered the costs of the national workshops, local consultancy services and other miscellaneous costs associated with the preparation of FDES and CES. ADB organised four workshops including two sub-regional workshops to discuss plans and programmes, review mid-term work progress and discuss the final results of the RETA. It provided advisory services to most participating DMCs that requested specific technical assistance during the process of developing the country-specific frameworks and the compendium. A short training course on environment statistics was also conducted in collaboration with the Central Statistical Organisation of the Government of India and Tata Energy Research Institute. A total of 23 persons from ten participating DMCs (excluding Pakistan) benefited from the training.</p> <p>3) Stakeholders involved, decision making process Concerned Government Officials</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvement/Changes: The RETA was generally successful in laying the foundation for the development and collection of environment statistics in participating countries. However, additional efforts will have to be made by the countries themselves and also by ADB to sustain the progress achieved. There was about seven months delay in the completion of the RETA, which was primarily due to some participating countries' delays in preparing their compendia. Most of the participating countries prepared their respective compendium of environment statistics for the first time. Since a large number of agencies were involved in the data compilation, effective coordination among the collecting and compiling agencies was required for the successful completion of the compendia. The countries that were able to have effective coordination among data collecting agencies were more successful than others in accomplishing their RETA responsibilities.</p> <p>2) Problems remain to be solved How to sustain this very important activity, where respective compendium of environment statistics will be continuously updated by participating countries.</p> <p>3) Unexpected positive impacts to date: The establishment of an environment statistics cell, formation of inter-agency committees, and the training of a large number of environment experts and statisticians are expected to contribute to the environment statistics capacity building of all the participating countries in the long run.</p>

Keys for success (cause of failure)		An important requirement for the successful implementation of this type of technical assistance is a strong sense of ownership from the participating countries. Therefore, it is necessary that serious commitments are obtained from all participating countries before they are included in the implementation of similar project in the future. Also, a close and very effective monitoring of the project's activities would be necessary to ensure success.
Evaluation		The RETA was successful in achieving its major objectives, and has contributed to the institutional building for developing the environment statistics of selected DMCs. All participating DMCs established institutional linkages across various agencies responsible for data collection through the creation of high level steering or inter-agency committees. They also established separate statistical units in their national statistics offices for the collection and compilation of environment statistics. All participating DMCs prepared their country specific FDES as well as the CES based on their frameworks. The compendia expected to be updated on a regular basis every two or three years.
Applicability		<p>One of the major outputs of this RETA has been the availability of environment statistics from 11 participating DMCs. In order to sustain the project's accomplishments, it is strongly recommended that a second phase be implemented to include additional DMCs where the concept could be introduced and the process of institutional strengthening be initiated. This will also contribute to improving the flow of environment statistics at ADB and will partly meet the data requirements of the Asian Environment Outlook. Since systematic compilation of environment statistics is a relatively new area, training will be required to develop expertise on the subject. ADB has been repeatedly requested by the participating countries to take the lead in conducting international training programme on environment statistics. Hence, it is recommended that a training component be included should a second phase be implemented.</p> <p>It is also important to have a coordinated approach among various international organisations to develop a common set of environment indicators and avoid duplication of work. It is recommended that the international agencies work together to develop standard handbooks and manuals in their respective environment areas that would promote a systematic development of environment statistics in DMCs and comparability of the resulting data.</p>
Reference		Development of Environment Statistics in Developing Asian and Pacific Countries, Published by the Asian Development Bank, 1999.
Sectoral Issues		3
Cross-sectoral Issues		4; 5
Instruments		3.3; 3.5; 4.2
Provider of this information	Name	
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Title		Institutional Strengthening of the Department of Fisheries and Marine Resources (DFMR)
Country		598
Province		
Area		
Implementation level		2
Duration/ Year		1 year
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	Fax	
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Sponsor(s)		1) Amount: \$883,000 2) Source of funds: ADB Japan Special Fund (JSF)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Despite access to some of the richest fishing grounds in the world, Papua New Guinea (PNG) has never developed a sustainable fishing industry. Foreign vessels annually extract an estimated 200,000 tons of fish from PNG waters, mostly tuna, while the country annually imports about 40,000 tons of canned fish for domestic consumption. To correct this situation, the Government's Fisheries and Coastal Resources Management and Development Program proposed changes in the regulatory framework to encourage private fishing enterprises, and increase support for small-scale and community fishing enterprises. Apart from increasing domestic fish production, the objective of the Government's policy and programme in the fisheries sector is to increase incomes and employment in line with its wider development strategy. The diversification of the economy away from dependence on the minerals sector is another objective. A crucial element in the success of the fisheries development plan has been the focus on institutional strengthening of Department of Fisheries and Marine Resources (DFMR) and the Department of Environment and Conservation (DEC) concerning plan-related activities. In particular, DFMR needs to develop more rigorous project preparation procedures, and DEC needs to enhance its capacity to undertake environmental impact assessment.

	SectionB: Outline of Practices /Actions	The TA was to institutionally strengthen and provide advisory support to DFMR to enable it to fulfil its role as the lead agency in the implementation of Government's proposed fisheries development plan. Implementation of the plan required institutional restructuring and considerable upgrading of skills in DFMR, and the set-up of an environmentally sound resource management system, which also involved DEC.
	SectionC: Results /Outcomes	<p>1) Improvement / Changes The TA provided substantial amount of training and it succeeded in increasing the capacity of DFMR in performing its functions.</p> <p>2) Problems remain to be solved Strong participation of the private sector and local communities' active involvement must be sought first prior to the implementation of any community-based fisheries project.</p> <p>3) Unexpected positive/negative impacts to date One important finding of the TA is that most marine resources (except tuna) are at the level of maximum sustainable yield and therefore no longer viable for further commercial exploitation.</p>
Keys for success (cause of failure)		Weaknesses in soliciting private sector participation. Intervention of social factor in making community-based fisheries a viable project.
Evaluation		Weak institutional setting adversely affected TA's implementation. Community-based fisheries projects should not be supported if social dimensions remain unattended or social preparation is still weak. The dispersed location of the Executing Agency offices slowed down TA implementation. Additional problems were caused at the provincial level by the volcanic eruption in Rabaul.
Applicability		Failures encountered in institutional strengthening made the TA less replicable to other areas.
Reference		
Sectoral Issues		5
Cross-sectoral Issues		1; 4
Instruments		3.4; 3.8
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Title		Integrated Management of Balikpapan Bay and Watershed in Indonesia
Country		360
Province		
Area		
Implementation level		1
Duration/ Year		1998-present
Contact Person/ Focal Point for Enquiry	Name	Maurice Knight
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Sponsor(s)		1) Amount: Unknown 2) Source of funds: United States Agency for International Development (USAID)
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	Intense and unregulated economic and transportation-related development in and around the Balikpapan Bay and surrounding watersheds threatens ecological and aesthetic values. Local residents and governments, expressing concerns on the future of Balikpapan and East Kalimantan, are beginning to demand more active participation in the development planning for the area as well as increased local governance and revenue retention by taking a participatory approach to develop a management plan on land and water. This project, locally known as Proyek Pesisir, is initiated by the USAID and the Government of Indonesia. It is the first initiative in Indonesia to overtly seek to link coastal land and water management using a bay-focused approach. Stakeholders include provincial and local governments, local NGOs, communities and selected industry partners.
	SectionB: Outline of Practices /Actions	Since commencing operations in Balikpapan in October 1998, most effort has been allocated to participatory definition of bay and watershed management issues, building capacity to undertake bay management, and conducting research and survey activities to inform the management process.

	SectionC: Results /Outcomes	<p>A series of major stakeholder workshops have been conducted, each involving the full spectrum of stakeholder interests. Field-base consultations were also arranged between these meetings.</p> <p>In addition, some 35 training events have been conducted for 1,560 participants. They have been conducted by Proyek Pesisir staff and by project technical advisors in partnership with local governments, local universities, and international and local NGOs, and in some cases, via regional study tours. Public awareness opportunities such as production and screening of a television documentary, monthly newspaper reports on survey and training activities, and development of interpretive materials for bay promotion have also been arranged.</p> <p>15 technical studies on various aspects of Balikpapan bay are underway or completed, and some 20 technical and education reports have been published. The discovery of a residual population of Irawaddy dolphin in the bay captured international media attention and created a unique marketing opportunity to build constituency for improved bay management.</p>
Keys for success (cause of failure)		
Evaluation		
Applicability		Experience of Proyek Pesisir is transferable to other municipalities as there is an increased interest in bay management well outside East Kalimantan. For instance, the Jakarta municipal government has requested information to guide development of a Jakarta bay management programme.
Reference		USAID Case Study: http://www.usaid.gov/our_work/environment/water/case_studies/indonesia.balikipapan_bay.pdf
Sectoral Issues		1; 5
Cross-sectoral Issues		1; 4
Instruments		1.1; 3.1; 3.2; 3.8
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Title		Integrated Pest Management (IPM)
Country		586
Province		
Area		Punjab, Rahim Yar Khan, Vehari Districts in Punjab Province, and Sakkar and Sakrand Districts in Sindh Province
Implementation level		1
Duration/ Year		November 2001 - October 2004
Contact Person/ Focal Point for Enquiry	Name	Dr. Iftikhar Ahmad, National IPM Coordinator
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Sponsor(s)		1) Amount: US\$745,000 2) Source(s) of funds: Asian Development Bank (\$500,000), Commonwealth Agricultural Bureau International Regional Bioscience Center Pakistan (\$45,000) and the Government of Pakistan (\$200,000)
Actors involved		1; 2; 3
Description of the Practice	SectionA: Background & Objectives	During the last two decades, pesticide consumption in Pakistan has risen from 665 tons to 44,852 tons as a result of aggressive marketing of agrochemical companies and farmers' fear of pest outbreaks. About 70% of pesticides are used on cotton. Cotton farmers have increased their pesticide application from 0.2 kg/ha to 10.6kg/ha. Considerable evidence shows overuse or misuse of pesticides by farmers, e.g., about 10,000 people are reported to be poisoned by pesticides annually in Pakistan; and pesticide application has adversely affected thousands of women cotton harvesters and their unborn children.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice To reduce the use of pesticides in cotton-based cropping system through the development of technologies and human resources for IPM.</p> <p>2) Outline of the practice - On-farm Participatory Research: to refine the IPM technology in cotton-based cropping system to evaluate biological control for cotton pest management, assess cotton pest-predator interactions, and test the efficacy of new materials for the control of American bollworms, whitefly, and Jassids. - Human Resources Development in IPM: training of trainers and farmer field school will be conducted over about seven months. About 120 agricultural extension staff from the department of agriculture in Punjab and Sindh provinces will be trained to become master trainers who will then train farmers under farmer field schools.</p> <p>3) Stakeholders involved, decision making process Federal Ministry of Food, Agriculture, and Livestock, Department of Agriculture of Punjab and Sindh provinces, and Food and Agriculture Organisation of the United Nations.</p>
	SectionC: Results /Outcomes	Project activities are ongoing.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		4
Cross-sectoral Issues		4
Instruments		3.6; 3.8; 4.1
Provider of this information	Name	Takashi Matsuo
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Title		Inter-linkages Initiative
Country		96; 116; 360; 418; 458; 104; 608; 702; 764; 704; 64; 184; 585; 598; 548
Province		
Area		
Implementation level		4
Duration/ Year		1997 - ongoing
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Sponsor(s)		2) Source(s) of funds: UNU project funds, external funding through, among others, Japanese Ministry of Environment, UNDP, UNEP, in-kind contributions of participating countries
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	<p>Over the past fifty years, several hundred multilateral environmental agreements (MEAs) have been established in an effort to protect and preserve the global environment. While many of these agreements work to support and strengthen each other's aims, in some instances, the objectives of MEAs either overlap or actively contradict each other. The recognition of this fact, along with its associated implications, has resulted in an increasing number of calls for better coordination and harmonisation between MEAs during the negotiation, ratification, and implementation stages.</p> <p>In response to these calls, the UNU started the Inter-linkages Initiative. It was born out of the need to develop better coordination between MEAs, an integrated approach for the development of comprehensive synergistic frameworks for local, national, regional and international stakeholders in the broad field of environmental management.</p>

<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The overall objective is to strengthen national governance structures and national and regional cooperation in the negotiation, ratification, and implementation of MEAs through the identification of inter-linkages and synergies both between MEAs and national and regional environmental policies and as well among different national and regional institutions involved in their implementation.</p> <p>The direct target groups comprise of government ministries, agencies and national focal points in charge of MEAs, NGOs, public and private businesses involved in the implementation of national and local strategies for sustainable development linked to MEAs. Indirect beneficiaries of the project are the populations of the participating countries, as rapid depletion of natural resources, loss of biological diversity, soil erosion and desertification directly or indirectly contribute to impoverishment. Better coordinated strategies for MEAs are expected to lead to an improved implementation of MEA obligations on the national and regional levels, to set free additional capacities within the agencies in charge, contribute to a national sustainable development strategy and thus in a long-term perspective enhance the living conditions especially of the poor, which suffer most from a degrading environment.</p> <p>2) Outline of the practice The Inter-linkages approach does not aim at creating another additional planning framework but instead assesses the existing institutional settings and capacities to implement environmental policies. Concentrating on the negotiation and implementation of MEAs narrows the focus to specific issues in line with national interests and eases the identification of priority areas for possible synergies. Proposing policy options to foster or if necessary reorganise existing structures to use opportunities of better coordination is not only cost- and time-effective for the respective countries itself, but also entails the lowest possible political burden and diverts the least possible amount of attention of the limited capacities presently available. Strengthening information exchange and harmonising data collection nationally and regionally enhances national environmental responsiveness and regional cooperation in environmental policies.</p> <p>3) Stakeholders involved, decision-making process Main stakeholders involved are government agencies and officials in charge of coordinating and implementing environmental policies, related to MEAs. In addition, civil society and private sector actors in the environment are also involved.</p>
<p>SectionC: Results /Outcomes</p>	<p>The outputs of the UNU Inter-linkages Initiative include: (a) Applied research and case studies; (b) Policy dialogues and workshops; (c) Capacity development activities; (d) Information management and virtual networking; (e) Process consulting and policy design.</p> <p>The countries involved assess their governance processes together with external international consultants and have the opportunity to address strengths and weaknesses in a multi-stakeholder approach. The countries are also offered support for follow-up activities such as trainings and workshops to tackle capacity gaps. Results achieved so far:</p> <ul style="list-style-type: none"> - Fostered awareness of positive and negative aspects within a national environmental governance system - Increased inter-agency communication and coordination - Strengthened planning processes for MEA management and policies for sustainable development - Reinforced link between planning, policy development, policy making and implementation efforts - Better cooperation with NGOs - Regional cooperation strengthened <p>Continuously to be addressed:</p> <ul style="list-style-type: none"> - How to best sustain the goals achieved through national and regional support mechanisms

Keys for success (cause of failure)		<ul style="list-style-type: none"> - National ownership - Inter-agency dialogue - Participatory multi-stakeholder approach - Transparent process
Evaluation		<p>The inter-linkages approach can be applied in a relatively short period of time and with marginal costs involved; it thus has a very high cost-benefit ratio. Its effectiveness mainly hinges upon a country's willingness to address gaps and to embrace changes in policies and procedures. The initiative supports this to the highest degree possible through process consultancy and follow-up activities. Its participatory approach, including all major stakeholders, provides for the integration of the different pillars of sustainable development - social, economic, environmental and cultural aspects, as well as for transparency. One of the biggest strengths is to bring together various stakeholders and international organisations to jointly address the challenges ahead.</p>
Applicability		<p>One of the aims of the Inter-linkages Initiative is an easy approach that is transferable and adoptable to other contexts and countries. The basic framework is simple and can be modified to changing policy priorities and governance systems. Initially started in South-East Asia and the Pacific, the approach is now also used in South Asia and currently adopted to be implemented in African countries as well.</p>
Reference		<p>Policy Briefs: Inter-linkages. Synergies and Coordination among Multilateral Environmental Agreements. UNU, July 1999, Tokyo, Japan. National and Regional Approaches in Asia and Pacific. UNU, January 2002, Tokyo, Japan. Inter-linkages between the Ozone and Climate Change Conventions. UNU, 2002, Tokyo, Japan. Inter-linkages in Financing Sustainable Development. UNU, August 2002, Tokyo, Japan.</p> <p>Case Studies: Pacific Island Countries Case Study, UNU, July 2002, Tokyo, Japan. Environmental Governance in Papua New Guinea. UNU, August 2003, Tokyo, Japan. Case studies on inter-linkages and environmental governance in 14 Asia and Pacific Countries, in: Global Environmental Change 13 (2003), 63-68. Bhutan's Approach to Environmental Governance. National Case Study of Inter-linkages Synergies and Coordination among Multilateral Environmental Agreements. UNU, December 2003, Tokyo, Japan. (Forthcoming)</p> <p>All reports and further information on the Inter-linkages Initiative are available online at http://www.geic.or.jp For further inquiries, please address to Jerry Velasquez (jerry@geic.or.jp) or Uli Piest (piest@hq.unu.edu).</p>
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5
Instruments		3.3; 3.7; 3.8; 4.2

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Title		Kitakyushu (Japan): Coexistence of Industry and Community
Country		392
Province		
Area		City of Kitakyushu
Implementation level		1
Duration/ Year		1970 - 2000
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Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: N/A
Actors involved		2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>Kitakyushu City was created in 1963 with the merger of five neighbouring cities. Similar to today's situation in most developing countries, Kitakyushu was aiming to boost economic growth by industrialisation following World War II. A national income-doubling programme was decided on in 1960 and measures to promote high economic growth were taken. Kitakyushu boosted the economy by inviting heavy industries.</p> <p>Kitakyushu had established itself as a centre for the cement industry, combining high quality limestone produced in the area and Chikuho coal. Large-scale factories sprung up in the area around Dokai Bay, forming the framework of the Kitakyushu Industrial Zone. The period of high economic growth was an era of heavy chemical industrialisation and remarkable development of heavy and chemical industries, such as steel and machinery. This boosted the economic growth at an average rate of 20% per annum till the first oil crisis in 1973.</p> <p>However, this industrialisation was the main source of the pollution, which began with the 'seven coloured smoke'. In the late 1950s, air pollution in the form of smoke and soot, offensive odours, and water pollution from factory wastewater grew serious in various locations.</p>

	<p>Air pollution of the ambient air was mainly due to heavy concentrations of:</p> <ul style="list-style-type: none"> - NOx - SOx - Suspended particulate matters (SPM) - Dust fall - Non-methane hydrocarbons (NMHC) in ambient air. <p>Water pollution was mainly due to:</p> <ul style="list-style-type: none"> - Presence of toxic substances in industrial wastewater - Biochemical Oxygen Demand (BOD) - Chemical Oxygen Demand (COD) - Organic-chlorine Chemical Substance <p>Moreover, there was noise and vibration, offensive odours, land subsidence, soil contamination, and industrial solid waste including slag, construction material, and sludge.</p> <p>The increasing pollution was causing devastating impact on humans and other natural resources. The residents around the bay started complaining of odour, and the lives of the ships anchoring in the bay became short. Eventually this bay was known as the Sea of Death. Air pollution cause major health impacts, although, not known during that time.</p> <p>The population of Kitakyushu wanted to reduce the industrial pollution, but without losing the industries that were their economical backbone.</p>
<p>SectionB: Outline of Practices /Actions</p>	<p>When the pollution became evident on health, natural resources and the living environment, and the community wanted the industries to take measures against it. But as most of the community was either directly employed by the polluting industries or was doing business with those industries, they did not want to make these industries relocate or to take any adverse action.</p> <p>Various women's groups were formed, which carried out studies on the impact of the pollution, and then started raising public awareness by showing those impacts. This public awareness mounted political pressure on the local government to respond. Fujikura (2001) suggests that the fear of losing elections was one of the major factors for the local government to negotiate pollution control measures with industries. Industries also did not want the government to lose the elections, as the other parties may place more stringent laws on the industries. Hence 'voluntary agreements' were worked out between the government and the industries.</p> <p>This clearly shows the initial role of the three actors -community, industries and government. Later actions also involved all three actors, as the communities had to cooperate with the government and the industries for various pollution control measures, i. e. relocation of households and industries. The local government needed to improve its capacity to monitor pollution, and the industries needed to take some innovative pollution control measures, which may not harm their economy while improving the environment.</p> <p>In Kitakyushu city, the authority was transferred to the local government from the prefectural government. With this transfer of authority, the city had the jurisdiction to formulate and implement various regulations, which were initially based on voluntary agreements. The government also had the authority to fine or punish the polluters, who violated those regulations. The government also strengthened their capacity by increasing the number of human resources with appropriate skills and also by acquiring technical equipment to monitor the pollution.</p> <p>Measures taken by the industries, initially ended with end-of-pipeline measures being introduced; however, most of the success was due to cleaner production including fuel quality improvements and fuel substitution.</p>

	SectionC: Results /Outcomes	The institutional strengthening of the city government through decentralisation from the prefectural government and the innovative cleaner technology adapted by the industries improved the environment up to the required levels. It also helped industries to reduce their costs of production and increase business at the end of day. In addition to this, environmental businesses started in the city and environmental industry came into existence. This further helped the city to boost the economy.
Keys for success (cause of failure)		Capacity development for urban environmental governance: Capacity of local government and innovative measures by the industries plays a very important role in effective pollution management. This capacity can be developed with the effective and efficient adaptation of various instruments including institutional strengthening, policies and regulatory framework, public awareness and stakeholder participation, financial mechanisms, and choice of technology. In Kitakyushu city, the authority was transferred to the local government from the prefectural government. With this transfer of authority, the city had the jurisdiction to formulate and implement various regulations, which were initially based on voluntary agreements. The government also had the authority to fine or punish the polluters, who violated those regulations. The government also strengthened their capacity by increasing the number of human resources with appropriate skills and also by acquiring technical equipment to monitor the pollution.
Evaluation		Kitakyushu has achieved dramatic success in controlling air pollution through various measures. The understanding of those measures helps to classify them among various groups as strengthening of local regulations, enhancing institutional capacity, fuel quality improvement, fuel substitution, production technology and end-of-pipeline options, financial mechanism and subsidies, enforcement, and public awareness. Based on this classification, we can assess the viability of these groups for achieving similar objectives to control pollution in developing countries. As the socio-economic and political structure of countries differs, a proper analysis of each measure should be done before recommending the same for policy making or implementation. Nevertheless, a proper understanding of the Kitakyushu experience improves the analytical skills for analysing the situation in the developing countries. Based on this analysis, proper measures may be drawn for the specific city.
Applicability		The Kitakyushu model is a good example for the existing situations in developing countries. In most developing countries, it is not a common practice that industries can realise the impact of the pollution by themselves and can take the necessary pollution control measures. Therefore, the roles of three major actors - community, local government, and industries - are crucial for pollution management. The capacity of local governments is the primary issue for pollution management, as governments are responsible for formulation and implementation of regulations. But in most Asian countries, the capacity of the governments for environmental management had not been in line with rapid industrialisation.
Reference		MEMON, Dr. Mushtaq Ahmed (2002): 'Kitakyushu (Japan) - Coexistence of Industry and Community.' In Kitakyushu Initiative for a Clean Environment: Successful and Transferable Practices. Urban Environmental Management Project, the Institute for Global Environmental Strategies.
Sectoral Issues		3
Cross-sectoral Issues		1
Instruments		3.3; 3.6; 3.7; 3.8
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Title		Leyte - Cebu Geothermal Project
Country		608
Province		
Area		
Implementation level		2
Duration/ Year		1994 - (20years)
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	Affiliation	—
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	Fax	—
	E-mail	—
Sponsor(s)		1) Amount \$458.9M 2) Source(s) of funds IBRD \$211M, Cofin Amount \$247.9M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The Philippines needs to develop its geothermal resources in Leyte. With almost 1,000MW of installed capacity across the country, Philippines is already the second largest user of geothermal electricity in the world. This project is one of the three- phased developments of geothermal resources in Leyte.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The objectives of the project are to: (a) meet the rapidly increasing demand for power in Cebu and the Visayas region using indigenous and environmentally superior geothermal energy; (b) strengthen the institutional, planning and financial systems of the National Power Corporation (NPC) and the Philippine National Oil Company (PNOC). 2) Outline of the practice For geothermal development, this project includes the following components: (a) develop a 185 MW geothermal energy field which will also include steam collection and power subtransmission systems; (b) enter into a build-operate-transfer contract with private sector companies to construct and operate a 185 MW geothermal power plant; and (c) carry out technical assistance for project implementation.

	SectionC: Results /Outcomes	N/A
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		World Bank Project Data Base Staff Appraisal Report
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		Leyte-Luzon Geothermal
Country		608
Province		
Area		Leyte and Luzon
Implementation level		2
Duration/ Year		1994 - 2000
Contact Person/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$1,333.6M 2) Source(s) of funds GEF Grant \$30.0M, Cofin Amount \$1,303.6M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	Project seeks to assist in meeting the rapidly increasing demand for electrical power using technology that substantially reduces greenhouse gas (GHG) emissions.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The objectives of the Leyte-Luzon Geothermal project are to: 1) meet the rapidly increasing demand for power in Luzon; 2) strengthen the energy sector; 3) support the large ongoing private sector participation in power generation; 4) strengthen the National Power Corporation's (NPC) capabilities in environmental and social impact analyses. 2) Outline of the practice The National Power Corporation (NPC) components of the project include the interconnection of electrical power systems of Leyte and Luzon Islands and the strengthening of the environmental and social engineering departments of NPC. The Philippine National Oil Company (PNOC) components of the project include the construction and operation of a 440 MW geothermal electric generation plant under a BOT contract, re-injection of waste gases to further reduce GHG emissions, and connection of the power station to the national grid.
	SectionC: Results /Outcomes	PNOC-EDC completed the steamfield development and conventional geothermal power plants (334 MW) in 7/97. The topping and bottoming cycle geothermal plants (51 MW) were completed in 1/98, and the entire geothermal power system was commissioned in 7/98.

Keys for Success (cause of failure)		N/A
Evaluation		N/A, Project Completion Report is not available
Applicability		N/A
Reference		GEF Project List PHI80 http://www.gefweb.org/Outreach/outreach-Publications/Project_factsheet/Philippines-leyt-2-cc-wb-eng.pdf
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
	Contact Address	2108-11 Kamiyamaguchi, Hayama, Kanagawa 240-0115 Japan
	Tel	
	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		Lighting the Village - financing project for Solar Home Systems (SHS) and Village Hydro projects
Country		144
Province		
Area		In 20 out of 24 administrative Districts
Implementation level		2
Duration/ Year		Commenced in the year 1998. An ongoing project in progress
Contact Person/ Focal Point for Enquiry	Name	Ms. Indrani Hettiarachchy
	Affiliation	SEESD (Gte) Ltd.
Contact Information	Address	Arthadhama Kendraya, 45, Rawatawatta Road, Moratuwa, SRI LANKA
	Tel	+94-075-558081
	Fax	+94-1-655122
	E-mail	solar678@sltnet.lk
Contact Person(2)/ Focal Point for Enquiry	Name	–
	Affiliation	–
Contact Information	Address	–
	Tel	–
	Fax	–
	E-mail	–
Sponsor(s)		1) Amount Up to date Rs. 255 Mln. 2) Source(s) of funds IDA / World Bank credit line, Local funding by Development Banks, Other sources.
Actors involved		2; 3; 4
Description of the Practice	SectionA: Background & Objectives	<p>Sarvodaya vision of village reawakening and its' mission of alleviation of poverty through economic empowerment has identified ten basic needs of the society. Energy is one such basic need. Renewable Energy project was initiated to find a suitable answer to reduce 'Energy Poverty'.</p> <p>In Sri Lanka two million house holds, which is 45% of the total population are not having main grid power. The project has targeted this rural remote village community using kerosene lamps for lighting.</p> <p>Objective is to provide environmental friendly, clean energy, bright light to replace accident prone, environment polluting, smoky flame with a view to improve the quality of life, specially to assist children's education.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>Solar project Phase I- Fixing 100 solar home systems in temples and public places with the finances from a donor. Purpose was to create awareness among the villagers to accept new technology. This created the demonstration effect.</p> <p>Phase II- Concept of total service: Technical & marketing, after sales service, financing all done by one party. System proved to be inefficient, expensive, time consuming.</p> <p>Phase III- Commercialising of solar: Use the competitive advantage of being a specialised micro financing institution.</p> <p>Out source the other services: Initiate a partnership with solar supplier companies and operate in close collaboration. Follow a set of ground rules to achieve efficiency.</p> <p>Village Hydro Totally with community based organisations. Management decision-making by the villages, shared technology, shared labour, project owned and operated by the village community. Lighting for the village from a small hydro power generating unit managed by the village.</p>
	<p>SectionC: Results /Outcomes</p>	<p>SOLAR This business partnership with the companies worked well. Synergy Companies using the village connections of Seeds and the goodwill created to affect their sales. Seeds making use of the situation and get the maximum out of company employees & services. Volume increase, more area coverage, more SHS fixed. It boosted the country program.</p> <p>Originally commenced in tow districts and speeded into 3 more in two years. Now in 20 districts. In numbers at the start only 10 SHS could be fixed for a month. At present 700 to 900 SHS are fixed every month on the scheme. Total investment has increased from US\$ 40,000 to US\$ 3 mln.</p> <p>On the negative side the volume increases created financial constrains, as funds were limited. Seeds is only an MFI and not a regulated financial institution. However, it had a good reputation backed by the goodwill of Sarvodaya. Development Banks were willing to lend for renewable energy initiatives as they had low cost funds from the IDAWB sponsored Energy Services Delivery Project (ESD) as Pcis but they were not willing to risk the funds by lending to the rural sector.</p> <p>Seeds borrowed on higher interest rates, shorter repayment terms, but at the same time it were able to operate a successful credit scheme.</p> <p>MARKET POSITION There were companies who could sell SHS. There were consumers who were willing to by them provided they are given longer repayment terms. There were Banks who had funds for that purpose but not willing to bother as lending to rural poor is cumbersome. Seeds could fill the gap if it had access to funds directly. Successful market penetration paved the way for Seeds to become a PCI (participatory credit institution) in the ESD project by 2001 March. New guidelines were formulated. Agreements executed and the MFI that had no recognition was place on equal footing with the Commercial & Development Banks. This was the turning point of the soloar pv. Market in Sri Lanka.</p>

<p>Keys for success (cause of failure)</p>	<p>1. Private public sector partnership that could match the demand and supply 2. Due consideration for all the stakeholders in the project. Not only the operators but also the poor villagers who are the consumers.</p> <p>TERMS OF OPERATIONS WERE EMBODIED INTO A MEMORANDUM OF UNDERSTANDING.</p> <p>The consumer should get the best of its service. Total service at his doorstep - It saves his time for production. An affordable price - No adhoc price changes. Service backed by warranties for equipments, well organised after sales service supervised and coordinated by the lender.</p> <p>Unsatisfied client has the ability to lodge a complaint with an independent authority where quick action will be taken (such instances were very rare).</p> <p>Client has the ability to upgrade the service on concessionary terms. He has the option to return the equipment in case he receives main grid power.</p> <p>Credit is provided on longer repayment terms. Payments to match the cash flow. Seasonal repayment terms. Evaluation of credit by using the knowledge of the people concerned, area, income patterns, and not on documentary evidence. Equipment is for the benefit of the family. Therefore family income taken into consideration. Collection on pre decided convenient dates. Client is given information record sheet to keep an account.</p> <p>Product designing by looking at all details</p> <p>Longer repayments Payments to match the cash flow. Mostly to equalise with the funds presently spent for lighting not to have an additional burden on the borrower. Seasonal payments Ability to pay up early and get the interest advantage. No additional security requested. Ownership of the equipment transferred on full payment. Affordable equity, but substantial. 20%</p> <p>Burden of recording information, documentation is shared by the employees of the supplier company and SEEDS as most of the consumers are not familiar with finance related documents.</p> <p>Service at no extra cost. Only payment is interest on pre-calculated basis on EMI terms reducing balance method.</p> <p>Protection on a Risk Assurance Fund on nominal one time payment which would cover-</p> <p>Repair costs due to unforeseen damages / natural disasters Borrower's death. Permanent disability. Crop failure / downturn in income temporarily. Loan instalments from the fund on the basis that it will be replenished when the income becomes better.</p> <p>Service in double quick time Good relation among the competitors Exchange of information Periodical meetings Joint decision making Avoid unhealthy competition</p>
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	<p>Quality lending Good credit evaluation Satisfactory repayment rates Easy modes of collection with participation of village level institutions</p> <p>Village Hydro Voluntary participation by the villages/beneficiaries Maximum utilisation of locally available resources Enhancement of the capacity/technical knowledge/management capabilities by capacity building programs Encourage commencing economic activities using newly available power ie. save time by using electrical equipment New services Enhance knowledge by having more connections with the outside world. Tel, Fax, TV, Internet.</p>
Evaluation	<p>- Effectiveness The program has reached over 17,000 households up to date. Awareness created has built favourable environment such as interest of the local Government & the Central government interest to introduce subsidies to make the SHS affordable to more villagers ie. - A provincial Government offered a substantial subsidy for individual SHS beneficiaries. A line Ministry offered subsidy for plantation labour force to fix SHS on pilot basis. At national level a fund is created to offer subsidy in broader manner.</p> <p>On village hydro Local Governments offered handsome grants.</p> <p>On the funding side the success has prompted the funders to introduce a follow on program with higher ambitions. Renewable Energy for Rural Economic Development (RERED) project.</p> <p>- Cost benefits The lending operation has cost effectiveness if it is operated at a higher scale. Scaling up of the program has helped in this regard. On a computerised operation there could be more cost saving and increased efficiencies. SEEDS is operating a high scale program on manual systems there by cost benefit achievements are less.</p> <p>Every rule is laid towards sustainability and acceptability. Financially the program is sustainable, as it has achieved desired levels of operation. Success of the program has prompted new players in the market to replicate our systems but no significant impact is made up to date.</p> <p>New suppliers have emerged in the market. DEEDS started with one company and there are 6 companies in the program at present.</p> <p>Main strength SEEDS has is its outreach as it works with 3,000 Sarvodaya Shramadana Societies and blessed with a committed workforce who are village based.</p> <p>All operations are done in a transparent manner. Responsibilities are well defined. Needs are looked into. Field staff is technically trained.</p> <p>Weakness shown is lack of resources to match the growing demand. Non-availability of suitably qualified willing individuals for new recruitments. Lack of required capital for investment in infrastructure facilities.</p> <p>Basic term followed is that the field officer be equipped with required resources. Insufficient capital availability has prevented the investment in Motor cycles.</p>

		<p>Having updated information is a key for decision-making. Not having a computerised database and MIS and operating on manual systems have shown several weaknesses.</p> <p>A good loan tracking system is essential. Field management could be made more efficient with such a system in operation. Capital requirement for such a system is heavy.</p>
Applicability		<p>Implementation of the SHS financing program is very easy in similar situations.</p> <p>Commencing with a consumer survey program could be started in any country with suitable changes.</p> <p>Details of information, procedure, policy could be provided.</p> <p>Some of them are already documented.</p> <p>India & Brazil has already had study programs with SEEDS sponsored by Winrock International (USA).</p> <p>Several other countries have shown interest in gathering information.</p> <p>Funding organisations too have collected documents, information, procedures etc.</p>
Reference		<p>On line Asia Times- Aug.21. 2001 'Sunshine on Sri Lanka's Solar Industry'</p> <p>REFOCUS-The International renewable Energy magazine, October 2001 Micro Financing solar power; The Sri Lanka SEEDS model by Judith Lipp</p>
Sectoral Issues		2; 3
Cross-sectoral Issues		4; 5; 6
Instruments		2.3; 3.1; 3.2; 3.7; 4.1
Provider of this information	Name	MS. Indrani Hettiarachchy
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Title		Making Every Drop Count: Water and Australian Aid - The Australian Government's water policy for the overseas aid program
Country		999
Province		
Area		Countries that receive Australian overseas development assistance, with an emphasis on the Asia Pacific region.
Implementation level		4
Duration/ Year		2003 -
Contact Person/ Focal Point for Enquiry	Name	Simon Buckley
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Contact Person(2)/ Focal Point for Enquiry	Name	–
	Affiliation	–
Contact Information	Address	–
	Tel	–
	Fax	–
	E-mail	–
Sponsor(s)		In 2002-03, the Australian Government's overseas aid program will spend approximately AUD \$89 million on water-related development assistance. In 2003-04 this figure is estimated to rise to about AUD \$94 million.
Actors involved		2; 5
Description of the Practice	SectionA: Background & Objectives	In Australia's immediate region 2 billion people do not have hygienic sanitation and around 700 million do not have access to safe drinking water. Globally, some 1.1 billion cannot access clean water, 2.4 billion live without decent sanitation and an estimated 10,000 people, the majority children or infants, die each day from water-related illness. It is the poor that suffer most. Water is essential for health, food production and poverty reduction. Over the past century, the world's population has tripled and water use has increased six-fold. As demand for water increases, so does the potential for tension between users within and between countries, which has implications for stability in Australia's region.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice Making Every Drop Count covers a range of issues including 'lessons learnt', future directions for water in the aid program and the strategies to implement these new directions. In particular, the policy emphasises the application of Australian expertise to water problems in our region. It articulates how Australia can assist in the equitable, efficient and sustainable management of water resources.</p> <p>2) Outline of the practice Making Every Drop Count outlines how the Australian Government will assist developing country partners to address water challenges by:</p> <ul style="list-style-type: none"> - Detailing the current water situation in both developed and developing countries. - Assessing the past experiences of water development and management ('lessons learnt'). - Outlining future directions for water-related assistance in the aid program. - Describing the key actions the Australian Government will take to implement these new directions. <p>3) Stakeholders involved, decision making process Numerous stakeholders were consulted in the formulation of this policy, including: AusAID staff (policy officers, technical advisors, country program managers/ desk officers); other government agencies (Environment Australia, Department of Agriculture, Fisheries and Forestry, Australian Centre for Agricultural Research, CSIRO); non-government organisations (Australian Council for Overseas Aid, TEARFund Australia). Decisions on the structure and emphasis of the policy were based on these consultations, and on two 'issues papers' (undertaken by internal AusAID staff and an external consultant).</p>
	<p>SectionC: Results /Outcomes</p>	<p>This policy is still relatively new, so it is not possible to comment on its results/outcomes. However, the policy has the explicit intention of achieving three primary outcomes:</p> <ul style="list-style-type: none"> - The promotion of attention to water issues in the Australian aid program. - Enhancing access and dissemination of Australian knowledge and expertise for application to water-related challenges in developing countries. - Building of strategic partnerships between the aid program and external partners to maximise the overall impacts of the Government's water-related development assistance.
<p>Keys for success (cause of failure)</p>		<p>Lessons learnt, both by Australia and other donors, are important to ensuring that future water-related assistance promotes the efficient, equitable and sustainable management and development of water resources.</p> <p>While many lessons have been learnt, the overarching message is that water management and development needs an integrated approach, based on the principles of Integrated Water Resource Management. Making Every Drop Count is based on this consideration. This includes focussing on:</p> <ul style="list-style-type: none"> - on issues relating water governance, policies and planning systems. - ensuring sustainable water service delivery systems targeted at access for the poor.
<p>Evaluation</p>		<p>Given that this policy has only recently been released, no evaluation has taken place. However, the 'Making it happen' section provides a strong framework for future evaluation and includes:</p> <ul style="list-style-type: none"> - The degree to which the policy has promoted attention to water issues in Australia's aid program. - The degree to which the policy has enhanced access and dissemination of Australian expertise and knowledge. - The degree to which the policy has led to the further development of effective partnerships that help address freshwater issues in the developing world.
<p>Applicability</p>		<p>The process of formulating this policy involved an extensive consultative network and stakeholder analysis (see Section B above). This network proved invaluable advice and guidance that informs the entire policy. The application of this approach, while time consuming and complex, is highly applicable to aid policy formulation and should be encouraged.</p>

Reference		Supporting documents, including the policy, can be found at the AusAID web site: http://www.aid.gov.au
Sectoral Issues		1
Cross-sectoral Issues		1; 5
Instruments		3.1; 3.2; 3.3; 3.5; 4.2
Provider of this information	Name	Simon Buckley
	Organisation	The Australian Agency for International Development (AusAID)
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	Fax	+61-2-6206-4203
	E-mail	simon_buckley@aid.gov.au

Title		Marine Discovery Centre (MDC)
Country		36
Province		
Area		South Australia
Implementation level		1
Duration/ Year		1998
Contact Person/ Focal Point for Enquiry	Name	Mr. Tim Hoile, Director
	Affiliation	
Contact Information	Address	PO Box 45, Henley Beach SA 5022 AUSTRALIA
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$150,000 2) Source(s) of funds: Government agencies, Corporate sponsorship, fees, special projects - interpretive signage, curriculum packs etc. 3) Efforts to raise/sustain funds for implementation: Continual efforts to raise funds
Actors involved		2; 5
Description of the Practice	SectionA: Background & Objectives	To develop an exciting marine science Centre including aquaria, Marine Trails, models science experiments, IT experiences and more.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice Our aim is to encourage an appreciation and understanding of marine life promoting life-long learning and long-term conservation and sustainable use.</p> <p>2) Outline of the practice Improved catchments and coastal environments by enhancing community awareness</p> <p>3) Stakeholders involved, decision making process Our Steering Committee, regarded as South Australia's leading marine education network, with representatives from the major marine and community organisations has been a tremendous source of guidance and support as the Centre has developed. This group includes representatives from the State Government Department of Primary Industries and Resources of South Australia-Fisheries, the Catholic Education Office, Coastcare, the Coasts and Clean Seas Program, the Fisheries Action Program, the Catchment Boards, the South Australian Research Development Institute - Aquatic Sciences, the Department of Environment and Conservation, the Landcare Focus Schools Program, the City of Charles Sturt, a local builder, the School Bursar, the School Board, the Parents and Friends Association, Parents and the School Staff. The new MDC Development Committee is quite unique in that it involves our local Australian Federal Government member, Chris Gallus, and local State Government member Paul Caica. Our Mayor of Henley Beach, Harold Anderson, Chair of the School Board and School Principal are also involved.</p> <p>Our very enthusiastic and committed 35 volunteers are very professional and have a very high-level of expertise. Evaluations from visiting educators and adults consistently pay tribute to our wonderful team of volunteers.</p> <p>Our School Community, including our parents and students, has embraced environmental learning through many activities including developing a sand dune transect, recycling, planting and improving the school grounds and establishing the MDC.</p> <p>Our Enviro Club, a lunch-time school student group, has stretched our networks through holding stalls for World Environment Day, dune-planting for the City of Charles Sturt, special presentations, visiting the South Australia Research Development Institute for Aquatic Sciences (SARDI) and guiding visiting students in the MDC.</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes - Improved environmental strategies</p> <p>2) Problems that remain to be solved - Securing long-term sponsorship</p> <p>3) Unexpected positive/negative impacts to date - The promotion of the local area and the school</p>
<p>Keys for success (cause of failure)</p>		<p>- Dedication and high-level of expertise of management and volunteers - A very cooperative and supportive work environment - A full day affordable excursion experience which includes an excellent staff: student ratio to support the learning experiences offered - Sound financial position</p>
<p>Evaluation</p>		<p>We have achieved outstanding success as a Marine Discovery Centre (MDC) team. The Centre is booked out for Primary School Students 2 years ahead and has won 26 International, National and State environmental awards. We have been able to keep the total cost for an excursion to a very economical fee. The MDC has survived for 6 years and has developed a successful developing business. We have 35 active volunteers supporting the Centre and provide excursion visits for primary schools (4-13 years of age), parents, community service groups and tertiary</p>

		students. Our strengths include providing visitors with 'best-practice' marine science experiences, providing an excellent volunteer programme, having a very highly regarded Steering Committee and producing a consistently high quality with special projects including interpretive signage, teaching resources, launches, a beachcombing poster and workshops/conferences. Our weaknesses include: reliance on winning grants to survive, reliance on volunteer support, lack of major corporate support.
Applicability		<ul style="list-style-type: none"> - Enthusiastic, committed leadership is essential as well as a committed, supportive community has made this programme successful. - Our school, parish and local community have a strong volunteer ethic and this is continually nurtured by the MDC.
Reference		During the past 12 months our MDC has been featured in over 100 media items, this has included local television, state and local newspapers, marine science journals, education literature and even the Reader's Digest!
Sectoral Issues		5
Cross-sectoral Issues		1; 4
Instruments		3.2; 3.3; 3.4; 3.5
Provider of this information	Name	Mr. Tim Hoile
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Title		Marine Electronic Highway in the Straits of Malacca and Singapore
Country		360; 458; 702
Province		
Area		
Implementation level		3
Duration/ Year		2004 - 2007
Contact Person/ Focal Point for Enquiry	Name	Mr. Koji Sekimizu
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	E-mail	ksekimizu@imo.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: Global Environment Facility (GEF), The World Bank, International Maritime Organisation (IMO), International Hydrographic Organisation (IHO), INTERTANKO and international shipping industry
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	<p>The Marine Electronic Highway (MEH) is an innovative marine information and infrastructure system that integrates environmental management and protection systems and maritime safety technologies for enhanced maritime services, higher navigational safety standards, integrated marine environment protection and sustainable development of coastal and marine resources. The backbone of the MEH is precision navigation and will utilise a network of electronic navigational charts (ENCs) in conjunction with Electronic Chart Display and Information System (ECDIS), Differential Global Positioning System (DGPS) and other maritime technologies.</p> <p>The general objectives of this initiative are to delineate options for the implementation of the MEH system in the Straits of Malacca and Singapore and assess the technical, financial, economic, social, institutional, political and legal aspects of the identified options, assess the integration of marine environment protection system with precision navigation, and develop sustainable financial mechanisms and a managing tool to operate, manage and administer the MEH system. The implementation will also cover the evaluation on the benefits of the system and financing requirements to implement the identified activities leading to the establishment of the MEH system in the Straits.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>The following targets are set upon implementing this project:</p> <ul style="list-style-type: none"> - Evaluation of the MEH pilot demonstration for the development of a full-scale system in the Straits; - Establishment and evaluation of available marine technology infrastructures in the Malacca and Singapore Straits; - Comparative evaluation of charting information in critical areas of the shipping lanes and port areas to enhance marine traffic management; - Assessment of the technical functionalities of the MEH system for maritime safety and marine environment protection; - Promote the evaluation and augmentation of the MEH system with new and emergent technologies on maritime safety and marine environment protection; - Technical evaluation on the integration of marine and coastal management information systems on the MEH system including meteorological and oceanographic data; - Evaluation of the MEH system for marine pollution prevention and response; - Profiling and modelling the sandwaves phenomena in selected areas of the Straits; - Development and evaluation of mechanisms for the long-term management of data and information exchange for the MEH system and its operational and administrative mechanisms; - Evaluation of the organisational structure at national, regional and international levels for the operation, administration and management of the MEH system including data exchange and warehousing; - Socio-economic and financial assessment of the MEH system; - Evaluation of the financing mechanisms including the development of public-private partnership; - Cost-benefit evaluation of system integration of maritime safety and marine environment protection technologies and information; - Organisation of national and regional workshops on the benefits and applicability of the MEH system and users feedback including training programmes for capacity-building for the littoral States; and - Production and dissemination of information on the MEH system through print media and via the Internet.
	<p>SectionC: Results /Outcomes</p>	<p>Expected results are:</p> <ul style="list-style-type: none"> - Overall enhancement of navigational safety for through and cross-Straits maritime traffic and chemical and oil spill prevention and response; - Establishment of an effective and financially viable pilot MEH system which will be the foundation of the full-scale MEH system covering the whole Straits of Malacca and Singapore; - Availability of adequate hydrographic data coverage necessary for the compilation of electronic navigational charts (ENC) for the protection of the marine environment such as for use in chemical and oil spill modelling including meteorological conditions for safety of navigation and transboundary marine pollution prevention, response and management; - Availability of high quality large -scale ENCs of the TSS indispensable for real time navigation in congested and confined waters; - Establishment of MEH data centres which will be the clearinghouse of the pilot MEH system and serve as the network servers for its products and services; - Demonstration of the technical, financial and economic viability and benefits of the pilot MEH system leading to an expanded client base and partners; - Integration of relevant marine environment systems within the MEH system for effective monitoring, response and management of marine pollution in the Straits; - Enhanced national and regional cooperation on maritime safety and transboundary marine pollution management; and - Provides the impetus for the ratification and accession of relevant international conventions, protocols and agreements on marine environment protection, maritime safety and sustainable development of the coastal and marine resources.

Keys for success (cause of failure)		
Evaluation		
Applicability		
Reference		Johannesburg Summit Website: http://www.un.org/esa/sustdev/partnerships/oceans/marinehwaymalacca.PDF
Sectoral Issues		5
Cross-sectoral Issues		1; 4
Instruments		1.3; 3.3; 3.5
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Title		Metro Manila Air Quality Improvement Sector Development Program
Country		608
Province		
Area		Metro Manila Airshed
Implementation level		2
Duration/ Year		5 years from December 1998
Contact Person/ Focal Point for Enquiry	Name	Julian Amador, Director
	Affiliation	Department of Environment and Natural Resources
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount: Loan: \$295 million; TA: 1.5 million 2) Source(s) of funds: ADB OCR Funds for Loan; ADB TASF for TA
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	The deteriorating quality of air in various cities of the Philippines, and in particular of Metro Manila and its surrounding areas, is a major issue that emerged in the 1990s, as air pollution was affecting the health and welfare of residents. The sources of air pollution in Metro Manila are both mobile (primarily motor vehicles) and stationary (mainly power plants and various industrial processes). The high concentrations of Total Suspended Particles (TSP), Particulate Matter 10 microns or less (PM10) and lead, predominantly from vehicles, exceeded ambient quality standards and were impairing the health and welfare of a large proportion of the population, in particular that of the 20 million residents in Metro Manila and surrounding airshed.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The objective of the Programme is to promote policy reforms to improve air quality through the abatement of mobile and stationary sources of air pollution. 2) Outline of the practice The scope of the Programme consists of policy reforms and investment requirements integrated within an agreed policy framework to achieve air quality improvement in an integrated manner. 3) Stakeholders involved, decision making process Throughout the entire programme, government, private sector, civil society, NGOs have been involved in the decision making process.

	SectionC: Results /Outcomes	<p>Improvements/changes</p> <ul style="list-style-type: none"> - improved air quality and health - integrated elements of sustainable development - improved capacity of institutions/organisations/relevant stakeholders - improved legislation and awareness - better understanding of the role market instruments as driving forces for improvements. <p>Unexpected positive impacts to date</p> <ul style="list-style-type: none"> - Positive civil society response
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Enhancement of collaboration among the different stakeholders and/or introduction/improvement of consultative mechanisms - Voluntary participation of local people - Enhancement of capacity of stakeholders/organisations - Shifting priorities in society - Introduction of economic policy instruments (e.g., introduction of new tax systems, introduction of effective cost recovery system) - Introduction of new and affordable technology - Combination of different policy tools
Evaluation		<p>Effectiveness: Significant improvements have been achieved, through a combination of policy reforms on emission standards, fuel quality and institutional strengthening; and investment to reduce mobile and stationary emissions; strengthening enforcement capacity of the agencies, and raise public awareness.</p> <p>Cost benefits: Include primarily improvement of health and environmental conditions as well as benefits gained from improved traffic flow.</p> <p>Sustainability: The project has been implemented according to the Philippines Clean Air Act provisions, ensuring both financial (creation of Air Quality Fund) and institutional (e.g. Pollution Adjudication Board Strengthening) sustainability.</p> <p>Degree of integration of social, economic, environmental and cultural aspects: An increasing degree of acceptability amongst the Metro Manila public has followed increasing understanding of pollution and a campaign on public awareness rising.</p> <p>Transparency/accountability: Throughout implementation accountability and ownership by the Government of the Philippines has been encouraged and although certain donor dependence is sometimes observed, improvements over the past 2-3 years have been major.</p>
Applicability		Although the project, is complex in nature, many Asian cities suffer from severe environmental pollution, were pollutants significantly exceed recommended air standards. Similar projects could benefit from such integrated approach, involving the improvement of fuel, road and vehicle conditions, through a series of investments (such as monitoring and abatement technology) and policy options.
Reference		N/A
Sectoral Issues		3; 4
Cross-sectoral Issues		1; 4; 5
Instruments		1.2; 3.1; 3.2; 3.3; 3.8

Provider of this information	Name	Julian Amador
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Title		Mini-Hydropower Project
Country		524
Province		
Area		
Implementation level		2
Duration/ Year		1981- 1991
Contact Person/ Focal Point for Enquiry	Name	N/A
	Affiliation	
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	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount \$14.94M 2) Source(s) of funds ADB\$8.30, Cofin Amount \$4.82M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The Mini-Hydropower Project was part of the Government of Nepal's strategy to electrify all 75-district headquarters and promote balanced regional growth by providing electricity to inaccessible hill areas. The government considered small hydropower project in the hill areas necessary social infrastructure to foster development, although such development might not be economically justified. The main objective of this project was to provide hydropower generation to several district headquarters and major market and tourist centres in the hill areas.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The project was intended to reduce consumption of imported fuel oil and increase the availability of power for irrigation, water supply pumping, agricultural product processing, and cottage industries. 2) Outline of the practice Project components originally included a) eight small hydropower generating plants and related transmission and distribution facilities, b) service connections and house wiring, c) canal and pipe irrigation at Ilam, d) a central maintenance workshop in Kathmandu, and e) training for plant operators and linesmen.

	SectionC: Results /Outcomes	<p>1) Changes There were numerous changes in project scope and construction design well into the implementation phase. Changes in scope reduced the number of subprojects from eight to six; reduced installed capacity from 2,650 to 2,850kW. The project was completed in 1991, six and half years later than the target date.</p> <p>2) Problems that remain to be solved To ensure technical sustainability of the project, training programs in the service and maintenance of small hydro project should be implemented, and operating practices should be improved.</p> <p>3) Unexpected positive/negative impacts to date The project has achieved its main physical objective of electrifying several district headquarters, though the numbers of beneficiaries and the economic value of benefits are far lower than estimated at appraisal.</p>
Keys for success (cause of failure)		A number of project design problems stemmed from insufficient topographical, geological and hydrological investigations and limited understanding of the construction and design requirements in remote and mountainous areas. Overly optimistic implementation schedule. Unrealistic demand forecasts and the absence of load promotion effort.
Evaluation		The project is rated unsuccessful based on its subprojects' marginal or negative economic internal rates of return and the fact that they are not operationally sustainable without continued subsidy from the government.
Applicability		The project experience demonstrates the importance of identifying critical assumptions and conditions necessary for success, and monitoring closely the progress in those areas.
Reference		ADB Project Database Project Performance Audit Report PPA: NEP14004 http://www.adb.org/Documents/PERs/PE-503.pdf
Sectoral Issues		2
Cross-sectoral Issues		4; 6
Instruments		3.2; 3.8; 4.1; 4.2
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Title		Model Laws for the Protection of Biodiversity Knowledge in Developing Countries
Country		649
Province		
Area		
Implementation level		4
Duration/ Year		N/A
Contact Person/ Focal Point for Enquiry	Name	Prof. Gurdial Singh Nijar, Consultant Ms. Chee Yoke Ling, Environment Representative
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source of funds: N/A
Actors involved		5
Description of the Practice	SectionA: Background & Objectives	Transnational corporate patenting of biological materials predominantly from the South is taking place on an alarming scale. Northern governments and multinational corporations are seeking to extend their intellectual property rights regimes to plants, animals, and microorganisms through the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement of the World Trade Organisation (WTO). This poses a grave threat to the nurturers of biodiversity, farmers, indigenous peoples and local communities. Their knowledge systems, and traditional cultural, social and economic lifestyle and practices are being usurped and undermined by these processes, amounting to biopiracy, as a result of which they would have to pay a market price for their return. An urgent response to this biopiracy is greatly needed to arrest the growing Northern control over biological materials from the South.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The whole intention of these laws for the protection of biodiversity knowledge are to bring community and indigenous peoples' rights within the ambit and protection of national legislation. These laws are already intended to be models for application in any developing countries where transnational corporate patenting is robbing communities and indigenous peoples of their biological resources.</p> <p>2) Outline of the practice Sovereign rights in resources accord the right to regulate access. Article 15.2 of the Convention on Biological Diversity obliges the Parties to facilitate access to genetic resources for environmentally sound uses and not to impose restrictions that run counter to the objectives of the Convention.</p> <p>Legislation for the Protection of Biodiversity: A Proposed Collector's Act A system of licensing collectors of biological diversity is suggested as a means of regulating them under a Collector's Act. The applicant will be vetted to ensure his ability to fulfil the obligations under the Act. The licence is then given for a prescribed period and subject to conditions. Any contravention of the obligations will expose the offender to penal sanctions and a withdrawal of the licence. Directors and employees of companies may be liable to imprisonment for any contravention of the Act. Licensed collectors will also be required to sign an agreement with the State that imposes obligations on the collector before, during and after the collection.</p> <p>Its provisions include obligations of the collector to furnish the State with plans for prospecting, the types of material to be collected in terms of species and quantities, the evaluation, storage and use of the collected material, including the uses to which it would be put, and the benefit the host country or community may derive from the collection of the germplasm.</p> <p>During the collection, the collector is limited to the quantum of the resource collected. He has to keep indigenous peoples and the local community informed of his mission and supply them with duplicate samples if required. Upon collection, he has to record the most complete data as to the plant population, its diversity, habitat and ecology sufficient to provide curators and users of germplasm an understanding of its original content; as well as document methods and technologies of using and preparing the collected material.</p> <p>After collection, a series of obligations requires processing the plant samples and pathogens for conservation, depositing all collections, associated materials and records of information with the Government, transferring the samples timeously to conditions which optimise their viability, and informing the authorities of any impending threat to plant populations or evidence of accelerated genetic erosion together with recommendations for remedial action. All prospecting studies and experimentation have to be done with a collaborator, approved by the State, from the source country.</p> <p>A sum representing not less than a fixed percentage of any income arising from the supply of germplasm extracts to commercial organisations is payable by the collector. An amount is similarly payable for royalties obtained as a result of the creation or invention of a marketable product. The collector must also obtain his country's endorsement agreeing to indemnify the source country for any losses it sustains by the collector's breach of the agreement, and to deliver the results of any report made up of studies or experimentation made on the collected specimen.</p>
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	<p>To prevent the usurpation of innovations of communities or indigenous peoples, a comprehensive obligation is imposed on the collector. It reads: 'No patent application shall be filed within or outside the country in respect of the collected specimens or any part thereof, its properties or activity of any derivatives which utilise the knowledge of indigenous groups or communities in the commercialisation of any product as well as to a more sophisticated process for extracting, isolating or synthesising the active chemical in the plant extracts or compositions used by the indigenous peoples or if the same represents the intellectual right of the indigenous communities.'</p> <p>Legislation for the Protection of Community and Indigenous Peoples' Rights and Knowledge</p> <p>There are two distinct possibilities on the question of protecting the knowledge of indigenous peoples and local communities. First, is to do nothing, on the premise that to provide any kind of protection of rights is to bring indigenous peoples and local communities and their resources into the fold of the market economy, which, with its subversive influences of materialism and consumerism, could overwhelm and ultimately destroy these societies. The second is to formulate a rights regime, which reflects the culture and value system of these communities as a device to prevent the usurpation, commoditisation and privatisation of their knowledge and ward off any threats to the integrity of these societies.</p> <p>Doing nothing in the face of active assaults on the biological resources and the knowledge systems of indigenous societies and local communities by pharmaceutical companies and other sectors of the industrial society is to perpetuate the continued destruction of these peoples and communities and their natural environment. The formulation of a rights regime is thus needed to better able to protect and preserve the fundamental values and the social and cultural cohesiveness and integrity of these societies that are largely responsible for conserving and sustainably using biological diversity.</p> <p>The main elements of the legislation would be:</p> <p>Ownership rights: Rights of custodianship, inalienable, not subject of exclusive monopoly rights</p> <p>The community is declared the 'owners' of this community knowledge. They exercise complete control over it collectively. They hold it in trust for themselves as well as for the beneficiaries of their ancestors; and they also hold it in trust for future generations. The knowledge, therefore always remains in the community and its integrity cannot be impaired, extinguished or divested.</p> <p>The proposed rights regime: (a) declares communities as custodians of the innovation; (b) prohibits the kind of dealing in the right which will have the effect of impairing its integrity (example: transferring, leasing or assigning the right); and (c) declares as void, as against the community, any transaction which has the effect of destroying the integrity of the right.</p> <p>The free sharing and transmission of knowledge between communities and generations, a tradition strong amongst some communities, does not amount to an impairing of the right. Communities in their exercise of the right to self-determination, may, if they choose to do so, commercialise the innovation. A legal mechanism for this 'ownership' holding will need to be identified: for example, a trust, or the incorporation of a body recognised as representing the collective interest of the community.</p> <p>If more than one community owns this knowledge, then it is deemed to be vested in both, or all, of the communities.</p>
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		<p>Commercial utilisation</p> <p>If any commercial utilisation is intended of the knowledge, than the provisions of the free exchange would not apply. No use can be made of the knowledge save and except with the consent of the community which has the custodianship of this knowledge. If the knowledge belongs to more than one community, then the consent of all the communities must necessarily be obtained.</p> <p>If any commercial use is made of this knowledge without any such consent, then, without prejudice to the right of the community to stop the use of the knowledge, a certain fixed percentage (representing the profits made or that could be made by the use of that knowledge) is payable by the user, whether demanded or not. The right arises upon its commercial use. This right can be enforced by the community whose knowledge is so used; in certain prescribed circumstances, for example, where the community is unable to act on its own initiative, the Government or any NGO group may act on its behalf, provided that the community has the first and prior right of enforcement.</p> <p>Proof of claim</p> <p>To facilitate evidentiary proof, any declaration by the elders, or other duly recognised members, of the community in a manner and form accepted by the cultural practices of that community, will be sufficient evidence of the existence of the right to that knowledge. The onus will then be on the person/corporation contending otherwise to prove its claim. Right to an innovation there will be no need to file a patent application to establish the right to the innovation. Protection arises once the innovation exists. The existence itself is established by the norms and practices of the particular community.</p> <p>The onus would be on those seeking to defeat the innovation of indigenous peoples to establish that their invention is in no way derived from the knowledge of indigenous peoples and local communities.</p> <p>All elements of culture, system and practices of communities formally recognised</p> <p>The rights regime incorporates and recognises all the elements of the culture, system and practices of local communities. It bestows on them the status of 'rights' which then become enforceable. In respect of genetic resources and local seeds, recognition extends to the whole livelihood system and the system of production by which marginalised communities makes a living.</p> <p>3) Stakeholders involved, decision-making process</p> <p>The authority in charge of drafting the law should conduct a consultation with identified stakeholders.</p> <p>Commercial utilisation</p> <p>If any commercial utilisation is intended of the knowledge, than the provisions of the free exchange would not apply. No use can be made of the knowledge save and except with the consent of the community which has the custodianship of this knowledge. If the knowledge belongs to more than one community, then the consent of all the communities must necessarily be obtained.</p> <p>If any commercial use is made of this knowledge without any such consent, then, without prejudice to the right of the community to stop the use of the knowledge, a certain fixed percentage (representing the profits made or that could be made by the use of that knowledge) is payable by the user, whether demanded or not. The right arises upon its commercial use. This right can be enforced by the community whose knowledge is so used; in certain prescribed circumstances, for example, where the community is unable to act on its own initiative, the Government or any NGO group may act on its behalf, provided that the community has the first and prior right of enforcement.</p>
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		<p>Proof of claim</p> <p>To facilitate evidentiary proof, any declaration by the elders, or other duly recognised members, of the community in a manner and form accepted by the cultural practices of that community, will be sufficient evidence of the existence of the right to that knowledge. The onus will then be on the person/corporation contending otherwise to prove its claim. Right to an innovation There will be no need to file a patent application to establish the right to the innovation. Protection arises once the innovation exists. The existence itself is established by the norms and practices of the particular community.</p> <p>The onus would be on those seeking to defeat the innovation of indigenous peoples to establish that their invention is in no way derived from the knowledge of indigenous peoples and local communities.</p> <p>All elements of culture, system and practices of communities formally recognised</p> <p>The rights regime incorporates and recognises all the elements of the culture, system and practices of local communities. It bestows on them the status of 'rights' which then become enforceable. In respect of genetic resources and local seeds, recognition extends to the whole livelihood system and the system of production by which marginalised communities makes a living.</p> <p>3) Stakeholders involved, decision-making process</p> <p>The authority in charge of drafting the law should conduct a consultation with identified stakeholders.</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/Changes</p> <p>As these are draft model laws, the effects of the actual implementation of these laws still remain to be seen.</p> <p>2) Problems The granting of sovereign rights to States in their biological resources by the Convention on Biological Diversity could be effectively undermined if they are not accorded the same rights to the crop genetic resources collected from their territory and located in gene banks.</p> <p>3) Unexpected positive/negative impacts to date</p> <p>The model legislation is being studied as one of the inputs to be included to biodiversity laws in Laos, Zimbabwe and Malaysia.</p>
<p>Keys for success (cause of failure)</p>		<p>Initially as challenges are made to this rights regime, the cost of defending the system or particular innovations may be high. But as the main elements of this rights regime are understood and established, and an increasing number of developing countries accept it as a desirable and effective way of protecting the knowledge systems of their indigenous peoples and local communities, the costs should be minimal. Industry will then have to take the existence of this regime into account prior to embarking on research or production of anything based on knowledge of indigenous peoples.</p>
<p>Evaluation</p>		<p>The protection of the traditional knowledge of indigenous people moves one step closer in the right direction towards the full recognition of community and indigenous peoples' rights. As these laws bring the rights of community and indigenous people into the spotlight, a much broader-based regime for the total recognition of their rights becomes a more urgent priority.</p>
<p>Applicability</p>		<p>This alternative rights regime can be suitably used and adapted in any developing country that is faced with the threats of depleting biodiversity and the biopiracy of both its biodiversity and the knowledge and expertise of community and indigenous people.</p>

Reference		Publication: Model Laws for the Protection of Biodiversity Knowledge in Developing Countries in Good Practices & Innovative Experiences in the South (Volume 2): Economic, Environmental and Sustainable Livelihood Initiatives. Edited by Martin Khor and Lim Li Lin. 2001. Published by Zed Books, Third World Network, Special Unit for Technical Cooperation among Developing Countries, UNDP.
Sectoral Issues		
Cross-sectoral Issues		1; 3; 5
Instruments		1.3; 3.3; 3.5
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Title		National Award for Environmental Model City
Country		156
Province		
Area		32 Cities (including 2 districts in Tianjin and Shanghai respectively) in China
Implementation level		2
Duration/ Year		1997-ongoing
Contact Person/ Focal Point for Enquiry	Name	Ms. Fei Yu
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: municipal governments
Actors involved		2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	In China's Environmental Protection Master Plan in the Ninth Five-Year-Plan (1996-2000) Period and Perspective Objectives for 2010, there is one target towards sustainable cities: China should establish some model cities with rapid economic development, clean and beautiful environment and sound ecological circulation.
		In order to realise this target, the previous National Environmental Protection Agency (currently known as the State Environmental Protection Administration; SEPA) initiated this activity in 1997.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The objective is to establish some model cities, which have excellence in coordinated development of society, economy and the environment, in order to promote urban sustainable development.</p> <p>2) Outline of the practice The policy practices associated with the model city development include the following: - Participation and application on a voluntary basis; - Recognition of environmental excellence of cities by awarding the title of 'National Environmental Model City'; - Established criteria for assessment, including 28 indicators in social, economic and environmental areas; - Procedures including i) formal application; ii) preparation of action plan for constructing model city; iii) action and improvement towards criteria; iv) on-site visit by SEPA; v) official assessment; vi) public reporting; vii) award decision; viii) annual award ceremony; and ix) periodical re-examination. - Encourage continuous environmental improvement.</p> <p>3) Stakeholders involved, decision-making process Stakeholders include SEPA, municipal government, municipal environmental protection bureaus, related sectors, regulated entities and the public.</p>
	<p>SectionC: Results /Outcomes</p>	<p>From 1997 till the end of 2002, there were 32 cities (districts) which gained the awards; 60 more cities have submitted applications and on the way of constructing their cities towards environmental model city criteria;</p> <p>1. Improvements/changes: - Environmental quality of the awarded cities has improved. By the end of 2001, these cities took the leading role in making their air quality and surface water quality comply with environmental quality standards prescribed by the State. - Environmental model cities played leading roles in improving urban environmental quality; - Both SEPA and municipal governments have accumulated experiences on achieving urban sustainable development; - Environmental awareness of local governments and the public has been increased.</p> <p>2. Problems that remain to be solved: - The criteria for assessment are needed to be improved. - The scope is necessary to expand from city zone to the areas around the city; - The re-examination should be strengthened to ensure their excellence.</p> <p>3. Unexpected positive/negative impacts to date: - Cities have achieved more rapid economic development after gaining the award; - The image of environmental model city has been improved which results in expanded foreign trade through increased foreign direct investment; - Sectoral structural adjustment has been accelerated.</p>
<p>Keys for success (cause of failure)</p>		<p>Several factors contributed to the programme. - With the increase of environmental awareness among the public, the investors and other stakeholders, many municipal governments have recognised the importance of good environment to sustain a sound social and economic development. The National Award for Environmental Model City has acted as a platform to recognise their efforts towards sustainable development and provided them with concrete criteria for performance. - Based on voluntary approach and awarding incentive, it is municipal government rather than SEPA, which takes initiative actions and provides required resources, and cooperates positively with SEPA in improving their performances towards model city criteria. Therefore, this</p>

		<p>mechanism saves transaction costs for its implementation and has financial sustainability for its continuous implementation.</p> <ul style="list-style-type: none"> - Not only environmental indicators, but also social and economic indicators in the access criteria make it possible for municipal governments to integrate environmental considerations into their decision-making on social and economic development at the very beginning of the decision-making process. The design of proper indicators is very important. - 10 day-public reporting via the media before final decision on the award makes it transparent to the public. - Voluntary approach rather than command & control encourages innovations of municipal government based on their own conditions. - The awarding incentive is very effective to increase the image of a city and therefore attract more investment. - The policy also encourages voluntary commitment to continuous improvement by municipal government after being awarded the title of model city.
Evaluation		<p>Measurable performance indicator is effective for the improvement of urban environment.</p> <ul style="list-style-type: none"> - Cost benefits: cost effective - Sustainability: financially sustained - Degree of integration of social, economic, environmental and cultural aspects: high degree of integration - Transparency/accountability: 10 day-public reporting makes it transparent to the public. - Strengths and weaknesses: <ul style="list-style-type: none"> * Strengths have been elaborated above. * Weaknesses: 1) effective mechanisms to ensure a sustained record of meeting the criteria after being awarded the title; 2) The effectiveness is very dependent on a well-designed criteria.
Applicability		<p>Applicability of the programme can be stated as follows:</p> <ul style="list-style-type: none"> - Social/economic/cultural/environmental conditions that make the project possible. - The increased public awareness and strong political wishes to improve urban environment are basic conditions to make it possible for implementation. - Degree of simplicity of the process of implementation. <p>The procedure is simple, however, the indicator is a bit complicated and should be designed according to the practical situations in a specific country.</p>
Reference		<ol style="list-style-type: none"> 1. Web site: http://www.sepa.gov.cn 2. Environmental Yearbook 1998, pp82, pp228. 3. Environmental Yearbook 1999, pp.199. 4. Environmental Yearbook 2000, pp.283. 5. Environmental Yearbook 2001, pp.189. 6. Environmental Yearbook 2002, pp.265.
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5
Instruments		3.4; 4.2
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Title		National environmental action plan for sustainable development of the Republic of Kazakhstan (NEAP)
Country		398
Province		
Area		
Implementation level		2
Duration/ Year		1997 - 1998
Contact Person/ Focal Point for Enquiry	Name	Mr. Vladimir Bogachev, Project manager
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: 900,000 USD 2) Source(s) of funds: WB, UNDP 3) Efforts to raise/sustain funds for implementation (if any): regular donors meeting, donors participation on the process
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	<p>The environment in Kazakhstan is very critical. As a result of anthropogenic loads on the natural environment of Kazakhstan an ability to ensure future economic and social development has been violated practically on the entire territory of country. The raw material resource policy of the nature use without taking into account the ecological and natural capacities of the territories was the main reason of the low efficiency of the economy, management system. A sharp reduction of financing ecological arrangements from the governmental budget took place.</p> <p>A hard macroeconomic policy of the transition period has put forward urgent social and economic problems having put off the solution of environmental issues. Such a situation has resulted in the need for identifying the and including into the only the most urgent feasible arrangements and measures of 'non-risk' strategy in the economy sectors, allowing to get both environmental and social economic benefits.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <ul style="list-style-type: none"> - Identifying the priority environmental problems on the basis of the analysis of the environmental state, transparent criteria and taking into account the process participants - Identifying the economically effective feasible actions on solving the priority problems including a complex of institutional and investment transformations, and analysis of the costs and benefits - Identifying the time framework and total costs of the Action Plan and development of the strategy for its financial implementation - Designing an organisational structure and coordination mechanisms required for fulfilment of the Action Plan - Involving the main stakeholders for creating a political and social support of the coordinated actions. <p>2) Outline of the practice</p> <p>At the first stage of the NEAP development thematic working groups led by different ministries (economy, health, etc.) were formed out of national experts for the analysis of the environmental issues of Kazakhstan. All the problems were broken down into seven blocks and each group carried out their analysis taking into account the causes and consequences interconnections. Summarised and systematic information on the state of Kazakhstani environment was handed over to experts groups for the analysis and evaluation, and then presented at the national workshops on identifying the priority problems and actions.</p> <p>3) Stakeholders involved, decision making process</p> <p>More than 2000 participants representing the public, NGOs, scientists, academicians, the central and local governments, sector ministries, worked together at this Workshop on ranging environmental problem.</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes</p> <p>Initiatives, proposed for NEAP/SD, have been included in the National development strategy and Governmental programme, including several loans and many grants. Kazakh NEAP was indicated as one of the best NEAPs in NIS region. Among them there are Kazakhstani proposals, important for regional policy, on developing the Central Asian Regional Environmental Action Plan and establishing the Regional Environmental Centre for Central Asia. Many NEAP projects was implemented and many of them are in the process of implementation.</p> <p>2) Problems that remain to be solved</p> <ol style="list-style-type: none"> 1. National governance system should be changed to integrated and environmental governance 2. National economic indicators should be integrated with SD indicators 3. National capacity building for environment and SD should be increasing <p>3) Unexpected positive/negative impacts to date</p> <p><Positive></p> <ul style="list-style-type: none"> - A lot NGOs started to work from NEAP process; - Neighbour countries used this experience; - Kazakhstan's climate change initiative to be part of the annex 1 of UNFCCC; - Others sectors in Kazakhstan used the same approaches <p><Negative></p> <ul style="list-style-type: none"> - Short-term projects are not effective in long-term perspective; - Big expectation from donors.

Keys for success (cause of failure)		<p>1. One management NEAP centre and very clear and simple methodology on selection of environmental priorities, used in same time on the national and local levels;</p> <p>2. Trainings and capacity building parallel programmes (more than 200 national experts was trained for ZOPP technology and logframe analyse), effective management of NEAP team of professional expert groups;</p> <p>3. Broad public participation process (more than 2000 participants);</p> <p>4. Stakeholders and donors involving in each steps.</p>
Evaluation		<p>Programmes of monitoring and revision of plan help to achieve results and maintain pace and continuity of the initiated nature protection actions. Analysis of Implementation of Nature Protection Strategic Plans of Oblast of Kazakhstan allow to amend oblast development programmes to support priority projects at local level.</p> <p>The system is being created in Kazakhstan allows to efficiently supervise planning and implementation of nature protection programmes and projects and timely introduces amendments to nature protection strategies, concentrate financial resources to increase efficiency of investments, made for achievement of environmental priorities.</p>
Applicability		The experience gained could be used by other regions interested in development the national programs and strategies for SD and would allow cooperation of all stakeholders at the unified platform.
Reference		<p>NEAP publications:</p> <p>The National Environmental Action Plan for Sustainable Development, RK Ministry of Ecology and Natural Resources, 1998.</p> <p>Evaluation of progress in development and implementation of national environmental action programs in countries of Central and Eastern Europe, CIS, OECD, 1998.</p>
Sectoral Issues		3
Cross-sectoral Issues		1
Instruments		1.3; 3.4; 3.5; 3.7
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Title		Nayakrishi Andolon: A Community-based System of Organic Farming
Country		50
Province		
Area		
Implementation level		1
Duration/ Year		Early 1990's - ongoing
Contact Person/ Focal Point for Enquiry	Name	Mr. Farhad Mazhar, Ms Farida Akhter and others
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	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Source of funds: Local farm community 3) Efforts to raise/sustain funds for implementation: Local resources are used to sustain project.
Actors involved		5
Description of the Practice	SectionA: Background & Objectives	<p>In Bangladesh, community-based organic farming started from the realisation of the harmful effects of modern agriculture. Modern agriculture, introduced in the mid-sixties as a package of chemical fertilisers, pesticides, high yielding variety (HYV) seeds and irrigation water, started showing a tremendous decline in the yield of the crop and led to an enormous increase in the need for application of inputs, especially fertilisers and pesticides. Groundwater was no longer as available as it used to be. The livestock, fish and poultry populations were diminishing. Exotic varieties were being introduced gradually. Many poor farmers were forced to sell land and other productive assets, and to shift from farming to non-farming occupations.</p> <p>It was amid such a background that some farmers gathered together to seek an alternative and came up with a community-based work, which is organic in nature. It was named Nayakrishi Andolon.</p> <p>In essence, Nayakrishi Andolon developed as a response against the overwhelming practice of chemical agriculture and the erosion of community power in the face of encroaching centralising forces beyond the control of the farmers. The farmers responded against environmental destruction, the economic, social and political processes of dispossession and disempowerment, privatisation and the consequent erosion of the common property, loss of seed and genetic resources, and above all, the increasing perception of insecurity of food and productive resources.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The objective of the movement is to seek and practice a community-based organic farming that would provide farm family healthy food, a healthy environment and a happy life. The target audience of this movement is farmers and their families. More than 25,000 farmers in four districts of Tangail, Pabna, Cox's Bazar and Noakhali have been organised.</p> <p>2) Outline of the practice Nayakrishi Andolon is based on 10 simple principles. These principles were developed through the experiences and knowledge of farmers. The principles are as follows:</p> <p>Principle 1: Absolutely no use of pesticides. Nayakrishi farmers do not use any pesticides or poison, organic or inorganic. Pest-control practices can be implemented without the use of poisons.</p> <p>Principle 2: No use or gradual decrease in the application of chemical fertilisers. The land must be made healthy through crop mixing which gives natural nourishment to the soil and also to ensure the presence of living microorganisms in the soil.</p> <p>Principle 3: Multi-cropping, inter-cropping, mixed cropping, agroforestry and other familiar methods are used to retain and enhance soil fertility. Farmers believe that the best method for pest management is conservation and constant regeneration of biodiversity. Nitrogen-fixing species of plants and trees are grown and farmers are experimenting with new species and innovating new ways to increase the fertility of their soil.</p> <p>Principle 4: Practice of agroforestry and integration of fuelwood, fruit and various multipurpose trees along with rice and vegetable fields. Exotic and imported agroforestry are generally rejected.</p> <p>Principle 5: Calculate total yield of a farming household and the material gains of the community as a whole through maintenance and enhancement of biodiversity. Farmers are relearning to calculate the total yield of the farm, not the quantitative productivity of a single crop. Thus, a more accurate view of the overall output and benefits of the farm are obtained.</p> <p>Principle 6: Livestock, poultry and semi-domesticated birds are part of the farming household.</p> <p>Principle 7: Local varieties of livestock, poultry and fish are given priority. Local varieties are usually economically advantageous and ecologically suitable.</p> <p>Principle 8: Seeds and genetic resources must be conserved at the household and community level. Under the Nayakrishi practice, seeds and genetic resources must never get out of the hands of the farmers, particularly women. The privatisation of seeds and genetic resources and the patenting of life forms are resisted.</p> <p>Principle 9: Water resources must be conserved. Water is the source of conserving the biodiversity of plants and fish resources.</p> <p>Principle 10: Use of deep tubewells for irrigation is not necessary. Nayakrishi farmers through their farming practices ensure nourishment of the land and do not need irrigation.</p>
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	<p>3) Stakeholders involved, decision-making process</p> <p>The stakeholders are the farmers of Nayakrishi Andolon, involving the men, women and children of the community. UBINIG (Policy Research for Development Alternatives), a NGO had carried out extensive research on the effects of modern agriculture and what could be done about it. UBINIG supported the farmers. The activities of Nayakrishi Andolon are coordinated through centres run by UBINIG in all the project areas.</p> <p>Through the centres, training programmes, workshops and meetings are organised. UBINIG coordinates the task where experienced Nayakrishi farmers train the new farmers.</p> <p>The decision making process involves the community themselves. The main activities of Nayakrishi are conducted in the farmers' villages in their own land. Farmers cultivate their land and share knowledge with their fellow members. They also hold meetings in their villages and create an atmosphere for mutual friendship. They gradually declare a village as a Nayakrishi village if pesticide use can be stopped totally.</p>
<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/Changes</p> <p>As a fundamental principle of agricultural practice, Nayakrishi farmers rejected monoculture and ground their practices on mixed cropping and crop rotation. This was a highly effective method for pest management and contributed to the nutritional health of the soil.</p> <p>The farmers also get more varieties of fish, and a wide range of uncultivated crops which either come as partner crops from the multi-cropping fields or are grown on the common land because there are no more poisons used in the villages. The livestock and poultry also develop more rapidly thereby enriching the biodiversity and food security of the people.</p> <p>2) Problems</p> <p>The influence of modern agriculture lay in the new-generation of farmers not believing that crops can be produced without the use of chemical fertilisers and pesticides. They also believe that they need to extract groundwater for irrigation. The dependence on external inputs was so great that many of the farmers became indebted.</p> <p>The farmers were initially worried that their output would drop if they adopted Nayakrishi. Their worries were overcome by farmer-to-farmer exchange and actual demonstrations in the fields of the farmers.</p> <p>The collection of local-variety of seeds is difficult as many of them are on the verge of extinction. A lot of effort is undertaken in the collection of seeds.</p> <p>3) Unexpected positive impacts to date</p> <p>At the local level, the impact is among the farmers and also among the non-farming communities. The most important impact apart from the ecological gains is in engendering general confidence among the farming communities in and around the Nayakrishi villages that Nayakrishi is economically viable.</p> <p>Farmers' livestock populations have increased by between 100-200%. Their cash income has increased by around 50-200%. Mixed cropping is three times more productive than monocultures. It also provides revenue from cash crops and is an extremely good risk-management strategy, besides providing food security needs of the community.</p>

		<p>The community seed wealth centers have been extremely effective. After the harvest, the farmers are obliged to return two times the amount of seed they took. If the harvest was unsuccessful, this condition is waived. Most farmers return more than required because the seeds and the seed wealth centers are theirs and they benefit directly from them.</p> <p>There are also cultural impacts such as reduced incidence of violence against women. The empowerment of women is achieved by the nature of relationship Nayakrishi brings into the life activities of the village.</p>
Keys for success (cause of failure)		<p>The backbone of the Nayakrishi farmers' network is the gram karni or the extension workers. These are the marginal farmers, mostly women who, are prepared to work to impart knowledge and to mobilise the farmers in their neighbouring villages to work for Nayakrishi.</p> <p>Apart from networking and campaigning, the gram karni also maintain audits of the natural resources of the village. The information is maintained collectively and Nayakrishi farmers are put on alert if any 'land race' or 'wild' species or variety is getting eroded or lost.</p> <p>To enhance the capacity of the community, the Specialised Women Seed Network was formed. This comprises women who specialise in certain species or varieties. Their task is to collect local varieties from different parts of Bangladesh and to monitor and document the introduction of a variety in a village or locality and keeping the information up to date. The specialisation encourages individual persons to be more focused on a few species and as a result they develop valuable knowledge in a particular area.</p>
Evaluation		<p>The farmer community is more confident than before in their capacity to change their life situation. Nayakrishi also has the potential to become a model for health and nutrition care.</p> <p>While poor farmers are joining Nayakrishi for subsistence reasons, the middle farmers have acknowledged the economic-viability of the organic farming system as a whole. The farmers have also realised the environmental hazards and the loss of biodiversity due to the use of chemicals and the overwhelming practice of monoculture.</p> <p>The Nayakrishi movement has proved to be effective in terms of improvement of the quality of life of the farm community besides empowering the women.</p> <p>There is overall positive impacts on the community as they enjoy food security, nutrition, good health and income. The land is regaining fertility and biodiversity is enhanced in their locality. The farmers are economically better off because they do not have to incur the costs of inputs. Farmers are also organised and they take collective decisions about crops and marketing the products.</p>
Applicability		<p>The Nayakrishi Andolon is a farmers' movement whereby the farmers take the initiative to motivate other farmers. In Bangladesh, four districts are directly involved and more areas are covered through the interaction among farmers.</p> <p>The South Asian Network on Food, Ecology and Culture (SANFEC) was formed in August 1997 to facilitate interaction among Nayakrishi farmers with farmers in Nepal, India and Pakistan.</p> <p>The Nayakrishi principle can be adapted by farmers in other countries to suit local situation and needs. Through networking, farmer-to farmer exchange and sharing of experiences, the Nayakrishi is a viable initiative.</p>

Reference		<p>Publication:</p> <p>Nayakrishi Andolon: A community-based system of organic farming in Good Practices & Innovative Experiences in the South (Volume 1): Economic, Environmental and Sustainable Livelihood Initiatives. Edited by Martin Khor and Lim Li Lin. 2001. Published by Zed Books, Third World Network, Special Unit for Technical Cooperation among Developing Countries, UNDP.</p> <p>Research conducted by:</p> <p>UBINIG, Address: 5/3 Barabo Mahanpur, Ring Road, Shaymoli, Dhaka 1207, Bangladesh Tel: +880-2-811465, 816420 Fax: + 880-2-813065 Email: ubinig@citechco.net</p>
Sectoral Issues		3
Cross-sectoral Issues		4
Instruments		3.1; 3.3; 3.4; 4.1
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Title		North Solomons Education Research Project
Country		598
Province		
Area		Bougainville Island
Implementation level		1
Duration/ Year		Late 1970s - ongoing
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Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		
Actors involved		5
Description of the Practice	SectionA: Background & Objectives	During the late1970s the North Solomons decided to set up an education system more responsive to peoples' aspirations. Through an informal meeting between a University of Papua New Guinea staff member and representatives of the North Solomons Provincial Government, a consultation took place, which resulted in the North Solomons Education Research Project.

	<p>SectionB: Outline of Practices /Actions</p>	<p>When the project was started, people were very critical of the education system in the province and the North Solomons Education Research Project was intended to investigate the kind of education system to which the people aspired.</p> <p>In order to carry out the survey the research team randomly selected four schools, three of which were on Bougainville Island and one on the island of Buka. I happened to be the Principal of one of those schools. As I worked with the research team I became very interested in vernacular language education. At that time, although I could speak my mother tongue fluently, I could not write very well.</p> <p>The Project was already planned and designed by the beginning of 1980. However, the area where I was teaching did not have any 'Viles Tok Ples Skul' - yet the people were concerned in maintaining their first Language. The Research Coordinator brought in a Canadian researcher of children's games. He was made very welcome by the local people and spent a lot of his time talking to the older people. Many of the older people often told us, as we ventured into the villages, that they wanted their children to learn the traditional games because it strengthened and encouraged the cultural values of their place. They also voiced concerns on the possibility of their children losing their language because the children were very much encouraged to learn English and play introduced games such as soccer, volleyball, tunnel-ball and overhead-ball. They were more tuned to playing with introduced objects, they would say.</p> <p>As he researched the games I decided to collect chants and songs and the traditional stories from my own older relatives, my uncles, my mother and few others. It was then that I realised how the language was evolving. Most of the chants were in a language long gone. Although, I could not interpret any of the words, my uncle would explain everything to me during long painstaking discussions. All I could remember was that as a child growing up, the village children and I used to chant them under the moonlight. As an adult I did not see anything like that happening. Why? Because I was busy trying to educate the children in English. The children in the villages did not play any of the traditional games because they had to sleep early or do their homework. This is exactly what the older people were concerned about. Losing their traditions and values which may lead to losing their language.</p> <p>In 1990 after immigrating to Australia, as my late husband was at the Australian National University, I was introduced to Mr Onishi, who was doing his PhD in Linguistics. Because of the problems in the North Solomons Province, he could not undertake his fieldwork on location in Bougainville, but used a Siuwai speaker and myself to research our language and write the grammar. Thanks to him, now I am able to extend the research into the Games, Chants and Stories and Riddles as part of the linguistic research of the Southern Bougainville Language Group. During the past 5 years I have recorded as much as I could of the Siuwai culture from the children's games, chants, stories and riddles to marriage ceremonies and clan genealogy.</p> <p>As one of those parents who witnessed the crisis on Bougainville Island, I can see fundamental issues concerning traditional governance as against the introduced widely taught Westminster system of government. The western style of governance is so alien to people's every day lives.</p> <p>As I write these traditional chants, stories and games I try to understand the underlying emotions and traditional values of the people who constitute the living organism of the communities and the island as a whole. I feel very strongly that to neglect traditional customs, values and governance may have unforeseen long-term consequences.</p>
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	SectionC: Results /Outcomes	Today parents of young children in my area are striving to maintain the culture and its system of governance. They build 'Viles Tok Ples Skuls', whereby they expect elementary school teachers to educate the children in our language and culture. In other words, parents want their children's education to be founded in traditional values. They want to teach them a more environmentally friendly agricultural system instead of using harmful substances. They want to teach them to use traditional ways of fishing and hunting.
Keys for success (cause of failure)		My utmost belief is that education is a key to development and needs of the people must be valued and developed rather than imposing and preaching alien values. I believe through the books I have been writing the traditional governance and values will be continued.
Evaluation		N/A, on-going project
Applicability		The project has begun to link basic educational initiatives, based on local culture, languages, values and traditions, with education for sustainability. It involves the development of teaching materials and modules delivered through local community systems of governance. As such, it has the potential to be a model for such programs in the Pacific region and other developing countries.
Reference		- Delpit, L. D., & Kemelfield, G. (1985). An Evaluation of the Viles Tok Ples Skul Scheme in the North Solomons Province. Port Moresby: Educational Research Unit, University of Papua New Guinea; Arawa: The North Solomons University Centre, (North Solomons Education Research Project). - Kemelfield, G. (1981) North Solomons Education Research Project. Research Branch, DOE, Waigani.
Sectoral Issues		3
Cross-sectoral Issues		4
Instruments		3.1; 3.2; 3.4; 3.5
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Title		Off-Grid Renewable Energy Development (Technical Assistance)
Country		860
Province		
Area		
Implementation level		2
Duration/ Year		2003 - 2004 (6months)
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	Affiliation	
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Sponsor(s)		1) Amount \$500,000 2) Source(s) of funds ADB(Gov. of Denmark) \$350,000, Cofin Amount \$150,000
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	In rural areas, where 62% of the Uzbekistan's population reside, the supply of electricity is unstable. This instability primary impedes the operation of irrigating systems, which increases the risk of crop failure. The instability of available electricity and absence of local generating capacity increases reliance on mobile diesel pumping stations. The environmental costs of such operations are large due to the emission of air pollutants. Uzbekistan has good potential for developing renewable energy, particularly hydropower, solar, wind, geothermal and biomass resources.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice Objectives of this Technical Assistance are a) to undertake a comprehensive assessment of the potential for renewable energy options in small towns and rural areas in Uzbekistan and b) to develop a viable pilot scheme of renewable energy options in selected off-grid areas.</p> <p>2) Outline of the practice - Analyse potential sources for renewable energy development in off-grid rural areas and small towns - Analyze the potential for development of all other forms of energy in off-grid areas - List the demand management programs that could be used by the domestic and industry sectors - Perform a detailed cost-benefit analysis for identified renewable energy options - Prepare a detailed action plan to promote high priority renewable energy options - Examine the institutional mechanism, in particular the policy and regulatory framework, for promoting renewable energy options in off-grid rural areas and small towns</p> <p>3) Stakeholders involved, decision making process International organisation, Central government</p>
	SectionC: Results /Outcomes	The expected outputs include a) a review and assessment of the potential for renewable energy development; b) an action plan to improve renewable energy; c) designs of pilot projects for the most appropriate renewable energy options; d) detailed feasibility assessment for the increase of pilot projects including an assessment of financing mechanisms and e) dissemination of TA findings.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		ADB Project Database, Technical Assistance Report TAR: UZB 37107 http://www.adb.org/Documents/TARs/UZB/tar_uzb_37107.pdf
Sectoral Issues		2
Cross-sectoral Issues		6
Instruments		3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Oil spill impact and response management program
Country		50
Province		
Area		
Implementation level		1
Duration/ Year		July 2000 - July 2002
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	Affiliation	
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Sponsor(s)		1) Amount; US\$991,000 2) Source(s) of funds; Asian Development Funds
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	As Mongla Port is only 3 kilometres north of the Sundarbans Reserved Forest which was declared a World Heritage Site, there was an urgent need to review the legal and regulatory instruments and standards to deal with oil spills and port related environmental management issues. To assist the process, it was agreed to provide the TA with aims to: (i) develop the basis of a national oil spill contingency plan that will provide the legal and regulatory framework for oil spill response mechanism for ports in Bangladesh, (ii) contribute toward the establishment of effective monitoring arrangements for environment impacts; (iii) strengthen the initial capability of Mongla Port Authority to respond to oil spills, and (iv) introduce monitoring and risk assessment systems to identify the risk of contamination.
	SectionB: Outline of Practices /Actions	The technical assistance was designed to address specific issues by developing (i) National Oil Spill Contingency Plan (ii) Zonal Oil Spill Contingency Plan, (iii) Oil Spill Impact on Sundarbans Mangrove Forest Report, (iv) Monitoring Manual for the Oils Spill Impact in Forest Area, (v) Oil Spill Training Manual, and (vi) Manual on Ports Environment Management. To facilitate its implementation of these plans and manuals, workshops were organised for the capacity building and training of more than two hundred stakeholders.

	SectionC: Results /Outcomes	As a result of this technical assistance, the government decided to ratify MARPOL 73/78.
Keys for success (cause of failure)		The technical assistance was comprehensive in that it covered monitoring and training manuals as well as contingency plans. The consultant worked closely with the Executing Agency and other government agencies through a steering committee, which comprised high-level officials. The executing agency was not a government agency but the port authority. It caused difficulty in coordinating with the government agencies but seems to have had an advantage to make practical plans and manuals. Training workshops effectively enhanced the capacity of stakeholders as well as EA and relevant agencies leading to ratification of MARPOL 73/78.
Evaluation		The technical assistance was effective enough to complete oil spill contingency plans as well as monitoring and training manuals in two years at reasonable cost. Preventing oil spill from economic activities of the ports is significantly improving the sustainability of the area, as the ports are closely located to environmentally sensitive area. The process to establish contingency plans and manuals were transparent through the steering committee and workshops for stakeholders. The technical assistance has to be followed up so that the recommended actions concerning organisational arrangements, procurement of equipment and materials and training of team staff are taken.
Applicability		This project can be applied in those areas where important economic activities are threatening the environment while the relevant agencies lack capacity of making contingency plan and monitoring the situation.
Reference		TA Completion Report
Sectoral Issues		4; 5
Cross-sectoral Issues		1; 3; 4
Instruments		1.1; 1.3; 3.5; 3.8; 4.2
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Title		On-the Job Training for Directors of Local Environmental Protection Bureaus
Country		156
Province		
Area		
Implementation level		2
Duration/ Year		2001 - ongoing
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	Affiliation	
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	Fax	
	E-mail	–
Sponsor(s)		1) Amount: 4.5 million RMB 2) Source of funds: Most funds come from SEPA, World Bank and JICA. We are planning to cooperate with Environmental Defense and other environmental NGOs.
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	As the fast economic development in China, the environmental problems become more and more serious in our country. The pressure and new situation of environmental protection made SEPA decided to improve the quality of directors of local EPBs.
	SectionB: Outline of Practices /Actions	1. The aim is to improving the quality of directors from local EPBs and makes them more fitful to their job and the situation of environmental protection. 2. We focus the training in knowledge of environmental law and environmental management. Increased the knowledge of directors from local EPBs by introducing popular methods of environmental management in developed countries. 3. Administrators in SEPA and experts from World Bank and JICA.
	SectionC: Results /Outcomes	1. Since 2001, we have held 15 times training courses successfully. The total number of the students is more than 2,500. Through the training courses, we have improved the quality of directors from local EPBs, promoted the level of environmental management and working efficiency. 2. The problem of our training courses is that we need to build a fix teachers team and also to find more fund to support the practice in our training.

Keys for success (cause of failure)		The fully support from SEPA and local EPBs. Good cooperation by experts from World Bank and other environmental NGOs.
Evaluation		Though the training courses did not have economic benefit directly, it does bring great social benefit. The students of our training courses come from 30 provinces throughout the country.
Applicability		Some developed countries have already held such training courses. We are planning to invite some directors of EPBs in other developing countries to share the experience in environmental protection.
Reference		http://www.chinaeol.net
Sectoral Issues		3
Cross-sectoral Issues		4
Instruments		3.3; 3.8; 4.2
Provider of this information	Name	GAO Tong (Ms.)
	Organisation	Sino-Japan Friendship Center for Environmental Protection
	Job Title	
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	Fax	+86-10-8463-0987
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Title		Optimising Development of Small Hydel Resources in Hilly Areas
Country		356
Province		
Area		Himalayan and sub-Himalayan regions
Implementation level		2
Duration/ Year		1994 - 2003
Contact Person/ Focal Point for Enquiry	Name	N/A
	Affiliation	Ministry of Non-conventional Energy Sources
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$14.64M 2) Source(s) of funds GEF Grant \$7.50M, Cofin Amount \$7.14M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	India has an estimated potential of over 10,000MW of small hydel power at canal drops and irrigation dam-based sites, run-of-rivers, and natural streams in the hilly regions. Only a fraction of this potential has so far been utilised. The project's overall objective is to formulate technical and economic guidelines and to adopt advanced, feasible, and environmentally superior technologies for optimising planning and development of small hydro resources in the hilly region.
	SectionB: Outline of Practices /Actions	- Objectives of the practice 1) To develop a national strategy and a master plan which detailed investment proposals for the optimum utilisation of small hydel resources in Himalayan and sub-Himalayan regions. 2) To develop a package of commercially viable and environmentally sound technologies based on the installation of twenty demonstration units for the generation of hydroelectric power, and to develop appropriate models for ownership, management, and maintenance of small hydel projects through a people-centred and participatory approach.
	SectionC: Results /Outcomes	

Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		
Reference		GEF Project List Project Document IND 386
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.3; 3.5; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
	Contact Address	2108-11 Kamiyamaguchi, Hayama, Kanagawa 240-0115 Japan
	Tel	
	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		Organic Agriculture and Fair Trade: Promoting Sustainability at the Source
Country		356; 360; 144
Province		
Area		
Implementation level		4
Duration/ Year		1996- ongoing
Contact Person/ Focal Point for Enquiry	Name	
	Affiliation	ForesTrade, Inc.
Contact Information	Address	41 Spring Tree Road, Brattleboro, VT 05301 U.S.A.
	Tel	+1-800-989-4399
	Fax	+1-802-257-7619
	E-mail	info@forestrade.com
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: profits from sales, private investors, conventional creditors, and customers and foundations dedicated to the social and environmental mission, who provide grants and working capital to partnering grower groups and farming communities.
Actors involved		4; 5
Description of the Practice	SectionA: Background & Objectives	ForesTrade is a product development and trading company specialising in certified organic and sustainably harvested organic species, essential oils and coffee. Working closely with farmers and communities in Indonesia, Guatemala, Grenada, Sri Lanka, India, and Uganda, the company has implemented an effective business model that wholly integrates social and environmental concerns and successfully bridges multi-stakeholder partnerships.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <ul style="list-style-type: none"> - To serve as an environmentally and socially responsible international business that directly supports sustainable agriculture, conservation of natural resources, preservation of biological diversity, and promotion of socio-economic and self-determined community development. - To produce a consistent supply of quality certified organic products, including spices, coffee, and essential oils, while providing our customers reliable distribution and commercially competitive prices. - To promote socio-economic development by linking farmers with new and higher valued markets, and by paying farmers an organic premium for their products, which is always above conventional spot prices. - To help break the cycle of farmer debt and finance community based micro-enterprises by providing working capital loans and promoting credit and saving schemes to qualifying farming communities. <p>ForesTrade's activities envision to promoting secure food supplies, poverty alleviation, sustainable land management and mountain development strategies, combating deforestation, promotion of science and international finance in developing countries, and the greater involvement and integration of NGOs, indigenous peoples, local authorities, business, scientists, and farmers.</p> <p>2) Outline of the practice</p> <p>ForesTrade directly links local indigenous farmers with international organic markets by working in alliances with a number of local NGOs and by providing financial and technical assistance. Technology transfer and capacity building occur through extensive and ongoing sustainable agriculture skills training, infrastructure design and development, organisational development support, and financial management support provided by ForesTrade's regional staff and partner NGOs.</p> <p>ForesTrade provides an incentive to farmers for implementing sustainable agricultural practices by paying an economic premium for certified organic products. ForesTrade works closely with groups of small producers to develop long-term land management plans based in sustainable agricultural practices and organic certification is renewed on an annual basis, encouraging producers to continually implement land and crop management improvements.</p>
	<p>SectionC: Results /Outcomes</p>	<p>Measurable results and specific targets include:</p> <ul style="list-style-type: none"> - Approximately 6,000 farming families, cultivating over 100,000 hectares are supported in maintaining sustainable agricultural practices through economic incentives. Results from organic practices include greater soil fertility and increased yields and pest resistance. - Affordable capital loans and organic premiums have enabled significant improvements to community infrastructure, such as: 14 community based cardamom and all spice dryers, construction of community centres, purchase of transport vehicles for delivering products, refurbishing four local mosques with improved community water systems, and the development of nurseries for reforestation in the majority of farming communities. - Affirmation of cultural diversity through employment of a multi-cultural and multi-lingual staff, which include, local indigenous populations and field extension staff who are proficient in local dialects. - Our time frame is open-ended, as ForesTrade is committed to indefinite support and continued activity in our partner regions. - Reporting devices include organic certification from five external certifying agencies, Fair Trade certification for coffee production in Indonesia, social and environmental reporting requirements required by The Nature Conservancy and Conservation International, and quarterly and annual reports to investors.

<p>Keys for success (cause of failure)</p>	<p>The project aims to reinforce sustainable economic development and natural resource conservation using a market-driven approach. Capitalising on the growing demand for organic and natural products, the project has set up supply partnerships for high value crops (such as cardamom and allspice) in a number of rural communities.</p> <p>ForesTrade provides affordable working capital loans to selected qualifying producer groups giving them leverage against local traders. Without a fund to pay producers for their product on a timely basis, many producers would elect to sell to another buyer even at a lower price, due to pressing financial needs. Providing technical assistance and institutional support, ForesTrade helps to strengthen the capacity of local micro-enterprises and cooperatives.</p>
<p>Evaluation</p>	<p>ForesTrade's innovative partnerships and alliances has involved producers, processors, NGOs, and customers around the world, allowing early entry into the rapidly growing international market for organic and fair trade products. By working in mutually beneficial partnerships with 6,000 local, indigenous producers, over 25 local and international NGOs, and about 100 manufacturers and distributors, ForesTrade has found a way to balance social and ecological sense with good business sense. In recognition of their contribution to sustainability, ForesTrade received the 2002 World Summit Award for Sustainable Development Partnerships at the Johannesburg Summit.</p>
<p>Applicability</p>	<p>ForesTrade is committed to integrating environmental conservation, sustainable agriculture and community development into its core business model. The capacity for project replication is established through the following:</p> <ol style="list-style-type: none"> 1) Implementation of an integrated supply and demand-based project development process that includes: <ol style="list-style-type: none"> a) Participatory agro-ecological and socio-economic surveys. b) Institutional assessments of local organisations, cooperatives, and businesses. c) Technical assessments of product availability and quality. d) Financial feasibility analysis. e) Market study based on customer requirements and demand. 2) Identification of communities and farmers who have an orientation towards sustainable agriculture practices and where the agricultural land has been chemical-free for at least three years. 3) Identification of communities who are geographically isolated, in close proximity to biologically important and fragile ecosystems, and who are in need of socio-economic development. 4) Development of partnerships with local indigenous farmer groups and cooperatives, local business partners, NGOs, ForesTrade's field staff and parent company ForesTrade, Inc. 5) Provision of technical assistance, training and support for 'organic' and 'fair trade' certification. 6) Regional field offices with local extension staff in each area that are ethnically diverse and multilingual with a proficiency in local dialects. 7) Evaluation of market trends and potential demand to support increased production and development of new products (i.e. the addition of organic essential oils). 8) Strict adherence to organic standards for production and processing. Implementation of an internal control system that closely monitors every product, input and transaction to ensure the organic credibility of every farmer ForesTrade works with.

		<p>9) Education in the marketplace bridging customers with the social and environmental impact of their decisions to purchase ForesTrade's organic and fair-trade products.</p> <p>10) Development of long-term, international and strategic alliances linking producers, processors, retailers and consumers.</p>
Reference		<p>Virtual Exhibit Project Showcase: http://www.virtualexhibit.net/new/globalShowcaseTemplate.php?project_id=365 Johannesburg Summit 2002 Business Action for Sustainable Development http://basd.free.fr/initiatives/viewproject.php.144.html</p>
Sectoral Issues		3
Cross-sectoral Issues		2; 3; 4; 5
Instruments		2.3; 3.1; 3.2; 3.3; 3.4; 3.5; 3.8; 4.2
Provider of this information	Name	APFED Secretariat
	Organisation	
	Job Title	
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	Tel	
	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		Oxfam Community Aid Abroad Trading
Country		36
Province		
Area		And over 30 countries in Asia, Africa and Latin America
Implementation level		4
Duration/ Year		Started in 1970's, ongoing
Contact Person/ Focal Point for Enquiry	Name	Mr. Paul Deighton
	Affiliation	Oxfam Community Aid Abroad Trading
Contact Information	Address	PO Box 184Kilkenny SA 5009, AUSTRALIA
	Tel	+61-8-8341-1422
	Fax	+61-8-8341-2958
	E-mail	pauld@oxfamtrading.org.au
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		Self-funded through purchase and sales of handcraft products
Actors involved		5
Description of the Practice	SectionA: Background & Objectives	Small-scale handcraft producers are marginalised from markets through international trade practice and WTO rules, forcing them to work for low wages in poor conditions and with little chance for improving their lives.
	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice Improve market access and capacity of producers to service those markets. Increase awareness of fair trade in Australian markets.</p> <p>2) Outline of the practice Import handcrafts from small Fair Trade handcraft enterprises, sell those products in Australia, and use profits for capacity building programmes with the producers.</p> <p>3) Stakeholders involved, decision-making process Originally set up by volunteers, now run by Board appointed by Oxfam Australia, and management team. Decisions sometimes made using ad hoc input from producer stakeholders via IFAT etc and frequent visits to producers.</p>

	SectionC: Results /Outcomes	<p>1) Improvements/changes</p> <p>There are several sources of information on various individual successes, including IFAT assessments by producers, annual reports of producer organisations, studies commissioned by IFAT and/or its members. Several producer organisations move from selling solely through Fair Trade channels into mainstream markets, at least partly, and we regularly take on new less-developed producers when we can and try to help them build capacity to do the same.</p> <p>2) Problems that remain to be solved</p> <p>Capacity of new producer partners in various areas (design, pricing, quality control etc etc). Ongoing.</p>
Keys for success (cause of failure)		<p>Most of the factors below apply to some extent, although they can be seen as much as outcomes as inputs in our context, working in a feedback loop to eventually lead to success.</p> <ul style="list-style-type: none"> - enhancement of collaboration among the different stakeholders and/or introduction/improvement of consultative mechanisms - facilitation of gender equity, social inclusion, economic and social mobility - voluntary participation of local people - use of knowledge and/or techniques that used to be utilised, including traditional/indigenous ones - change in the way of using local resources (e.g., make use of available local resources not used sustainably before) - enhancement of capacity of stakeholders/organisations - shifting priorities in society - introduction of economic policy instruments (e.g., introduction of new tax systems, introduction of effective cost recovery system) - introduction of new and affordable technology - combination of different policy tools
Evaluation		<p>With such a broad diversity of participants in our Fair Trade work it's difficult to generalise and summarise the evaluation. See our 'Self-Assessment against the IFAT Standards' for detailed discussion.</p>
Applicability		<p>Other countries, especially developing countries, could set up a potentially successful project such as this Oxfam Australia Trading Pty Ltd. It is relatively simple and is more fully described in the enclosed 'Self-Assessment against the IFAT Standards' March 2003.</p> <p>IFAT = International Federation of Alternate Traders.</p>
Reference		<p>Oxfam website http://www.oxfamtrading.org.au, or IFAT website http://www.ifat.org, 'Self-Assessment against the IFAT Standards', March 2003.</p>
Sectoral Issues		
Cross-sectoral Issues		3; 4
Instruments		3.2; 3.7; 3.8

Provider of this information	Name	Mr. Paul Deighton
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	Tel	+61-8-8341-1422
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	E-mail	pauld@oxfamtrading.org.au

Title		Palawan New and Renewable Energy and Livelihood Support Project
Country		608
Province		
Area		Parawan
Implementation level		1
Duration/ Year		1999 -
Contact Person/ Focal Point for Enquiry	Name	Nandita Mongia, Regional GEF Coordinator for Climate Change,
	Affiliation	RBAP
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$2.55M 2) Source(s) of funds GEF Grant \$0.75M, Cofin Amount \$1.80M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	At present, great opportunities to promote renewable energy exist in Palawan. Both the provincial and the municipal governments in Palawan are highly committed to developing renewable energy in Palawan to provide electric power services to the households without access to electricity.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice This project is aimed to reduce the long-term growth of GHG emissions through removing barriers to commercial utilisation of renewable energy systems to substitute for the use of diesel generators in Palawan. 2) Outline of the practice 1. Build Capacity for Local Government Units and Rural Electric Co-operatives 2. Public Awareness Campaign on Renewable Energy 3. Establish a Renewable Energy Development Center 4. Design a Risk Sharing Mechanism to Support RESCO (Rural Energy Service Company)

	SectionC: Results /Outcomes	Increased capacity and recognition of renewable energy and RESCO (Rural Energy Service Company) at the local government level.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		
Reference		UNDP-GEF Portfolio, GEF Project List PHI/99/G http://www.gefweb.org/operport/msp/Philippines%20OP6.doc
Sectoral Issues		2
Cross-sectoral Issues		1; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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	Tel	
	Fax	+81-46-855-3809
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Title		Papua New Guinea Agricultural Research Priorities
Country		598
Province		
Area		
Implementation level		2
Duration/ Year		1987-1992
Contact Person/ Focal Point for Enquiry	Name	Dr. George Antony
	Affiliation	CSIRO Sustainable Ecosystems (University of New England (UNE) while project was undertaken)
Contact Information	Address	L3, QBP Building South, 306 Carmody Rd., St. Lucia QLD 4067, AUSTRALIA
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	Fax	+61-7-3214-2308
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount Approx. A\$400,000</p> <p>2) Source(s) of funds Australian Centre for International Agricultural Research (ACIAR)</p> <p>3) Efforts to raise/sustain funds for implementation Implementation by developing country</p>
Actors involved		2; 5
Description of the Practice	SectionA: Background & Objectives	<p>Traditional semi-subsistent farming systems in Papua New Guinea built on shifting cultivation facing a resource constraint due to limited land, rapid population growth and aspirations for better material living standards. Fallow periods needed for replenishing soil fertility between crops were getting shorter due to land shortage, causing declining fertility and a downward spiral in agricultural production.</p> <p>The objective of the project was to develop policy options for orienting research in supporting sustainable agriculture in a way that links the maintenance of ecosystem services with the aspirations of village societies.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice Target audience of the project were policy decision-makers and agricultural research scientists in Papua New Guinea.</p> <p>2) Outline of the practice A model of Papua New Guinea village agriculture was built, containing (1) a biophysical module representing the semi-subsistent agricultural system built on shifting cultivation and bush fallowing, (2) a farm-household module based on the theory of peasant economics, and (3) a regional extension to bring broader resource and social constraints to bear. The model was validated for the Gumine region of Highlands Papua New Guinea and used for 30-year simulation runs of options. Three broad prototype agricultural technologies were tested using the model: fallowing productivity increased by the introduction of leguminous trees; improved varieties for the staple food sweet potato; and increased yields for cash crop 'village coffee' through better management.</p> <p>3) Stakeholders involved, decision-making process The Papua New Guinea Department of Agriculture and Livestock was the local collaborating agency. Regular meetings were held with a local coordinating committee consisting of high-level officials of the Department to direct the project.</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes Results were used in the development of agricultural research policy for Papua New Guinea. Local counterparts participating the project work acquired knowledge of advanced modelling and analytical techniques for village agriculture.</p> <p>2) Problems that remain to be solved Continuing political and financial difficulties in Papua New Guinea led to agricultural research being given a low policy and funding priority.</p> <p>3) Unexpected positive/negative impacts to date Despite problems mentioned in (2) above, there is still a good awareness of the results among remaining staff in the agricultural research system in Papua New Guinea.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Success of the study was due to local participation that guaranteed cultural relevance. this was combined with advanced techniques in the analysis and modelling of semi-subsistent farm households. - Local participation was strong from the political level down to staff participating in data collection and analysis. - Emphasis by ACIAR and UNE on analytical rigour provided high-quality output.
<p>Evaluation</p>		<ul style="list-style-type: none"> - The method used was highly relevant, achieving a strong synthesis of advanced policy analysis with a true reflection of the socio-economic situation and aspiration of semi-subsistent farm households. - Project costs are likely to have been recouped through improved policy practice. For lack of a follow-up study, project cost/benefit ratio cannot be identified due to the mainly indirect impact of the project through human capacity building. - There is evidence of ongoing awareness of the study results despite the dire straits of the Papua New Guinean agricultural research system. - Strict ACIAR guidelines were adhered to in local participation and project management, guaranteeing continuing oversight by both the Australian funding body and the local collaborating institution. - Strength of the project was its pioneering analytical method and local capacity building. Weakness was reliance on local institutions for implementation in a political climate that was generally disastrous for socio-economic development.

Applicability		<ul style="list-style-type: none"> - The analytical method is highly portable and adaptable to local conditions in the analysis of semi-subsistent farm households and agricultural research policy in developing countries. - Adaptation of the analytical method requires highly qualified staff, but implementation and policy formulation fits well with typical institutional capacity in developing countries.
Reference		<ul style="list-style-type: none"> - Antony, G (2002). 'Policy options for sustainable agriculture in Papua New Guinea.' Paper presented at the conference of the Australia and New Zealand Society for Ecological Economists 'Strategy into Action: Regional and Industry Policy Applications of Ecologically Sustainable Development'. University of Technology, Sydney, 2-4 December. - Antony, G (1994). 'Research priority setting in a small developing country: a framework and implications for Papua New Guinea.' Journal of Developing Areas 28(3), 325-344. - Antony, G and Anderson, JR (1991). 'Modelling technology replacement over time for the ex-ante analysis of agricultural research projects.' Agricultural Systems 37(2), 183-192. - Antony, G; Kauzi, GY and Prior, RNB (1990). 'Returns to research on insect pollination of oil palm in Papua New Guinea.' Quarterly Journal of International Agriculture 29(2), 119-131. - Anderson, JR; Antony, G and Davis, JS (1990). 'Research priority settings in a small developing country: the case of Papua New Guinea.' In Echeverria, RG (ed.) Methods for Diagnosing Research System Constraints and Assessing the Impact of Agricultural Research. ISNAR, The Hague. - Antony, G (1990). Appraisal of the Expected Economic Effects of Research Projects Planned or Currently Undertaken at the Cocoa and Coconut Research Institute. Research Bulletin No. 45. Department of Agriculture and Livestock, Port Moresby. - Antony, G (1990). Appraisal of the Expected Economic Effects of Research Projects Planned or Currently Undertaken at the Coffee Research Institute. Research Bulletin No. 46. Department of Agriculture and Livestock, Port Moresby. - Antony, G (1990). Appraisal of the Expected Economic Effects of Research Projects Planned or Currently Undertaken in Oil Palm in Papua New Guinea. Research Bulletin No. 47. Department of Agriculture and Livestock, Port Moresby. - Antony, G (1990). User's Guide to Program CBR: Calculation of the Costs and Benefits of PNG Export-Crop Research. Research Bulletin No. 48. Department of Agriculture and Livestock, Port Moresby. - Antony, G and Anderson, JR (1990). A Method for Forecasting Expected Economic Effects of Export-Crop Research in Papua New Guinea. ACIAR / ISNAR Project Paper Series No. 21. Australian Centre for International Agricultural Research, Canberra. - Antony, G and Kauzi, GY (1990). A Method for Forecasting the Expected Economic Effects of Projects in Export-Crop Research in Papua New Guinea: A Layman's Guide. Research Bulletin No. 49. Department of Agriculture and Livestock, Port Moresby. - Antony, G; Kauzi, GY and Loh, DW (1990). Returns to Cocoa Research 1965 to 1980 in Papua New Guinea: A Layman's Guide. Research Bulletin No. 50. Department of Agriculture and Livestock, Port Moresby. - Antony, G; Kauzi, G and Prior, RNB (1990). Returns to Research on Insect Pollination of Oil Palm in Papua New Guinea: A Layman's Guide. Research Bulletin No. 51. Department of Agriculture and Livestock, Port Moresby. - Antony, G; Parton, KA and Kauzi, GY (1990). Agricultural Research in Papua New Guinea and the PNG Agricultural Research Priorities Project. Occasional Papers in Economic Development No. 30. Faculty of Economic Studies, University of New England, Armidale.
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5; 6
Instruments		3.2; 3.3; 3.4; 3.5; 3.8; 4.1; 4.2

Provider of this information	Name	Dr. George Antony
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	E-mail	george.antony@csiro.au

Title		People Empowerment Program
Country		608
Province		
Area		Naga City
Implementation level		1
Duration/ Year		
Contact Person/ Focal Point for Enquiry	Name	Government of Naga City
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	The programme involves the formulation and implementation of a comprehensive framework that allowed the people to become active participants in the governance of Naga city.
	SectionB: Outline of Practices /Actions	People in Naga city became active participants in city's decision-making process. They have become involved in matters such as city government procurement, budgeting, and gained power to influence decisions such as the cancellation of a city government plan to set up a golf course. They are able to vote wisely on issues because the programme put in place an effective and convenient system of information dissemination (e.g. creation of a website that features the city budget, procurement, awards and bidding process.)
	SectionC: Results /Outcomes	Effective use of city resource. Democratic decision making system.
Keys for success (cause of failure)		Active public involvement, information dissemination
Evaluation		
Applicability		

Reference		
Sectoral Issues		3
Cross-sectoral Issues		1
Instruments		3.1; 3.2; 3.4; 3.5
Provider of this information	Name	Ella S. Antonio
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	E-mail	esantonio@skynet.net

Title		Planning for Sustainable Urbanisation (technical assistance)
Country		764
Province		
Area		
Implementation level		1; 2
Duration/ Year		February 2002 - February 2004
Contact Person/ Focal Point for Enquiry	Name	Mr. Graham Jackson
	Affiliation	Asian Development Bank (ADB)
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	Fax	+63-2-636-2305
	E-mail	gjackson@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$500,000 2) Sources of funds: Asian Development Bank (ADB)
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	Historically, Thailand's development has been funded by Objectives the central government and implemented through the central government's line ministries, with little integration or coordination, and with little or no local participation. In addition, it was also focused on the physical aspects of development. Following decentralisation efforts during the 1990s, local governments are being increasingly tasked with the responsibility of planning, funding, implementing and managing their development. In an effort to bring about more sustainable and demand-driven urbanisation, local governments are now focusing more on stakeholder involvement, the biophysical aspects of development, and local revenue generation. Their task is made more difficult as rapid urbanisation is creating 'extended urban areas' that require much more collaboration between local governments.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives The technical assistance (TA) was to identify and implement pilot programmes focusing on: (i) building local government capacity, (ii) developing processes for collaborative planning, and (iii) the development of a national sustainable urbanisation strategy for the central government.</p> <p>To develop these programmes, the TA is focusing on three specific and interconnected areas: (i) formulation of a national sustainable urbanisation strategy; (ii) assistance to pilot extended urban centres in action/collaborative planning; and (iii) identification and design of priority pilot urban projects.</p> <p>2) Outline: In accordance with the TA design, three pilot areas have been selected for case study, all of which are extended urban regions. Multistakeholder committees have been established, which have prepared a framework of strategic development thrusts, based on what they saw as their respective comparative advantages. These pilot programmes will be complete in early 2004. In parallel, work has been proceeding on the national sustainable urbanisation strategy, which has included research work on urban-rural linkages and fiscal/institutional arrangements for local governments.</p> <p>3) Stakeholders involved Central government officials, local government officials, academics, members of local institutions and associations.</p>
	<p>SectionC: Results /Outcomes</p>	<p>The work undertaken by the multistakeholder committees has created a much greater awareness of development issues, as well as the impact of nearby development undertaken by adjacent local governments. There is also a greater awareness of how urban and rural areas affect each other. Fiscal mismatches between local governments still need to be addressed.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Enhancement of collaboration among the stakeholders. - Enhancement of capacity of stakeholders. - Moving the responsibility for planning and implementation to stakeholders at the local level leads to more integrated and sustainable development, but it needs time to become effective.
<p>Evaluation</p>		<p>The exercise has been very fruitful in terms of highlighting that, under decentralisation, local communities can play a much greater role in their development. It has also highlighted that local communities need to be enabled to generate their own revenue locally in order to fulfil their role under the legislation. A final evaluation will be made in early 2004, following a national workshop in February 2004.</p>
<p>Applicability</p>		<p>The technical assistance is proving to be very useful. However, it has had the benefit of being undertaken by a national planning agency, with the support of legislation for decentralisation, and at a time when there is much political will for an emphasis on sustainability in development. Although the approach taken under this T A may be used elsewhere, the effectiveness of the TA in other countries would depend on the particular institutional, legislative and political environment.</p>
<p>Reference</p>		<p>N/A</p>
<p>Sectoral Issues</p>		<p>3</p>
<p>Cross- sectoral Issues</p>		<p>1; 4</p>
<p>Instruments</p>		<p>3.8; 4.2</p>

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Title		Policy Guidelines: Reducing Vehicle Emissions in Asia
Country		649
Province		
Area		
Implementation level		4
Duration/ Year		November 2000 - December 2003
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Sponsor(s)		1) Amount: \$900,000 2) Source(s) of funds: ADB Technical Assistance
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Air quality in Asian cities is under threat due to growth in mobility. This has serious health and economic implications. Following Guidelines were produced: - Reducing Vehicle Emissions in Asia - Cleaner Fuels - Cleaner Two and Three Wheelers - Vehicle Emissions Standards and Inspection and Maintenance - Transport Planning and Traffic Management for Better Air Quality - Appendix: Adverse Health and Environmental Effects of Vehicle Emissions

	<p>SectionB: Outline of Practices /Actions</p>	<p>Outline of the practice</p> <ul style="list-style-type: none"> - Providing guidance on development of regulations of emissions and fuels; - Providing guidance on policies related to Inspection and maintenance and sustainable transport planning and management - Providing guidance on how to address pollution from 2-3 wheelers <p>Stakeholders involved, decision making process</p> <p>The Policy Guidelines were drafted, taking into account the results of 5 regional workshops (Fuel, Delhi; 2-3 Wheelers, Hanoi; Inspection and Maintenance, Chongqing; Transport Planning and Management, Manila; Concluding Workshop, Manila). In addition, extensive peer review took place of draft Policy Guidelines.</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes</p> <p>A number of cities and countries have started to strengthen management of mobile sources of pollution: e.g. Vehicle emission standards and fuel quality standards. In other cases cities and countries are now increasingly committed to develop policies. Several Projects have been started as an outcome.</p> <p>2) Problems that remain to be solved</p> <p>Air pollution is a serious problem, which requires an integrated approach. Formulating and implementing policy guidelines is an important first step but more needs to be done across Asia.</p> <p>3) Unexpected positive impacts to date</p> <p>The implementation of the project on policy guidelines and the consultation process carried out to support the development has resulted in the establishment of the Clean Air Initiatives for Asian Cities, which is now the most important umbrella organisation on air quality management in Asia.</p>
<p>Keys for success (cause of failure)</p>		<p>Project was able to mobilise key actors. The project was helped by a relative institutional vacuum on guidelines for regulating emissions in Asia. The inclusive approach to consult a broad range of stakeholders was instrumental in getting broad based support for the policy guidelines.</p>
<p>Evaluation</p>		<p>The Policy Guidelines were a success. They met a demand. The support expressed since they were issued indicate their relevance and acceptance. They were developed in a cost effective manner. Their implementation will result in considerable improvements in air quality and as such economic savings.</p>
<p>Applicability</p>		<p>The Guidelines are to be applied in cities across Asia. Through the Clean Air Initiative for Asian Cities, which was established partly as a result from this project, includes now over 100 institutional members in 14 countries in Asia. CAI-Asia is actively working with its institutional members to improve air quality. The Policy guidelines play an important role in this.</p>
<p>Reference</p>		<ul style="list-style-type: none"> - Related materials are available on-line: http://www.adb.org/vehicle-emissions/policy.asp - Hard copy of the Policy Guidelines is available through CAI-Asia Secretariat, care of Glynda Bathan - gbathan@ab.org, or through the ADB Publications Unit, PO Box 789, 0980 Manila, fax - 632 636 2648, adbpub@adb.org. - CD-ROM, which includes Policy Guidelines, as well as all presentations of the 5 Regional workshops, 3 Action Plans for Viet Nam, Jakarta, and Chongqing, and 2 studies.
<p>Sectoral Issues</p>		<p>3</p>

Cross-sectoral Issues		1
Instruments		1.1; 3.2; 4.2
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Title		Port Kembla Wave Energy Project
Country		36
Province		
Area		Port Kembla, NSW
Implementation level		1
Duration/ Year		1997 - 2004
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Sponsor(s)		1) Amount & 2) Source(s) of fund (to 30 June 2002) Private Investors - \$5M Government (Australian Greenhouse Office) - \$430K 3) Efforts to raise/sustain funds for implementation Ongoing efforts to raise capital via strategic relationships and government grants are continuing.
Actors involved		2; 4

<p>Description of the Practice</p>	<p>SectionA: Background & Objectives</p>	<p>Energetech Australia Pty Ltd is a renewable energy company. Energetech's founder, Dr. Tom Denniss, has developed a new and commercially efficient system for extracting energy from ocean waves and converting it to electricity. The technology now makes it possible for wave energy to provide a cheap, sustainable source of power to grid-connected and remote power users.</p> <p>The technology has been proven technically feasible and construction of the first wave power plant using the Energetech technology will commence in 2002. Our initial commercialisation effort will be centred in Australia where the technology was developed and where we can take advantage of abundant natural wave resources, national pride for successful local companies and local government, customer and investor support. We have also researched and tested the market from a global perspective and will be pursuing opportunities around the world.</p> <p>Wave energy is a suitable renewable energy resource for certain coastlines in major markets in Australia, the US, the Pacific Islands, Japan, China, northern Europe, South America and Africa. The Energetech system can be deployed as a single device, or strung together in a series, similar in concept to wind energy's 'wind farms'.</p> <p>The customers for the Energetech system are power utilities, single industrial users in heavy and remote industry, and remote communities and islands which are currently without power or rely on diesel. The technology can also be used in hybrid renewable projects in suitable locations, and combined with wind or solar. It can also be used as an integrated component in the construction of coastal structures, such as harbour breakwaters. The Denniss-Auld turbine, a key component of the Energetech system, can also be sold as a separate component and incorporated into wave energy devices developed by other companies.</p>
	<p>SectionB: Outline of Practices /Actions</p>	<p>Government energy policy now widely accepts that a well-balanced fuel mix that includes renewables is essential to sustainable economic growth. Governments recognise that renewable energies are indigenous and non-depleting sources of supply, which is positive for energy security. The present energy system, from extraction to use, is now held responsible for much of the manmade global climate change problem and that energy consumption is acknowledged as a cause of environment damage. Different geographical and climatic conditions, as well as differences in policies to support renewables have caused considerable variation in the use of renewables between countries. Political goodwill and national policies ranging from capital subsidies to fixed buy-back rates, fiscal incentives, support for third party financing, surcharge arrangements and public support for research and development have been critically important in those countries where there is high adoption of renewables.</p> <p>Global Market Drivers - Positive Demand Factors Are Emerging Future global electricity demand is predicted to rise significantly above current levels. Demand for renewable energy will come from two key market segments:</p> <p>Environmental Driven Markets. These are generally the OECD countries, who, in order to meet mandated emission targets emanating from the UN Kyoto Protocol, will sharply accelerate their use of renewable energy. These markets are expected to provide the largest gain in the renewables increase from 1999 to 2002.</p>

		<p>Energy Driven Markets. These are particularly the Asian and developing economies where demands for new energy are being propelled by population growth, industrialisation and urbanisation. Government and industry are predisposed to meet new electricity requirements from renewable sources, which are indigenous and require relatively short installation timeframes. The demand from these markets is expected to overtake that of the OECD countries past 2002.</p> <p>The liberalisation of energy policy and the rise of the political and 'green' consumer are also driving greater demand. The breakup of state energy monopolies has spawned competition and allowed businesses and individuals to choose their provider of electrical services. In many markets, the options for industrial, business and residential consumers include 'green energy' programs. While still a minor part of the mix, green energy options will gradually increase awareness and attention, and cause increased market demand from some customer segments. There is also an observable trend amongst conventional energy producers to consider the use of renewable technologies. The market is increasingly influenced by traditional market drivers rather than by political forces.</p>
	SectionC: Results /Outcomes	Not applicable
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Change in the way of using local resources - Community attitude toward clean energy - Government's commitments to increasing renewable energy sources - Introduction of new and affordable technology
Evaluation		Not applicable
Applicability		See Section B: Outline of Practices/Actions
Reference		
Sectoral Issues		2
Cross-sectoral Issues		6
Instruments		3.1; 3.2; 3.4; 3.5; 4.1; 4.2
Provider of this information	Name	
	Organisation	
	Job Title	
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Title		Preparing the Rural Electrification Project
Country		242
Province		
Area		
Implementation level		2
Duration/ Year		2002 -
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Sponsor(s)		1) Amount \$400,000 2) Source(s) of funds ADB \$400,000
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The energy sector provided an essential input for the rapidly expanding production sectors. Electricity consumption has increased from 4,500 to 6,500 GWh in 2000. About 87% of urban households and 49% of rural households have access to electricity. The Government accords high priority to rural electrification and is guided by the Rural Electrification Policy (1993).

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice</p> <p>This TA will establish a development strategy and investment plan for rural electrification (RE) with special emphasis on extending the Fiji Electricity Authority (FEA) electrical grid, on building new diesel-power capacity, and on providing renewable energy supply (e.g., solar photovoltaic, micro-hydro, and biomass).</p> <p>2) Outline of the practice</p> <p>The TA will assess the social, institutional, and environmental aspects of RE, and recommend development strategies. It will also identify and carry out a feasibility study and develop an RE project suitable for financing by ADB and other external funding agencies, and assess its long-term sustainability. Main outputs will be the rural electrification master plan and the feasibility study of possible projects for ADB financing.</p>
	SectionC: Results /Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		ADB Project Database Project Profile PPTA: FIJ35487-01
Sectoral Issues		2
Cross-sectoral Issues		1; 6
Instruments		3.7; 4.1; 4.2
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Title		Productive Use of Clean Energy for Sustainable Development of Small Island Developing States
Country		998
Province		
Area		
Implementation level		3
Duration/ Year		May 2002
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Sponsor(s)		N/A
Actors involved		1
Description of the Practice	SectionA: Background & Objectives	To achieve energy self-sufficiency and to increase the use of available energy for productive activities in Small Island Developing States (SIDS).
	SectionB: Outline of Practices /Actions	1. Analyse demand and supply side energy data, consider development targets and identify needs, formulate policies and strategies. 2. Develop projects to submit to donors. 3. Implement demonstration projects.
	SectionC: Results /Outcomes	To implement programs in SIDS, help SIDS achieve energy self-sufficiency, and increase the use of available energy for productive activities.
Keys for success (cause of failure)		
Evaluation		N/A
Applicability		Replicable to many other regions.

Reference		WSSD website: http://webapps01.un.org/dsd/partnerships/search/partnerships/141.html
Sectoral Issues		2
Cross-sectoral Issues		4; 6
Instruments		3.2; 3.3; 3.8; 4.1
Provider of this information	Name	
	Organisation	
	Job Title	
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Title		Project Mukdaham
Country		764
Province		
Area		City of Mukdaham
Implementation level		1
Duration/ Year		2000 - ongoing
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Sponsor(s)		1) Amount: Unknown 2) Sources of funds: Unknown
Actors involved		2; 4; 5
Description of the Practice	SectionA: Background & Objectives	Project Mukdaham is an ongoing, cooperative education project undertaken in Mukdaham City in collaboration with local high schools, a leading eLearning provider, a non-profit foundation, the Thai Education Ministry and the community. The project challenges students to use English to learn how to adapt global sustainable business practices to a local situation.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice Project Mukdaham is part of the educational effort called 'English for Sustainability (EfS).' EfS is promoted by Projects International (PI), a network of educators working to develop students communicative/action competence to participate positively as citizens in a global society. This would be achieved by working with schools, businesses and civil society organisations to integrate EfS with Thai's English as a Foreign Language (EFL) curriculum.

		<p>2) Outline of the practice</p> <p>Project Mukdaham specifically asks students to investigate the operations of the Ploy Palace Hotel. In 2001 and 2002, the students conducted an environmental audit to identify areas for the Ploy Palace Hotel, the largest international hotel in the city, to implement sustainable business practices. They then developed an action plan for encouraging the hotel to adopt new, sustainable practices. At the end of the project, students presented and published their findings for the hotel management, members of the community, and students in other countries. This gave a real and meaningful use for their English while encouraging sustainable development. This also gave students confidence and experience in implementing actions in the local community and through the Internet communicating their ideas globally.</p> <p>At present, Project Mukdaham is involving 25 students from 3 schools in Mukdaham Province and linking them with the Mukdaham Handcraft Centre. The students are designing and marketing a locally made product for the global market place. The Handcraft Centre and local help students with local knowledge and products.</p> <p>3) Stakeholders involved</p> <p>Project Mukdaham is the result of a partnership of several quite diverse organisations. Partners include Mukdaham High School, Ploy Palace Hotel, ERIC Mukdaham (Thai Ministry of Education), English-To-Go Limited (a provider of English language training materials), Projects International and EON Foundation.</p>
	SectionC: Results /Outcomes	By participating in the project, students become aware that there is no single path to sustainability. Further, as local situations often have global roots, they become aware that global economic, political, and environmental issues affect them directly. This approach, while being tentative in endorsing any one global solution, does give hope that local sustainability can be achieved.
Keys for Success (cause of failure)		Integration of Education for Sustainability into English as a Foreign Language curriculum: Students get hands-on experience handling sustainability issues in real local businesses. Project Mukdaham sidesteps the usual interdiscipline problems by formatting EfS into project work for English as Foreign Language.
Evaluation		<p>Analysis on the project's implications to change the students' knowledge, behaviours and attitudes on sustainability is discussed based on the ten 'Education for Sustainability' indicators from pre and post project questionnaires.</p> <p>1) Does the project provide the students with new knowledge and skills? Yes - Students have a great deal of control over the final results.</p> <p>2) Does the project treat the relationships of traditional subjects in interconnected ways? Yes - Students must combine their knowledge of science, math, history, geography, economy, politics, and languages.</p> <p>3) Does the project empower students to take individual and cooperative sustainable actions? (paradigm shift) No - The results of the questionnaires and discussions after the project show that there is little change in individual or cooperative actions. Change takes time.</p> <p>4) Does the project take students outside of the classroom? Yes - Students study at the hotel and in the community.</p> <p>5) Does the project link local situation with the national and global realities? Yes - Lessons introduce the interconnectedness of local, national and global issues in sustainability.</p>

		<p>6) Does the project avoid teaching or preaching ready-made solutions? Yes - Many sustainability theories are presented.</p> <p>7) Does the project encompass economic, environmental, and social systems? Yes - A sustainability drawing activity encourages students to link the environment, economy and society in a concept of future sustainability.</p> <p>8) Does the project encourage students to perceive, interpret, criticise and transform their world? Yes - Students must transform their inquiry, analysis and presentation into an actual business application.</p> <p>9) Does the project liberate learners from the dominant paradigm? No - From our questionnaire feedback it is difficult to say that the learners were liberated. A paradigm shift occurs over time.</p> <p>10) Does the project recognise that economic, social and environmental knowledge is requisite to any successful change? Yes - The guest lectures ensure the students have such knowledge.</p>
Applicability		<p>Project Mukdaham has led to a number of teaching training workshops held for ERIC managers and high school teachers from other provinces of Thailand. Similar projects are already underway in neighbouring provinces and a tri-nation project is planned between businesses and schools along the Mekong River from Thailand, Cambodia and Laos.</p> <p>While it has already been and will continue to be a catalyst for future initiatives, Project Mukdaham modelled itself on a similar project in Japan. Project Kamakura, links Kamakura Jogakuin High School with Shiseido Cosmetics. Two of the teachers from Project Kamakura participated in the first Project Mukdaham. Teachers from Project Mukdaham now participate in other projects and so the word is spread.</p> <p>The use of a website to record the projects and to deliver related teaching and learning resources enables a rich archive of replicable ideas and material to be accessible globally. New community features to the website allow participants to share information and collaborate together internationally.</p> <p>In the editorial introducing an article on Project Mukdaham in the UK Development Education Journal (Vol. 8.2 March 2002). The editor says 'The importance of this concept is brought out in another way by the piece contributed by Graham Harper. His case studies highlight a key distinction. It is not enough to be made aware of the problems experienced across the world: the physics of global warming or the principles of recycling. In order for education to be worth something ... this generation must be encouraged, and prepared, to tackle these problems.' Project Mukdaham is an example of how this can happen and be replicated.</p>
Reference		<p>UNDP Virtual Exhibit http://www.virtualexhibit.net/new/globalShowcaseTemplate.php?project_id=87&region_id=6&industry_id=all Projects International/EON Foundation website http://www.e-o-n.org/Projects_International/alpha/</p>

Sectoral Issues		3
Cross-Sectoral Issues		4; 5
Instruments		3.1; 3.2; 3.3; 3.4; 3.5; 3.8
Provider of this information	Name	APFED Secretariat
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Title		Promoting Methane Recovery and Utilisation from Mixed Municipal Waste
Country		156
Province		
Area		
Implementation level		2
Duration/ Year		1996 - (4years). The Project is postponed to June 2004.
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Sponsor(s)		1) Amount \$19.59M 2) Source(s) of funds GEF Grant \$5.31M, Cofin \$14.28M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Landfill gas recovery has not been attempted in China thus far, but the Chinese government recognises its importance in municipal waste disposal and wishes to recover the methane that will be generated from landfills.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The project's long-term objectives are to promote widespread adoption of landfill gas recovery technology in China based on the technical and organisational experience gained from the three pilot landfills proposed in this project. Specifically these include i) significant reduction of emissions of methane; ii) reduction in air, water and land pollution associated with refuse dumping; and iii) promotion of indigenous enterprises that will build and operate recovery systems and utilise the energy. 2) Outline of the practice The studies cover institutional arrangements, commercial viability, managerial set-up and market assessment for landfill gas utilisation. The entire project is expected to be completed by the June 2004. A detailed work plan for project results dissemination and replication is being finalised.

	SectionC: Results /Outcomes	
Keys for Success (cause of failure)		N/A (Completion of the project has been postponed)
Evaluation		N/A, on-going project
Applicability		
Reference		UNDP-GEF Portfolio Project Document http://www.gefweb.org/Outreach/outreach-Publications/Project_factsheet/China-prom-9-cc-undp-eng.pdf
Sectoral Issues		2
Cross-Sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Promotion of Cleaner Production (CP)
Country		608
Province		
Area		
Implementation level		2
Duration/ Year		June 2003 - May 2004 (12 months)
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Contact Person(2)/ Focal Point for Enquiry	Name	
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Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount: \$1.12 million 2) Source(s) of funds: ADB cofinanced by the Governments of Spain and Norway
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	Cleaner production is the continuous use of preventive and integrated environmental management strategies related to production processes, services and products to improve an organisation's profitability as well as reduce risks to human health and the environment. The Government of the Philippines asked the ADB for advisory technical assistance to promote cleaner production (CP) to industries to strengthen their competitiveness and reduce negative environmental impact.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice Enhance the Department of Science and Technology's (DOST's) capacity to promote sustainable development in the Philippines, strengthen competitiveness of the industry sector through the understanding and adoption of CP practices. 2) Outline of the practice (i) To build the capacity of DOST staff and other concerned agencies and industry to identify, evaluate, develop and promote CP. (ii) Assist industries, especially SMEs, to adopt environment management systems and practices through training and demonstration processes. 3) Stakeholders involved, decision making process Government agencies, Industry, Academia, Professional organisations

	SectionC: Results /Outcomes	<p>1) Improvements/changes</p> <ul style="list-style-type: none"> - integrated elements of sustainable development, - improved capacity of institutions/organisations/relevant stakeholders, and - improved awareness. <p>2) Problems that remain to be solved</p> <p>TA has not been completed. One main item to be accomplished is sustainability and replicability of the projects.</p>
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Enhancement of collaboration among the different stakeholders and introduction/improvement of consultative mechanisms - Use of knowledge and/or techniques - Enhancement of capacity of stakeholders and government organisations - Increase awareness on introduction of new and affordable technology - Introduction of measurable indicators and environmental management systems.
Evaluation		<ul style="list-style-type: none"> - Effectiveness: progressively increasing building on a programme of activities design specifically for this purpose. Evaluation could only be determined on completion, but awareness has significantly raised amongst industry and professional organisations. - Cost benefits: directly to industry, indirectly the benefits will be extend to the entire population.
Applicability		Already replicated in various countries.
Reference		N/A
Sectoral Issues		2; 3; 4
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.4; 3.8; 4.1
Provider of this information	Name	Tatiana Gallego-Lizon
	Organisation	
	Job Title	
	Contact Address	
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	E-mail	

Title		Provincial Towns Water Supply and Sanitation
Country		598
Province		
Area		
Implementation level		2
Duration/ Year		Five (5) Years, 2000 - 2005
Contact Person/ Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment), Pacific Department
	Affiliation	Asian Development Bank (ADB)
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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Sponsor(s)		1) Amount: \$15.3 million, plus an add-on grant of \$1.7 million for low cost sanitation and health awareness component 2) Sources of fund: ADB Asian Development Fund (ADF) and Japan Fund for Poverty Reduction (JFPR)
Actors involved		1; 2; 5

Description of the Practice	SectionA: Background & Objectives	<p>The prevailing environmental conditions in provincial towns of Papua New Guinea (PNG) have significant adverse impacts on people's health and quality of life and negative impacts on their human and economic development. Improving basic urban services, particularly water supply and sanitation, is directly linked to the goal of improving public health and overall social indicators. Large sections of urban society suffer from service inadequacies and unsanitary conditions, with the poor suffering disproportionately more. Water supply and sewerage systems cover about 43 percent and 20 percent of the total urban population of PNG, respectively. Communities acknowledge water as their number one priority, with lack of water during the dry season as a very serious and universal problem. Sanitation is generally inadequate. Where sewerage systems exist, they serve mostly the developed sections of towns. For many communities on the urban fringes, defecating in open air is the only option.</p> <p>The Project aims to provide:</p> <ul style="list-style-type: none"> (i) piped water supplies, sewerage and sewage treatment (new or upgrading of existing systems and expanding coverage) to six selected provincial towns; (ii) capacity building for the PNG Waterboard; and (iii) support for selected sector policy measures. <p>In addition, a low-cost sanitation, community awareness and health education (LCS-CAHE) programme will be implemented to provide (i) affordable options (e.g. ventilated improved pit latrines) for on-site sanitation to low-income households, and (ii) community awareness and health education programmes.</p>
	SectionB: Outline of Practices /Actions	<p>1) Objective of the practice</p> <p>The objectives of the Project are to:(i) increase coverage and improve quality in the delivery of basic water supply and sanitation (sewerage) services; and (ii) improve management and coordination of the water supply and sanitation sector by building the capacity of the Waterboard. The objective of the LCS-CAHE programme is to improve health and reduce poverty for poor households and other urban residents through low-cost sanitation (LCS), community awareness and health education (CAHE) activities.</p> <p>2) Outline of the practice</p> <p>The Project has already fielded an Inception Mission in Feb-March 2002 and conducted one workshop each in Madang and Lae with the stakeholders to ensure participatory implementation as required in the JFPR guidelines. Memorandum of Agreement (MOA) between the concerned parties has been drafted and some comments have been received and incorporated in the document. Drafts of MOA have been prepared for Madang and Lae. Most of the component activities that are being implemented are: (i) construction/upgrading of the surface and groundwater intakes and treatment facilities; (ii) installation of new sewerage networks and wastewater treatment and effluent disposal system; (iii) implementation of recommended policy and institutional changes; and (iv) capacity building of the Waterboard.</p> <p>3) Stakeholders involved, decision making process</p> <p>Local Communities, Concerned Government Officials, and other official of the PNG Waterboard</p>
	SectionC: Results /Outcomes	N/A; the project is in progress.
Keys for success (cause of failure)		N/A; the project is in progress.

Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		1
Cross-sectoral Issues		1; 4
Instruments		3.2; 3.8
Provider of this information	Name	Daniele Ponzi
	Organisation	Asian Development Bank (ADB)
	Job Title	Senior Economist (Environment), Pacific Department
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Title		Provision of water related services to the low-income population in Haiphong, Viet Nam
Country		704
Province		
Area		Haiphong City
Implementation level		1
Duration/ Year		1993 - ongoing
Contact Person/ Focal Point for Enquiry	Name	Ms. Train Thi Panh
	Affiliation	Haiphong Water Supply Company, Haiphong Water Supply and Sanitation Programme
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	Tel	+84-31-842047
	Fax	+84-31-822705
	E-mail	N/A
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: World Bank, Government budget, and International development aid.
Actors involved		1; 3; 4
Description of the Practice	SectionA: Background & Objectives	<p>Haiphong is the third largest city in Viet Nam with a population of 1,718,900 (including urban center and suburbs). As a port city Haiphong is an economic, industrial, commercial and tourist service center in the coastal zone of north Viet Nam. In 1993 the development of Haiphong faced many difficulties one of them being inadequate water supply for the city's inhabitants especially the low-income group. Collective water mainly through public tanks was the norm for water supply; some households were connected, but all non-metered, to the water supply network, which suffered from very high water loss of about 70%.</p> <p>The Haiphong Water Supply Company (HPWSCO) is the unit managing the city's water supply. Three main obstacles for successful operation of HPWSCO were identified:</p> <p>1) Problems in distribution: In spite of a nominally high production (115,000 cu. m/day), the water supply was inadequate due to the 70% water loss. This included insufficient quantity, quality and pressure of water, with poor reliability and insufficient coverage of distribution.</p> <p>2) Financial problems: Viet Nam abandoned the free-water policy in 1989 and since government subsidy was cut off completely in 1990, HPWSCO has made a loss every year.</p> <p>3) Problems in consumer relations: The general public's attitude towards HPWSCO was very negative. Furthermore, when water was subsidised HPWSCO could see consumers as passive beneficiaries, but with the change in policy the consumers should be seen in a more active role where they have the right to demand services; they have become customers and thus the role of HPWSCO as a service agency has changed.</p>

	<p>Besides these three problems the management of HPWSCo lacked well-prepared plans, coordination, and clear visions of final purpose and commitment.</p> <p>Due to the strong state control and the administrative system of Viet Nam, the sovereignty of the HPWSCo in several matters crucial to its own operation was practically non-existent or at least severely limited. Amongst others, these matters included: Tariffs and revenue, investment, many technical and financial decisions, and recruitment issues. Thus, the HPWSCo had to immediately grab and tackle those questions that were completely in its power and initiative. First and foremost, these included the consumer relations and all related internal activities of the company that influenced the outcome. With the assistance of the Government of Finland the HPWSCo developed a new management model, the Phuong Model, which had the following objectives:</p> <ul style="list-style-type: none"> - Strengthen the relation between the company and the consumers. - Strengthen the responsibility between the company and local authorities in protection of water projects and water facilities - Reduce money loss and water loss through reordering the selling, buying and use of water. - Increase service levels through problem solving and application of consumer demands. - Make consumers follow all regulations on management and use of water, protection of water projects and payment in time. - Eradicate flat-rate water use to show the fair play between seller and buyer and to avoid wastewater. - Eradicate public water use to avoid water runs over all time.
<p>SectionB: Outline of Practices /Actions</p>	<p>In short 'Phuong Model' means project implementation and consumer service in cooperation with the local phuong administration and the inhabitants of the phuong. The 'Phuong Water Management Model' emphasises the role of the consumer by introducing a customer-oriented approach in the implementation of the distribution network, the metered house connection, the conducting of billing, and the revenue collection. On the practical side this meant that the potential customers of HPWSCo were involved and activated prior to the implementation measures to get a chance to introduce their opinions and thus influence the implementation.</p> <p>On the institutional side decentralisation was carried out by creation of phuong management units (PMU). A PMU normally has 5-7 employees: A manager, 2-3 water meter readers, 2-3 money collectors and a technician. The PMU serves as a consumer service office and during the construction of phuong networks and water metering of the households PMUs were established in every phuong. The tasks of the PMU are: Management and repair of pipes and meters, meter reading, money collection, maintain good relations with local authorities, encouragement and education of consumers in relation to water consumption, and management to reduce money loss and water loss.</p> <p>On the technical side the improvement of the distribution network included the disconnection of all old pipelines from the main pipes, and the installation of new pipelines, household connections, and consumer meters.</p> <p>The Phuong Model was tested through implementation in two pilot phungs and having gained positive and precious lessons from these pilot cases the model was applied to a larger number of phungs.</p>

	SectionC: Results /Outcomes	<p>By application of the Phuong Model, the HPWSCo has achieved several notable results. The average water loss in improved areas was reduced and has dropped below 15% compared to the earlier 70%. The company has ensured a reliable provision of clean water to the low-income population at all times with high pressure and a good quality that meets Vietnamese standards for drinking water.</p> <p>Furthermore the financial situation of the HPWSCo has changed remarkably. Since 1995 the company's revenue from water business can cover all its costs and make some profit. The HPWSCo has reached revenue of over 300% compared with the past time. The money collection and rate of bills paid have enhanced greatly both reaching nearly 100%. Also the relation with the consumers has been highly improved with almost no complaints on water services. Through the involvement of the consumers prior to the implementation the consumers gained motivation to contribute and in return the company has provided a service level, which is considered to be worth the contributions by the population. In this way the HPWSCo has come close to the consumers and won their support.</p>
Keys for success (cause of failure)		<p>There are some factors, which were necessary for the successful implementation of the Phuong Model. The participatory approach with the administrative units (the PMU) close to the population ensured the support of the consumers, which again made the interaction between the official administration and the population smooth. It was important that the communities were consulted and involved in all aspects of the water supply service. The decentralisation of responsibility from the company to the PMUs furthermore ensured the successful management of the water supply.</p>
Evaluation		<p>The Phuong Model has proved to be a reasonable and appropriate model, which has brought good economic and social effects. It has demonstrated that the money collection and water loss can be solved, at the same time as water services can increase to satisfy consumers' water demands.</p> <p>By working to serve more customers using existing water supply resources rather than focusing on construction to increase supply, HPWSCo was able to efficiently commercialise their company maintaining production while increasing revenue. While constantly struggling to organise its relations with governmental and local authorities on a more sustainable basis, the company has been able to improve its performance of water supply toward a well functioning and financially self-sustainable public enterprise.</p> <p>In ten years the HPWSCo has moved away from the state subsidy to become a self-financing public utility. It has also shown that the common perception of politicians that the prevailing water tariff is too high and that a raise in tariff would lead to resistance from people is wrong. Regarding impact of the model and its reforms from the consumer perspective, the water supply service quality has been significantly improved.</p>
Applicability		<p>After introducing the Phuong Water Management Model in Haiphong it has been recommended as a development model for several other water companies in Viet Nam. The approach in the Phuong Model is compatible with the administrative structure of the urban areas in Viet Nam. The administrative units are close to the population, they have to live with the people, listen to their wishes and claims and take action whenever that is needed. This structure provides good opportunities for people's participation.</p> <p>The Phuong Model and its community-based institutional arrangements (the PMU) works well in Haiphong due to the close cooperation between the rule-making and regulatory body of the phuong People's Committee, the police, and the HPWSCo. Other unique municipal arrangements might be equally effective.</p>

Reference		Case study for the UNESCAP: Provision of water related services to the low-income population in Haiphong, Viet Nam.
Sectoral Issues		1; 3
Cross-sectoral Issues		1; 2; 4
Instruments		2.2; 3.1; 3.4; 3.8
Provider of this information	Name	Lotte Blanner
	Organisation	ESCAP
	Job Title	
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Title		Provision of water-related services to the low-income population in East Manila
Country		608
Province		
Area		East Manila
Implementation level		1
Duration/ Year		1997 - ongoing
Contact Person/ Focal Point for Enquiry	Name	Virgilio C. Rivera, Jr.
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Contact Person(2)/ Focal Point for Enquiry	Name	Jun M. Dizon
	Affiliation	Manila Water Company Inc.
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	Tel	+63-2-981-8195
	Fax	+63-2-426-7432
	E-mail	jun.dizon@manilawater.com
Sponsor(s)		The concessionaires are required to pay concession fees amounting to about P30 billion over the 25-year concession period. This amount represents debt service payments for the existing foreign debt obligations of Metropolitan Waterworks Sewerage System (MWSS). The concession fee can also be viewed as rental or lease for the use of MWSS facilities.
Actors involved		1; 3; 4
Description of the Practice	SectionA: Background & Objectives	<p>By the mid-1990s, the Philippine Government was experiencing a severe shortage in water supply particularly for the densely populated metropolitan Manila and its adjacent towns. The MWSS is a public utility engaged in the provision of water supply and sanitation services for Metro Manila's nearly 12 million inhabitants. Given the decline in operating efficiency and financial viability of the MWSS, the government passed a National Water Crisis Law in 1995 and, in 1997, decided to privatise the MWSS. The International Finance Corporation (IFC) played a key advisory role and described the programme as the 'biggest water privatisation in the world'.</p> <p>Through private sector participation, the MWSS privatisation was expected to achieve expansion of service coverage, improvement in the quality of service delivery - e.g. ensure 24-hour water supply - and increased operating efficiency particularly reduction of non-revenue water (NRW). Furthermore it was expected to relieve the government of the financial burden needed to improve MWSS facilities.</p>

	SectionB: Outline of Practices /Actions	<p>In consultation with IFC, MWSS decided to adopt a concession model as the mode of entry of the private sector. Furthermore, to ensure competitive benchmarking, MWSS divided its franchise area into two zones i.e., East Zone and West Zone. This entailed auctioning two 25-year concessions through competitive bidding and giving the winning bidders the responsibility to handle water treatment, distribution, tariff collection, facility improvement and overall management. Strong private sector was shown by the participation of major players in the global water industry like Vivendi, Ondeo, Anglian and United Utilities.</p> <p>In August 1997 Manila Water Company Inc. (MWCI) won one of the concession areas and took over the operations of the MWSS. Since then, MWCI has constructed almost 218 kilometers of new distribution lines, installed more than 100,000 new household connections and upgraded its distribution system in the past four years. As a result, clean potable water is now flowing in the faucets of around 4 million people living in the East Zone, a significant improvement from the 3 million people served in August 1997. To date, more than 440,000 households are already connected to the MWCI water system. Billed volume increased by more than 70% from 1997 to 2002.</p>
	SectionC: Results /Outcomes	<p>In its activities the MWCI particular focused on the urban poor. The company was successful in developing Tubig Para Sa Barangay, a program for the urban poor. In coordination with local government units and communities, the company launched more than 200 projects since 1998 with beneficiaries exceeding 60,000 households or nearly 400,000 people. The program has enabled the socially disadvantaged sectors of society to obtain water connections at affordable rates, reducing the cost per cubic meter of water by as much as 97%. Through the program, the company has minimised illegal connections, leaks, and the incidence of water contamination. Moreover, the program has improved the quality of life for most people and has fostered excellent community partnership. The company likewise laid the foundation for improvements in sewerage and sanitation services for East Manila e.g. through rehabilitation of sewerage treatment plants.</p> <p>Non-revenue water registered a marked improvement from the 63% level before privatisation. Despite the efforts in the past five years, NRW is currently hovering 53% and continues to be a major challenge for the MWCI.</p> <p>The company also recorded a major turnaround in its financial performance and has laid the foundation for sustainable growth. The initial success of the company was achieved despite significant business risks and unforeseen events such as the 1997 Asian financial crisis and the El Niño phenomenon in 1998. The positive performance of MWCI during the period is essentially attributed to a business strategy that was centred on the customer as the main driving force.</p>
Keys for success (cause of failure)		<p>The successful implementation of the MWSS privatisation was achieved because of strong political will of the Government, clear objectives, existence of enabling laws, focused execution by a competent team and unwavering support of the private sector.</p> <p>Sustainability of this privatisation depends on further strengthening of the partnership between MWSS and the private sector partner, and of community representation and involvement with the regulatory process as well as in the delivery of water services.</p>
Evaluation		<p>The success of MWCI's Tubig Para Sa Barangay Programme can be attributed to the fact that the company is organised well, knows where it wants to go and functions as a cohesive unit. The company consistently aimed for and achieved efficiency gains in the last four years. For example MWCI's manpower productivity ratio significantly improved as the company downsized the concession by reducing the workforce by 25% within three years of operation.</p> <p>Experience shows that MWCI was more effective providing service to communities that are well organised. Active community participation (a) enhances sense of ownership; (b) encourages the people to police their own ranks against pilferage; (c) improves collection efficiency; and (d) increases transparency; and (e) expedites public consultations. The operator must play a key</p>

		lead role in establishing People's Organisations prior to full-blown implementation to ensure the active involvement of community-based organisations and local government units in programme design from concept to implementation.
Applicability		The design of the programme should be based on the capacity of (e.g. level of income, how well the community is organised, etc.) and needs of the community being targeted. Thus, there is no single model that will be effective in all types of communities and operating environments.
Reference		Case study for UNESCAP: Provision of water related services to the low-income population in East Manila, Philippines.
Sectoral Issues		1;3
Cross-sectoral Issues		1; 4
Instruments		1.1; 3.4; 3.7; 3.8; 4.2
Provider of this information	Name	Lotte Blanner
	Organisation	ESCAP
	Job Title	
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Title		Provision of water-related services to the low-income population in Pune
Country		356
Province		
Area		City of Pune in the state of Maharashtra
Implementation level		1
Duration/ Year		2000 - ongoing
Contact Person/ Focal Point for Enquiry	Name	V. Srinivas Chary
	Affiliation	College of India
Contact Information	Address	Bella Vista, Khairtabad, Hyderabad - 500 082. (A.P.) INDIA
	Tel	+91-40-2331-0952 ext. 221
	Fax	+91-40-2331-2954
	E-mail	schary@asci.org.in
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: The city administration Pune Municipal Corporation (PMC) provides the financial resources.
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	<p>Pune is the most important district of the most industrialised state of India. The city of Pune is a hub of extensive economic activity, and has a population of 2,540,069 21% of which live in the city's 553 slums. The city is located at the confluence of Mula and Mutha rivers, and is blessed with a perennial source of surface water. The responsibility for both water and sanitation services rests with the Pune Municipal Corporation. The city's slum dwellers have for long suffered inadequate sanitation where the crude toilet to person ratio is as low as 1:2,500. Even in settlements where toilets are available they are old, dilapidated and unusable due to poor maintenance.</p> <p>The PMC, whose responsibility it is to maintain the toilet blocks, lack the resources to monitor their staff (the caretakers), and since the caretakers are not accountable to the community they evade their duties. The lack of adequate sanitation forces people to open defecation causing several interrelated problem in the slums such as environmental pollution, very unhygienic conditions, and health problems.</p>

		To address this situation and improve the sanitation the PMC in 2000 set sanitation for the urban poor as the topmost priority and initiated The Millennium Toilet Scheme.
	SectionB: Outline of Practices /Actions	<p>Under The Millennium Toilet Scheme, community toilets are being provided to all the slums of Pune city in a phased manner. The PMC selected 8 privately run non-profit making institutions to participate in the scheme, and entered into a contract with them to construct and maintain the toilet blocks for the next 30 years. The PMC incurred with the capital expenses of constructing the toilet blocks, and agreed to provide water during the construction period and subsequently provide water and electricity for the contract period of 30 years. The institutions will handle the process of construction and maintenance. A contract was signed between the parties to this extent.</p> <p>The institutions consulted and involved the community in the decision making process of site identification, designing, structure of the building etc. Some valuable suggestions came up from the community during discussions; one member of a particular area suggested shifting the entrance of the women's block to avoid embarrassment. The design of the toilet blocks were customised as per the community's desire by professional engineers and approved by the PMC. At many places the community contributed sweat equity during the construction phase. A monthly user fee of Rs. 20 towards maintenance (including salary of the caretaker) is collected.</p>
	SectionC: Results /Outcomes	<p>The slum communities are extremely satisfied with the scheme as they have had benefits such as improved environment, financial savings etc. The health of the community improved significantly, and the households, which were located in the areas where the toilets were properly maintained, made monthly savings on the medical bills equivalent to 20% of their average monthly income. Moreover, the communities experienced increase in their monthly income as well, as the number of workdays lost due to sickness came down significantly. During construction, the scheme generated great deal of economic activity. It provided employment to 6,800 people who were involved in the construction of the toilet blocks in their respective slum areas. Not only the residents of the slum areas, but also the floating population and migrants from the adjoining areas benefited.</p> <p>Women especially were empowered through this scheme. A particular group of women became contractors for the construction of the toilet blocks. The scheme enabled them to come out of the closed walls of their houses, interact with people, and demand work form them, which in itself is a significant empowerment. Furthermore, one of the private institutions, which functions through a community based organisation (CBO), has trained women members into teams of plumbers, electricians, and carpenters, who can immediately attend to any minor repairs that arise.</p> <p>Also from the PMCs perspective the scheme has brought benefits. Not only is the PMC relieved from the daily maintenance of the toilet blocks but the corporation also makes substantial savings. The huge annual maintenance expenditure is now being saved, which enables the PMC to undertake other infrastructural development activities for other sectors.</p>
Keys for success (cause of failure)		<p>The crux of the workability potential of the whole scheme is the maintenance of the toilets. If the maintenance is poor, the toilet blocks will become defunct and similar to the prior situation. Besides, a strong coordination among the different departments of the PMC is required for the success of the present scheme.</p> <p>The sustainability of the system depends on the commitment of the private institutions and the involvement and interest of the user community. Community ownership is required to sustain the scheme, and to build this the institutions have a key role to play. Any amount of monitoring either by the PMC officials or the institutions will not create pressure to maintain the toilet blocks, unless the user community owns the block and with a sense of responsibility contributes towards maintaining the blocks.</p>

Evaluation		<p>The unique feature of this scheme is that for the first time in the country, the city administration in partnership with the civil society and privately run non-profit making institutions created a community infrastructure. This kind of partnership has clearly proved to be more effective compared to direct provision of services by the public agency. The overall quality of the services goes up due to the partnership since private agency can have better management practices and greater commitment. At the same time, the supportive role of the public sector facilitates and enhances the efficiency of the private sector.</p> <p>The PMCs relation with the slum communities has improved because of the proactive initiative of the PMC to provide sanitation facilities to those in need. Furthermore, the scheme has promoted gender equality through the empowerment of women groups.</p>
Applicability		<p>With very minor changes, the system is considered to be replicable wherever there are slums in any part of the world. Considering the financial aspect, the PMC was rich in resources and could bear the entire capital cost of construction. In cases where the city administration is unable to meet the expenses financial institutions can be approached for assistance and a part of the burden passed down to the users after a survey is conducted to understand their willingness and ability to pay. Pune is also rich in water resources hence it is not a problem for the municipality to provide water for the scheme. This might not apply to any other city or slum community, which faces the same problems.</p>
Reference		Case study for UNESCAP: Provision of water related services to the low-income population in Pune, India.
Sectoral Issues		1; 3
Cross-sectoral Issues		1; 4
Instruments		2.4; 3.1; 3.2; 3.4; 3.7; 4.1
Provider of this information	Name	Lotte Blanner
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Title		Rainwater Harvesting and Utilisation in Urban Areas
Country		392
Province		
Area		Sumida Ward, Tokyo
Implementation level		1
Duration/ Year		1982 - ongoing
Contact Person/ Focal Point for Enquiry	Name	Dr. Makoto Murase, Chief, Environmental Promotion Section
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount: Unknown</p> <p>2) Sources of funds: Expenses associated with the installation of rainwater storage and utilisation facilities are covered by the facility owners. In other words, the facilities in public buildings are financed by the Ward while individuals and local businesses cover the costs on their own. Rainwater utilisation is enhanced by a subsidy program set up by the Ward in 1995, which aims to further promote rainwater utilisation in the municipality. Tokyo Municipal Government has also provided financial assistance (amounts unknown).</p>
Actors involved		3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>Sumida Ward is one of the 23 wards in Metropolitan Tokyo that encompasses an area of 13.75 sq. km and has 225,935 residents (as of December 2001). With high rainfall and geography (the ward is surrounded by the Sumida and Arakawa Rivers), Sumida residents have often suffered from floods but paradoxically had concerns on inadequate water supply.</p> <p>Water resource management for disaster relief was also an issue for Sumida residents. In 1923, the Great Kanto Earthquake hit Sumida Ward and 48,400 residents died in a huge fire. Again, in 1945, the ward was completely burnt by bombing raids during the Second World War.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>Rainwater harvesting and utilisation programme has been initiated in order to change the way the city interacts with the natural water cycle, leading to a more stable water supply system.</p> <p>Activities on rainwater harvesting and utilisation include the following:</p> <p>(1) Introduction of rainwater utilisation facilities to public facilities, private housings, businesses and communities in the ward</p> <ul style="list-style-type: none"> - Stored rainwater in the facilities is used to flush toilets, sparkle gardens and cool water in air conditionings. - The subsidy programme arranged by the ward, along with guidance and information services, provide incentives for local businesses to efficiently use water resources by installing 'miniature dams (small-scale rainwater utilisation facilities)'. Invention of 'Rojison (community rainwater tanks with hand-operated pumps)' by the community residents also provided opportunities for raising environmental awareness. <p>(2) Establishment of network</p> <ul style="list-style-type: none"> - The ward invited local governments nationwide to organise the Rainwater Utilisation Liaison Council for Local Governments to exchange policy ideas and experiences related to rainwater utilisation. <p>Major stakeholders include residents, businesses and government officials of the Sumida Ward.</p>
	<p>SectionC: Results /Outcomes</p>	<p>Project achievements include:</p> <ul style="list-style-type: none"> - Installation of rainwater utilisation facilities in the Ryogoku Kokugikan (Japan's primary sumo wrestling stadium), 26 public buildings, 160+ private facilities and 9 'rojisons'. - Organising the Tokyo International Conference on Rainwater Utilisation (1994) - Publication of the rainwater utilisation guidelines (1995) - Formation of the Association of Businesses for Rainwater Utilisation (2001) - Establishment of the Rainwater Museum - Publication of 'Rainwater Harvesting and Utilisation: An Environmentally Sound Approach for Sustainable Urban Water Management (2002)' <p>Sumida's rainwater utilisation projects are selected as a 'best practice' by the G8 Environmental Futures Forum 2000 and also received an excellent local initiative award from International Council for Local Environmental Initiatives (ICLEI) in 2000. Dr. Makoto Murase, Project leader and official of the Sumida Ward, has also received the Rolex Awards for Enterprise in 2002.</p>
<p>Keys for success (cause offailure)</p>		<p>Keys for success include:</p> <ul style="list-style-type: none"> - Personality of project leader: Dr. Murase is the first to develop practical ways to use rain on such a scale in urban environments. His life-passion - to solve urban water shortages, provide water for may household uses to millions of people and change the way city planners view rainfall- has changed the mindsets of the city fathers and even more conservative heads of Japan Sumo Wrestling Federation. - Community revitalisation through rainwater utilisation: Rainwater utilisation was not promoted solely because of environmental perspectives. Rather, it reflected the geography, history, and culture of respective communities in the ward. As a result, rainwater utilisation involved various stakeholders and the facilities turned to be a symbol of the communities. - Pro-active initiatives by the ward: One of the initial efforts of the ward was to install rainwater utilisation facilities in public buildings. Public facilities are visually attractive and relatively easy for residents.

Evaluation		Sumida's rainwater utilisation projects are characterised by the following: <ul style="list-style-type: none"> - Ongoing practices - Contribution to future policy planning - Use of low and transferable technology - Sustainable resource use - Collaboration among municipal governments, citizens and local enterprises - Community revitalisation and creation of community identity.
Applicability		Rainwater utilisation technologies are relatively simple, inexpensive and highly transferable. They can be replicated especially in the cities that have alternating rainy and dry seasons and suffer from flooding, water shortages, land subsidence, and/or limited water supplies. However, the implementation of rainwater utilisation requires the support of municipal government officials as well as cross-departmental cooperation and coordination. Educational opportunities are also necessary to inform local residents and businesses about the short- and long-term benefits of rainwater utilisation.
Reference		-Japan for Sustainability. (2003) Promoting Rainwater Utilisation. Japan for Sustainability Newsletter. Available: http://www.japanfs.org/en/newsletter/200302.html - Murase, M. Rainwater Utilisation in Urban Areas. Reports from Second World Water Forum. Available: http://www.ircsa.org/Meeting%20Reports/2WWF/Rainwater%20Utilisation%20in%20Urban%20Areas.pdf - United Nations Environment Programme. (2002) Rainwater Harvesting and Utilisation. IETC Urban Environment Series. Available: http://www.unep.or.jp/ietc/Publications/Urban/UrbanEnv-2/index.asp
Sectoral Issues		1
Cross-sectoral Issues		6
Instruments		3.3; 3.8; 4.1
Provider of this information	Name	APFED Secretariat
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Title		Regional Partnership for Poverty Alleviation and Environmental Protection through Green Productivity - Integrated Community Development and Clean Development Mechanism
Country		50; 156; 242; 356; 360; 364; 392; 410; 418; 458; 496; 524; 586; 608; 702; 144; 764; 704
Province		
Area		
Implementation level		4
Duration/ Year		2003-2007
Contact Person/ Focal Point for Enquiry	Name	Mr. Augustine Koh, Director, Environment Department
	Affiliation	Asian Productivity Organisation (APO)
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	E-mail	akoh@apo-tokyo.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount: N/A</p> <p>2) Sources of funds: The initial seed funding will be made available through the ongoing Japanese Government's Official Development Assistance (ODA) to the APO through the Ministry of Foreign Affairs.</p> <ul style="list-style-type: none"> - The APO would make its own contribution from its general funds. - Each participating governments, through their designated NPOs would contribute to the project funding (in cash and/or in kind). - The participating communities would contribute in kind for the GP-ICD projects. - Other sources of international funding will also be tapped.
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	<p>While the Asian region has experienced impressive growth in the past decades, still the rural population living in extreme poverty characterises the region. A number of development programmes have been implemented in the past; however the results are far from satisfactory. Recently, it is increasingly recognised that the issues of rural community development are very closely linked with environmental protection.</p> <p>The APO started its Green Productivity (GP) programme in the mid-1990s in response to the challenges of sustainable development arising from the recommendations of the Earth Summit in Rio in 1992. The primary objective of the GP programme is to integrate productivity improvement with environmental concerns. GP essentially addresses the triple bottom-line issues of economic profitability, environmental protection, and social fairness.</p>

		GP application in communities is an excellent model in which the productivity principles are effectively applied to harmonise the triple bottom-line results for the ultimate goals of poverty alleviation and sustainable development. The APO believes that the GP has a great potential in poverty alleviation and Integrated Community Development (ICD), based on its past experiences in Vietnam. The APO started its GP-ICD projects in 3 communities in Vietnam in 1998 and today 72 communities are implementing GP-ICD for better quality of life, which is poised to become the national programme in the coming years.
	SectionB: Outline of Practices /Actions	<p>The main objective of the proposed partnership initiative is to expand the GP-ICD projects in the selected APO member countries as a novel approach for environmental protection, poverty alleviation and sustainable integrated community development to meet the Millennium Development Goals.</p> <p>Through the GP intervention and by adopting appropriate technology, following outcomes can be expected from these GP-ICD activities:</p> <ul style="list-style-type: none"> - Enhanced national, regional and global partnerships for integrated community development - Improved living standards for communities through: <ul style="list-style-type: none"> o Better potable water supply for communities o Better sanitation o Enhanced solid waste management system, with possible reuse of waste (as a community resource) - Efficient resource management by the participation of local communities to ensure environmental sustainability. <p>The specific activities under the proposed partnership initiative include:</p> <ul style="list-style-type: none"> - Training and Capacity building of the communities and related agencies/organisations - Demonstration Projects in different countries to demonstrate the workability of the GP-ICD approach in the local situation - Technical assistance through expert deputation - Information dissemination - Appropriate technology transfer through study missions, training seminars etc.
	SectionC: Results /Outcomes	<p>The expected results of the partnership initiative include:</p> <ul style="list-style-type: none"> - Improved living standards for communities through - Efficient resource management by the participation of local communities to ensure environmental sustainability. - Reduction in CO2 emissions by using alternative energy sources other than coal - Enhanced national, regional and global partnerships for integrated community development - Establishment of a clear linkage between GP-ICD projects and CDM projects in the participating countries through the initiatives of new partnerships.
Keys for success (cause offailure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		N/A
Reference		WSSD website: http://www.johannesburgsummit.org/html/sustainable_dev/p2_consumption/101202_pov_alleviation.pdf
Sectoral Issues		1; 2
Cross-sectoral Issues		1; 4; 6

Instruments		1.2; 3.2; 3.3; 3.8; 4.1
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Title		Rehabilitation of renewable energy projects for rural electrification and livelihood development (Technical Assistance)
Country		608
Province		
Area		
Implementation level		2
Duration/ Year		2003 - 2005 (18months)
Contact Person/ Focal Point for Enquiry	Name	Y. Zhai
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Sponsor(s)		1) Amount \$650,000 2) Source(s) of funds ADB \$450,000, Cofin Amount \$200,000
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	Many new and renewable energy (NRE) projects were carried out in the Philippines since 1970 in both public and private sectors with total investment estimated at \$100 million. These projects were mostly driven by the funding agencies and technology-based. However, about 20-25% of these projects were less than successful. The overall of this Technical Assistance is to reduce poverty through the provision and efficient use of sustainable NRE supply, in support of livelihood systems for poor local communities in off-grid areas of the Philippines, within the framework of public-private-civil society partnerships.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice The purpose of this TA is to ensure the sustainability of NRE projects through pilot testing rehabilitation of unsuccessful NRE projects combined with income generating livelihood development.</p> <p>2) Outline of the practice This TA i) analyses successful and unsuccessful projects resulting in recommendations for correcting failures, ii) implements the recommendations in demonstration projects, and iii) helps the project recover investments.</p>
	SectionC: Results /Outcomes	<p>The TA will result in the following outputs:</p> <ul style="list-style-type: none"> - background study on the issues regarding successes and failures in project design and implementation of NRE projects, and - documentation and dissemination within the Philippines and to other developing member countries with similar issues, of the methodology and lessons learned.
Keys for success (cause of failure)		N/A
Evaluation		
Applicability		
Reference		ADB Database TAR: PHI 36561 http://www.adb.org/Documents/TARs/PHI/tar_phi_36561.pdf
Sectoral Issues		2
Cross-sectoral Issues		4; 6
Instruments		3.2; 3.3; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Removal of Barriers to Biomass Power Generation and Co-generation
Country		764
Province		
Area		
Implementation level		2
Duration/ Year		
Contact Person/ Focal Point for Enquiry	Name	Dr. Nandita Mongia, GEF Regional Coordinator for Climate Change
	Affiliation	
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	E-mail	nandita.mongia@undp.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$73.22M 2) Source(s) of funds GEF Grant \$6.83M, Cofin Amount \$66.39M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	Thailand's increasing consumption of fossil fuels, and consequently, a growing dependence on fuel imports poses one of the major challenges facing the Thai Government. There is little experience with large-scale biomass power and co-generation projects (>10 MW), which export excess electric power to the grid in Thailand to date. The principal objective of this project is to reduce GHG emissions in Thailand by removing the major barriers to the development of biomass co-generation and power generation to replace current fossil fuel use in Thailand.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice</p> <p>The objective of the project is to a) build capacity to provide information and services to potential biomass power project investors; b) improve the regulatory framework to provide financial incentives to biomass co-generation and power projects; c) create easy access to commercial financing for biomass co-generation and power projects; and d) facilitate the implementation of two initial biomass power pilot plants through support for commercial guarantees which will reduce technical risks associated with the deployment of this new technology in Thailand.</p> <p>2) Outline of the practice</p> <p>The Biomass One-stop Clearing House (BOSCH) coordinates overall this project.</p>
	SectionC: Results /Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		UNDP-GEF Portfolio Thailand 13
Sectoral Issues		2
Cross- sectoral Issues		1; 2; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
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Title		Removal of Barriers to Biomass Power Generation, Part I
Country		356
Province		
Area		
Implementation level		2
Duration/ Year		2002 - (5years)
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	E-mail	
Sponsor(s)		1) Amount \$39.15M 2) Source(s) of funds GEF Grant \$5.65M, Cofin Amount \$33.5M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	India has been estimated to have approximately 50,000 MW of renewable energy power potential, mainly from the sources like wind, biomass and mini-hydro. The Ministry of Non-Conventional Energy Sources (MNES) has formulated a number of promotional policies and provides financial and fiscal incentives to tap the estimated renewable energy potential. The rate of spread of biomass power technologies in general is low, despite the efforts made by the Ministry since 1993. There are a number of barriers that constrain the large-scale deployment of these technologies. The objective of this two-part project is to remove barriers to the increased use of biomass energy sources for generating electricity for own consumption and export to the grid. This project aims to accelerate the adoption of environmentally sustainable biomass power and cogeneration technologies in India. It will promote combustion, gasification and cogeneration technologies for electricity generation using different types of captive and distributed biomass resources.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice</p> <p>The specific objectives include demonstration of techno-commercial viability of biomass power technologies for captive and distributed biomass materials in the niche areas. The emphasis will be on demonstration of different project development models and establishment of sustainable business and support service networks, for large-scale multiplication across the country.</p> <p>2) Outline of the practice</p> <p>The project will utilise technical assistance focused on removing the remaining technical, regulatory and institutional barriers to widespread use of biomass power. It will then utilise investment risk mitigation support to promote repeated investments in biomass power generation projects. Part I of the project will provide technical assistance and investment support in a limited number of states.</p>
	SectionC: Results /Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		GEF Project List Project Document IND 1199
Sectoral Issues		2
Cross- sectoral Issues		1; 2; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Removing Barriers to Mini & Micro Hydropower Development for Decentralised Rural Electrification
Country		64
Province		
Area		
Implementation level		2
Duration/ Year		1998 -
Contact Person/ Focal Point for Enquiry	Name	Anders Knudby
	Affiliation	UNDP Bhutan
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	E-mail	anders.knudby@undp.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount \$7.31M 2) Source(s) of funds GEF Grant \$3.2M, Cofin \$4.11M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The Royal Government of Bhutan places very high priority in developing its rich hydropower resources, and attempts to achieve an appropriate mix of economically attractive large-scale projects, and providing energy services to remote rural areas.
	SectionB: Outline of Practices /Actions	This project is a Project Development Facility project (PDF-B), and aims to develop a full size GEF project. The full size project will break down barriers for a sustainable development of micro hydropower. To encourage private participation in rural electrification the project will address barrier removal measures (such as perceived risks, lack of management skills, lack of accessibility to sound design systems and policy boosts) that the small hydro sector needs to overcome in order to be a sustainable source of energy.
	SectionC: Results /Outcomes	This project will demonstrate the viability of micro-hydro schemes that can be owned and operated through local capacity building to provide off grid electricity.

Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		
Reference		UNDP GEF Portfolio http://www.gefweb.org/COUNCIL/GEF_C14/pipeline2/UNDP/Bhutan%20OP6.pdf
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.4; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
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Title		Renewable Energy and Energy Efficiency Program for the Pacific
Country		998
Province		
Area		Pacific Developing Countries
Implementation level		3
Duration/ Year		2003 - 2005 (24months)
Contact Person/ Focal Point for Enquiry	Name	D. Ponzi
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1) Amount \$750,000 2) Source(s) of funds ADB \$600,000, Cofin Amount \$150,000
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Access to modern forms of energy is an essential prerequisite for economic development and poverty reduction as well as a key determinant of quality of life and the level of social development. Only a few Pacific island communities have access to modern energy sources, and those with access rely heavily on imported fossil fuels. In almost all Pacific Developing Member Countries (PDMCs), renewable energy sources in the form of hydropower, wind, solar, biofuel, geothermal and wave/tidal energy hold high potential for contributing to sustainable development. This TA will address most of the current constraints to development of renewable energy and energy efficiency, and will support the ultimate goal of significantly increasing PDMCs' rural community access to commercially viable energy services.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice The purpose of this TA is to help create an environment that will enable the development of a market-based rural energy sector, in which mature renewable energy and energy efficiency applications play a key and increasing role.</p> <p>2) Outline of the practice The TA will implement the following activities.</p> <ul style="list-style-type: none"> - Prepare, discuss and disseminate lessons from the past through a stocktaking review of past renewable energy and energy efficiency assistance in the Pacific; - Develop and prepare an action plan for the adoption of an appropriate policy framework; - Develop and prepare an action plan for the establishment of appropriate institutional arrangements; - Develop and prepare an action plan for the adoption of the necessary regulatory and legal framework; - Develop a system of financing schemes targeted at the private sector and household end-users; etc.. <p>3) Stakeholders involved, decision making process International organisation, Central government</p>
	SectionC: Results /Outcomes	The outputs in the two PDMCs will include a) review of, consultations on, and dissemination of lessons from past renewable energy and energy efficiency assistance in the Pacific; b) an action plan for the adoption of appropriate policies, institutional arrangements, legal/regulatory measures, and financial schemes; c) a training needs analysis and training curricula etc..
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		ADB Project Database, Technical Assistance Report TAR: OTH36259
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
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Title		Renewable Energy Development
Country		360
Province		
Area		
Implementation level		2
Duration/ Year		2000 - 2008
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	Fax	–
	E-mail	–
Sponsor(s)		1) Amount \$256M 2) Sources of funds ADB \$161M Borrower \$95M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The power generation using renewable energy resources will meet subprojects' electricity needs without burning fossil fuels. Power supply will improve local residents' quality of life, promote commercial and industrial development, and be environmentally sustainable. Electricity is used not only by the high- and middle-income consumers, but also by the poor to meet their basic needs. Electricity is also vital for economic activities that create employment and reduce poverty.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The Project will expand renewable energy use and thereby limit emission of greenhouse gases. 2) Outline of the practice The Renewable Energy Development Sector Project will comprise various core and no core subprojects that will add about 82 megawatt (MW) power generation capacity with 480 giga watt-hour (GWh) annual energy output. All the energy will be produced from renewable resources, thus avoiding the use of fossil fuels. The associated power distribution networks will be correspondingly strengthened.

	SectionC: Results /Outcomes	The total beneficiary population is about 5.2 million, of whom about 1.5 million are poor. Around 76,000 new customers are expected to be connected to the power grid.
Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		ADB Project Profile Document INO 34100-01
Sectoral Issues		2
Cross-sectoral Issues		1; 6
Instruments		4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
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Title		Renewable energy development in small towns and rural areas (Technical Assistance)
Country		496
Province		
Area		
Implementation level		2
Duration/ Year		2003 - 2004 (18months)
Contact Person/ Focal Point for Enquiry	Name	S. Hasnie, Energy specialist
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Sponsor(s)		1) Amount \$475,000 2) Source(s) of funds ADB \$400,000, Cofin Amount \$75,000
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	In Mongolia with its vast land, sparse population, and hundreds of isolated small settlements throughout the country, an off-grid solution is the most economic option to provide electricity in rural areas and isolated small towns.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The immediate purpose of the TA is to assist the government of Mongolia to undertake a comprehensive assessment - through policy study, technical review and a few pilot schemes - of the technical feasibility and economic viability of new renewable energy technologies under Mongolian circumstances, as a basis for decision making and policy formulation. 2) Outline of the practice The TA adopts a consultative participatory approach and builds on the work of the Government and other agencies. Key activities include policy dialogue with the Government, the workshop and exhibition, a media campaign promoting renewable energy, development of a monitoring mechanism for pilot projects.

	SectionC: Results /Outcomes	The TA will (i) formulate a renewable energy policy and study existing renewable energy use in Mongolia; (ii) finance a renewable energy exhibit in Ulaanbaatar; (iii) develop a campaign for mainstreaming renewable energy in rural areas; (iv) select appropriate technology from the exhibit.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		ADB Database TAR: MON36255 http://www.adb.org/Documents/TARs/MON/tar_mon36255.pdf
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		2.3; 3.2; 3.4; 3.8; 4.1; 4.2
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Title		Renewable Energy Development Project
Country		156
Province		
Area		
Implementation level		2
Duration/ Year		Jan. 2002 - Dec. 2006
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Sponsor(s)		1) Amount \$409M 2) Sources of funds IBRD \$100M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The project aims to foster development of a sustainable market for PV technologies and demonstration of the viability of commercial wind development in the coastal regions. In achieving its objectives, it would use state-of-the-art and cost-effective wind and PV technologies to supply electricity in an environmentally sustainable way and to provide modern energy to dispersed rural households and institutions.
	SectionB: Outline of Practices /Actions	The project consists of: (a) installation and operation of grid-connected wind farms on two sites Shanghai, totalling 20 MW of installed capacity; (b) supply of about 10 MW of PV systems to 300-400,000 households and institutions in remote areas of six North-western provinces; and (c) support for technology upgrading to improve the performance and reduce the costs of solar PV technologies in China.
	SectionC: Results /Outcomes	

Keys for success (cause of failure)		Lessons drawn from past projects and international experience.
Evaluation		N/A, on-going project
Applicability		Applicable to many emerging renewable energy projects of the kind.
Reference		PID6365 (The World Bank)
Sectoral Issues		2
Cross-sectoral Issues		1; 6
Instruments		3.2; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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Title		Renewable Energy for Rural Economic Development (RERED)
Country		144
Province		
Area		
Implementation level		2
Duration/ Year		2002 - 2008
Contact Person/ Focal Point for Enquiry	Name	Subramaniam V. Iyer, Task Manager
	Affiliation	The World Bank
Contact Information	Address	1818 H Street, NW, Washington D.C. 20433
	Tel	+1-202-458-4441
	Fax	+1-202-522-2427
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$133.70M 2) Sources of funds BORROWER/RECIPIENT \$0.80M IBRD IDA \$75.00M BORROWING COUNTRY'S FIN. INTERMEDIARY/IES \$17.90M SUB-BORROWER (S) \$25.80M FOREIGN PRIVATE COMMERCIAL SOURCES (UNIDENTIFIED) \$6.20M GLOBAL ENVIRONMENT FACILITY \$8.00M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	This project's objectives are to: (i) Improve the rural quality of life by providing electricity access to remote communities through off-grid renewable energy technologies; and (ii) Promote private sector power generation for the main grid from renewable energy resources. These objectives are consistent with Sri Lanka's vision of extending electricity access to at least 75 percent of its population by 2007, and developing initiatives for productive use of electricity to increase rural household incomes and improve the delivery of rural social services, such as health and education.

	SectionB: Outline of Practices /Actions	The key components of the project are: (a) Grid-Connected Renewable Energy Power Generation. (b) Solar PV Investments. (c) Independent Grid Systems. (d) Energy Efficiency and Demand Side Management (DSM). (e) Cross-sectoral Energy Applications. (f) Technical Assistance.
	SectionC: Results /Outcomes	
Keys for success (cause of failure)		Lessons and knowledge acquired from similar projects and reviews.
Evaluation		N/A, on-going project
Applicability		Applicable to other similar regions.
Reference		PID10960 (The World Bank) Renewable Energy for Rural Economic Development Project Website: http://www.energyservices.lk/
Sectoral Issues		2
Cross- sectoral Issues		1; 6
Instruments		4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Renewable Energy Hybrid Power Systems
Country		242
Province		
Area		
Implementation level		2
Duration/ Year		1998 -
Contact Person/ Focal Point for Enquiry	Name	Asenaca Ravuvu
	Affiliation	UNDP/GEF
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	E-mail	asenaca.ravuvu@undp.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$1.424M 2) Source(s) of funds GEF Grant \$0.74M, Cofin \$0.670
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The Government of Fiji attaches great importance to sustainable development and the protection of natural resources. This project is intended to set up a commercial Rural Energy Service Company (ESCO) that charges a fee for the electricity supplied to the consumers as a sustainable institutional framework to operate the renewable energy system in Nabouwalu, for replication in other parts of Fiji.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice This project will remove institutional, economic, financial and informational barriers, thereby leading to wide-scale commercial operation of renewable energy systems to replace current diesel generators in the government stations and provide electric power service to the 900 unelectrified villages.</p> <p>2) Outline of the practice 1. Establish the legal and regulatory framework for the Rural Energy Service Company 2. Establish the financial framework for the Rural Energy Service Company 3. Develop investment plan for the Rural Energy Service Company; 4. Training ESCO staff and managers in business management skills; 5. Training ESCO staff in installation and maintenance of the renewable system; etc.</p>
	SectionC: Results /Outcomes	Apr - Jun/2003: The regulatory charter for enabling RESCOs to participate in the country's rural electrification was approved by Cabinet.
Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		UNDP-GEF Portfolio Project Document
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 5; 6
Instruments		1.1; 3.2; 3.5; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Renewable Energy Project
Country		364
Province		
Area		
Implementation level		2
Duration/ Year		Not Yet Approved
Contact Person/ Focal Point for Enquiry	Name	N/A
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$30.175M 2) Source(s) of funds GEF Grant \$5.175M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Iran possesses renewable energy sources which have been characterised as 'world class' by international and local renewable energy experts. The objective of the project is to accelerate the sustainable development of selected renewable energy technology applications through investment and provision of technical assistance.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice This project aims to remove the institutional, policy, financial, and technical barriers to broad-scale renewable energy development. 2) Outline of the practice The project includes investment projects for each of the selected technology applications; grid-connected wind farms and small-and/or mini-hydro schemes to serve the energy needs of villages not expected to be connected to the national grid in the near to medium term. It also provides funds for carrying out national wind and small-hydro resource assessments.

	SectionC: Results /Outcomes	
Keys for success (cause of failure)		N/A
Evaluation		N/A, not yet started
Applicability		
Reference		GEF Project List (Proposal for Project Development Funds (PDF))
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Renewable Energy Promotion (Rural Electrification and Transmission)
Country		116
Province		
Area		
Implementation level		2
Duration/ Year		6 years
Contact Person/ Focal Point for Enquiry	Name	Robin Broadfield, GEF Coordinator East Asia & Pacific Region
	Affiliation	
Contact Information	Address	
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	Fax	+1-202-522-1666/7147
	E-mail	Rbroadfield@worldbank.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$16.58M 2) Source(s) of funds GEF Grant \$6.08M, Cofin Amount \$10.50M
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	Rural electrification is a critical necessity for economic development of and improvement in quality of life for the Cambodian people. The present level of access to electricity service in the rural area is extremely low, and what is available is environmentally unsustainable in the long run. On the other hand, Cambodia has considerable renewable energy resources that offer a sustainable alternative for rural electrification by expanding the generation base and rendering it environmentally more balanced and friendly.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice The overall project objectives are to: Eliminate the policy, institutional, financing and information barriers that impede the market development for renewable energy in Cambodia so that rural people can have increased access to electricity services; and accelerate rural transformation by expanding electricity access.</p> <p>2) Outline of the practice This project has two main components: (i) technical assistance and capacity building for key stakeholders, and (ii) investments in renewable energy systems for isolated mini-grids using hydro sources and in off-grid solar and village hydro.</p>
	SectionC: Results /Outcomes	N/A
Keys for success (cause of failure)		N/A
Evaluation		N/A. This project was approved in Dec.2003
Applicability		N/A
Reference		World Bank Project Data Base (GEF-PO71591)
Sectoral Issues		2
Cross- sectoral Issues		1; 4
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Renewable Energy Small Power (RESP) Project
Country		360
Province		
Area		
Implementation level		2
Duration/ Year		1997-2001
Contact Person/ Focal Point for Enquiry	Name	Public Information Center
	Affiliation	The World Bank
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	Tel	+1-202-458-5454
	Fax	+1-202-522-1500
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$200M 2) Sources of funds GEF\$6M, IBRD\$92M, Balance: Private sector Government/PLN
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The specific objectives of the project are: (i) catalyse the rapid penetration of grid and off-grid based renewable energy projects in the private sector, within the framework of a least cost rural electrification strategy; (ii) facilitate participation by the private sector in advancing renewable energy commercialisation; (iii) promote environmentally sound energy resource development in Indonesia; (iv) strengthen Indonesia's institutional capacity to sustain renewable energy development.
	SectionB: Outline of Practices /Actions	The project consists of three components: (i) Small Private Power (SPP) Component: Private sector renewable energy based small electricity generation projects - biomass cogeneration, mini-hydro, mini-geothermal; (ii) PLN Component: PLN owned and operated renewable based small electricity generation projects and (iii) Technical Assistance.
	SectionC: Results /Outcomes	

Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		May be applicable to other developing countries.
Reference		PIC1676 (The World Bank)
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 5; 6
Instruments		3.5; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
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Title		Renewable-Energy-Based Rural Electrification (RERE) Initiative
Country		242
Province		
Area		
Implementation level		2
Duration/ Year		Ongoing
Contact Person/ Focal Point for Enquiry	Name	Tomonori Minowa, Second North American Division, North American Affairs Bureau
	Affiliation	Ministry of Foreign Affairs of Japan
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	E-mail	tomonori.minowa@mofa.go.jp
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1) Amount N/A 2) Sources of Funds Government of Japan \$361,000 (FY2002), Government of Fiji over\$150,000
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	To promote and develop renewable energy technology appropriate to the marine and tropical environment of the Asia-Pacific region (hybrid power systems, solar home systems for remote villages) and to assist, facilitate and support its application through technical services, education, and training for the sustainable development of the region.
	SectionB: Outline of Practices /Actions	Installation of solar-home-systems (SHSs) in remote out-of-grid villages in Fiji. The Fiji Department of Energy has identified approximately 40,000 households that cannot be connected to the main power grid. The goal of this initiative is to reach one-half of those households or 20,000 installations. And development of sustainable maintenance and management of those systems.
	SectionC: Results /Outcomes	The renewable-energy-based technologies under this initiative have and will continue to result in improved quality of life and economic development of Pacific Island nations with minimal environment impact.
Keys for success (cause of failure)		Coordination and implementation by NGO, Pacific International Center for High Technology Research (PICHTER)
Evaluation		Being successfully implemented.
Applicability		Replicable to many areas within and around Fiji.
Reference		WSSD Type II Partnership Information

Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.3; 3.8; 4.1
Provider of this information	Name	The APFED Secretariat
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Title		RETA - Promoting Effective Water Management Policies and Practices
Country		649
Province		
Area		
Implementation level		4
Duration/ Year		2002-2006
Contact Person/ Focal Point for Enquiry	Name	Wouter Lincklaen Arriens, Lead Water Resources Specialist
	Affiliation	Agriculture, Natural Resources, and Social Sectors, Regional and Sustainable Development Department, Asian Development Bank (ADB)
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	Tel	+63-2-632-6754
	Fax	+63-2-636-238
	E-mail	wlincklaenarriens@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: commitment of \$16 million (the Netherlands) commitment of Nkr 15 million (Norway) 2) Source(s) of funds: the Netherlands and Norway 3) Efforts to raise/sustain funds for implementation (if any): the Fund is a multi-donor facility; other countries may contribute
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	On a case-by-case basis in different DMCs and depending on the activity under a programme category.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice Promote effective water management policies and practices at the regional, sub-regional, and country levels and thereby catalyse the implementation of ADB's water policy in the Asia and Pacific region.</p> <p>2) Outline of the practice Activities add value to the water projects carried out by ADB's regional departments and increase the synergy in ADB's water sector operations. Activities are categorised into (i) promotion and public awareness; (ii) pilot and demonstration activities; (iii) regional events and initiatives; (iv) water partnership; (v) knowledge base and capacity building; and (vi) coordination, monitoring and evaluation.</p> <p>3) Stakeholders involved, decision making process Steering Committee acts as oversight and provides overall direction. Water Sector Committee manages the implementation, monitoring, evaluation and approval of minor program activities.</p>
	SectionC: Results /Outcomes	N/A; the project is in progress.
Keys for success (cause of failure)		<p>Guided by seven Principal Elements of ADB's Water Policy:</p> <ol style="list-style-type: none"> 1) Promote a national focus on water sector reform, 2) Foster the integrated management of water resources, 3) Improve and expand the delivery of water services, 4) Foster the conservation of water and increase system efficiencies, 5) Promote regional cooperation, 6) Facilitate exchange of water sector information and experience, and 7) Improve governance.
Evaluation		The project is in progress.
Applicability		Activities are carried out in different DMCs based on demand.
Reference		http://www.adb.org/water
Sectoral Issues		1; 5
Cross- sectoral Issues		1; 4; 5
Instruments		3.2; 3.3; 3.8; 4.2
Provider of this information	Name	Dennis Von C. Custodio
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	Job Title	Water Operations Adviser
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	Fax	+63-2-636-2381/636-2356
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Title		Rural Electrification and Renewable Energy Development
Country		50
Province		
Area		
Implementation level		2
Duration/ Year		2002 - 2008
Contact Person/ Focal Point for Enquiry	Name	Subramaniam V. Iyer, Task Manager
	Affiliation	The World Bank
Contact Information	Address	1818 H Street, NW, Washington D.C. 20433
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	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$298.30M 2) Sources of funds: BORROWER \$92.34M IBRD \$190.98M LOCAL COMMUNITIES \$6.78M GLOBAL ENVIRONMENT FACILITY \$8.20M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The project aims to support Bangladesh's vision of attaining a higher level of social development and economic growth by increasing access to electricity in rural areas.
	SectionB: Outline of Practices /Actions	(i) Assisting the Rural Electrification Board to expand the reach, capacity and reliability of rural grids and to improve the operational and financial performance of the rural electricity cooperatives; (ii) promoting use of solar home systems in rural areas unsuited for grid expansion; (iii) facilitating development of small power projects, using renewable energy sources; and (iv) supporting initiatives in rural areas for productive use of electricity to increase household incomes and improve the delivery of services.
	SectionC: Results /Outcomes	

Keys for success (cause of failure)		Lessons learned from past projects in Bangladesh and knowledge acquired from similar projects of other countries.
Evaluation		N/A, on-going project
Applicability		Applicable to many other similar regions
Reference		PID10435 (The World Bank)
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		1.1; 3.3; 3.4; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Rural Electrification and Transmission Project
Country		116
Province		
Area		
Implementation level		2
Duration/ Year		2003-2009
Contact Person/ Focal Point for Enquiry	Name	Mr. Enrique Crousillat
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The primary objectives of the project are to reduce poverty and support the foundations for sustainable development in the long term. The project will seek to accomplish these objectives by (a) promoting rural development by providing the economic benefits of electricity; and (b) improving power sector efficiency, by consolidating the sector restructuring efforts, reducing electricity costs and removing infrastructure bottlenecks.
	SectionB: Outline of Practices /Actions	The project will support: (a) institutional development and capacity building; (b) grid extension to rural areas by EDC; (c) off-grid electricity expansion and quality improvement of Rural Electricity Enterprises; (d) commercial investments in mini hydro projects; (e) solar home systems and improved used of batteries for household electricity supply.
	SectionC: Results /Outcomes	It is expected that up to 100,000 new customers would receive electricity. The off-grid pilot projects are expected to constitute the basis for further initiatives to supply electricity to currently isolated population centres.
Keys for success (cause of failure)		Replication of the World Bank's experience in similar projects
Evaluation		N/A, on-going project
Applicability		Applicable to many other developing regions.

Reference		PID9274 (The World Bank)
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1
Provider of this information	Name	The APFED Secretariat
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Title		Rural Power Project
Country		608
Province		
Area		
Implementation level		2
Duration/ Year		N/A
Contact Person/ Focal Point for Enquiry	Name	Selina Wai Sheung Shum, Task Manager
	Affiliation	The World Bank
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	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$37.90M 2) Sources of funds: IBRD \$20.00M GLOBAL ENVIRONMENT FACILITY \$10.00M LOCAL SOURCES OF BORROWING COUNTRY \$3.60M SUB-BORROWER(S) \$4.30M
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	The objective of the proposed project is to assist the country in making available affordable, reliable and adequate electricity which is used to meet the needs of rural communities in a sustainable manner. Electrification must be viewed as an important component of overall rural development efforts. The government is presently carrying out projects to provide other infrastructure (notably roads and water supply), social facilities and other rural development support. The proposed project would complement a range of these ongoing and planned efforts for rural development in the country.

	SectionB: Outline of Practices /Actions	This project has consists of two broad subsectors; Decentralised electrification (off-main grid) Subsector: This will include (a) small scale energy generation; and (b) provision of basic electricity service to households, public centres (e.g. schools, health clinics, community centres, street lighting etc.) and productive applications. EC Grid Subsector aimed at attaining adequate, affordable and reliable electricity services through the transformation of EC into empowered, competitive and financially self-sufficient organisations.
	SectionC: Results /Outcomes	Targeted 6,000 households would be grouped into market packages of sufficient critical mass for business operations. Significant cost effective application of renewable energy technologies is expected.
Keys for success (cause of failure)		Lessons learned from earlier projects. Coordination by multi-agency Project Preparation Team (PPT)
Evaluation		N/A
Applicability		Applicable to the similar regions
Reference		PID10750 (The World Bank)
Sectoral Issues		2
Cross- sectoral Issues		1; 4; 6
Instruments		3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Savai'i Renewable Energy Project
Country		882
Province		
Area		
Implementation level		1
Duration/ Year		2003 - 2003 (9months)
Contact Person/ Focal Point for Enquiry	Name	L. Bodda, Project Economist
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	Tel	+63-2-632-6186
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	E-mail	lbodda@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$400,000 2) Source(s) of funds ADB \$300,000, Cofin Amount 100,000
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Samoa government intends to improve its peoples' living standards and enable private sector development on the island of Savai'i which lags behind the capital island of Upolu in hardship and poverty. The government has requested ADB to consider assisting the power sector to provide an adequate, reliable and environmentally sustainable power supply at least cost to the island of Savai'i by developing the hydropower potential of the Sili River basin.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice This Technical Assistance establishes a least-cost power development plan for the island of Savai'i. The plan will consider the development of local renewable resources, including water resources of the Sili River basin, for providing adequate power generation on the island. 2) Outline of the practice This Technical Assistance will be implemented in two stages: a) assessment of social, institutional, and environmental aspects of the proposed power supply in Savai'i and b) development of a hydropower project suitable for financing by ADB or other external funding agencies and assessment of its long-term sustainability.

	SectionC: Results /Outcomes	The TA will assess the social, institutional, and environmental aspects of the sector, recommend development strategies, and explore the possibility of private sector participation in the sector.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		ADB Project Database, Technical Assistance Report TAR: SAM35132
Sectoral Issues		1; 2
Cross-sectoral Issues		1; 6
Instruments		3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		SIGN 3 Asia - Sustainable Investment - Global Network for Asia
Country		50; 156; 242; 356; 360; 364; 392; 410; 418; 458; 496; 524; 586; 608; 702; 144; 764; 704
Province		
Area		
Implementation level		4
Duration/ Year		2002 - 2007
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: European Commission (Asia EcoBest Programme), Governments of France and the Netherlands, TotalFinaElf (until 2002); United Nations Foundation and German Ministry of the Environment (2002-2003).
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	<ul style="list-style-type: none"> - Foreign and domestic investments are key engines to economic growth in Asia. Profitability of and returns on the investment are the major concerns for the investors. - Sustainable development issues are inherently linked with the economic development and encompass productivity enhancement, environmental protection and social fairness. These issues are more and more influencing the business decisions, and thus the investment decisions. - The risks on account of sustainable development related issues are increasingly becoming a crucial factor in the investment decisions. - Through concerted efforts, Asia can be promoted as the attractive destination for the investments, owing to the sustainability factor. - Concerted efforts and partnerships between governments, think tanks and the business community can lead to innovative solutions and actions towards mutually beneficial goals.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <p>SIGN3-Asia's central aim is to promote 'sustainable investments' and to assist in:</p> <ul style="list-style-type: none"> - Developing synergies between private capital, institutional investments and Official Development Assistance (ODA). Bringing the broad financial resource streams together is the principal of synergies which is primarily designed to boost sustainable investments in Asia. - Addressing 'sustainable development' along the 'global value chain'. Shouldering responsibilities between Governments, International Institutions, Transnational Corporation, Local Entrepreneurs will help to leapfrog development and reduce investments risks while addressing the specific needs of each sector. - Contributing to the implementation of the Millennium Declaration Targets in particular by addressing the 'basic needs of the poor' and fostering 'decoupling/resource productivity/cleaner production' - Supporting and developing synergies between existing initiatives of Asian interested parties, the UN, Development Banks, the EU, US, the OECD, Export Credit Agencies (ECAs), Association for Sustainable & Responsible Investment in Asia (ASrIA) and a coalition of progressive business. <p>2) Outline of the practice</p> <p>SIGN3-Asia, as a Regional Network that promotes Sustainable Development, brings together existing initiatives and organisations both catalysts and doers and is building synergies between Champions of sustainable development Asian Governments, Institutional Donors, Financial and Banking community, International organisations as UN agencies and initiatives (UNEP-FI, UNEP-CP), OECD, Export Credit Agencies, NGOs, SRI Agencies, ICC Asian chapters, Experts A new and creative Coalition of Progressive Business, including progressive Asian, European and US entrepreneurs and business associations which will help to promote new pro-poor and pro-environment policies Local Asian Entrepreneurs, SMEs and Social Enterprises having a Sustainability/Cleaner production strategy in place. SIGN3-Asia, acts as a knowledge hub, for a co-development, improved access to new skills, helping to shape tripartite partnerships (public-private-civil society) and better networking.</p> <p>SIGN3-Asia challenges to establish a regional platform to facilitate promotion of sustainable investment in Asia. SIGN3-Asia plays an important facilitator's role in: developing a regional framework for sustainable investment, training/capacity building and networking/ information exchange.</p> <p>SIGN3-Asia has initiated a Global Forum Policy group as a highly visible policy dialogue group will maintain direct contact with Asian and OECD governments, civil society and development institutions and build an open dialogue giving a strategic understanding of the market, securing transparency, building trust, offering new opportunities as well as reducing risks both in terms of investments and reputation. There are 3 other working groups on sustainable investment strategy, capacity building/technical assistance and standards and risk evaluation. They were also designed to be an interactive platform among the stakeholders.</p>
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		<p>3) Partners involved</p> <p>SIGN3-Asia has mobilised the support and participation of five key categories of Partners at the highest level of the decision making process. Partners represented in SIGN3-Asia will include the stakeholders needed to 'strengthening financing for development':</p> <p>a) Public authorities, public utilities and state-owned enterprises, governmental development agencies, investment and productivity boards, local governments, development assistance agencies, and other institutions in the public domain.</p> <p>b) Financing institutions and investors, development and commercial banks, investment funds and fund managers, export credit agencies, and similar financing sources/intermediaries.</p> <p>c) Private business and industry corporations, their associations/federations, chambers of commerce, and small and medium enterprises/associations in various economic sectors.</p> <p>d) Important civil society representatives, such as non-governmental organisations (NGOs) engaged in grassroots development, trade unions, legislators and parliamentarians, charity trusts/foundations, and similar development-oriented interest groups.</p> <p>e) Research and development organisations, training centres, academia, scientists and technology developers, rating agencies, policy think tanks, and others.</p>
	SectionC: Results /Outcomes	<p>SIGN3-Asia's central aim is to help bring about a paradigm change in capital flows and investments into Asian developing economies through. Its coverage is inclusive of all mechanisms by which capital transfers do take place, its core focus is on foreign direct investment (FDI) as the catalyst for change towards sustainable investment. Convergence between international trade, foreign direct investment and development aid would unlock and redirect private capital to address concerns over escalating poverty and a deteriorating environment. Since the incremental donor aid pathway appears to be eroding under the weight of global circumstances, there is a degree of urgency to harmonise activities around a trade-poverty-environment nexus to help low and middle-income countries overcome their present economic circumstances.</p>
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		<p>WSSD List of Partnerships for Sustainable Development http://www.johannesburgsummit.org/html/sustainable_dev/p2_means_implement/1809_sign3_asia.pdf Summary of the SIGN3-Asia E- Conference http://www.apo-tokyo.org/gp.new/e_conf0703/theme_paper.htm</p>
Sectoral Issues		
Cross-sectoral Issues		2; 3; 5
Instruments		2.3; 3.1; 3.2; 3.3; 3.4; 3.5; 3.8; 4.2
Provider of this information	Name	Dr. Loh Wah Sing
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Title		Solar and Wind Energy Resource Assessment (SWERA)
Country		50; 156; 524; 144
Province		
Area		
Implementation level		4
Duration/ Year		2001 - 2004 (3years)
Contact Person/ Focal Point for Enquiry	Name	Ahmed Djoghlaif, Executive Coordinator
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Contact Information	Address	
	Tel	
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Sponsor(s)		1) Amount \$9.02M 2) Source(s) of funds GEF \$6.512M, Cofin Amount \$2.508M
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	The overall aim of SWERA is to bring sustainable energy approaches to developing countries through increased investment in renewable energy projects. The database and analytical tools developed through SWERA will help governments develop realistic energy policies and programmes that are based on sound knowledge of available renewable resources.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice SWERA is creating a global archive of information and a technical review service that can help developing countries evaluate their renewable energy resources. 2) Outline of the practice It is doing so through a network of international and national agencies, who are collecting and analysing data on solar and wind energy resources. When it is completed, the global archive will include existing wind energy resource data such as: a) global ocean surface wind speeds (applicable to coastlines and small islands) b) high resolution maps from countries where previous mapping has been undertaken, and c) new wind maps in 5-7 regions.

	SectionC: Results /Outcomes	Solar and wind energy information collected through SWERA will be assembled into widely usable CD-ROMS, and incorporated into a user-friendly Geographical Information System (GIS) tool. As a final but critical part of the project, the solar or wind energy resource potential in 13 countries will be determined by national collaborating partners.
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		This project is implemented also in Latin America and Africa, such as Brazil, Cuba, El Salvador, Ethiopia, Ghana, Guatemala, Honduras, Kenya and Nicaragua.
Reference		UNEP Project: Project Document SWERA SWERA Website: http://swera.unep.net/swera/index.php
Sectoral Issues		2
Cross-sectoral Issues		5; 6
Instruments		3.2; 3.3; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
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Title		Solar Lanterns
Country		998; 999
Province		
Area		Rural Southeast Asia and the Pacific
Implementation level		4
Duration/ Year		12months/ Started in July 2003
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Contact Person(2)/ Focal Point for Enquiry	Name	
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Sponsor(s)		1) Amount \$130,000 2) Source(s) of funds AusAID, UNDP, GEF
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Rural poor excluded from educational and development opportunities by lack of access to basic power and lighting.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <ul style="list-style-type: none"> - Provide access to electric light for households in areas not serviced by mains or diesel power. - Increase effectiveness of literacy programs - Increase opportunities for development - Allow rural dwellers to participate in educational programs <p>2) Outline of the practice</p> <ul style="list-style-type: none"> - Evaluate high reliability portable solar lanterns - Supply solar lanterns to rural householders - Establish service and spares facilities in the region - Establish revolving fund for maintenance <p>3) Stakeholders involved, decision making process</p> <ul style="list-style-type: none"> - Educational authorities - Rural development authorities - Local councils - Local businesses - Residents
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes</p> <ul style="list-style-type: none"> - Increased literacy - Increased rural opportunities through education - Increased household income from home-based production - Opportunities for local business in servicing <p>2) Problems that remain to be solved</p> <ul style="list-style-type: none"> - Ensuring equipment is used and not on-sold - Ensuring equipment is serviced and repaired if required
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - facilitation of rural development - opportunities for women - enhancement of local institutions - enhancement of capacity of stakeholders/organisations - shifting priorities in society - introduction of new and affordable technology
<p>Evaluation</p>		<ul style="list-style-type: none"> - provides a low cost, high-value electrification for The poorest rural communities - significant cost benefit due to The enhancement of personal and economic development opportunities - uses renewable energy and can be sustained through a revolving fund to finance repairs and maintenance of The equipment - provides a high degree of synergy between educational and economic development, using new environmental technology - Basic criteria for eligibility to be fully transparent - low cost, high value project. Weakness is that it does not provide Basic power needs for radio or TV communications.
<p>Applicability</p>		<ul style="list-style-type: none"> - This project is applicable in most rural poor communities where education is hampered by lack of Basic facilities - The project is simple in implementation, with The major challenge being training of local service providers
<p>Reference</p>		<p>Publications available from TERI, New Delhi, India</p>
<p>Sectoral Issues</p>		<p>2</p>

Cross-sectoral Issues		4; 5; 6
Instruments		3.1; 3.2; 3.4; 3.5; 4.1
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Title		Solid Waste Management in Cebu City
Country		608
Province		
Area		Cebu
Implementation level		1
Duration/ Year		N/A
Contact Person/ Focal Point for Enquiry	Name	Managing Director
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Contact Person(2)/ Focal Point for Enquiry	Name	
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Contact Information	Address	
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Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: N/A 3) Efforts to raise/sustain funds for implementation: N/A
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	<p>Like other growing cities, the city of Cebu has problems managing its solid wastes. The major solid waste management problems of the city can be broadly categorised as follows:</p> <p>1) Weak institutional and organisational system for Solid Waste Management (SWM).</p> <p>2) Problems in the upper waste stream:</p> <ul style="list-style-type: none"> - Inefficiency in garbage collection due to lack of garbage vehicles. - No waste segregation done at the source. - No waste recycling done at the point of generation. - Too little revenue from waste collection fees. <p>3) Problems at the downstream:</p> <ul style="list-style-type: none"> - The city has a sorting facility, which has never been used due to design and operation problems. - The incinerator cannot be used due to The Clean Air Act of the Philippines which prohibits the use of incinerators. - Garbage pickers are free to enter the landfill. The cell containing the medical wastes is not enclosed with a fence. So these people are not only exposed to accidents but are also in danger of contracting diseases from hospital wastes. - The landfill has a total design capacity of 938,400 cubic meters (compacted) and a lifetime of about 6 to 7 years. It is now 4 years in operation and is nearing its life. Added to this is the difficulty in acquiring land for a new landfill. - Lack of soil covering made the waste disposal area inaccessible to the collection trucks. Consequently, the waste is dumped outside of the dumping area making the landfill more unsanitary.

	<ul style="list-style-type: none"> - The leachate is discharged directly to the sea without treatment. The existing leachate pond only functions as a storage pond, not as a treatment facility. - Absence of a landfilling plan has made it unsanitary, its waste disposal area has become inaccessible, and the leachate has overflowed to the sea. <p>The main problem with medical waste management is the failure of the city to clarify the designated agency responsible for the collection, transportation and disposal of medical wastes. Hospitals do not acknowledge at present that it is their responsibility to properly manage their wastes.</p>
SectionB: Outline of Practices /Actions	<p>Considering the magnitude of the problems that the city is facing, the city has taken steps to address its problems.</p> <ul style="list-style-type: none"> - Capacity Building: Aware that project sustainability depends on strong and improved executing body and institutional system, a four-man team from the office of the Department Public Services (DPS) underwent a 3-week training on Solid Waste Management in Hoofddorp Haarlemmermeer, Netherlands. - Public Information, Education and Communication: The city has tapped the assistance of NGOs, such as the Lihok Filipina that has undertaken a community-based solid waste management project in 7 city barangays. - Waste Segregation at Source: The city's DPS, in coordination with NGOs, conducted waste segregation projects in several barangays of the city. - Improvement of Waste Separation and Recycling at Disposal Area: Steps to improve the waste separation and materials recovery area at the landfill has been undertaken, such as redesigning the empty storage facility. - Medical Waste Management: Hospital and clinic wastes are segregated into infectious and non-infectious wastes during storage. The city is presently gathering information from all hospitals in the city, needed in establishing system of collection for infectious waste. For disposal, a separate area in the landfill has been designated and fenced as the area for medical wastes. - Industrial Waste Treatment: The common treatment facility for liquid wastes particularly electroplating wastes is situated adjacent to the city's sanitary landfill. The waste treatment facility handles liquid electroplating wastes from private industrial establishments operating. - Composting and Recycling: The city has been practicing waste segregation and organic farming. Each day a personnel from the City Agriculture Department collects at least one ton of biodegradable garbage from the Carbon market. The garbage materials are dumped into the composting facility, which makes use of the technology of trichoderma. The compost facility seeks to convert biodegradable garbage into organic fertiliser. The project has the goal of encouraging the practice of waste segregation as well as recycling among Cebuanos. One ton of garbage produces an output of 350 kilos of organic fertiliser, which will be utilised by dermofarm located at the nursery. - Energy Conservation: The Committee on Energy, Transportation, Communication and Other Utilities has begun negotiations with the University of San Carlos-affiliated Non-conventional Energy Centre for the construction of a 50 cubic meter biogas digester. - Efficient Garbage Collection System: The city has 63 garbage-collecting vehicles. In addition to this, 3 large private trucks supplement the city's public collection. Moreover, the city hopes to acquire trash compactors and high-pressure washers to be utilised in the sanitary landfill through the assistance of its sister city, Haarlemmermeer of the Netherlands.

	SectionC: Results /Outcomes	<p>With the help of, among others, its sister city of Haarlemmermeer of the Netherlands, Cebu has undertaken institutional capacity building, increased the public information on the matter, improved the working and health conditions of the waste pickers, and reached a better management of medical waste.</p> <p>Furthermore, the city is currently undertaking composting. Through the institutionalisation of the compost/organic fertiliser facility at the city nursery, the city has been practicing waste segregation and organic farming.</p>
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Conduct of waste minimisation activities, such as recycling and composting. - Conduct of medical waste management. - Management of a good landfill system.
Evaluation		<p>The city needs to realise that it is far more important to focus all efforts in the upper waste stream. Reducing the amount of wastes generated at the source will spell a difference since this will also reduce the waste loads at the disposal area. Large waste recycling centres such as those developed in other countries may not be applicable for the city because of the city's relatively low figures in the percentage of recyclable materials in wastes, however, other waste minimisation activities such as composting and small-scale recycling could be good for Cebu City. A biogas digester will have the added benefit of energy conservation.</p> <p>Waste segregation is another worthy activity. This has not been widely practiced in the household level due to the insufficiency of the city's information campaign to the community. On the other hand, this activity is quite popular in the hospitals as wastes there, are segregated and properly labelled. However, the effort may be considered useless after all because the segregated wastes are collectively collected in one truck, all combining what is inside. This needs special attention requiring concerted efforts from the city, hospital management and the DENR.</p>
Applicability		Composting and recycling activities are practical and inexpensive and the technology involved is simple and easy. These activities can be replicated in developing countries especially in the Asian region because of the similarity of the waste composition and socio-economic structure of these countries.
Reference		Reports provided by local governments attending the First Thematic Seminar on Solid Waste Management (19-20 September 2002).
Sectoral Issues		3
Cross-sectoral Issues		1; 4; 5; 6
Instruments		3.2; 3.3; 3.6; 4.2
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Title		Southern Provinces Rural Electrification Project
Country		418
Province		
Area		
Implementation level		2
Duration/ Year		1998 - 2004
Contact Person/ Focal Point for Enquiry	Name	The World Bank Info Shop
	Affiliation	The World Bank
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$37M 2) Sources of funds GEF & ESMAP :\$1M; EdL: balance
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The Project's main development objectives are: (a) to expand access to electricity in rural areas in 7 southern provinces of Laos, through grid extension and off-grid electrification, and (b) to strengthen EdL's capacity to plan and implement electrification investments and to manage its operations on a commercial basis.
	SectionB: Outline of Practices /Actions	The project will consist of the following three components: a) Distribution Extension Component (US\$ 31.7 million). Extension of the national electricity grid to about 50,000 households; b) Off-Grid Rural Electrification Component. Demonstration projects for off-grid electrification in about 46 rural communities will be executed. About 20 diesel mini-grids, 6 micro-hydro mini-grids and 20 solar battery charging stations will be financed; c) Institution Building Component. Technical assistance and related equipment to EdL and the Ministry of Industry and Handicrafts (MIH).
	SectionC: Results /Outcomes	

Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		Applicable to other less developed regions
Reference		PID6033 (The World Bank)
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		2.4; 3.4; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		Strengthening the Live Reef Fish Trade Management in PDMCs
Country		998
Province		
Area		
Implementation level		3
Duration/ Year		1 year
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: \$215,000 2) Source of funds: ADB Technical Assistance Special Fund (TASF)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	<p>There are proven approaches for reorienting the Live Reef Fish Trade (LRFT) so that it can be conducted in an environmentally sustainable manner with strong potential for poverty reduction. It is recognised that the live reef fishery, while being a potential source of both benefits and problems and demanding a high degree of awareness and preparedness, is of more significance to some PDMCs and territories than others. However, due to the currently high level of concern that the destructive fishing method will spread wider, action should be taken using an approach to benefits reef fishery management activities in general across the region. Regional cooperation is therefore the key, and can be better sustained if handled through regional organisations such as Secretariat of the Pacific Community (SPC) in cooperation with South Pacific Regional Environment Programme (SPREP) and the Forum Secretariats.</p> <p>The TA will help the PDMCs establish policies and management plans for the fisheries, and likewise assist in strengthening the institutional and technical capacities in SPC, and thereafter, in the PDMCs.</p>

	SectionB: Outline of Practices /Actions	<p>1) Objective of the practice</p> <p>The objectives of the TA aimed to help the PDMCs establish sound policies, strategies, and management plans for the LRFT, and to strengthen regional PDMC cooperation on sustainable management of live reef fish resources.</p> <p>A model management plan will be prepared. Given the diversity of the traditional authority systems, the communal ownership, and the traditional system of management, more detailed strategies and management plans for high priority PDMCs will be prepared.</p> <p>The TA will: (i) strengthen SPC to enable it to provide technical and policy advice to PDMC governments on sustainable management of the LRFT; (ii) train field staff and middle management government staff, and strengthen regional cooperation; and (iii) engage local communities in LRFT management planning and development as a sustainable local business opportunity.</p> <p>2) Outline of the practice</p> <p>So far, the TA has accomplished the following:</p> <ul style="list-style-type: none"> - Field assessments and baseline studies for Kiribati, Papua New Guinea, Fiji, Vanuatu, Marshall Islands, and Tonga had been carried out with active participation of local fisheries officials. - Production of awareness materials and best practice manual being prepared in close collaboration with IMA. Posters and identification cards had been printed. - Regional workshop to discuss specific management plan was held in Suva in July 2002. - Publication on live reef fish industry being prepared. <p>3) Stakeholders involved, decision making process</p> <p>Concerned Government Officials</p>
	SectionC: Results /Outcomes	N/A
Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		N/A
Sectoral Issues		5
Cross-sectoral Issues		1; 3; 4
Instruments		3.2; 3.7; 3.8
Provider of this information	Name	Thomas Gloerfelt-Tarp
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Title		Sundarbans Biodiversity Conservation Project (SBCP)
Country		50
Province		
Area		Sundarbans Reserve Forest, Khulna District
Implementation level		1
Duration/ Year		August 1999 - December 2006
Contact Person/ Focal Point for Enquiry	Name	Dr. Saiful Islam, Project Director
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: US\$77.7 million 2) Source(s) of funds: Asian Development Bank (\$33.7 million), Global Environment Facility (\$12.2 million), Government of the Netherlands (\$3.3 million), the Government of Bangladesh (\$16.1 million), NGOs (\$1.9 million), and Beneficiaries (\$3.7 million)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	The Sundarbans Reserved Forest (SRF) is the world's largest remaining contiguous mangrove area. It is increasingly used by commercial wood processors, rural communities who live mainly in the 0-20 km zone around the border, artisanal fisherfolk, and fishing vessels. Biological resources are being depleted.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice To develop a sustainable management and biodiversity conservation system for all SRF resources on the basis of environmentally sound plans and the participation of all key stakeholders.</p> <p>2) Outline of the practice The project was to establish a participatory system for conservation and sustainable management of the SRF as a multidimensional resource area. An integrated approach will be taken to:</p> <ul style="list-style-type: none"> - improve biodiversity conservation and forest management - improve institutional capacity to manage the SRF - reduce the poverty level of about 3.5 million people living in the impact zone by expanding economic opportunities, improving social infrastructure, improving organisation for resource users, and facilitating stakeholder participation in resource management - adopt a supportive set of policies, especially for charging economic prices for access to SRF resources. <p>3) Stakeholders involved, decision making process Forest Department within the Ministry of Environment and Forests, local communities, and NGOs</p>
	SectionC: Results /Outcomes	The project has encountered a number of difficulties in implementation, such as lack of ownership and low level of commitment to objectives by the Forest Department, lack of coordination between the Forest Department and the Technical Advisory Group (consultants) and lack of ability of the project office in managing project account. The Project was suspended in September 2003 and currently reformulated by the Forest Department.
Keys for success (cause of failure)		Difficulties in changing the traditional approach of a government agency.
Evaluation		Evaluation is yet to be done.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		1; 5
Cross-sectoral Issues		1; 4; 7
Instruments		3.1; 3.2; 3.3; 3.4; 3.8
Provider of this information	Name	Takashi Matsuo
	Organisation	
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	Fax	
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Title		Surabaya (Indonesia): Comprehensive Kampung Improvement as Model of Community Participation
Country		360
Province		
Area		Surabaya
Implementation level		1
Duration/ Year		1998 - 2002
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Sponsor(s)		1) Amount: N/A 2) Source(s) of funds: N/A
Actors involved		3; 5

Description of the Practice	SectionA: Background & Objectives	<p>Kampung is the native name for informal and self-planned (unplanned) settlements that constitute a large share of urban settlements in Indonesian cities. Kampung are not slums but are usually ill-served and low-income housing areas with regard to sewerage systems, garbage collection and other public services.</p> <p>The environmental problems faced by low-income urban settlement are complex in many of the world's large cities. These urban poor residents of the city are usually disadvantaged groups in terms of income and public service facilities. Efforts to improve living environments in such low-income urban settlements are often hampered by lack of financial resources, legality questions over land ownership, ineffective planning, over reliance on top-down approaches, and political will.</p> <p>The basic goal of the Kampung Improvement Programme (KIP) in Surabaya was to provide a basic level of service and to improve physical infrastructure through community involvement. About 63% of population in Surabaya was estimated to live in Kampung in 1993 although it constituted only 7% of city area in terms of physical space.</p> <p>Although KIP constituted one fifth of the total city development budget, it served more than 60% of population, mostly low-income group. From 1984-90 KIP achievement included:</p> <ul style="list-style-type: none"> - Improving 1.2 million people's living environment spread over 3,008 ha - Upgrading 220 km of footpaths and roads. Constructing 93 km drains and culverts - Laying 56,000 meters of water pipes. Building 86 public bathing, washing and toilet facilities - Significant improving solid waste collection, and - Constructing elementary schools and public health centres <p>Surabaya, the second largest city in Indonesia with population of 2.5 million, sought to make a more comprehensive programme for Kampung in the mid-90s, including physical infrastructure and non-physical aspects, such as improving social economic conditions in Kampung or community development in general. A new approach was needed as the development gap between Kampung and other parts of the city was large and growing, social-economic dynamics inside these Kampung needed to be strengthened and there was a realisation that the potential to do more existed in the communities. Accordingly, the Comprehensive Kampung Improvement Programme (C-KIP) was launched and implemented from 1998-2002 in 27 Surabayan Kampung.</p> <p>C-KIP Objectives included:</p> <ul style="list-style-type: none"> - To direct community to be aware of Kampung's problem and potential - To encourage community to identify and solve their priority of needs and obstacles - To encourage community to construct self planning, implementation and evaluation of the development of their living environment - To improve the community competency to discover, develop and mobilise any resources nearby - To improve the social-economic capacity of the community.
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	<p>SectionB: Outline of Practices /Actions</p>	<p>The first step in the implementation of C-KIP is Community Self-Survey that maps the problems and opportunities that exist in the community. This survey, a quantitative indicator based mapping, is the basis for substantial activity planning. The community is fully involved in this survey and problems and opportunities that exist in the community, from the view of the community, is identified and analysed. This mapping tool covers five aspects:</p> <ul style="list-style-type: none"> - Housing conditions - Availability and quality of services - Availability and quality of infrastructure - Community status - Supported aspect (organisation, participation, etc.). <p>Based on community-recognised priority of the problems and potentials, the community meets, in the form of community workshop, with experts and city government to decide what they want to do. This could include physical infrastructure planning such as pathway development, solid waste management, waste water improvement, public toilets, etc.; as well as non-physical aspects such as development of co-operatives, micro-credit for small business, skill development training, education, family loans, etc.</p> <p>Next, Community Organisations are formed, which are responsible for management of the funds, programme implementation and overall supervision. Four types of Community Organisations are identified in C-KIP process, each responsible for decision making, finance management, implementation and supervising.</p> <ul style="list-style-type: none"> - Decision making: Local Kampung Development Board (KDB) is a legal entity responsible for overall management of the process including bridging between the programme establishing community and fund providing city government or bank. It also plays a role in disseminating technology information, mobilising public, etc. Members of the board are elected from bottom-up principles from local community stakeholders. - Finance managing: Multi Economic-based Cooperation (MEC) is a self-sustaining local co-operative mechanism that manages the fund, provides micro-credit, etc. to the community groups. The responsibility of paying micro-credit lies on each self-help group rather than individuals. This avoids the problem of 'free rider' by some individuals because members of the group carefully select its members from their trusted individuals. Representative of MEC, using interview method, examines and identifies their capacity to obtain loans or in some situations, the MEC may recommend a member(s) with less experience to follow the group training appropriate to their interest before providing loan. - Implementation: Community Self-help Group (CSG) consists of 5-10 households with similar interests that represent the need and demands of community members in a collective way at smallest neighbourhood unit level (RTs). The tasks of the group are to select trusted members, establish and arrange programme and priority, comply with the programme scheme, and conduct the activity. Some of CSG may also be established to conduct physical programme that is funded by grants and community self-fund. - Supervising: Supervision Council (SC) is responsible for monitoring and supervising all KDB activities. The member of SC is the heads of RTs, the heads of RWs (higher neighbourhood unit level) and LKMD (Sub-district Community Defence Board).
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	SectionC: Results /Outcomes	<p>C-KIP has made significant achievements and the programme has been sustainable so far. The overall assessment is difficult to be shown with quantitative indicators, as its sustainability in long term is more important. However, before C-KIP was launched, there was no such infrastructure and opportunities in Kampung, and the programme has provided visible assistance in improving the living environment and opportunities in the community. Therefore, the amount of activities that communities themselves carried out itself is achievement. Communities are solving their own problems on their own and these are significant achievements. The following preliminary results have been obtained thus far:</p> <ul style="list-style-type: none"> - Establishment of local institutions such as 27 Kampung Foundations, 27 Co-operatives and more than 500 Community Self Help Action Groups - Improving physical conditions, social economy and quality of life of 27 Kampung.
Keys for success (cause of failure)		<p>C-KIP is the ongoing process where increasingly more Kampung are participating. This programme is at implementation stage continuously. The important lesson learned from this programme and KIP is that the community-based mobilisation of resources and implementation activities is very effective while dealing with low-income group problems. The sense of ownership is very important for its sustainability and better management, which comes through community empowerment. The establishment of independent institutions in communities is one of the core important aspects. KIP has helped to make city 'inclusive', responsible, and credible as a result of community participation, activities and sense of group belongingness. This experience has opened up new avenues for communities and provided confidence that they can achieve additional objectives in the future.</p> <p>However, any programme is not without problems, at least at the initial stage. The major problems faced during the implementation were:</p> <ul style="list-style-type: none"> - Unwillingness of local government to allow local people to manage fund - Communities members are not always the best people for the job - Hesitant to take responsibility on parts of local community - Difficult for local community to make decisions on best course of action <p>However, these problems were sorted out once the programme started and activities took on momentum through series of workshops, meetings and confidence building measures between government and the community members.</p>
Evaluation		<p>The case study of C-KIP provides an innovative model for community participation with tremendous local achievement. C-KIP in essence, gives a perspective to communities on how to organise themselves and solve their problems on their own. However, in order for them to realise this, the residents must own the land, which is not always the case. Usually, the government may hesitate to run such a programme, particularly in terms of infrastructure development, with communities that are on illegal land. In the KIP program of Jakarta, the first move was made in transferring of land rights to dwellers; only then could the government work with communities in improving their living environment through KIP.</p>
Applicability		<p>The programme has potential application to other cities in Indonesia and elsewhere where un-serviced and unplanned compact low-lying settlement problems exist. The approach used in this programme to deal with issues facing low-income groups might be useful in solving similar problems being faced in many Asian urban areas.</p> <p>In any case, C-KIP is a community based development effort where communities are empowered in decision making and identifying their own priorities and problems. The model of community-involvement is very simple and is likely to work well in other cities in and out of this region. The model itself is very much refined as it stems out from successful KIP effort. However, small modifications may be necessary for different places. This is also a good model of how academic institutions can play role in complex practical urban issues and collaborate with</p>

		<p>local governments, which require technical assistance and new ideas.</p> <p>The replicable elements in this experience are:</p> <ul style="list-style-type: none"> - Model of community participation and empowerment through community organisations - Model of government and community collaboration - System for financial mechanism including micro-credit scheme and mobilisation of local resources
Reference		Dhakar, Dr. Shobhakar (2002): 'Surabaya (Indonesia) - Comprehensive Kampung Improvement as Model of Community Participation.' In Kitakyushu Initiative for a Clean Environment: Successful and Transferable Practices. Urban Environmental Management Project, the Institute for Global Environmental Strategies.
Sectoral Issues		3
Cross-sectoral Issues		1; 4
Instruments		3.1; 3.4; 3.8
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Title		Sustainable Development of Utility-Scale Wind Power Production, Phase I (Commercialisation of Wind Power Production in Pakistan)
Country		586
Province		
Area		
Implementation level		2
Duration/ Year		2004 - (5years) (Phase I : 2years)
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Sponsor(s)		1) Amount \$4.195M 2) Source(s) of funds GEF Grant \$3.475M, Cofin Amount \$0.72M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	In recent decades, the supply of electricity to less developed areas has been accorded high priority in Pakistan. Wind power is an option that merits serious consideration in Pakistan for this purpose.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice The overall project objective is to facilitate a low CO2 path for development through establishing and demonstrating commercial viability of a package for widespread harnessing wind energy in remote areas of Pakistan. 2) Outline of the practice Above objective will be done through a) identifying key barriers and a package to overcome significant barriers to future investment in this resource and b) scaling up the operations and demonstrations package of the technology to a critical mass to attract potential entrepreneurs.

	SectionC: Results /Outcomes	As the results of PDFB activities, site wind data was collected for 18month and the following project reports were completed. - Identification of Existing Barriers to Wind Energy - Identification of Policy Framework and Potential Sponsors for Wind Power - Baseline Load Demand Assessment - Financial and Economic Evaluation - Environmental Impact Assessment - Development of Technical Specifications - Assessment of the Wind Measurements Undertaken in Pasni, Pakistan
Keys for success (cause of failure)		In the aftermath of 11 September, the candidate site Pasni was used as an air-based for the US forces in the war against Afghanistan. This resulted in delay in wind data monitoring and overall project schedule.
Evaluation		N/A. This project was just approved.
Applicability		This project is replicable to neighbouring coastal areas.
Reference		GEF Project List (PIMS 624)
Sectoral Issues		2
Cross-sectoral Issues		2; 6
Instruments		2.4; 3.4; 3.7; 3.8; 4.1; 4.2
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Title		Sustainable Rural Electrification
Country		64
Province		
Area		
Implementation level		2
Duration/ Year		1997 -
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Sponsor(s)		1) Amount \$12.90M 2) Sources of funds ADB \$10M Borrower \$2.9M
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	The objectives of the Project are: to provide opportunity for cash-generating business, job creation adequate education, and health services to rural people in Bhutan through electrification by indigenously generated hydropower and solar panels.
	SectionB: Outline of Practices /Actions	The scope of the Project includes: Part A: Rural Electrification by 33 kV and 11 kV distribution system; Part B: Remote rural electrification by solar panels for schools, hospitals, and other local community facilities; and Part C: Small-scale pilot Supervisory Control and Data Acquisition System (SCADA)
	SectionC: Results /Outcomes	

Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		ADB Project Profile Document BHU29242-01
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		System Efficiency Improvement, Equitisation and Renewable (SEIERP)
Country		704
Province		
Area		
Implementation level		2
Duration/ Year		2002 - 2007
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Sponsor(s)		1) Amount \$352.4M 2) Sources of funds IDA \$225.0M GEF \$4.5M Borrower \$112.9M
Actors involved		1; 2; 4
Description of the Practice	SectionA: Background & Objectives	The overall objectives of the proposed Project is to contribute to the Government's poverty alleviation programme in the rural areas and to improve the overall efficiency of power system services in the country. The proposed Project's main development objectives are to (a) improve overall system efficiency and reduce investment needs, (b) enhance energy access for the poor in remote areas and (c) sustain reform of the power sector.

	SectionB: Outline of Practices /Actions	<p>Component 1: System Efficiency improvement:</p> <p>i. Transmission system efficiency improvement.</p> <p>ii. Energy efficiency programs.</p> <p>Component 2: Improving rural access:</p> <p>i. Upgrading the 110 sub-transmission and MV.</p> <p>ii. Rehabilitation of existing small hydro plants.</p> <p>Component 3: Sector reform and institutional development</p> <p>i. Improvement of information system management.</p> <p>ii. Creation of District or commune level Joint-Stock Distribution Companies.</p> <p>iii. Strengthening regulations, planning and implementation capacity for Renewable Energy Projects.</p>
	SectionC: Results /Outcomes	
Keys for success (cause of failure)		Lessons learned from past projects and operations.
Evaluation		N/A, on-going project
Applicability		Applicable to other projects.
Reference		PID10127 (The World Bank)
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		1.1; 3.7; 4.1; 4.2
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Title		System-wide Genetic Resources Programme (SGRP)
Country		999
Province		
Area		
Implementation level		4
Duration/ Year		1997 - ongoing
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	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: Governments of Switzerland, Australia, Japan, the Netherlands and Sweden, the European Union, World Bank, donor contributions to CGIAR Centres
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	<p>Knowledge of the diversity of plants that contribute to food and agriculture is critical to our ability to use this diversity in the fight against hunger, poverty and environmental degradation. Generations of farmers have made use of the natural diversity in the plants they grew to select and improve their crops. Today, plant breeders have joined in this task; they also depend on diversity in their efforts to sustain food security, improve livelihoods and protect the environment.</p> <p>Sharing knowledge and information on genetic resources is essential to conserving and using agricultural biodiversity. Over the past three decades, the 16 Centres of the Consultative Group on International Agricultural Research (CGIAR) have developed vast reserves of data on genetic resources in agriculture, forestry and fisheries. Under the System-wide Genetic Resources Programme (SGRP), these Centres have been working in partnership to maximise collaboration, particularly in policy, public awareness, information, knowledge and technology, and capacity building related to genetic resources.</p>

		As part of the SGRP activities, the System-wide Information Network on Genetic Resources (SINGER) was established in 1997 to serve as a window onto the collections held by the CGIAR. SINGER links the independent Centre information systems and allows them to be searched simultaneously. Together, these collections comprise over half a million samples of crop, forage and tree germplasm for major importance for food and agriculture.
	SectionB: Outline of Practices /Actions	SIGNER allows 'one-stop' public access through the internet and on CD-ROM to detailed information on individual samples in the collections held by the CGIAR Centres. It offers specialised and innovative data searching and retrieval features that integrate multiple querying with mapping (global, regional, country), statistical (mean, variance and standard deviation) and graphical (scatter and distribution plots) functions. More specifically, the users can search the data by crop, taxonomy, geography, and acquisition or transfer - or can focus on the collections in one Centre or of one crop and query data on the characteristics and performance of the samples. SINGER also offers users the opportunity to download data for further analysis. SINGER registers an average of 10,000 searches a month from researchers, plant breeders, farmers and conservers.
	SectionC: Results /Outcomes	SIGNER encourages networking both on a crop and regional basis and aims to contribute to the FAO World Information and Early Warning Systems (WIEWS) on Plant Genetic Resources for Food and Agriculture and thereby assist in the development of a global information system for plant genetic resources conservation and use.
Keys for success (cause of failure)		N/A
Evaluation		SIGNER's impact on the lives of resource-poor farmers is essentially indirect and therefore difficult to assess. However, we take it as axiomatic that genetic diversity can be managed and used to improve the food security and livelihoods of the poorest people, and SIGNER makes a vital contribution to that effort.
Applicability		SIGNER is open to all stakeholders around the world.
Reference		SIGNER website: http://singer.cgiar.org/
Sectoral Issues		3
Cross-sectoral Issues		3; 4; 5
Instruments		3.2; 3.3; 3.4
Provider of this information	Name	APFED Secretariat
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Title		TA 3548-PRC: Preparing National Strategies for Soil and Water Conservation
Country		156
Province		
Area		
Implementation level		2
Duration/ Year		December 2000 - May 2002
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Sponsor(s)		1) Amount: \$800,0002 2) Source of funds: ADB
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	In the 1998 floods, the worst for 50 years in the People's Republic of China (PRC), massive physical damage (over \$20 billion) and extensive loss of life occurred. Increasing land degradation, including wind and water erosion, chemical and physical soil deterioration, mostly as a result of poor land use decisions over a long period of time, was largely responsible for creating the preconditions for such extensive devastation. Land degradation affects most provinces and annual soil loss is estimated at 5 billion tons. Water tables are declining in many areas and desertification is expanding in the drier more fragile areas of the west and central regions. Overstocking of grasslands has increased the spread of deserts in many areas and reduced biodiversity. Increasing sand and dust storms operating from degraded dry land areas are adversely affecting the quality of life in the major eastern cities and are a global problem. In the PRC, where per-capita arable land is only 0.11 hectares, shrinking farm areas can encourage non-viable farming practices. Land degradation is related to poverty; almost 90% of the rural poor live on moderately to severely degraded land.

		<p>The Government has been implementing soil and water conservation programmes for the past 50 years, and since the 1998 floods, the level of expenditure has significantly increased. There are also many sector plans and programmes administered by different Government agencies and committees to various targets - but these are not well coordinated, feedback mechanisms are weak, and overlaps in jurisdictions are common. As a result the level of efficiency in achieving the desired impact of public expenditures is low. An extensive body of legislation and regulation exists but this does not clearly or comprehensively provide for an effective framework to address soil and water conservation. Running through the relevant legislation is an emphasis on production over conservation. Here are also poor linkages between the legislation and the associated statutory instruments, and contradictions between policy objectives and legislation is evident. Various terms relating to sustainable land use often appear but without clear definitions or consistent and nationally agreed indicators or data. Overall, water and soil conservation policy places an emphasis on 'soil erosion' and 'desertification' with less mention of other principal forms of land degradation, i.e., salinity, acidification, vegetable decline, or nutrient decline. Moreover, various policies call for a broadening of the national policy framework for water and soil conservation, including the introduction of an effective cooperative, multi-sector approach, and of the need to improve the links between land tenure, poverty, and food security.</p>
	<p>SectionB: Outline of Practices /Actions</p>	<p>The objective was to address soil and water conservation in a comprehensive manner (not limited to existing institutional boundaries) and map out a strategic approach to control all forms of land degradation in the country.</p> <p>The extent and severity of land degradation was to be assessed as well as the lessons from past projects, appropriate international experience and models, a pipeline of potential projects for future investment and to design a progress monitoring and evaluation system. The objective and scope were far-reaching and highly worthwhile in the context of the severe environmental problems faced by the country, of which land degradation is probably the most fundamental in the context of rural poverty and the most difficult to address.</p>
	<p>SectionC: Results /Outcomes</p>	<p>The reports drew attention to the main barriers preventing the development of a sustainable countrywide programme to address land degradation. A strategic planning framework was recommended to address these issues covering policies, legislation, institutions, technologies, processes/approaches and methods, costs of benefits, monitoring and evaluation through a consistent set of indicators, financial requirements and specific projects and programmes for soil and water conservation. Three workshops were conducted to discuss aspects of the study, exchange views and obtain feedback from experienced resource persons. A concluding national workshop in June in Beijing presented the strategy framework. High-level Government endorsement was given for the main findings and recommendations at the national workshop. The principal outcome of the TA was the preparation of a National Strategy Plan for Soil and Water Conservation.</p> <p>A major output of the TA resulted from a detailed examination of the water and soil conservation legislative regime and eight associated primary environmental laws including the Law on Desertification Prevention and Control 2001, the Agriculture Law 1993, the Grassland Law 1985, Environmental Protection Law 1989, the Land Administration Law 1998, the Water Law 1988, and the Prevention and Control of Water Pollution Law 1996. Two alternative approaches were provided from this analysis. In the short term, an option for minimal change to the existing legislative regime was proposed, including a minor reform of soil conservation policy, definitions and concepts, minimal change to some related laws, and some reforms of institutional and human resources. However, overlaps and duplication remain. Alternatively, for the medium to longer term, substantial reform of existing laws, policy, institutional, and sectoral reform was proposed.</p>
<p>Keys for success (cause of failure)</p>		<p>Soil and Water Conservation Center (SWCMC)'s enhanced capability and commitment to implement the TA.</p>

Evaluation		The TA provided valuable insights into the major barriers to be overcome in developing a national strategy to address land degradation. These insights have been incorporated into a new multi-phase country-programming framework between the PRC and the Global Environment Facility (GEF). The initial focus of this new partnership that was endorsed in mid-October 2002 by the GEF Council will be an ADB supported project to address the enabling conditions for a comprehensive approach to land degradation in dry land ecosystems.
Applicability		Worth replicating
Reference		Consultants' reports
Sectoral Issues		1
Cross-sectoral Issues		7
Instruments		1.1; 3.8; 4.2
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Title		TA 3874 IC: Environmental Management and Renewable Energy Development
Country		4
Province		
Area		
Implementation level		2
Duration/ Year		May 2002 - May 2004
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	E-mail	
Sponsor(s)		1) Amount: \$750,000 2) Source(s) of funds: ADB
Actors involved		1; 5
Description of the Practice	SectionA: Background & Objectives	Afghanistan is an extremely poor landlocked country. Economic considerations have played second fiddle to political and military upheavals during the 2 decades of war.
	SectionB: Outline of Practices /Actions	The project is targeted to the poor in rural areas. Outline of the project Renewables for improved livelihood and enhancement of quality of life. Examples include: - Increased agricultural productivity by introduction of new technology - Increased income by using local resources that had not been used - Improved local environment by enhancing public awareness - Utilised natural resources more effectively by introducing new rules
	SectionC: Results /Outcomes	The project is ongoing. Some of the results include: - Multiple effects in different aspects simultaneously - Desired results with minimal time, expenditure of resources - Integrated elements of sustainable development - Improved capacity of institutions/organisations/relevant stakeholders.

Keys for success (cause of failure)		<p>Examples are:</p> <ul style="list-style-type: none"> - Enhancement of collaboration among the different stakeholders and/or introduction/improvement of consultative mechanisms - Facilitation of gender equity, social inclusion, economic and social mobility - Voluntary participation of local people - Use of knowledge and/or techniques that used to be utilised, including traditional/indigenous ones - Change in the way of using local resources (e.g., make use of available local resources not used sustainably before) - Enhancement of capacity of stakeholders/organisations - Shifting priorities in society - Introduction of economic policy instruments (e.g., introduction of new tax systems, introduction of effective cost recovery system) - Introduction of new and affordable technology - Combination of different policy tools
Evaluation		N/A; the project is in progress.
Applicability		Applicable to many of the developing countries.
Reference		N/A
Sectoral Issues		2
Cross-sectoral Issues		4; 6
Instruments		3.1; 3.2; 3.4; 4.1
Provider of this information	Name	Mr. Ali M. Azimi
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Title		TA 6001-REG: Technical Assistance for Regional Consultations for the Third World Water Forum
Country		999
Province		
Area		
Implementation level		4
Duration/ Year		June 2002 - March 2003
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Sponsor(s)		1) Amount: \$1.65 million 2) Source(s) of funds: ADB (\$1.0 million); Japan/Third Water Forum (\$0.65 million)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	<p>ADB's water policy was approved in January 2001. The policy was aimed to promote regional and subregional cooperation by assisting water assessments and exchange of data, enhancing awareness and understanding of water sector issues and needs of each country, and supporting water partnerships in its developing member countries (DMCs). The policy also emphasised the need to promote bilateral and multilateral cooperation and understanding in the water sector through international and regional agreements, in coordination with other international and multilateral agencies and other development partners.</p> <p>The critical state of water resources and the need to improve water services in the Asia and the Pacific region are set out in ADB's water policy paper. Freshwater endowments in Asia are among the world's lowest. South Asia, home to over a sixth of the world's population, has the lowest level of water resources per capita. Between 1950 and 1995, per capita availability of freshwater dropped by almost 70 percent in South and Central Asia, by about 60 per cent in North Asia, and by about 55 percent in Southeast Asia. One in three Asians does not have access to safe drinking water source within 200 meters of the home, and one in two Asians does not have access to adequate sanitation. Water scarcity impacts on health and the conditions and quality of life. The poor were particularly vulnerable to water scarcity, pollution, and flooding.</p> <p>The DMCs and the international community are becoming increasingly aware of the looming</p>

		<p>water crisis, and generally agree on the principles of integrated water resources management (IWRM), which recognises water as a basic need to sustain life. Several international conferences have promoted the concept of IWRM. To increase global awareness, the World Water Council (WWC) was established in 1996 as an international think tank on water.</p> <p>The WWC has taken on the responsibility to convene regular world water forums (WWFs) to:</p> <ul style="list-style-type: none"> (i) increase global awareness of water issues, (ii) debate solutions to water problems by the global community, and (iii) formulate a water vision for the 21st century. <p>The WWFs are being held every three years around World Water Day on 22 March. The Government of Japan, the host of the Third World Water Forum requested ADB to assist in the organisation of a forum scheduled on 16-23 March 2003 in Kyoto Japan. In response, ADB approved RETA 6001 on Regional Consultations for the Third World Water Forum, under which a series of regional consultations in the Asian and Pacific Region and the corresponding sessions in Kyoto were organised on five key themes: (i) water an poverty, (ii) water and cities, (iii) water and flood control, (iv) water and small islands, and (v) regional cooperation in shared water resources management: case for Aral Sea Basin. ADB was assigned to manage the fifth theme.</p>
	<p>SectionB: Outline of Practices /Actions</p>	<p>The TA was aimed to promote integrated water resources management (IWRM), improve water services to the poor, and subregional water cooperation by supporting the preparation and organisation of the third World Water Forum (WWF). The scope of the TA included four thematic areas (i) water and poverty, (ii) water and small island countries, (iii) regional cooperation for shared water resources, and (iv) flood management. A fifth theme, water in cities, will be prepared through a parallel activity. ADB would promote the theme of water and poverty as a central theme of the third WWF. The report on water and poverty is expected to focus global attention on the need for investments that meet poor people's needs. The focus would be on water needs from a community perspective, including water supply, sanitation, hygiene, water quality, water for domestic an agricultural uses, watersheds, and flood protection.</p>
	<p>SectionC: Results /Outcomes</p>	<p>The session of Regional Cooperation in Shared Water Resources Management in Aral Sea Basin was jointly convened by ADB, Interstate Committee for Water Coordination (ICWC) and the United Nations University (UNU) on 18 March 2003 in Kyoto. Over 100 participants representing high-level government officials of five Central Asian Republics and Afghanistan, international donors renowned international experts, NGOs and Japan's civil and academic society took part in the session. Also, major donor organisations active in Central Asia, including the World Bank and USAID participated in the session.</p> <p>Lively discussions took place among the participants on key aspects of water resources management, environment, and socio-economic development of Aral Sea Basin. All riparian states re-iterated their commitments to more effective regional cooperation in managing their shared water resources, and to improving legal and institutional framework of regional cooperation. Individual countries underlined their immediate priorities on regional issues that are often shared with other riparian states:</p> <ul style="list-style-type: none"> (i) Kyrgyztan emphasised the need to develop a sub-regional water convention and comprehensive framework agreements on the use of water from Amudarya and Syrdarya rivers; (ii) Uzbekistan analysed the issues related to water use efficiency in the sub-region in the concrete example of Uzbekistan and suggested alternative ways to address them; (iii) Kazakhstan and Tajikistan emphasised the needs for improved institutional arrangements for shared water resources management in the sub-region and expressed their intention to obtain UN status for the Aral Sea Basin organisations; (iv) Turkmenistan highlighted the water quality issues, and the need to process and utilise the recycled water; and

		<p>(v) Afghanistan announced its sovereign rights to the use of water from Amudarya River and Afghanistan's water rights need to be explicitly recognised by other countries of Amudarya river sub-basin.</p> <p>With financial assistance of the United Nations University for Peace (UNUP), CARs are about to start a series of workshops aimed at preparing the basic concepts and background document needed for reorganising the existing regional institutions into a new regional organisation with UN status. Given ADB's past experience in supporting the Mekong River Commission, the delegates requested ADB to provide the CARs with the opportunity to study Mekong River experience. At the end of the session, the heads of the delegates of the Aral Sea Basin states drafted a declaration on Aral Sea Initiatives to be conveyed to the Ministerial conference scheduled on 22 to 23 March 2003.</p> <p>The session was successful in achieving its objectives of (i) summarising the experiences and lessons learned on Aral Sea basin states in jointly managing their shared water resources over the past decade; (ii) analysing the emerging water resources management issues and discuss the alternative ways of resolving them, and (iii) discussing the donor activities in Aral Sea Basin initiatives.</p>
Keys for success (cause of failure)		Coordination among the riparian countries
Evaluation		The forum has been successful in that it provided ADB with good opportunity to further promote a regional cooperation in Aral Sea Basin, sensitise the Aral Sea issues to global audience and donors, and strengthen its relations with governments of Aral Sea Basin states.
Applicability		The initiatives may be applied to other international river basins.
Reference		Proceedings of the conference
Sectoral Issues		1
Cross-sectoral Issues		1; 4; 5
Instruments		3.2; 3.3; 3.5
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Title		TA No. 3647-KAZ: Technology and Institutional Development for Sustainable Locust Management
Country		398
Province		
Area		
Implementation level		2
Duration/ Year		September 2001 - September 2003
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Sponsor(s)		1) Amount: \$700,000 2) Source(s) of funds: ADB
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	Kazakhstan has suffered recurrent crop and pasture damages from locusts. The scale of the problem increased dramatically after independence (during1996-2001), when cessation of state subsidies for wheat production in the northern steppe lands led to the abandonment of up to one third of the former wheat lands. The resulting mosaic of weedy fields, pastures, and bare ground provides ideal breeding grounds for locusts. At the same period, lack of budgetary provision for plant protection led to a reduction in the surveillance and monitoring of the locust situation. At the height of the locust upsurge, damage was caused to 220,000 hectares resulting in losses of \$15 million. The Government was forced to conduct a massive chemical control campaign throughout the country with assistance from Food and Agriculture Organisation to modernise both the application methods and the types of chemicals. However, there was no corresponding development of systematic measures to monitor and mitigate the avoidable environmental and public health impacts of the large-scale spraying. There was a clear need to improve the targeting of control operations through more effective collection and analysis of locust information and to take steps to reduce the potential for impacts, both human and environmental, of the control operations. This could be achieved through enhanced public awareness of the dangers of pesticides and how to avoid them, and through updated information on best practice in line with international standards for health, safety, and environmental protection during control operations.

	<p>SectionB: Outline of Practices /Actions</p>	<p>The objective of the technical assistance (TA) was to assist the Ministry of Agriculture (MOA) and its related agencies to develop capacity and technologies for locust management by formulating an environmentally and financially sound programme for locust monitoring and control. The TA comprised three components; (i) information dissemination on improved technologies, (ii) locust monitoring and forecasting system, and (iii) environmental monitoring of locust control operations. The outcome of the TA was expected to provide guidance to the MOA in maintaining an enhanced capability for predicting and managing locust population upsurges, in adopting more environmentally benign control strategies, and reducing risks to people and the environment through enhanced information dissemination and monitoring of control programmes. During implementation, the TA scope was expanded from 5 northern regions to cover all 14 regions, and corresponding increase in equipment and consultancy inputs. The TA initiatives led to the establishment, on 15 January 2003 as a regular Government institution, of the National Center for Phytosanitary Diagnostic and Forecasting (NCPDF), which was not envisaged at the TA preparation stage. NCPDF will be financed out of annual budget and is mandated to monitor and manage all pests including locust and hence, the ministry and field offices staff and equipment associated with locust management were transferred to NCPDF. On Government's request, the TA provided further consultancy inputs to train the new staff of NCPDF, which decided to use the locust information management system developed under the TA. The requirements of the expanded scope were met from contingencies and savings in some categories. The TA scope was appropriate, its schedule timely, and executing arrangements befitting. All stakeholders actively participated in TA activities and the executing agency (EA) demonstrated strong ownership which was reflected by request to expand TA scope to cover the entire country, the establishment of the NCPDF, adoption by the NCPDF of the system developed under the TA, and the request for training of the NCPDF staff. -Relevant staff at the central, regional district levels were closely associated with the project activities.</p>
	<p>SectionC: Results /Outcomes</p>	<p>The TA prepared a three-volume final report, adequately addressing the TOR, as given below.</p> <p>Information dissemination: A vigorous public information campaign was launched through newspapers, radio, and TV. In addition, the Project produced a 20-minute video which focuses on the dangers of pesticides spraying and how they can be minimised. Also, 20,000 copies of a poster providing contact points for information and emergency use were distributed and 5,000 copies of a pocket-sized booklet providing guidelines to good practice in safe spraying were produced for operators. The booklet was produced in conjunction with a major safety inspection program covering spraying operations in two regions. The results of the inspection surveys were published in the Journal of Plant Protection and Quarantine. Using the materials produced under the TA, NCPDF will continue information dissemination.</p> <p>Seminars/workshops on new technology: A seminar was held in April 2 to inform the relevant staff the objectives and scope of the Project while eliciting information and opinions. A seminar on the use of locust fungal disease <i>Metarhizium</i> as an environment-friendly bio-control agent against locusts was conducted in November 01. This was followed by providing the MOA with a translation of the Food and Agriculture Organisation Expert Consultation on risk assessment of bio-control agents for locust control. NCPDF will continue working on the initiatives developed under the TA.</p>

		<p>Locust monitoring system: After a wide process of consultation, involving a major workshop/seminar, personal interviews, desk study, and questionnaires; the Project designed, developed, and delivered a functioning GIS/database system capable of storing, processing, and displaying locust information across the whole of Kazakhstan, separately for each of the three main locust species and for non-migratory grasshopper pests. The system is accompanied by a complete operational manual, in Russian and English. Twenty-three staff, representing all regions, received training in the use of the system. NCPDF will use this system for monitoring pests of all crops including the locust.</p> <p>Environmental monitoring: A detailed report was produced of the results of monitoring the toxicological effects of four of the commonest pesticides used in Kazakhstan on terrestrial and aquatic biodiversity under controlled conditions using best practice. Analyses of pesticide residues in living organisms indicated that chlorinated hydrocarbon pesticides are still present in the environment and being concentrated in the tissues of birds and other animals many years after they ceased to be used. Environmental monitoring of pest control is now the responsibility of NCPDF, which it will undertake using the procedures and guidelines developed under the TA.</p>
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Development of an effective system for locust monitoring and information dissemination - Public awareness about the locusts
Evaluation		All outputs were delivered in time, met the TOR requirements, and were of high quality. Also, the requirements of expanded scope were met within the TA allocation, and the Government is fully satisfied with the outputs.
Applicability		The technologies developed and capacity built can be used to manage pests of any crop. Also, the initiative may be replicated in other countries.
Reference		Consultants' reports
Sectoral Issues		4
Cross-sectoral Issues		4; 5; 6
Instruments		3.2; 3.4; 3.8; 4.1
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Title		TA No.2119-PRC: Forest Ecosystem Planning and Agro-Industrial Pollution Control
Country		156
Province		
Area		
Implementation level		1
Duration/ Year		March 1997 - November 1998
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Sponsor(s)		1) Amount: \$700,000 2) Source(s) of funds: ADB (\$600,000); Government (\$100,000)
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	Jinggu Country has an abundance of forest resources, the principal natural resource in the area. A substantial portion of the local population is dependent on forest-related activities for their livelihood. Forest management practices need to be improved to ensure long-term sustainable utilisation of forest resources. The then management of forests focuses on harvesting the silvicultural management practices required to maintain growth and quality of the forest stand were neglected. Moreover, the harvesting activities were concentrated on mature and over mature forests deploying the clear-cutting method, which needs to be replaced by a silviculturally acceptable harvesting practices. There is also a need to reforest about 205,000 ha of open forests and wastelands to arrest environmental degradation. Because of its remoteness and lack of road networks, timber prices in Jinggu County are low compared with those in other parts of the country. High transportation costs from the Project area to markets was a constraint for the development of wood processing industries such as sawmills and plywood mills. Wood processing industries do not use small diameter wood (topwood from sawlogs/veneer logs), which constitutes about 30 percent of the harvested volume. This topwood largely goes to waste, as there was little demand for it other than for the small percentage used for fuelwood in urban areas.

		<p>Thinning operations, which enhance forest productivity and quality of forest products, are not currently carried out as there was no demand for this type of wood in the project area. ADB provided a loan to the People's Republic of China to enhance forest resources in the Project area through proper management, reforestation of suitable areas, and the creation of conditions for the sustainable use of forest resources. The loan was supported by a piggybacked technical assistance (No. 2119-PRC: Forest Ecosystem Planning and Agro-Industrial Pollution Control).</p>
	SectionB: Outline of Practices /Actions	<p>The TA scope comprised two parts: Part A covered the undertaking of a baseline study, including (i) a reconnaissance level mapping of forest ecotypes in the Simao pine commercial forests; (ii) field checking of ecotype boundaries and final mapping; (iii) sampling of selected ecotype map units with detailed flora and fauna surveys and entry of data into a geographical information system (GIS); (iv) interpreting data in relation to alternative silvicultural regimes; and (v) recommending areas to be given protected status.</p> <p>Part B covered the undertaking of agro-industrial pollution control study, including (i) reviewing the list of major polluting industries and their contribution to the total pollution control loads in terms of major water quality parameters (e.g., BOD, COD, and colour); (ii) documenting modern process alternatives that could be used to treat wastes from each industry; (iii) estimating unit costs for renovation; (iv) estimating the extent of reduction in pollution loads for varying levels of expenditure; and (v) formulating an industrial pollution control management plan for the pulp and sugar industries to reduce pollution loads. Taking into account the profitability of typical plants, as well as their environmental impacts, the study would recommend a priority listing of plants for renovation and a priority listing of plants for closure.</p>
	SectionC: Results /Outcomes	<p>Part A- Forestry Ecosystem Planning: A series of recommendations were made and agreed for implementation with concerned Government agencies for achieving sustainable silviculture practices that would allow development of the pine resources while ensuring protection of the Country's environment and biodiversity. These recommendations were based on comprehensive flora and fauna surveys of the country, which identified rare and endangered species. The component also developed a comprehensive GIS for the forest resources. The GIS, combined with the Forest Department field survey notes on the roughly 35,000 sub-compartments in Jinggu County and other spatial data (roads, rivers, political boundaries, etc) and satellite imagery, created a powerful tool for effective management and monitoring of forest resources. The successful creation of the GIS was the result of close cooperation between the Yunnan Environmental Investigation Center (YEIC) and the Forest Survey and Design Institute (FSDI). YEIC took every opportunity to train FSDI staff in the main operations involved. They also took part in two-week course given by Project staff for technicians from the Jinggu Forest Bureau (JFB) and the Jinggu Environmental Protection Bureau (JEPB). The course given by JFB and JEPB staff on understanding of how the GIS worked and what it could be used for. The system was installed in all four bureaus and back up was provided by YEIC, which thoroughly mastered all the procedures involved.</p> <p>Part B- Agro-Industrial Pollution Control: The component accomplished a thorough review of the agro-industrial pollution occurring in Yunnan Province and made recommendations to dramatically reduce the polluting discharges. These recommendations were based on environmental audits of the various polluters that demonstrated the financial and economic viability of the proposed measures. The reduction in pollution loads on the river would also improve the quality of the water flowing from Yunnan Province to the adjacent countries.</p>
Keys for success (cause of failure)		<ul style="list-style-type: none"> - Implementation of flora and fauna surveys to identify rare and endangered species. - Developing environmental audit system for various polluters.
Evaluation		The TA was considered as successful in that it produced solid outputs that fully meet the TA objectives and terms of reference.

Applicability		The lessons learned in implementing the TA may be adopted in other ADB TA projects in both the PRC and other member countries.
Reference		Consultants' reports
Sectoral Issues		3; 4
Cross-sectoral Issues		1; 5 ; 6
Instruments		1.1; 3.8; 4.1; 4.2
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Title		TA No.2934-KGZ: Environmental Monitoring Management
Country		417
Province		
Area		
Implementation level		2
Duration/ Year		July 1998 - October 2001
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Sponsor(s)		1) Amount: \$598,000 2) Source(s) of funds: ADB
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	<p>Following the Kyrgyz Republic's independence from the former Soviet Union in 1991, industrial and agriculture underwent a sharp decline. Despite reduced industrial output, potential for further pollution of air, soil, and water remained. The advent of a market economy called for an entirely new approach to the environment and the use of resources. Very few policymakers had exposure to concepts that relate economic growth with environmental production so that the resource bas will be protected.</p> <p>The Ministry of Environmental Protection (MOEP) had been elevated in October 1996 to ministerial status from the previous State Committee for Environmental Protection. A more proactive role was apparent in efforts to promote environmental monitoring, and incorporation of environmental projects in economic activities under the National Environmental Action Plan (NEAP). A cooperative relationship between MOEP and other government agencies needed to be forged. A TA to strengthen environmental institutions and improve environmental impact assessment in the country had been carried out in 1996. One of the four focal areas recommended by that study to be urgently developed was environmental monitoring.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>The objective of the TA was to strengthen the capacity of Kyrgyz institutions to effectively carry out environmental monitoring and data management. The targeted improvements were to be achieved through (i) implementing a training-of-trainers programme for environmental monitoring and data management; (ii) carrying out pilot-scale monitoring and data management under training case studies; (iii) providing two mobile monitoring units and data management equipment for the training; (iv) drafting plans for environmental monitoring and data management; (v) preparing guidelines and manuals; and (vi) holding workshops and seminars. Focal areas for pilot-scale monitoring exercises under the training case studies were Chu Province and Bishkek City. Regional plans for environmental monitoring and data management for the Chu area, and outline plan for the whole country were drafted in detail. The organisation of the TA was exceptional. There were two parallel projects, financed by ADB and the Government of Finland. ADB was responsible for its own part only, as defined in TA paper. The two consultant teams worked with the same counterparts, same trainees, and shared the office space and facilities.</p>
	<p>SectionC: Results /Outcomes</p>	<p>The Consultants prepared inception, interim, and final reports that were reviewed and approved in tripartite meetings. The reports contained both the outcome of the ADB-financed and the Finland-financed parallel TA projects. All reports and training manuals were of good quality. The final report was published and discussed in two workshops in Bishkek, one for professionals, and another for NGOs and any interested persons. All important materials during implementation were translated from English to Russian, and vice versa, although the language skills of the trainees and counterpart persons improved significantly during the TA. The report has become a popular source of information, and served as training materials in other environmental development approaches in Bishkek.</p> <p>The TA contributed significantly to the institutional capacity of MOEP, as well as other institutions involved. Trainers trained under the TA strengthened the human resources of their institutions: most of the 14 participants were promoted by their employees during or after the TA. Their domestic and overseas training, and eight case study exercises at home were successful. The TOR of the TA was generally followed. An important output was the establishment of cooperation between the institutions involved in environmental monitoring. At least three different institutions shared the monitoring databases and use the computer network that was established under the TA. Another key output was the action plan for future development activities, which has become the bases of further projects.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Awareness about environmental monitoring. - Enhancement of capacity of MOEP
<p>Evaluation</p>		<p>The achievements in bringing the recipient agencies were outstanding, as well as the establishment of a strong local will and commitment to continue the development. Cooperation between the donors involved was also excellent, facilitated by good consultants and counterpart staff.</p>
<p>Applicability</p>		<p>At least three different institutions shared the monitoring databases and use the computer network that was established under the TA. Another key output was the action plan for future development activities, which has become the bases of further projects.</p>
<p>Reference</p>		<p>Consultants' reports</p>
<p>Sectoral Issues</p>		<p>3</p>
<p>Cross- sectoral Issues</p>		<p>1; 4; 5</p>
<p>Instruments</p>		<p>3.2; 3.5; 3.7; 3.8</p>

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Title		TA3290-PRC: Capacity Building in Ministerial Status Responsibilities in the State Environmental Protection Administration
Country		156
Province		
Area		
Implementation level		2
Duration/ Year		May 2000 - December 2001
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Sponsor(s)		1) Amount: \$810,000 2) Source(s) of funds: ADB
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	In March 1998, the State Environmental Protection Administration (SEPA) was upgraded to Ministerial level and was given additional duties and responsibilities. The additional mandates given to SEPA included (i) supervision of nuclear safety, (ii) control of vehicular emissions, (iii) rural environmental protection, (iv) technology safety, (v) coordination of environmental conventions and protocols, and (vi) the function of the former Environmental Protection Committee of the State Council that was dissolved in 1998. The Government requested ADB to provide a technical assistance to enhance SEPA's capacity to develop, implement and enforce new environmental guidelines, regulations and rules covering its expanded functions. As there were little experience within the People's Republic of China, SEPA required transfer of technology, case studies, training and comparative analysis of the advantages and disadvantages of similar programmes carried out in other countries.

	SectionB: Outline of Practices /Actions	The TA objectives were to assist SEPA in (i) improving the formulation and implementation of national environmental policy, law and regulations; and (ii) building the human and institutional capacities to carry out its expanded mandate. The TA scope included (i) development of Strategic Environmental Assessment Guidelines, (ii) technology evaluation guidelines, (iii) policy appraisal and evaluation, (iv) analysis of the environmental administrative system in the PRC and its interrelationship with other agencies, (v) assessment of the internal and operational management within SEPA to carry out its expanded functions, and (vi) strengthening ecological management.
	SectionC: Results /Outcomes	<p>Aside from developing the Strategic Environmental Assessment (SEA) Guidelines, the consultants carried out case studies in country training programmes for SEPA staff, consultation meetings with stakeholders as well as interested parties like universities, non-governmental organisations and representatives of foreign missions in PRC. The implementation of the TA complied with the terms of reference except for the component involving the assessment of the internal and operational management within SEPA. The consultants provided case studies from environmental management structures used in other countries and encourage SEPA personnel to analyse their internal structure and operation considering the advantages and disadvantages or lessons learned from other countries.</p> <p>The case studies developed under the TA were translated and used in training programmes for local environmental protection bureaus or EPBs. SEPA had scheduled the promulgation of the SEA Guidelines based on the TA output in the first half of 2002. Public consultation was carried out on 12 December 2001 on the draft SEA Guidelines. The draft SEA Guidelines is similar to the proposed guidelines developed under the TA. SEPA is coordinate with the Ministry of Science and Technology for joint development and promulgation of environmental technology evaluation guidelines developed under the TA. ADB encouraged SEPA to utilise the facilities developed under TA 2434-PRC (Establishing a Center for the Transfer of Environmentally Sound Technology) under the Ministry of Science and Technology. The technology transfer center is carrying out technology verification and certification activities. SEPA is further considering the recommended activities and work plan proposed in the TA to improve ecological management.</p>
Keys for success (cause of failure)		Assessment of internal organisational and management structure is a very sensitive issue and even if higher authorities agree to such an exercise, the successful cooperation and participation of the rank and file are difficult. It is therefore suggested that studies of similar nature should be properly firmed up during project design, and commitments from all parties involved are secured before project start up.
Evaluation		The TA could be assessed as generally successful. SEPA is already initiating the procedures to officially promulgate, implement, and enforce the SEA guidelines and technology appraisal.
Applicability		See Section C.
Reference		Consultants' reports
Sectoral Issues		3
Cross- sectoral Issues		1; 4; 5
Instruments		1.1; 3.8; 4.2

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Title		The Air Pollution In Megacities of Asia (APMA) project
Country		156; 356; 392; 524; 608; 410; 702; 764
Province		
Area		
Implementation level		4
Duration/ Year		2000 - ongoing
Contact Person/ Focal Point for Enquiry	Name	Dr. Gary Haq
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	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: Korean Ministry of the Environment and the Swedish International Cooperation Development Agency (SIDA)
Actors involved		2; 5

Description of the Practice	SectionA: Background & Objectives	<p>More than half of the world's population live in urban areas in Asia. Urban air pollution in most Asian megacities (with a population of more than ten million) such as Beijing, Delhi and Jakarta has worsened due to the cumulative effects of population growth, industrialisation and increased vehicle use. The health consequences of exposure to polluted air are considerable - approximately 20-30 per cent of all respiratory diseases appear to be caused by air pollution.</p> <p>Clean air is an important prerequisite for sustainable economic development and is a basic requirement for human health and welfare. In addition, urban air pollutants contribute to atmospheric problems such as acidification and global climate change, which have impacts on crop productivity, forest growth, biodiversity, buildings and cultural monuments.</p> <p>Although several attempts have been made at regional cooperation to address air pollution in Asia (e.g. Malé Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effects in South Asia), much progress needs to be made to deal with the issue of urban air quality in Asian megacities.</p> <p>Poor information exchange on best practice in urban air quality management and the lack of harmonised air pollution policies in the region has contributed to the absence of regional cooperation in addressing urban air quality.</p> <p>There is a clear need for a well coordinated, internationally sponsored initiative to address the fundamental problem of urban air pollution and provide the basis for future regional cooperation. It is envisaged that the APMA project will meet this need to address urban air pollution in Asia.</p>
	SectionB: Outline of Practices /Actions	<p>The overall objective of the APMA project is to contribute to the improvement of urban air quality in major and megacities in Asia and to reduce the impact on human health to achieve a more sustainable urban environment. The APMA project aims to strengthen Air Quality Management (AQM) practice in major and megacities in Asia by establishing an information network for city authorities. The network will provide information on AQM, technical support and training and facilitate the adoption of regional and local AQM action plans.</p> <p>The APMA project will consist of two phases. Objectives for Phase I of the project are:</p> <ul style="list-style-type: none"> - to collate available data on emissions of urban air pollutants from fixed and mobile sources, trends in urban air pollutant concentrations, and existing studies on health and environmental impacts of urban air pollution in order to facilitate information exchange between Megacities in the project; - to identify and review existing goals, policies and strategies in urban air pollution management at the local, provincial and national levels; - to identify best practice in urban air pollution management in selected European cities and to determine the relevance of the European experience of urban air pollution management to Asian Megacities; and - to make recommendations to reduce urban air pollution in the form of a regional action plan.

		<p>The objectives of Phase II of APMA are:</p> <ul style="list-style-type: none"> - to promote regional cooperation in the management of air pollution in Asian megacities via the establishment of a network; - to facilitate the introduction of regional guidelines on urban air pollution management in Asia via regional action plans. <p>Asian megacities considered for inclusion in this project involves: Bangkok, Beijing, Calcutta, Chongqing Dhaka, Guangzhou, Hanoi, Hong Kong, Jakarta, Karachi, Kathmandu, Manila, Mumbai, New Delhi, Osaka, Pusan, Seoul, Shanghai, Singapore, Taipei and Tokyo.</p>
	SectionC: Results /Outcomes	<p>Several workshops and task force meetings have been organised so far. At the Second Planning Task Force Meeting, it was agreed that APMA would coordinate its activities with the Asia Development Bank and World Bank's Clean Air Initiative (CAI) - Asia. This would avoid any duplication of efforts and confusing key decision-makers on air quality management within the region who would have been approached by two separate initiatives.</p> <p>As of April 2002, a report on Urban Air Pollution Management and Practice in the major and megacities of Asia has been edited for publication.</p>
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		In Africa, SIDA has implemented a similar project called 'Air Pollution Information Network Africa (APINA)'.
Reference		APMA website: http://www.york.ac.uk/inst/sei/rapidc2/apma.html
Sectoral Issues		4
Cross-sectoral Issues		1; 4; 5
Instruments		1.1; 3.3; 3.5
Provider of this information	Name	APFED Secretariat
	Organisation	
	Job Title	
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	Fax	+81-46-855-3809
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Title		The Exmouth Advanced Mini Wind Farm
Country		36
Province		
Area		On the North West Cape near Exmouth, Western Australia
Implementation level		1
Duration/ Year		2000 - 2002
Contact Person/ Focal Point for Enquiry	Name	Mr. Adrian Chegwidden, Manager
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		<p>1) Amount Project Cost - \$454,000</p> <p>2) Source(s) of funds Funded by Western Power - \$229,000 & The Australian Greenhouse Office - \$225,000</p> <p>3) Efforts to raise/sustain funds for implementation A grant under the Renewable Energy Commercialisation Program (RECP) through the Australian Greenhouse Office was applied for and was awarded for the project for the amount of \$225,000.</p>
Actors involved		2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	Exmouth is in the North West of Western Australia. The area is subject to cyclones, demonstrated by Cyclone Vance in 1999, which devastated the town. The town is on an islanded electricity network and relies on diesel fuel to generate electricity. This fuel is expensive and renewable energy solutions go some way in reducing this cost. Western Power joined with Westwind Turbines for this project to commercialise their new 20kW wind turbine, which had the capability of being able to be lowered for an advancing cyclone. This coupled with being able to offset some diesel fuel consumption provided the rationale for the project. The project was also eligible for Australian Greenhouse Office funding as it commercialised new technology.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The project aimed to: - Commercialise the 20kW wind turbine developed by Westwind Turbines. - Reduce diesel fuel consumption in Exmouth. - Demonstrate the suitability of the wind turbine for cyclone areas. - Raise awareness of renewable energy in country areas such as Exmouth.</p> <p>2) Outline of the practice The project has: - Demonstrated the benefits of the wind turbine to new customers of Westwind, which consequently has increased sales of this machine. - Given Exmouth a green image by having a renewable energy system installed to supply some power to the town. - Reduced diesel fuel consumption. - Increased community awareness of renewable energy and sustainability.</p> <p>3) Stakeholders involved, decision making process Minister for Energy (Western Australia), Shire of Exmouth, Department of Land Administration, Regional Power Branch of Western Power, Exmouth Community, Department of Defence, and the Media</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes Western Power and Westwind Turbines have identified a number of improvements for future projects of this size, principally in design and construction. These improvements are experienced based and will benefit future installations of this turbine size.</p> <p>2) Problems that remain to be solved Western Power has had some problems with one component of the wind farm, but this has been due to the product being a new product developed especially for this application and is believed to be now resolved. No other problems are outstanding.</p> <p>3) Unexpected positive/negative impacts to date No unexpected positive or negative impacts have been recorded to date.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Enhancement of collaboration among the different stakeholders - Enhancement of capacity of stakeholders/organisations - Shifting priorities in society - Introduction of new and affordable technology
<p>Evaluation</p>		<p>The project achieved its aim through a process of community consultation, stakeholder management, effective project management techniques, industry partnerships, and effective internal processes and controls. The project demonstrates a commitment by Western Power, Westwind Turbines and the Australia Greenhouse Office to sustainability and renewable energy alternatives. The success of this project has been a result of cooperation between Western Power, Westwind Turbines and key stakeholders. The benefits to the Exmouth community will be an increased awareness of sustainability and renewable energy alternatives, and this is supported by a benefit to Western Power of a reduction in diesel fuel consumption and demonstration of this novel arrangement.</p>
<p>Applicability</p>		<p>The project has direct applications in small-islanded diesel electricity networks such as small towns, communities, and aboriginal and pastoral stations. The wind turbine is designed to be able to be raised and lowered. This has applications in areas where high winds are experienced such as cyclone and tornado areas, and provides an easy means of construction and maintenance of the turbine. The wind turbine when coupled to an inverter can power local loads or be fed into a local electricity distribution network, with the ability to offset diesel fuel.</p>
<p>Reference</p>		

Sectoral Issues		2
Cross-sectoral Issues		1; 6
Instruments		2.3; 2.4; 3.2; 3.3; 3.8; 4.1
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Title		The Global Mercury Project (GMP)
Country		360; 418
Province		
Area		
Implementation level		3
Duration/ Year		2002 - present
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	Affiliation	Global Mercury Project
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Sponsor(s)		1) Amount: N/A 2) Sources of funds: United Nations Industrial Development Organisation (UNIDO), United Nations Development Programme (UNDP), Global Environmental Facility (GEF)
Actors involved		1; 2; 3; 5

Description of the Practice	SectionA: Background & Objectives	<p>The Global Mercury Project (GMP) will demonstrate ways of overcoming barriers to the adoption of best practices and pollution prevention measures that limit the mercury contamination of international waters from artisanal and small-scale gold mining (ASM). In addition, the GMP aims to introduce cleaner technologies, train miners, develop regulatory mechanisms and capacities within Government, conduct environmental and health assessments (E&HA) and build capacity in local laboratories to continue monitoring mercury pollution after the project.</p> <p>One of the GMP objectives is to establish programme management structures in each of the 6 participating countries (Brazil, Indonesia, Lao PDR, Sudan, Tanzania and Zimbabwe). In Asia, the programme has been developed in the River Mekong in Laos and River Kahayan in Central Kalimantan, Indonesia.</p> <p>The River Mekong which is about 4,500 kilometers long and is a life-stay for almost 50 million people and their cultures sets out at the Qinghai plateau in Western China before flowing into Laos, Myanmar, Thailand, Cambodia and Vietnam. Although the upper portions of the river are characterised by turbulence, the lower Mekong is more placid, and the annual flooding supports a biologically diverse ecosystem. In Laos, alluvial mining activities are carried out as seasonal activities during the dry non-agricultural season mainly by dredging on the River Mekong and its tributaries. Up to 3,000 miners have been found at any one time working on River Mekong. The Kahayan River, is the largest river in Central Kalimantan and drains directly into the Java sea and thus with effects to Singapore, the Islands of Sumatra, Java, Bali and others. Most activities are based on alluvial operations within the river systems with a few mining hard rock gold veins. However, even those in hard rock mining transport the ore to the rivers for processing. The Kahayan River in Central Kalimantan and the Tapian River in North Sulawesi are known to have a high concentration of miners per kilometre length. It has been reported that more than 2,000 illegal miners would converge on single mining site following a reported gold recovery. In Indonesia where artisanal gold mining activities are carried out either through village cooperative units or through illegal operations and are found in the provinces of West and Central Java, Sumatra, Central and East Kalimantan, North Sulawesi and others, nearly 180 tonnes of mercury are released to the environment annually.</p>
	SectionB: Outline of Practices /Actions	<p>GMP's activities are associated with:</p> <ul style="list-style-type: none"> - reducing mercury pollution caused by artisanal miners on international waters; - introducing cleaner technologies for gold extraction and train miners; - developing capacity and regulatory mechanisms within Government that will enable the sector to minimise mercury pollution; - introducing environmental and health monitoring programs; - building capacity in local laboratories to assess the extent and impact of mercury pollution beyond the 3-year project life. <p>As part of a large awareness program, educational campaigns and pilot units have been established to demonstrate the efficiency and advantages of cleaner technologies.</p>
	SectionC: Results /Outcomes	<p>Achievements that GMP made in June 2003 include:</p> <ul style="list-style-type: none"> - Meeting with stakeholders in Indonesia (Jakarta, Palangkaraya and Manado) and presentation of lectures on environmental and health effects caused by mercury. - First Country Task Force Meeting in Indonesia. - Elaboration of a comprehensive protocol to standardise E&HA methodologies to be used in all participating countries.

Keys for success (cause of failure)		Networking and collaboration among various stakeholders.
Evaluation		N/A; the project is in progress.
Applicability		Similar efforts can be made in the regions with high intensity of mercury-based artisanal gold extraction activities and their impacts on significant international waters.
Reference		GMP website: http://www.unites.uqam.ca/gmf/intranet/gmp/front_page.htm
Sectoral Issues		4
Cross-sectoral Issues		1; 4; 6
Instruments		1.1; 3.2; 3.3; 3.8; 4.1
Provider of this information	Name	APFED Secretariat
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Title		The Netherlands Cooperation Fund on Promotion of Renewable Energy, Energy Efficiency and Greenhouse Gas Abatement - PREGA
Country		50; 116; 156; 356; 360; 398; 417; 496; 524; 586; 608
Province		
Area		
Implementation level		4
Duration/ Year		April 2001 - (3years project)
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	E-mail	
Sponsor(s)		1) Amount \$6M 2) Source(s) of funds ADB, Co-financed by the Government of the Netherlands
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	The main objective of PREGA is to promote investments in renewable energy, energy efficiency and greenhouse gas abatement technologies in developing member countries that will (1) increase access to energy services by the poor, (2) realise other strategic development objectives, and (3) help reduce greenhouse gas emissions.
	SectionB: Outline of Practices /Actions	PREGA will (1) develop capacities of national policymakers, technical experts, and staff of financing institutions for promoting renewable energy, energy efficiency and greenhouse gas abatement, (2) support policy, regulatory, and institutional reforms, including removal of energy pricing distortions, and (3) facilitate access to private sector financing.
	SectionC: Results /Outcomes	- Pre-feasibility studies of investment projects for financing consideration through commercial, multilateral, and bilateral sources. - Reports on policy and institutional barriers to dissemination of renewable energy, energy efficiency and greenhouse gas abatement technologies, and financing models for such investment projects. - Workshops, both on regional and national levels.

Keys for success (cause of failure)		N/A
Evaluation		N/A
Applicability		N/A
Reference		http://www.adb.org/REACH/neththerland.asp
Sectoral Issues		2
Cross-sectoral Issues		1; 2; 5; 6
Instruments		3.2; 3.7; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
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Title		The Pani Panchayat (Water Council): Water and Equity
Country		356
Province		
Area		Maharashtra
Implementation level		1
Duration/ Year		Initiated in 1974 and ongoing
Contact Person/ Focal Point for Enquiry	Name	Mr. Vilasrao Salunkhe
	Affiliation	Gram Gourav Pratisthan
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	Fax	N/A
	E-mail	N/A
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount: Unknown</p> <p>2) Source of funds: Industrialists, International aid agencies, Mr Vilasrao Salunkhe's own industry.</p> <p>3) Efforts to raise/sustain funds for implementation: Villagers where the scheme is implemented were to put up 20% of the cost of the scheme. This invariably brought about greater cohesion in the village set-up, since it forced villagers to work together and maintain their schemes in their own interests.</p>
Actors involved		4; 5

Description of the Practice	SectionA: Background & Objectives	<p>In 1972, the state of Maharashtra went through a severe drought crisis. The drought hit several hundred villages with a combined population of more than 400,000 people. In the drought-prone areas of Maharashtra, the rainfall fluctuates between 250mm and 500mm per year. During his travels around the drought-affected areas, Vilasrao Salunkhe was struck by the fact that in several areas, there was no water available for agriculture of any kind. Even drinking water is sometimes not available. Villagers had no means of survival.</p> <p>Although farmers owned land, they could do nothing with it without access to a guaranteed source of water for cultivation. This was the principal cause of their poverty. Since there was no water they could never employ themselves on the land and earn an assured income. In drought-prone areas, this was the fate of both large and small landowners.</p> <p>Another significant aspect is the problem of equity. In the olden days, water-harvesting systems in India were communally owned and the benefits were shared equitably. This is not so at present time. Even today, despite the fact that government agencies have accepted the idea that watersheds must be developed holistically, equity considerations have not been addressed in the implementation of programs.</p> <p>Development projects in India and other countries suffer from the problem of equity or the lack of it. Invariably, while some people benefit from a project, often with public funds, other people pay. Some receive water from a dam, others are displaced in the process. Even in the command areas of irrigation schemes, those with large landholdings get copious quantities of water whereas those with smallholdings and those at the margins of the command get little of it. The objective of the project was to work out a set of technological and social innovations that not only helps repair and restore degraded watersheds, thereby increasing water harvests, but, by guaranteeing each family within the community an equal share of the water harvested, thus meeting goals of equity.</p>
	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice, aim, target audience</p> <p>Mr. Vilasrao Salunkhe initiated the Gram Gourav Pratisthan Trust (GGP) in 1974 for the purpose of applying his social innovations. All the experiments in watershed management and the later multiplication of more than 50 lift irrigation schemes in the area were carried out with the support of GGP. The GGP played a catalytic role in supporting groups of farmers from different areas who wished to carry out programmes for water harvesting and lift irrigation schemes. It provided money in the form of interest-free loans to enable farmers to meet the costs of such schemes. The primary task of the project is to perfect a watershed management plan for farmers themselves to conserve the scanty rainfall that the region receives annually and to distribute the water equally among all the villagers. Thus the target audience in this project are the villagers.</p>

	<p>2) Outline of the practice</p> <p>The water conservation initiative was first started in a 16-hectare plot of hillside in Naigoan village in the Purandhar taluka of Pune district. The land belonged to the temple trust of the village and had remained barren and uncultivable for several years. When Salunkhe first commenced work, the 16-hectare plot could not produce more than 2-4 bags of grains a year. He began the restoration work by first attempting measures to conserve the soil and harvest the scarce rainwater. First a series of contour bunds were raised to trap water runoff and also to protect the soil from erosion. A percolation tank was constructed at the base of the hillslope, which he saw was a micro-watershed. He estimated the capacity of the percolation tank at one million cubic feet of water. A well was dug below it and water pumped from here up the hillslope for irrigating the fields. More than 4,000 trees were planted amid the rocky areas and around 2,000 fruit trees were raised on and around the more fertile bunds. Grass and shrub were allowed to grow on land that was not being cultivated. The area was protected from animal grazing for a while to enable the vegetation to gain strength. Eventually as the general health of the watershed improved as a result of these measures, production from the land increased to 100 quintals (1 quintal = 100kg) of food grains and the employment generated on the 16-hectare farm enabled five households to survive with 15 head of cattle. The entire exercise of environmental regeneration of the watershed took a whole 5 years. The problem of equity was bound to emerge in a major way in the projects that Salunkhe was going to help to duplicate. Therefore he proposed a new idea that the water resource gained as a result of the project would be allocated to each farmer in proportion to the number of family members (the maximum share per family unit of five members being two and a half acres) rather than in proportion to landholdings. In this way the benefits of each irrigation scheme would be equitably distributed. Overall agricultural produce would also increase because water would be allocated to a large number of small farmers and it is well recognised that small farms are able to work at higher levels of productivity than large farms.</p> <p>3) Stakeholders involved, decision-making process</p> <p>The idea Salunkhe proposed was that as water is common property, all the villagers should have equal right and access to the utilisation of the water harvested in the area. This was translated into practice by offering membership of the lift irrigation schemes to landless villagers. By doing this, the landless could become sharecroppers in the lands of the larger landholders who had excess land but could do nothing with it. The irrigation schemes were thus undertaken by farmers as a group rather than on an individual basis. Thus the landowners, farmers and landless were all stakeholders in the project. There is also scope for farmer participation in the design and investment proposals related to lift irrigation schemes they wished to install in their area and Salunkhe insisted that the water management committees take up full charge of the lift irrigation schemes.</p>
<p>SectionC: Results /Outcomes</p>	<p>1) Problems and how they were overcome</p> <p>The principal problem encountered by the GGP was the lack of concern sometimes shown by government bureaucrats in the different departments dealing with agriculture, electricity and irrigation. For example, when Salunkhe first approached the agriculture department for carrying out water conservation plans in the villages, he was told that technicians were not available to either prepare the plans or to carry out any surveys. Eventually, students from an Engineering College were drafted to carry out the work.</p> <p>After several irrigation schemes were approved by the government and even the subsidies had reached the farmers, the electricity department did not want to consider the demand for power to energise the sets. Electricity proved to be a more difficult proposition than finances.</p>

		<p>Other problems were caused by the political instability of the period which often delayed arrival of subsidies, created such hurdles that farmers could not procure subsidies, or delayed electrical connections for lift irrigation schemes until years after such schemes had been paid for and ready for use.</p> <p>Another main problem was the non-availability of civil engineers, who refused to work in the villages, preferring the cities instead. This problem was eventually solved by creating a cadre of young men who were trained as 'barefoot engineers', equipped with basic civil engineering skills so that they could assist farmers with technical aspects of lift irrigation schemes and other water-harvesting projects.</p> <p>2) Impacts</p> <p>The impacts of the innovations introduced by Salunkhe and the GGP is astonishing. Barren lands that had produced little or no food were gradually producing one good seasonal crop, which helped farmers survive the year with dignity. In some areas, as water availability increased, farmers could go on for two crops. The schemes co-sponsored by the GGP eventually enabled 3,000 acres to be brought under protective irrigation, benefiting a population of some 10,000 people from 1,500 families. The availability of water made possible through conservation schemes and percolation tanks meant that drinking water for the village population was accessible and close at hand and villagers, women especially, did not have to trudge across long distances for water in the hot sun any longer.</p>
<p>Keys for success (cause of failure)</p>		<p>The principal insight of Vilasrao Salunkhe's initiative was to insist on equity and be able to prove that once the equity problem was taken care of, society as a whole improved its prospects. By insisting that at least 20% of the investment in the lift irrigation schemes be taken put in by the members of the scheme, they took care of the maintenance and management of the scheme and ensure that it runs well for their own interests. The members of the scheme were also encouraged to participate in the decision-making process at design level itself. Besides this, even the landless were given an opportunity to participate in the scheme. The inclusion of all the stakeholders from the beginning till the management of the scheme themselves, ensured success of the scheme.</p>
<p>Evaluation</p>		<p>The principle that people should have equal shares in common resources, if adopted would revolutionise society. At present a landless person in the village is seen as a person who has no right to resources just because he has no land. Because of this, he often does not have political power since it is assumed that he is poor and therefore his views need not be taken into account when decisions concerning his survival or that of the community are being made. The Pani Panchayat (Water Council) guarantees the landless person the right to a share of water even if he has no land. He can then dispense with this right as he wishes, particularly if he has no land on which to use the water. He can use it as an input on the lands of large landowners: both together can thus produce output where none could before individually. Present policies dictate that those who have large landholdings get larger quantities of water and those nearest the water source get more water than those who are far away. Such policies should not form the basis of democracies based on the idea of equality and equity. The technical aspects of watershed management and the lessons of Naigoan can be incorporated by government in the conception and planning of its comprehensive watershed development programmes.</p>

Applicability		There is every scope for transferring Salunkhe's ideas to other communities and countries, as both the technical and social innovations are such that they can be readily understood and implemented with appropriate adaptations to suit local circumstances. The idea of planning development on the basis of watersheds in place of piecemeal development projects, which are conceived in isolation, is now well-established and has become a routine plank of public policy, at least in a country like India. Another attractive aspect of Salunkhe's work, the principle of equal shares in water sources, can also be adopted with minor variations in different situations with significant impacts on human welfare.
Reference		Publication: The Pani Panchayat: Water and Equity in Good Practices & Innovative Experiences in the South (Volume 3): Citizen Initiatives in Social Services, Popular Education and Human Rights. (2001). Edited by M. Khor and L. L. Lin. Published by Zed Books, Third World Network, Special Unit for Technical Cooperation among Developing Countries, United Nations Development Programme (UNDP). Research conducted by: Claude Alvares, Editor, Other India Press Address: Above Mapusa Clinic, Mapusa 403 507, Goa, INDIA Tel: +91-832-226-3306, 225-6479 Fax: + 91-832-226-3305 Email: oibs@bom2.vsnl.net.in
Sectoral Issues		1
Cross-sectoral Issues		4
Instruments		3.7; 3.8; 4.2
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Title		The Regional Environmental Centre for Central Asia (CAREC) as a sustainable mechanism for partnership and multi stakeholders dialog on environment and development in Central Asia.
Country		398; 417; 762; 795; 860
Province		
Area		
Implementation level		3
Duration/ Year		Since 2001; CAREC started as a non-profit, non-political, independent organisation on the long term base
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	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount - 1.3 Million USD</p> <p>2) Source(s) of funds: European Commission, United States Environmental Protection Agency, Governments of Central Asian countries, UN agencies, private sector</p> <p>3) Efforts to raise/sustain funds for implementation: Best technologies on project management, partnership cooperation with all stakeholders, costs minimisation</p>
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>The main problem in Central Asia is the absence of experience of intersectoral and intergovernmental cooperation and partnership (between NGOs, governments, business, science, etc.). Transition period of previous decade decreased the efficiency of projects aimed at environment and development problems solving. CAREC provides the ways to improve cooperation between the active programmes and projects. CAREC introduces the idea of necessity to convert to the principles of sustainable development throughout the CA sub-region.</p> <p>CAREC became the organisation that establishes partnership between sectors and between CA countries as well. As the main objective CAREC recognises the potential of CA countries to present in the world community (such WSSD) unified and coordinated position.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <ul style="list-style-type: none"> - Establishing and supporting a constructive dialog between sectors (government, NGOs, donors, businesses, Mass Media and experts) - Public involvement into decision making in area of environment problem solving, support sub-regional NGOs in implementing local environmental project - Support in introducing cleaner production technologies and development of local management (LEAP) - Introducing the principles of environmental education, supporting CA working group - Gathering and spreading information concerned Environment and Sustainable development - Participation in regional programmes, such as Aral Sea Basin and Caspian Sea Programs. <p>2) Outline of the practice</p> <p>CA sub-region obtained the opportunity to present its own and common position at the global and regional international level. CAREC supported them by information, experts assessment, meetings. CA NGOs had opportunity to become in several global and regional processes, such the WSSD, Millennium assessment.</p> <p>New phase of the Aral Sea Program till 2010 includes environmental component, developed by CAREC support. CAREC supported this program by experts and NGOs involving, meetings of working groups, providing database.</p> <p>CAREC is a partner of clean production project. In frame of the project CAREC organised database on clean technologies, trainings and small grant program for enterprises. Legal and institutional frame condition has been developed.</p> <p>For the development of environment management on local level CAREC supported several projects. Local environment action plans (LEAPs) in all CA countries created multi stakeholders dialog on environmental priorities.</p> <p>3) Stakeholders involved, decision making process</p> <p>NGOs, governments, private sector, local governments, donors and international organisations involved in the CAREC programme on different levels (as a Board and advisory council members, project staff and contractors and participants of dialogues).</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes</p> <p>By the CAREC initiative Central Asian ministers of environment protection, economy and finance and other participants as well declared the sub-regional CA SD Initiative till 2012. CA Initiative proposes to solve the prior sub-regional problems on the basis of partnership between governments and sectors, was included into the final documents of the WSSD. After WSSD CA countries adopted common goals with list of indicators. Dialogues between stakeholders were created and free exchange information programmes were started. CA education program was developed and its implementation has started. More then 40 local projects for environment were implemented.</p> <p>2) Problems that remain to be solved</p> <p>Inter-sectoral cooperation is still a problem in CA, including legal, institutional, organisational and others aspects.</p> <p>Sustainable finance and economic mechanisms should be established in CA.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Cross-sectoral and target oriented goals and civil society involving was critical key factors for success of the CAREC programmes; - The work put into local and practice enabled implementation of the coordinated activity and projects that improve the environmental social, economic and political situation; - Neutral basis of the CAREC (independent, non-profit, not political and regional legal base) provides best platform for different stakeholders.

Evaluation		Obligation on the national and sub-regional levels supported by concrete projects on local level with public participation and public control.
Applicability		Now more than 40 countries and international organisations has been involved in to such programmes (Russian REC, REC for Caucasus, REC for CEE region, etc). The experience gained could be developing and using for strengthening multi-stakeholder dialogues and public participation in others countries.
Reference		Publications or other relevant information available regarding submitted project / policy / initiatives - Progress review on implementation of the Agenda-21 in Central Asia: http://www.johannesburgsummit.org/html/sustainable_dev/p2_partners_other_areas/central_asian.pdf - CAREC's documents (in English and Russian languages) http://www.carec.kz - Report 'Water, environment and security in Central Asia' (both in English and Russian): http://www.unece.org/env/documents/2003/ece/cep/ece.cep.106.rev.1.e.pdf - 'Grant Program 2001-2002 for the CA NGOs' (both in English and Russian) - Status, prospects and ways of environmental education development in CA countries (both in English and Russian) - 'Environmental NGOs in CA' (both in English and Russian)
Sectoral Issues		3
Cross-sectoral Issues		1; 5; 7
Instruments		3.1; 3.3; 3.5; 4.2
Provider of this information	Name	Alexandr Nikolayenko
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Title		THE RENEWABLE ENERGY AND ENERGY EFFICIENCY PARTNERSHIP(REEEP)
Country		999
Province		
Area		Developed, middle-income and rapidly industrialising countries
Implementation level		4
Duration/ Year		Aug. 2002 - Aug. 2005 (Major review of progress)
Contact Person/ Focal Point for Enquiry	Name	Dr. Amal-Lee Amin
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount N/A 2) Sources of Fund UK \$500k (for first year's activity), Other partners are expected to provide voluntary contributions in kind
Actors involved		1; 2; 4; 5
Description of the Practice	SectionA: Background & Objectives	To accelerate global market growth and deployment of renewable energy and energy efficiency systems (REES) in pursuit of national environmental, economic, social and security objectives.
	SectionB: Outline of Practices /Actions	Government, industry and international agency partners agree to set their own ambitious targets, programmes and timeframes for: - Increasing the share of renewable energy use and the improvement in energy efficiency in all sectors of economy - Establishing innovative financing mechanisms and increasing the availability of export credits for renewable energy and energy efficiency technologies - Progressively phasing out energy subsidies that inhibit sustainable development, etc.
	SectionC: Results /Outcomes	The initiative aims to foster collaboration in order to accelerate the growth of markets in modern renewables and energy efficiency, with the aim of lowering costs and facilitating the removal of other policy, technological, market and regulatory barriers.

Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		Applicable to many developed and developing countries
Reference		WSSD Type II Partnership Information REEEP Website: http://www.reeep.org
Sectoral Issues		2
Cross-sectoral Issues		1; 3; 4; 5; 6
Instruments		3.3; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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	Tel	
	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		The Sustainability of Groundwater Supplies
Country		36
Province		
Area		Anangu Pitjantjatjara aboriginal lands, South Australia
Implementation level		1
Duration/ Year		ongoing
Contact Person/ Focal Point for Enquiry	Name	Sandy Dodds
	Affiliation	Department of Water, Land and Biodiversity Conservation, South Australian State Government
Contact Information	Address	PO Box 80, Glen Osmond, South Australia 5064 AUSTRALIA
	Tel	+61-8-8338-2753
	Fax	N/A
	E-mail	Jsdodds@senet.com.au
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$500,000 2) Source(s) of funds: Australian State and Federal Governments, through ATSIC (the Aboriginal and Torres Strait Islander Commission), itself Federal Government Funded
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	Aboriginal Communities had water supplies provided by the South Australian State Government, but these tended to fail without warning, leaving a community with insufficient supplies until further groundwater resources could be found. This could take many months, with the search for potential well sites, drilling, testing and installation of infrastructure. The area is isolated (500km from Alice Springs and 2,000km from Adelaide), and it was necessary to bring in personnel and equipment (hydrogeologists, drillers, drill-rigs, pump-testing equipment, etc.) from either or both of these places. Although roads in the Aboriginal Lands are good, they are unpaved and can be closed in wet weather. Seven-year droughts are not uncommon, and longer periods are possible.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <p>The main objective is to understand the parameters affecting the water supply at each well and thereby to be able to predict, to a greater or lesser extent, the sustainability of the supply and the factors affecting the sustainability. The water level may rise as a result of local rains, but is this happening and how much rain is required to cause recharge of the aquifer? Or is the groundwater supply a fossil, rather than a renewable, resource. The water level may fall as a result of extraction or because of natural drainage of water away from the area. In the latter case the sustainability of the well may be unaffected by the rate of extraction. Does the extraction of water from one well affect the water level in a nearby well?</p> <p>A secondary objective is to understand the general groundwater distribution in each area to assist future water search. Most of the aquifers in the area are in fractured rock, but a few may be sedimentary layers. This understanding also facilitates a prediction of the total groundwater resource available and its dependence on regular, if infrequent, recharge.</p> <p>2) Outline of the practice</p> <p>Each producing water-well was fitted with equipment to record hourly the rate of water extraction and the water level. One well in each community was also fitted with a rain gauge. Data loggers were downloaded at 6-monthly intervals. The data were studied for short- and long-term trends, in conjunction with knowledge of the area from geology, topography, air-photographs, satellite imagery, etc. The questions outlined in 1) above were answered in biannual reports showing the gradual improvement in the confidence and precision of the conclusions.</p> <p>3) Stakeholders involved, decision-making process</p> <p>The results were fed back to those responsible for providing the water supplies for immediate action if required. Additionally, a study was done to come up with a water management strategy, involving community and government discussion.</p>
	<p>SectionC: Results /Outcomes</p>	<p>All communities now have predictable sustainable water supplies within the constraints of highly variable rainfall patterns. Continued monitoring will predict any forthcoming failures well ahead of time. Management of limited water supplies remains to be resolved. This is a delicate issue, involving much discussion between the stakeholders, principally the community dwellers who use the resource and the government departments who manage the supply. The policy must be politically acceptable while encouraging a reasonable and sustainable use of a fragile resource.</p>
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Monitor data quality: monitoring technology was highly unreliable at the start of the project, but was improved by close interaction with manufacturers and by in-house development and maintenance. - Acquire data from as many wells as possible: passive as well as pumped. Passive wells give a better assessment of the aquifer water balance. - Look at whole groundwater picture, especially recharge (rainfall and penetration) and both surface and sub-surface drainage. Both local and regional pictures may be significant. - Study water usage priorities and conservation. - Incorporate all points of view - providers, users and managers.
<p>Evaluation</p>		<ul style="list-style-type: none"> - Reliable groundwater supplies were successfully established and assessed as sustainable at each community, within the constraints of low yielding aquifers and very erratic recharge events. At the least, these limitations were understood and explained. - Overall water quality was good, but some areas had minor impurities which would be injurious to health if taken over a long time. Evaluation of water quality was successful, but provision of water at WHO standards to all communities was not achieved. - The costs of maintaining and downloading the system are considerable, and a fair proportion of data is still lost to equipment malfunction between downloads. A remote way (telemetry) of monitoring the performance might be of benefit.

Applicability		<p>- Every environment is different. This technique applies particularly to groundwater supplies in arid areas.</p> <p>- Even in arid areas the particulars will vary according to local conditions and needs - rainfall distribution, aquifer type, community size and cultural development (subsistence, agricultural, degree of industrialisation). Techniques described are for 'primitive' communities lacking in technical skills, but would be easier to manage in more developed communities.</p>
Reference		<p>- Dodds A.R., Hostetler S D., & Jacobson G. (2001). Community water supplies in the Anangu Pitjantjatjara Lands, South Australia: sustainability of groundwater resources. Department of Agriculture Fisheries & Forestry Australia.</p> <p>- Dodds, A.R. and Sampson, L.. (2000). The sustainability of water resources in the Anangu Pitjantjatjara lands, South Australia. South Australian Department for Water Resources report. South Australia. Department of Primary Industries and Resources. Report Book, 2000/027.</p> <p>- Dodds, A.R. and Sampson, L.. (2001). Hydrogeological report on water well monitoring in Aboriginal lands - October 2000 to April 2001. South Australia. Department for Water Resources. Report, DWR 2001/012.</p>
Sectoral Issues		1
Cross-sectoral Issues		6
Instruments		3.8; 4.1
Provider of this information	Name	Sandy Dodds
	Organisation	Department of Water, Land and Biodiversity Conservation, South Australian State Government
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Title		The Volume-Based Collection Fee System
Country		410
Province		
Area		Nationwide
Implementation level		2
Duration/ Year		1995 - current
Contact Person/ Focal Point for Enquiry	Name	Mr. Young-kee Lee, International Affairs Division,
	Affiliation	Ministry of Environment
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		N/A
Actors involved		2; 3; 5
Description of the Practice	SectionA: Background & Objectives	The amount of municipal solid waste increased sharply during early 1990s and most of them went to landfill sites. Establishing landfill site became difficult due to increased public concerns and small land space. Local government that is responsible for managing municipal solid waste did not pay much attention on the reduction and recycling of solid waste.
	SectionB: Outline of Practices /Actions	1) Objectives of the practice - To reduce municipal solid waste at source - To encourage separation and collection of recyclables 2) Outline of the practice - See the attached document. 3) Stakeholders involved, decision making process - Residents, local municipalities, recyclers, producers

	SectionC: Results /Outcomes	1) Improvements/changes - increase of recycling rates - reduction of msw generation 2) Problems that remain to be solved - illegal behaviour at agricultural or remote area
Keys for success (cause of failure)		- Active involvement of residents and advertisement of press at the beginning - Continuous monitoring of local municipalities - Strong support and leadership of Ministry of Environment - Development of policy measures which support the system
Evaluation		Increased resource efficiency and decreased maw generation
Applicability		Volume-Based Waste Fee System, Korea Environmental Policy Bulletin, no.1 vol.1, 2003, published by Ministry of Environment and KEI
Reference		
Sectoral Issues		3
Cross-sectoral Issues		1
Instruments		1.1; 2.2; 4.2
Provider of this information	Name	Dr. Kyunghee Choi
	Organisation	National Institute of Environmental Research
	Job Title	Research Officer
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Title		Third Water Supply and Sanitation Sector Project
Country		144
Province		
Area		Rural and urban communities in Anuradhapura, Hambantota, Kalutara, Kegalle, Monaragala and Puttalam
Implementation level		1
Duration/ Year		July 1998-June 2005
Contact Person/ Focal Point for Enquiry	Name	K.L.L. Premanath, Project Director and Additional General Manager
	Affiliation	National Water Supply and Drainage Board
Contact Information	Address	P.O.Box. 14, Mount Lavinia, SRI LANKA
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	Fax	+94-11-2605149
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: US\$ 121 million 2) Source(s) of funds: Asian Development Bank (US\$75.0 million); Government of France (US\$15.0 million); Government of Norway (US\$ 8.0 million); Government of Sri Lanka (US\$ 16.0 million); beneficiaries (US\$ 7.0 million)
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	More than one third of the beneficiaries in the Project area are below the poverty line. Health conditions are also poor with a high incidence of waterborne diseases. The demand for water supply and sanitation is high. The districts are those (apart from the North and Northeast) where sustainable investments in water supply and sanitation have not yet been undertaken. About 90% of the target population reside in the rural areas, which are prone to water shortages. In addition there is a lack of institutional autonomy and weak management in the sector.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice The main aim of the project is to ensure long-term sustainability of sector development through policy reforms. It also seeks to improve the health and well being of one million people in 6 districts through improvements in the water supply and in sanitation, and education hygiene.</p> <p>2) Outline of the practice The Project will (i) introduce policy reforms, including private sector participation, to promote efficient and equitable use of water and its consideration as an economic good; (ii) provide communities in the districts of Anuradhapura, Hambantota, Lautara, Kegalle, Monaragala, and Puttalam, and the town of Anuradhapura with improved access to safe water and, consequently, improve public health; (iii) improve the environment and quality of life in the project area by investing in sustainable sanitation system; (iv) pilot a project for source protection, and catchment conservation; (v) improve public awareness of hygiene and sanitation as well as people's participation in sustainable water management, through the design and implementation of a community education and awareness programme.</p> <p>3) Stakeholders involved, decision making process All sectoral ministries and line agencies, local authorities, NGOs, CBOs, multilateral and bilateral donor agencies, private sector and communities.</p>
	SectionC: Results /Outcomes	The rural water supply programme is progressing well especially after the introduction of the rapid participatory rural appraisal, which ensures inclusion, and participation of all social groups of the community. The project has seen a significant decrease in the use of water for farming and an increase of profit on farm products with the introduction of environmentally friendly methods for the use of fertilisers and water conservation awareness programmes. Policy reforms, esp. private sector participation in water supply has been slow though the commitment from the Water Board is there.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		Rapid participatory rural appraisals are critical for the success of rural water supply programmes and to ensure active participation and inclusion of all social groups in the scheme.
Reference		N/A
Sectoral Issues		1
Cross-sectoral Issues		1; 4
Instruments		2.4; 3.1; 3.2; 3.4
Provider of this information	Name	Eva Mayerhofer
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Tonle Sap Environmental Management Project
Country		116
Province		
Area		Tonle Sap
Implementation level		1
Duration/ Year		2003-2008
Contact Person/ Focal Point for Enquiry	Name	Mr. Oliver Serrat
	Affiliation	Asian Development Bank (ADB)
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	Tel	+63-2-632-6179
	Fax	+63-2-636-2231
	E-mail	oserrat@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount Loan: ADB \$10.9 million, Global Environment Facility (GEF) \$3.2 million 2) Source(s) of funds: ADB TA \$540,000; UNDP TA \$627,000
Actors involved		1; 2; 3; 5
Description of the Practice	SectionA: Background & Objectives	Sustainable management of natural resource and the environment in the Tonle Sap basin.
	SectionB: Outline of Practices /Actions	Examples of the practice include: - increased agricultural productivity by introduction of new technology, - increased income by using local resources that had not been used, - improved local environment by enhancing public awareness, - utilised natural resources more effectively by introducing new rules.
	SectionC: Results /Outcomes	- achieved multiple effects in different aspects simultaneously - produced desired results With minimal time, expenditure of resources - integrated elements of sustainable development - improved capacity of institutions/organisations/relevant stakeholders

Keys for success (cause of failure)		<ul style="list-style-type: none"> - Enhancement of collaboration among the different stakeholders and/or introduction/improvement of consultative mechanisms, - Facilitation of gender equity, social inclusion, economic and social mobility of voluntary participation of local people, - Use of knowledge and/or techniques that used to be utilised, including traditional/indigenous ones, - Change in the way of using local resources (e.g., make use of available local resources not used sustainable before) - Enhancement of capacity of stakeholders/organisations - Shifting priorities in society - Introduction of economic policy instruments (e.g., introduction of new tax systems, introduction of effective cost recovery system) - Introduction of new and affordable technology - Combination of different policy tools
Evaluation		<p>Effectiveness</p> <ul style="list-style-type: none"> - Cost benefits - Sustainability - Degree of integration of social, economic, environmental and cultural Aspects - Transparency/accountability - Strengths and weaknesses
Applicability		N/A
Reference		http://www.adb.org/projects/tonle_sap
Sectoral Issues		1
Cross-sectoral Issues		1; 2; 4
Instruments		3.7; 3.8; 4.1
Provider of this information	Name	Mr. C.R. Rajendran / O.Serrat
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	Fax	+63-2-636-2231
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Title		Treatment of Arsenic Contaminated Drinking Water
Country		50; 356
Province		
Area		
Implementation level		3
Duration/ Year		ongoing
Contact Person/ Focal Point for Enquiry	Name	Bruno Morin
	Affiliation	Alcan, Inc.
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	Fax	+1-613-342-6943
	E-mail	bruno.morin@alcan.com
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: Unknown 2) Sources of funds: Alcan, Inc.
Actors involved		1; 2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>A number of safe water programmes in India and Bangladesh had an unintended side effect in that several million tube wells drilled have been found to be contaminated by arsenic. Arsenic levels in the affected tube wells are typically in excess of 200 µg/L and in many areas, concentrations can exceed 1,000 µg/L.</p> <p>Historically, regeneration (or activated alumina) has been associated with and has been accepted as the preferred media for arsenic removal from water. Regeneration, however, has some detriments: disposal of the regeneration effluent, additional processing steps, and the handling and storage of chemicals, not applicable to point-of-use (POU) systems.</p> <p>Alcan produced ActiGuard AAFS50, the easiest and most cost-effective media for arsenic removal, in containers of various sizes and configurations. With the MAGG/RRM system, the arsenic is adsorbed when the water passes through the media. The system can be used in units designed for a single family, a group of families, a small community system or a municipality.</p>

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice The goal is to provide communities, villages, families with a very efficient, cost effective and readily accessible solution to arsenic contamination problems through provision of water treatment systems. Access to clean and safe water supply greatly improves people's lives and reduces the risk of developing health problems, such as those associated with arsenic poisoning. The supply of water treatment systems can potentially help the up to 75 million people in Bangladesh alone who are at risk of developing arsenic-related diseases. The system requires no electricity to operate.</p> <p>2) Outline of the practice Alcan, with its partner in India and Bangladesh, has been very active in this area for several years, supplying units for the removal of arsenic from drinking water.</p> <p>3) Partners Involved Some of the organisations that have funded/implemented the system include: BRAC in Sonargaon and Jhikorgacha under a UNICEF project; GRAMEEN Bank in Kochua under a UNICEF project; ROTARY in the field in Sonargaon, Srinagar and Bandarthana; CARE and IDE in Rajshahi/Chapai Noabganj under Watsan Partnership Project; DASCOH under Swiss Red Cross in Faridpur and Rajbari; World Vision, Bangladesh in Netrokona and Sherpur; The Public Health Engineering Department (PHED); The Kishan Co-operative Milk Producers Union Limited, Nadia District; School of Fundamental Research, Kolkata.</p>
	<p>SectionC: Results /Outcomes</p>	<p>The project, so far, has made the following achievements:</p> <ul style="list-style-type: none"> - The first Alcan arsenic removal systems were installed in Bangladesh under the auspices of BRAC on April 20, 2000. Today more than 2,000 units are in operation, providing safe drinking water to communities and enjoying tremendous user acceptance. (Updated progress is available at: http://magctech.com/field.html) - Since introduction of the systems in April 2000, their success at removing arsenic from drinking water has been validated by several independent studies. - Regular testing carried out initially in The Intronics Technology Center and BUET had shown a 100% success rate of arsenic removal to well below the permissible Bangladesh limit of 0.05 mg/l. - The treated water also meets the drinking water quality parameters of the WHO guide lines as well as Bangladesh Environmental Quality Standard for Drinking Water. Testing under the rapid assessment validation exercise also confirmed the same results. - In a BAMWSP/DFID/WaterAid validation, the technologies system containing Alcan's media came out as the most effective system for removing arsenic and was also the preferred system as judged by the users with respect to ease of operation, water flow rate, and taste of water.
<p>Keys for success (cause of failure)</p>		<ul style="list-style-type: none"> - Corporate social responsibility: As an industry leader, Alcan Chemicals has moved ahead to meet the growing demand for an improved product to comply with new USEPA Mandates covering arsenic levels in drinking water, more stringent requirements for allowable levels of arsenic in water supplies in other countries, and to assist in finding the solution to the growing water problems in South Asia. - Public-private partnership among national and international agencies as well as local communities.

Evaluation		The merits of the system have also been evaluated by independent surveys. Two studies, one conducted by the UK Government Department for International Development and the other by the School of Fundamental Research in Kolkata, proved that Alcan system is the best approach in terms of arsenic removal, water flow, cost effectiveness, ease of use, and user preference.
Applicability		The system is simple, low cost, robust, requires no electricity, minimum maintenance and over 2,000 units are already in operation.
Reference		Johannesburg Summit Business Action for Sustainable Development http://basd.free.fr/initiatives/viewproject.php.147.html Alcan Chemicals website: http://www.chemicals.alcan.com/news/ns_act_solution.htm
Sectoral Issues		1; 4
Cross-sectoral Issues		4; 6
Instruments		3.3; 3.4; 3.8; 4.1
Provider of this information	Name	APFED Secretariat
	Organisation	
	Job Title	
	Contact Address	c/o Institute for Global Environmental Strategies 2108-11 Kamiyamaguchi, Hayama, Kanagawa, 240-0015 JAPAN
	Tel	
	Fax	+81-46-855-3809
	E-mail	apfed@iges.or.jp

Title		TREE for Legacy: Tree Resources for Education, Enterprise and for Legacy
Country		608
Province		
Area		Nueva Vizcaya province
Implementation level		1
Duration/ Year		ongoing
Contact Person/ Focal Point for Enquiry	Name	Government of Nueva Vizcaya Province
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		3; 5
Description of the Practice	SectionA: Background & Objectives	TREE solved the problems of rapid deforestation (forest cover was down to 25%) and poverty in the province.
	SectionB: Outline of Practices /Actions	The programme encouraged people to plant trees and reap benefits there from to finance their education, provide resources for investment and rights in protected areas.
	SectionC: Results /Outcomes	Through the program, 600 hectares have so far been planted with 260,000 trees, and these will benefit about 1,695 individuals and 127 organisations.
Keys for success (cause of failure)		A large scaled public involvement
Evaluation		
Applicability		

Reference		
Sectoral Issues		3
Cross-sectoral Issues		1; 2
Instruments		3.1; 3.2; 3.4
Provider of this information	Name	Ella S. Antonio
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	Fax	+63-2-641-4175; '+63-2-747-5818
	E-mail	esantonio@skynet.net

Title		Upper Watershed Management
Country		144
Province		
Area		Ratnapura, Badulla, and Nuwara Eliya Districts
Implementation level		2
Duration/ Year		May 1998 - December 2004
Contact Person/ Focal Point for Enquiry	Name	Mr. D.P. Munaweera, Project Director
	Affiliation	Ministry of Environment and Natural Resources
Contact Information	Address	No. 30 Luxapana Mawatha, Jayanthipura, Battaramulla, SRI LANKA
	Tel	+94-1-863132
	Fax	+94-1-867430
	E-mail	uwmp2@lanka.ccom.lk
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: US\$23.7 million 2) Source(s) of funds: Asian Development Bank (\$16.6 million), Beneficiaries (\$1.1 million), and the Government of Sri Lanka (\$6.0 million)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Objectives include: - Widespread deforestation and intensive cultivation on strip lands, - Severe degradation of watersheds which caused soil erosion, - Poverty problems in upper watersheds, - Reduction of top soil, crop yields, and farm incomes in the cultivated areas of watersheds, - Reduction of irrigation capacity and hydropower generation in lowland areas as a result of siltation of irrigation canals and reservoirs, - Increased incidence of flooding in rural and urban areas downstream.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice To rehabilitate and sustainable manage and protect critical watersheds, improve incomes of project beneficiaries, and facilitate establishing a medium- to long-term watershed management policy.</p> <p>2) Outline of the practice - Participatory rehabilitation and protection of forests by buffer zone planting of 4,000 ha, timber farms of 3,000 ha, and homestead gardens of 1,500 ha which will address the problem of soil erosion. - Promotion of conservation-oriented farming systems covering 4,500 ha which will increase crop productivity in the cultivation areas.</p> <p>3) Stakeholders involved, decision-making process Institutional capacities of the Ministry of Environment and Natural Resources, implementing agencies, NGOs, and farmers for long-term sustainability of watershed management.</p>
	SectionC: Results /Outcomes	Physical activities are ongoing. The issue of resettlement has emerged and a Resettlement Plan is being prepared to address this.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		1
Cross-sectoral Issues		1; 4
Instruments		3.1; 3.2
Provider of this information	Name	Takashi Matsuo
	Organisation	
	Job Title	
	Contact Address	
	Tel	
	Fax	
	E-mail	

Title		Urban Planning and Environment Management
Country		798
Province		
Area		
Implementation level		1
Duration/ Year		1 year
Contact Person/ Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment) (in lieu of Paul McCabe, Program Officer/Economist, who originally supervised the implementation of the TA).
	Affiliation	Asian Development Bank (ADB)
Contact Information	Address	6 ADB Avenue, Mandaluyong City, Manila, PHILIPPINES
	Tel	+63-2-632-4444
	Fax	+63-2-636-2444
	E-mail	information@adb.org; dponzi@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: \$310,000 2) Source of funds: ADB Japan Special Fund (JSF)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	Land scarcity and increasing population density have caused serious problems in Funafuti, especially in land management, housing and water supply, sanitation and waste management, and pollution control. Living standards have seriously deteriorated, and the urban planning functions are fragmented among ministries and departments. To ease population pressure on Funafuti, some Government departments and functions are being moved to the larger island of Vaitupu, 130 km north of the capital. A land-use plan for both atolls was needed to address problems of unplanned and uncontrolled development and environmental deterioration.

	SectionB: Outline of Practices /Actions	<p>1) Objective of the practice The overall objective of the TA was to help the Government to ensure that the urbanisation of Funafuti and Vaitupu takes place in an environmentally sustainable manner. This involves: (i) rationalising and improving land use planning and legislation; (ii) strengthening institutional capacity in urban planning and management; (iii) prioritising projects for improvement of environmental infrastructure and service; and (iv) supporting the decentralisation policy.</p> <p>2) Outline of the practice The TA employed a multidisciplinary approach which emphasised on participatory development. The method was useful as it combined international expertise with local consultants that facilitated the conduct of successful meetings and consultations with key stakeholders.</p> <p>3) Stakeholders involved, decision making process Island councils, community representatives, leading NGOs, and landowners.</p>
	SectionC: Results /Outcomes	<p>Improvement/Changes The TA was instrumental in the preparation of urban plans for Funafuti and Vaitupu, the definition of environmental infrastructure improvement projects; and recommendations for improvements to the land administration and valuation system, along with complimentary institutional development and implementation proposals.</p>
Keys for success (cause of failure)		<p>The multidisciplinary approach cum participatory development in undertaking consultation meetings helped facilitates the implementation of the TA. The presence of the local consultants served as a 'bridge' in reaching the local communities.</p>
Evaluation		<p>The TA was able to deliver the required outputs/reports on water supply, solid waste management, and environmental improvements. Recommendations on government reform and institutional development were found useful as they would be essential for urban development.</p> <p>The utility of local consultation in the island context was underlined. Tuvalu remains a traditional society, perhaps to a greater extent than other Pacific Island countries. A project proposal, thus, needs extensive discussion at all levels within the small community before it can go ahead.</p>
Applicability		<p>The procedure methodology applied in implementing the TA is worth replicating in other areas of similar situation and intention.</p>
Reference		N/A
Sectoral Issues		3
Cross- sectoral Issues		1; 4
Instruments		1.1; 3.7; 3.8; 4.2

Provider of this information	Name	Daniele Ponzi
	Organisation	Asian Development Bank (ADB)
	Job Title	Senior Economist (Environment), Pacific Department
	Contact Address	6 ADB Avenue, Mandaluyong City, Manila, PHILIPPINES
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	Fax	+63-2-636-2444
	E-mail	information@adb.org; sjarvenpaa@adb.org

Title		Village First Electrification Program (VFEP)
Country		90; 598; 548
Province		
Area		The VFEP began in the Solomon Islands but now includes PNG, Bougainville and Vanuatu.
Implementation level		3
Duration/ Year		1983 to present
Contact Person/ Focal Point for Enquiry	Name	Dr. Paul Bryce or Ms. Donnella R Bryce
	Affiliation	APACE Village First Electrification Group (APACE = Appropriate Technology for Community and Environment)
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	Tel	+61-2-9514-2547
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		<p>1) Amount \$3,000,000 over 20 years (excluding considerable in-kind contributions which included but is not limited to : professional services, time, research time, local materials and labour costs)</p> <p>2) Source(s) of funds Rural communities, APACE, GOA, ROC, SIG, Caritas, UTS and various small donors.</p> <p>3) Efforts to raise/sustain funds for implementation</p> <ul style="list-style-type: none"> - A financial model, The Village First Financial Package has been developed. The model is based on a percentage ratio of 15:15:60 financing between community, local govt and 'investor'. The investor maybe an aid donor, corporate investment or carbon credit sale. - As the program is implemented, and further village renewable energy systems are commissioned, village communities sustain their systems through community-developed regular tariff collections which are invested locally by the community. - Funding for capacity building at National level, for ongoing technical and social support, training, for policy support, standards and renewable energy advocacy work is directed to a representative (indigenous) Council by village subscriptions, but is currently quite small and will require supplementary funding for some time to come.
Actors involved		2; 4; 5

<p>Description of the Practice</p>	<p>SectionA: Background & Objectives</p>	<p>Rural energy poverty is endemic in Pacific Island nations, for geographic and historical reasons, as well as lack of human and institutional capacity. Private sector investment is quite impracticable, given the remoteness, the lack of economic linkages, and the dispersion of existing energy demands. With 85% of Pacific Islanders residing in rural areas, and negligible employment available in urban areas, the nation has experienced growing economic and social deprivation since independence, without options at the rural level for basic services provided by affordable energy. Electricity is a prerequisite for basic services, economic development and nation-state building (as noted in the Pacific Energy Policy 2002, Committee of Regional Organisations of the Pacific).</p> <p>In general all rural village communities in Solomon Islands have or are facing severe environmental exploitation and/or degradation due to increasing population demands coupled with lack of economic opportunity and international pressure to open markets to the natural resources. The traditional society structures based on Melanesian cultural practices are still the major organisational force in the region and dictate communal collectiveness and land-ownership. The Solomon Islands appears very low on the Human Development Index, as do many other of the Melanesian countries. During the course of the Village first Electrification program in Solomon Island there has been considerable social unrest and a national, violent coup. Much of this unrest can be attributed to socio-economic deprivation, however we have found in our experience that villages actively involved in the VFE Program have not become involved in the unrest and have in fact become advocates for peace through self-help economic progress based on access to affordable energy supplies.</p> <p>A pilot village based micro hydro electrification system at Irii Village, Solomon Islands was commissioned in 1983, on a model of local identification of need, community partnership in design and construction, followed by local ownership, operation and local (village) financial return. The pilot was successfully commissioned despite the small electrical power available, and indeed has operated since, with some periods of down time for repair. Indeed, it is now being upgraded without external assistance or finances, to provide increased output and service new neighbouring communities.</p> <p>The Irii experience prompted the Village First Electrification Program (VFEP). In the absence of Government support structures that can effectively work at this level, the VFEP provides for the unprecedented demand for the model's diffusion as an appropriate technology and a Melanesian-style socially conducive project management method. The VFEP provides a national (and now a regional) support structure for self-help between communities. Indigenous, registered national Councils have been formed in Solomon Islands and PNG (SI Village Electrification Council and PNG Village Electrification Council) with similar structures being nurtured in Vanuatu and Bougainville and interest being shown from East Timor and several other pacific nations.</p>
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	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice Social and economic opportunity at rural village level, by locally initiated and locally-controlled project cycles providing up-front access to affordable and maintainable electricity.</p> <p>2) Outline of the practice A series of progressively more endogenous project cycles, in which local village experience and capacity-building is facilitated by previous village project participants and appropriate training activities.</p> <p>3) Stakeholders involved, decision making process Stakeholders are generally local resource and land owners, village hydroelectric management committee, village women's committee, APACE (Sol Is) VFEG Team (experienced and trained in previous project cycles), SIVEC, APACE VFEG (formerly APACE) facilitators and socio-technical advisors</p> <p>NB1: The APACE VFEG Team, that now operates in Solomon Islands and has also visited and assisted villages in Bougainville, PNG and Vanuatu is still totally supported by APACE VFEG Australia. It is anticipated that this Team will gradually become absorbed and supported by SIVEC as it gains more strength and experience.</p> <p>NB2: Based on our experience APACE has developed an affirmative women and energy policy. This policy is founded on the principle that women in Melanesia are the primary energy suppliers and users, and are often the disadvantaged group when benefits are distributed. They are also often the traditional line for resource ownership and resource access and are usually the group to spend most of their time in the village. APACE has consistently believed that if a village renewable energy system is to be sustainable then women must be meaningfully involved in the decision making process about that system. APACE VFEG is the Oceania rep for ENERGIA and the working party for the establishment of the Pacific Women's Energy and Gender Group.</p> <p>The process (project cycle) begins with a local request to participate in the program, followed by a self-assessment procedure of information sharing, followed by an on-site social, technical and environmental appraisal with further community workshops regarding the responsibilities, costs, possible benefits and challenges (risks) arising within the local context. Given feasibility, transparent, explicit contracts detailing responsibilities of each stakeholder are developed, and funding sought through local representatives and/or SIVEC.</p> <p>Design is largely an indigenous responsibility for experienced and senior VFEG Team members in concert with community input. APACE VFEG (Australia) provide designs for complex modules of turbo machinery and electronic control, training, guidance and/or facilitation in program management and or development when requested. Construction is largely by local community effort, under the management of the VFEG Team. Local training is around an experiential model, supplemented by specialist training activities. Social awareness and understanding by the whole community is emphasised throughout the project cycle, to enhance emotional ownership, develop understanding for safe and effective utilisation of electricity and to develop accepted structures that may sustain the system's financial and technical management thereafter.</p>
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	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes</p> <ul style="list-style-type: none"> - A comprehensive SI provincial resource assessment. - Resource assessments and feasibility studies in PNG, Bougainville and Vanuatu. - Renewable energy awareness in hundreds on rural villages. - Increased human resources in the renewable energy sector, including women - National and provincial institutions totally focussed on rural renewable energy for development. - National policy changes to acknowledge and accommodate village owner renewable energy systems. - Appropriate, but very high-level standards. - A model for measuring, monitoring and verification of greenhouse gas savings. - Forestry conservation practices initiated. - Environmental protection practices initiated. - Greenhouse awareness becoming widespread. - Peace building. - Seven village-owned and managed rural micro hydroelectricity systems in rural areas of Solomon Islands and PNG, operating for various periods back to 1983, without Government subsidy or any further outside financing. - Micro hydro systems up-graded in Bougainville. - Schools, health clinics, village stores, small workshops and enterprises spawned from these renewable systems. New community halls, meeting places and women's centres. Youth activities such as lighted sport's fields and musical evenings and dances. New wharves and roads, added village security through 'street' lighting and navigation lights for homecoming canoes. Access to communications and outside information through cheap radio access, village television and in a couple of instances telephone and in two instances plans are underway to join the local email network. Refrigeration and cool storage for market produce and fish and the social cohesion that accompanies their construction. <p>2) Problems that remain to be solved</p> <p>The sustainability of the Program is in jeopardy, despite its apparent widespread success, since it is a continuous challenge for any remote village to sustain such a sophisticated system with negligible national technical infrastructure, no Government human capacity or resources for rural support. Each of the six Solomon Island community power systems has experienced difficulties from time to time for various social and technical reasons. One system has effectively failed when these challenges were compounded by the effects of both a tsunami and pressure from logging interests. All village systems, as well as future examples, will benefit from a national Council with more than extensive goodwill, voluntary support and small voluntary village subscriptions to carry out a vital support and coordination role. Villages involved need such a connecting agency, for information networking and regular technical assessment. Support in social and technical areas beyond reasonable local knowledge or experience.</p>
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	<p>3) Unexpected positive/negative impacts to date</p> <ol style="list-style-type: none"> 1. Social pride has always been an outstanding characteristic that accompanies commissioning of each project, and has greatly assisted their long-term sustainability. 2. The link between electrification and subsequent development, so often unformed in other models, has slowly emerged in this program via the capacity building inherent within it. 3. The complexities of local social structures continue to provide unexpected areas for local self-awareness. 4. There has been negative impacts arising from factions within Government, international logging companies and their local representatives, and others with competing interests. Nevertheless, it is remarkable that small communities have retained enthusiasm, operated and maintained complex systems with such pride for periods that dwarf other attempts at longevity in the Pacific 5. One surprising aspect has been the growing tendency for international donors to view rural electrification as an area to be left to the profit sector (while pursuing social and educational initiatives that depend upon energy access) despite the realities of the Melanesian context as well as the historical experience social goals for RE within industrialised nations <p>Examples:</p> <ul style="list-style-type: none"> - achieved multiple effects in different aspects simultaneously - produced desired results with minimal time, expenditure of resources - integrated elements of sustainable development - improved capacity of institutions/organisations/relevant stakeholders
<p>Keys for success (cause of failure)</p>	<ul style="list-style-type: none"> - enhancement of collaboration among the different stakeholders and/or introduction/improvement of consultative mechanisms - facilitation of gender equity, social inclusion, economic and social mobility - voluntary participation of local people - use of knowledge and/or techniques that used to be utilised, including traditional/indigenous ones - change in the way of using local resources (e.g., make use of available local resources not used sustainably before) - enhancement of capacity of stakeholders/organisations - shifting priorities in society - introduction of economic policy instruments (e.g., introduction of new tax systems, introduction of effective cost recovery system) - introduction of new and affordable technology - combination of different policy tools <p>All of the above factors have been present. The centrality of beneficiaries in the full project cycle has facilitated an inclusive result, maximising local resources, knowledge and skills, and enhancing capacities at each level.</p> <p>Other 'tools' we have found that contributed to the success of the program:</p> <p>The adoption of comprehensive agreements, between all relevant stakeholders, for all stages to of the project. However we have also found it to be essential to have these agreements negotiated and signed BEFORE activity begins at each stage and that the basis for the agreements must be founded on awareness, information and understanding of the technology, the process and the possible outcomes.</p> <p>Shared responsibility for financing the project</p> <p>Transparency and shared responsibility for fiscal management of the project.</p> <p>Comprehensive community input into policy development.</p>

<p>Evaluation</p>	<p>Effectiveness: The VFEP has proven to deliver considerable economic, social and environmental benefits to communities that have chosen to participate. It has further delivered considerable national benefits in capacity and institutional building. The program has delivered benefits that were not foreseen in the beginning of the program; benefits such as social cohesion, environmental advocacy, peace building initiatives, reversal of urban drift, improvement of the status of women in their communities.</p> <p>Cost benefit: The VFEP has proven that it can deliver a community owned, micro-hydro system up to 100kw of 240 volt ac power, full village reticulation, a management structure, trained technicians and business development for approximately \$300,000 using the VFEP Financial model. This is comparable or even better than other model I have been able to locate.</p> <p>Sustainability. The first premise in developing the VFEP model was sustainability. The model is a wholistic 'program' that has researched and developed appropriate infrastructure, socio-economic need and application, policy support, cultural mores, financial opportunities and requirements, gender needs and appropriate technologies. My belief is that as this model has been developed by a not-for-profit group that had the capacity to work with communities, at the grass-roots level, it has held sustainability as the core value not placed it as a necessary externality. I can produce much information on the processes of develop sustainability methodologies for all aspects and processes with in this program if requested.</p> <p>The next part of the question concerning integration of social, economic, environmental and cultural aspects has been addressed in the program as elements of the sustainability of the program. Each has been looked at in its own context with each participating stakeholder, and then built into the fundamental structure of the program. For example all villages that participate in the VFEP are fully reticulated under the initial project funding (this is quite a rare occurrence) to allow for immediate take up of the power load and the concomitant economic return.</p> <p>Transparency and accountability of the VFEP have been principles that we have worked hard to maintain. Levels or fiscal responsibility, performance and capability have been carefully assessed and systems and procedures to match those expectations have been developed and implemented. Contracts, agreements and reports are considered public documents and are distributed among the appropriate stakeholders. Information, newsletters etc is widely distributed among VFEP participants. External and internal audits are regularly held at all level s of the project.</p> <p>It could be said that there are 'no secrets' in this program.</p> <p>I believe that APACE VFEG has successfully and stridently maintained horizontal accountability for the VFEP as opposed to traditional vertical or hierarchical accountability.</p> <p>APACE VFEG, in conjunction with a specific village community in the Western Province of Solomon Islands and SIVEC is attempting to conduct a longer-term evaluation of the outcomes and the impact of a micro-hydro renewable energy system on the village community and the local environment. The evaluation has involved university research and fieldwork in developing appropriate indicators and a methodology. This work has been proceeding for two and a half years but has been a totally unfunded project. I am at present seeking some support to allow the valuable work to continue to a point where it can be collated and published.</p>
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Applicability		<p>The 'Village First Electrification Model' has been developed over many years to meet the particular contest of rural, village based society with little to no prospect for government support. The model has proven its applicability in developing countries, in this region with low socio-economic indicators. APACE VFEG has also trialed this some of these approaches in several villages in north-eastern Laos and has found the same positive results to the VFEP initiatives.</p> <p>However I believe that the basic constructs of the model, ie initial community needs identification and request, community centred decision making and responsibility and 'appropriate' technology are universal and will apply to non-urban communities in developed countries.</p> <p>The VFEP model is a straight forward and basically simple model of eight steps. However the constraint, of this model, is that it takes time to move carefully and deliberately through each step to allow the process to be embedded within the 'recipient' group.</p>
Reference		<p>'Replanting the Banana Tree' (B Hardy sent this book to Tokyo Jan 2003) APACE quarterly Newsletters 24 project submissions Yearly project and program reports Numerous journal publications and conference papers - lists will be supplied if required Global Village Energy Fund Newsletter April 2003 Pacific Energy News February and April editions 2003 AIJ Award from Australian Government Green Globe Award - SEDA Fred Hollows Award Services to Humanity Institute of Engineers Award for Excellence in Export of Terchnology Keynote speech at Village Power 2000 Support letters from foreign leaders Etc</p>
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 5; 6
Instruments		3.1; 3.2; 3.3; 3.4; 3.5; 3.8; 4.1; 4.2
Provider of this information	Name	Mrs Barbara Hardy
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	E-mail	bhardy@picwine.com.au

Title		Watarru a renewable energy success story
Country		36
Province		
Area		South Australia's arid zone
Implementation level		1
Duration/ Year		First commenced 1992; reviews and upgrades took place to meet growing demand; the story focuses on developments to 2001.
Contact Person/ Focal Point for Enquiry	Name	Mr. Brian Hanson, Senior Field Officer
	Affiliation	ATSIC (Aboriginal and Torres Strait Island Commission)
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
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	Fax	
	E-mail	
Sponsor(s)		1) Amount \$1m+ 2) Source(s) of funds Commonwealth & State funds
Actors involved		2; 3; 5

Description of the Practice	SectionA: Background & Objectives	<p>Watarru Community Inc. is a small Aboriginal community, in the Anangu Pitjantjatjara Lands in the northwest corner of South Australia (map reference Mt Lindsay). To get there you travel 600 kilometres on dirt roads after you leave the Stuart Highway at the Northern Territory and South Australian border. Then through the Musgrave Ranges, you pass Mt Woodroffe South Australia (SA)'s highest mountain, and then across flat sand dune country.</p> <p>Watarru Community is SA's most remote Indigenous community; inaccessible location for fuel trucks to deliver diesel. Due to the remote nature of the community, and the difficulties in transporting diesel in 44-gallon drums on a very poorly maintained track, it was decided to explore the option of a hybrid renewable energy power supply.</p> <p>As the community infrastructure grew, so did the power requirements. To meet this and future needs, a plan was formulated to allow the system to be expanded in a modular fashion as funds became available. Today Watarru is a growing community of 70 to 90 people, with a load of between 150 & 380kWh / day providing power to 14 houses, an administration centre, workshop, clinic, a modern community school, teacher houses and a store.</p> <p>See Section 'References'.</p>
	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice</p> <p>2) Outline of the practice</p> <p>The system comprises of a 27kW nominal solar array, coupled with a 35kW 3-phase inverter, the 2 x original wind turbines, a 200kWh battery bank and a 60kVA 3-phase diesel generator. The renewables are sised to meet the daytime load for the majority of the year, with peak periods met via the diesel generator or a combination of generator & inverter as the site loads demand. At night the site is fed via the inverter and the battery bank, with the generator being called on as required to meet high loads and recharge the battery bank.</p> <p>Examples:</p> <ul style="list-style-type: none"> - increased agricultural productivity by introduction of new technology - increased income by using local resources that had not been used - improved local environment by enhancing public awareness - utilised natural resources more effectively by introducing new rules <p>3) Stakeholders involved, decision making process</p> <p>Sustainable living environment</p> <p>A reliable power supply meant other agencies were willing to support housing and infrastructure</p>

	<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes Summary: - Daily KWH variance: 150KWH to 380KWH per day - Average generator run time = 7 hours per day (since October 1998) - Power generated = 70% Renewables & 30% Diesel generator - Data logging is important at energy source and consumer usage - Community manage power usage and are involved in decision making, using 'logged' data in an 'easy read' format - Maintenance and ongoing service delivery is well coordinated- Important to have the cooperation of funding & support agencies, building designers, product manufacturers and a commitment to Research & Development, all of which have contributed to Watarru's renewable energy success story. - Achieved multiple effects in different aspects simultaneously - Produced desired results with minimal time, expenditure of resources - Integrated elements of sustainable development - Improved capacity of institutions/organisations/relevant stakeholders</p> <p>See 'References' Section.</p> <p>2) Problems that remain to be solved - Meeting continued demands</p>
<p>Keys for success (cause of failure)</p>		<p>Examples: - enhancement of collaboration among the different stakeholders and/or introduction/improvement of consultative mechanisms YES - facilitation of gender equity, social inclusion, economic and social mobility YES - voluntary participation of local people Not Really - use of knowledge and/or techniques that used to be utilised, including traditional/indigenous ones Cross culture negotiations happened - change in the way of using local resources (e.g., make use of available local resources not used sustainably before) Community started to impose own governance on power management matters. - enhancement of capacity of stakeholders/organisations Shared goals & rewards - shifting priorities in society Increase agency support that translated into more power demand - introduction of economic policy instruments (e.g., introduction of new tax systems, introduction of effective cost recovery system) Partial user pays introduced - introduction of new and affordable technology Not really, many hybrids are capital intensive and have to be maintained properly - combination of different policy tools ?</p>
<p>Evaluation</p>		<p>- effectiveness GOOD - cost benefits LONG TERM - sustainability GOOD with agreed maintenance regime - degree of integration of social, economic, environmental and cultural aspects Community live where it wants to be + GOOD - transparency/accountability Yes good records kept able to justify investment to tax payers - strengths and weaknesses High capital cost Lack of local resources to maintain asset</p>
<p>Applicability</p>		<p>- social/economic/cultural/environmental conditions that make The project possible of course it would need support of funding agencies - degree of simplicity of The process of implementation. it high tech stuff simplicity does not come into it</p>

Reference		- COMTEC 2001 Paper 'Watarru Community - A Renewable Energy Success Story' Brian Hanson - CDROM for presentation Community Infrastructure 2001 (B Hanson owner)
Sectoral Issues		2
Cross-sectoral Issues		1; 4; 6
Instruments		3.1; 3.2; 3.3; 3.4; 3.8; 4.1; 4.2
Provider of this information	Name	Mrs Barbara Hardy
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	Fax	+61-8-8296-7338
	E-mail	bhardy@picwine.com.au

Title		Water Resources Management Project
Country		144
Province		
Area		Deduru Oya Basin, Attanagalu Oya Basin, and Menik Ganga Basin
Implementation level		2
Duration/ Year		October 2001- June 2006
Contact Person/ Focal Point for Enquiry	Name	Mr. K.S.R. de Silva, Director General
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Contact Person(2)/ Focal Point for Enquiry	Name	Mr. S.G.G. Rajkumar, Project Director
	Affiliation	National Water Supply & Drainage Board (NWSDB)
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	Tel	+94-74-721118
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	E-mail	enwaterboard@eol.lk
Sponsor(s)		1) Amount: US\$28.2 million 2) Source(s) of funds: Asian Development Bank (\$19.7 million), and the Government of Sri Lanka (\$8.5 million)
Actors involved		1; 2
Description of the Practice	SectionA: Background & Objectives	Rapid industrial growth, urbanisation, and increasing water demands in the agriculture sector in recent years have caused increasing stress on Sri Lanka's water resources and highlight the importance of more efficient and holistic management of the resource. Inefficiencies have been exacerbated by the fact that a number of agencies exploit the water resource but operate more or less independently of each other, with no single agency having a mandate for overall management.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice To strengthen the Government's capacity to manage its water resources in a sustainable, participatory, and transparent way.</p> <p>2) Outline of the practice Part A: Institutional Development - Establishment of National Water Resources Authority and its operational links to other water agencies - Database improvement for water resource data collection and information management by modernising and expanding the monitoring and data management and sharing facilities - Strengthening of water resource management by supporting the implementation of plans in three pilot river basins.</p> <p>Part B: Infrastructure for Water resource Management - Construction of Kelani Conservation Barrage to restore the capacity of the water supply intake for Greater Colombo at Ambatale - Six low-flow measuring weirs for accurate measurement of low flow in selected critical rivers where there is competition for water</p> <p>3) Stakeholders involved, decision making process National Water Resources Authority (to be established). National Water Supply and Drainage Board, and Irrigation Department</p>
	SectionC: Results /Outcomes	Project activities has just started in 2002, and physical activities are still under preparatory stage.
Keys for success (cause of failure)		N/A; the project is in progress.
Evaluation		N/A; the project is in progress.
Applicability		N/A; the project is in progress.
Reference		N/A
Sectoral Issues		1
Cross-sectoral Issues		1; 4
Instruments		3.8; 4.2
Provider of this information	Name	Takashi Matsuo
	Organisation	
	Job Title	
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	Fax	
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Title		Water Supply and Sanitation Rehabilitation Project (Phase I and II)
Country		626
Province		
Area		
Implementation level		2
Duration/ Year		Phase I - August 2000 - December 2001 Phase II - July 2001 to 30 April 2003
Contact Person/ Focal Point for Enquiry	Name	Daniele Ponzi, Senior Economist (Environment), Pacific Department
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	E-mail	information@adb.org
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
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	E-mail	
Sponsor(s)		1) Amount: Phase I: \$4.5 million, Phase II: \$4.5 million 2) Source of funds: ADB Trust Fund for East Timor (TFET)
Actors involved		1; 2; 5
Description of the Practice	SectionA: Background & Objectives	As a newly independent State, East Timor remained weak and needed immediate assistance after the conflict in 1999. Much of its infrastructure facilities like buildings, water treatment facilities, storage tanks, etc. were burned down or damaged. The Trust Fund for East Timor (TFET) was established to address the emergency humanitarian needs of the early post conflict period. One of the six ADB managed infrastructure rehabilitation projects is on water supply and sanitation implemented in 2000 which has two phases.

	<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objective of the practice The objective of the Phase I was to provide East Timorese with sustainable water supply and sanitation (WS&S) services using appropriate technology and management. Phase II project was basically a continuation of the activities implemented in Phase I. Its main targets are to: (i) improve the capacity of water supply and sanitation (WS&S) services; and (ii) assist in the implementation of priority projects in Dili districts, sub districts, and villages in cooperation with other donor countries.</p> <p>2) Outline of the practice The major project activity was to support implementation of priority water supply and sanitation projects in Dili, district capitals, and community systems. This activity was augmented by capacity building and institutional development programmes.</p> <p>3) Stakeholders involved, decision making process Concerned Government officials and affected communities</p>
	<p>SectionC: Results /Outcomes</p>	<p>1) Improvement/Changes The project has accomplished the restoration of damaged WS&S infrastructure, and built the country's institutional capacity to manage and operate the system. A Project Management Unit (PMU) was successfully established in September 2000 and the Program Implementation Document (PID) and Sector Management and Investment Framework (SMIF) were prepared and completed in December 2000. These are now being used as guidelines in implementing the overall rehabilitation activities being pursued in Phase II activities of the project.</p> <p>The project has also identified and implemented priority capacity and institutional development activities and has laid the necessary groundwork for the physical rehabilitation and development assistance to the beneficiaries. Generally, the project has resulted in a range of important quantifiable and non-quantifiable socio-economic benefits at the local levels. These relate to general improvements in the quality of life of the project beneficiaries. Many communities have benefited from access to water for the first time. In Dili, and other major towns, the quality of services has improved a lot.</p> <p>2) Problems remain to be solved While most water supply services have been restored to the basic level, this is not yet considered adequate based on quality standards. Further improvement is necessary to achieve acceptable level to meet public health, human dignity, and environmental protection goals.</p>
<p>Keys for success (cause of failure)</p>		<p>High level of commitments from the implementing and partner agencies.</p>
<p>Evaluation</p>		<ul style="list-style-type: none"> - External support is still necessary to continue the rehabilitation works undertaken. - External support should fit within the strategies earlier prepared and should address long-term need. - Sector assistance projects should be designed with sufficient flexibility to respond appropriately to evolving needs. - Capacity building efforts must be continued. - Water leakage and wastage should be minimised and wastewater disposal systems must be installed. - Health and hygiene must be continuously promoted.
<p>Applicability</p>		<p>N/A</p>
<p>Reference</p>		<p>N/A</p>
<p>Sectoral Issues</p>		<p>1</p>

Cross-sectoral Issues		1; 4; 6
Instruments		3.7; 3.8; 4.1
Provider of this information	Name	Daniele Ponzi
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Title		Wind Power Development Project
Country		156
Province		
Area		Xinjiang Autonomous Region and Provinces of Heilongjiang and Liaoning
Implementation level		1
Duration/ Year		1998 - 2003
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Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount \$98.7M 2) Sources of funds ADB \$58M Co financing \$22.0M Borrower \$18.5M
Actors involved		1; 4
Description of the Practice	SectionA: Background & Objectives	Combustion of fossil fuels has led to serious local environmental problems in the PRC, notably air pollution. An aggressive program of energy conservation and development of non-coal energy alternatives, including renewable energy (wind energy, solar, etc.) could limit the increase in GHG emissions in the longer term. With moderate action, the PRC could draw as much as 6 percent of its energy needs in 2020 from renewable energy sources.

	SectionB: Outline of Practices /Actions	<p>1) Objectives of the practice</p> <p>The objective of the Project is to produce electricity in an environment-friendly manner by developing wind-based power generation and thereby avoid emissions of sulphur dioxide; nitrogen oxide; total suspended particulates (TSP); and carbon dioxide associated with conventional thermal power generation.</p> <p>2) Outline of the practice</p> <p>The scope of the Project comprises (i) construction of wind farms at Dabancheng in the Xinjiang Autonomous Region (30 MW); at Fujin in Heilongjiang Province (24 MW); and at Xiwaizi in Liaoning Province (24 MW); and (ii) technical assistance for Barrier Removal and Institutional Strengthening to promote wind-based power generation in the three provinces.</p>
	SectionC: Results /Outcomes	<p>The Project will produce electricity in an environment-friendly manner and thereby avoid air pollution. In particular, over its lifetime, it will avoid emissions of about 11,000 tons of sulphur dioxide, about 7,400 tons of nitrogen oxides; about 5,000 tons of particulates and about 1.94 million tons of carbon dioxide. It will also accelerate the use of wind-based electricity in the PRC.</p>
Keys for success (cause of failure)		N/A
Evaluation		N/A, on-going project
Applicability		
Reference		ADB Project Profile Document 31163-01
Sectoral Issues		2
Cross-sectoral Issues		1; 6
Instruments		3.2; 3.8; 4.1; 4.2
Provider of this information	Name	The APFED Secretariat
	Organisation	Institute for Global Environmental Strategies
	Job Title	
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Title		Zero Waste by 2020
Country		554
Province		
Area		
Implementation level		1; 2
Duration/ Year		1997 - ongoing
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	Affiliation	Zero Waste New Zealand Trust
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	E-mail	mailbox@zerowaste.co.nz or lucy@zerowaste.co.nz
Contact Person(2)/ Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		1) Amount: N/A 2) Source of funds: N/A 3) Efforts to raise/sustain funds for implementation: Funds were raised so that seed grants could be given to assist local initiatives.
Actors involved		2; 3; 4; 5
Description of the Practice	SectionA: Background & Objectives	<p>Communities all around the world are grappling with the waste problem. New Zealand, with a population of just four million, is littered with landfills - often near or over sensitive marine and freshwater systems. Many of these are closing and being replaced with larger regional landfills that New Zealanders are told will be safer. This contradicts studies that show there are significant health risks associated with land filling and the knowledge that all landfill liners will eventually leak. Regardless of their safety, these large facilities present a clear danger because increased investment and capacity actually encourages increased materials flows.</p> <p>Globally we have put our faith in the idea of 'managing' waste but it hasn't solved the problem, and a tragedy is unfolding as the hidden long-term costs of waste accumulate. Waste disposal to landfills (and, in some countries, to incinerators) threatens materials efficiency and, as has been discovered by many manufacturers around the world, industrial competitiveness. In the final analysis landfills and incinerators destroy valuable resources. This destruction of resources is enough reason to condemn landfills and incinerators as outmoded disposal technologies. The final goal for a sustainable society is to create a 100% materials-efficient economy.</p>

	<p>Zero Waste is a whole system approach to addressing the problem of society's unsustainable resource flows. Zero Waste encompasses waste elimination at source through product design and producer responsibility, and waste reduction strategies further down the supply chain such as clean production, product dismantling, recycling, reuse and composting.</p> <p>Communities that implement Zero Waste strategies are aiming to switch from wasteful and damaging waste disposal methods to value-added resource recovery systems that will help build sustainable local economies.</p>
<p>SectionB: Outline of Practices /Actions</p>	<p>1) Objectives of the practice</p> <p>The Zero Waste campaign began in 1997 with the founding of Zero Waste New Zealand Trust, a not-for-profit organisation with the vision for New Zealand to become the first Zero Waste society. The campaign built on the work of many small local groups trying to create sustainable jobs and businesses through resource recovery and waste minimisation activities. The campaign aimed to unify the various waste elimination initiatives into an easily understood vision and to provide a rallying point for the community sector.</p> <p>The ultimate goal of Zero Waste is to create a closed loop materials economy where products are made to be reused, repaired and recycled; an economy that minimises and ultimately eliminates waste.</p> <p>2) Outline of the practice</p> <p>To help achieve its goal of Zero Waste by 2020, Zero Waste New Zealand Trust focuses on three core areas:</p> <p>a. Advocacy and Policy Development</p> <p>This is the major work of the Trust - to promote the vision of a zero waste society where all materials are valued as resources. This is achieved by:</p> <ul style="list-style-type: none"> - Manufacturers designing products that can be reused, disassembled or recycled at the end of their lives. - Businesses using Clean Production techniques (Clean Production takes a life cycle view of all material flows, from extraction of the raw material to product manufacture and the ultimate fate of the product at the end of its life. It is a way of designing products and manufacturing processes in harmony with natural ecological cycles. It aims to eliminate toxic wastes and inputs, and ultimately promotes the judicious use of renewable energy and materials). - Local authorities providing the incentives and support infrastructure for recycling and resource recovery. - Central government creating policy that favours waste minimisation and recycling over disposal to landfill. - Consumers buying recycled, and recycling. <p>b. Networking and Technology Transfer</p> <p>To help communities achieve zero waste the Trust researches waste reduction technologies from around the world and assists local implementation. Often this involves third party advice from Zero Waste Advisors - experts in various aspects of waste stream diversion, including kerbside collection systems, organic waste processing and recovered materials manufacturing. The Advisor's main aim is to help clients including councils, recyclers, non-profit organisations and businesses achieve 'massive and rapid' waste reduction outcomes.</p> <p>The Trust also assists the networking of groups around the country and acts as an information exchange for businesses, schools, recyclers, universities and community groups. They do this through a website and monthly newsletter.</p>

	<p>c. Funding</p> <p>The Trust also provides small amounts of financial support to individuals and groups working on waste reduction and recycling solutions in New Zealand's communities. Grants can be used for a wide range of projects demonstrating a commitment to achieving Zero Waste including research, policy development, technical support, pilot projects, education and events.</p> <p>3) Stakeholders involved, decision-making process</p> <p>In a Zero Waste society everyone should take responsibility. The stakeholders involve Central Government, regional councils (states), local authorities, industrial designers, manufacturers, retailers, secondary materials handlers, universities, schools, consultants/engineers, community organisations, and the householder.</p>
<p>SectionC: Results /Outcomes</p>	<p>1) Improvements/changes</p> <p>In 2002 New Zealand became the first country in the world to adopt a national policy of Zero Waste. By adopting Zero Waste, the New Zealand Government recognised the validity of the Zero Waste campaign and took the first step away from management, to elimination of waste. No other country had gone so far as to make Zero Waste a national goal. The vision 'Towards Zero Waste and a Sustainable New Zealand' resulted from an extensive, community-led campaign that has so far resulted in 38 of New Zealand's 74 local authorities adopting Zero Waste targets.</p> <p>2) Problems that remain to be solved</p> <p>If nurtured and supported by Government, the community and council-led Zero Waste campaign could put New Zealand in the forefront of sustainability. But dangers lie ahead if the New Zealand Government continues a hands-off approach and leaves waste to the 'market' forces. These dangers include:</p> <ul style="list-style-type: none"> - Mission fatigue on the part of councils and community groups that have been leading the charge but are out of energy and finances to carry on - Consolidation of the waste industry as it fights the threat posed by increasingly effective community waste reduction initiatives - Ineffective use of resources as national communication campaigns fail to capitalise on established community campaigns and the national Zero Waste movement - Cynicism by the public at the lack of integrity between the vision of the Government's Waste Strategy and its commitment to achieving it - Loss of New Zealand's lead. Zero Waste is taking off overseas - and New Zealand's example has played a big part in this. It has been 'the inspiration' for many other countries. <p>3) Unexpected positive/negative impacts to date</p> <p>With 38 New Zealand's local authorities officially committed to a goal of zero waste, huge waste reductions are inevitable, creating a momentum that will fuel new innovations, business, jobs and local economic development. Below are case studies of the local authorities that have adopted Zero Waste.</p> <p>a. Opotiki District Council</p> <p>Opotiki District Council with a population of 9,200 was the first council to take up the challenge and in September 1998 adopted Zero Waste to landfill by 2010, starting on a journey that has seen waste plummet from 10,000 tonnes to 1,500 tonnes to landfill per annum - an 85% reduction in five years.</p>

		<p>The main reasons for Opotiki's success are that Council took a strong leadership role, developed a whole system approach, and invested the necessary resources to make its programmes work. Specifically it:</p> <ul style="list-style-type: none"> - Imposed charges at the landfill (1999) - Established a kerbside collection of recyclables (2000) - Reduced the size of the residual rubbish bag from 75 litres to 25 litres (2001) - Established a resource recovery infrastructure network throughout the district in 2002. <p>The total cost of their Zero Waste strategy (\$460,000 to establish 3 resource recovery facilities) was approximately \$3,000 more than what it would have cost to continue to landfill waste. For that \$3,000, they have created local jobs; massively reduced waste and have purchased a number of community assets. Opotiki District Council is now aiming for a 90% diversion from landfill by June 2004.</p> <p>b. Kaikoura District Council</p> <p>Kaikoura District Council with a population of 5,000 was the third council to adopt a Zero Waste policy in March 1999. Driving this decision was a rapidly filling landfill, a strong environmental ethos (driven by the income derived from the over one million visitors who come to enjoy the environment) and the need to create employment for individuals at the bottom of the social heap.</p> <p>Kaikoura responded to its Zero Waste challenge by forming a joint venture company with a local community group, Kaikoura Wastebusters. The new venture, called Innovative Waste Kaikoura (IWK), was given responsibility for managing all the town's waste services and implementing its Zero Waste policy. Kaikoura faces a problem common to all small tourist towns - how to stretch income from its narrow rating base to cover the infrastructure requirements of a booming tourist trade - including waste services. Innovation has been the key, and IWK has lived up to its name developing low cost solutions to drive waste diversion to its current level of 56.8% by volume (and increasing).</p> <p>These include:</p> <ul style="list-style-type: none"> - Weekly kerbside recyclables collection for town residents (residual waste has to be self-hauled to the resource recovery centre or a bin-hire company employed). Fortnightly recyclables pick up for outlying areas - Twice weekly recyclables collection for business - Skip-bin hire for the construction industry - IWK designed and built enclosed composting unit to handle greenwaste and foodwaste - Landfill cell storage for those materials that are currently uneconomic to recycle but could have value in the future - A thriving re-use shop - Use of crushed recovered glass as a filter medium for leachate control - Compaction and baling of residual waste once recyclables have been removed to maximise landfill space - Mining of old parts of the landfill to extract recyclable material and create more space. - IWK has the support of the community in its drive for Zero Waste and as created nine full time jobs through its activities, when there were only two people employed at the landfill four years ago.
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c. Mackenzie District Council

Mackenzie District Council with a population of 4,000 was the thirteenth council to adopt Zero Waste in November 1999, choosing a target date of 2014. Like Kaikoura it has a seasonal tourist influx necessitating a waste minimisation strategy that worked as well in the high volume tourist season as in the off-season.

Council staff spent a significant amount of time running financial models, to assess its options and the financial impact of each option. Each option was also compared to how well it would deliver on the Zero Waste goal. The outcome of this planning was the launch of a range of new waste minimisation systems in June 2002 including:

- A new 3-bag kerbside collection system for household residents - one for recyclables, one for organics and one for residual waste. This is the first of its kind in New Zealand.
- The construction and in-house operation of three new Resource Recovery Centres in each of the main townships.
- A comprehensive education programme
- The installation of a Vertical Composting Unit to process large volumes (47% of the waste stream) of food waste and green waste into compost. This includes a large amount of seasonal food waste originating from the hermitage in Mt Cook National Park.
- Financial incentives to separate waste.

Key to the success of Mackenzie's system has been its meticulous planning and its utilisation of the full range of skills at its disposal from the political skills of the Mayor to the communication skills of Ashburton's Mid Canterbury Wastebusters, the engineering skills of the Solid Waste Manager and the financial skills of the Accountant.

Mackenzie's strategy has truly been a team effort and is already resulting in waste diversion of around 70%, just one year after implementation.

d. Dunedin City Council

Dunedin City Council (population 120,000) adopted its Zero Waste goal in October 1999 and set about developing a long-term strategic implementation tool to help it achieve this. Staff worked in partnership with Zero Waste Advisors from Waste Not Ltd and Meritec to develop the 'Dunedin Zero Waste Strategy Tool,' a computer spreadsheet system that provides a framework for turning the vision of zero waste into practical initiatives. A suggested implementation programme was devised for Dunedin and the tool 'genericised' for use by other councils, becoming 'ZAP - Zero Waste Action Plan.'

One of the priorities identified through the process was the establishment of a Resource Recovery Centre. An upgrade of the Green Island Landfill to include this and a Transfer Station had been on the books for a number of years but the adoption of a Zero Waste target and implementation plan changed the emphasis towards more resource recovery. In 2002 a purpose-built Resource Recovery Centre was opened at the Green Island landfill. This was followed in March 2003 with the launch of a new kerbside collection of recyclables. With these initiatives in place Dunedin City Council now estimates that it is recovering around 28% of its residential waste.

e. In November 2003, The New Zealand Institute of Architects adopted Zero Waste as a guiding principle for its members.

<p>Keys for success (cause of failure)</p>	<p>The Zero Waste campaign in New Zealand has been supported by three key strategic initiatives.</p> <p>1. Supporting the Community Sector</p> <p>There is an active community sector in New Zealand led by practical, far-sighted individuals who have tried to fill the vacuum resulting from the 'hands-off' Government style of the 1980's and taken ownership of problems in their communities. These people intuitively understand the power of Zero Waste as a motivator - and the need for urgent change. They have an urgency to stop wasted resources filling up landfills - and instead use them to create local jobs and small businesses. These people know that recycling and resource recovery on their own are not enough to create a Zero Waste society. They see and deal with a growing avalanche of non-recoverable materials on a daily basis and know that the solution lies with product design and Extended Producer Responsibility. But they also know that action must be taken to recover materials and products that can be reused and recycled, and that each community must build the infrastructure for a sustainable materials economy at the local level.</p> <p>The community pioneers have been under-funded and, in the past, often dismissed as fringe elements. Zero Waste New Zealand Trust with the support, and often alongside, Community Employment Group has given these groups recognition, technical support, mentoring, networking, and seed-grants. The national network and campaign has helped validate their work and given them encouragement in an often isolated and unsupportive environment. This growing credibility has enabled other funders and local authorities, to recognise the potential of these groups to create sustainable jobs and added their support and credibility to the community groups' work. There are over 40 community groups working in some way towards Zero Waste and they have become significant players in waste reduction in New Zealand. A number of these groups are currently establishing the Zero Waste Community Enterprise Network (ZWCEN) under the umbrella of Zero Waste New Zealand Trust.</p> <p>2. Challenging and Supporting Local Authorities</p> <p>The second main strategy has been to promote the vision of Zero Waste to decision makers in local authorities. The adoption of Zero Waste strategies by city and district councils has been one of the most visible successes of the campaign.</p> <p>The first councils to adopt Zero Waste targets (in 1998) were Opotiki District Council and Christchurch City Council - the early adopters in the Zero Waste story, and two of the most successful. Christchurch adopted Zero Waste independently of the Zero Waste campaign. As part of the campaign, presentations were made to councils, Rotary Clubs, public meetings, workshops and conferences around the country and the Zero Waste message began to filter out to other communities. In 1999 Zero Waste New Zealand challenged the rest of New Zealand's 74 district and city councils to adopt 'Zero Waste by 2015' targets, offering the first ten that accepted the challenge, technical, networking and financial support. The response was enthusiastic and by mid 2000, 25 councils had committed to Zero Waste. No further funding was provided after this time but councils kept on adopting Zero Waste targets and now 51% have done so. The momentum continues with more councils indicating their intention of adopting Zero Waste targets in the near future.</p> <p>Key to the success of the Zero Waste New Zealand campaign has been the requirement for councils to adopt a Zero Waste target with a date at a full Council meeting to ensure there is a high level of understanding and commitment at all levels. By adopting it at political level, and documenting it in council minutes, the policy remains firm, even if staff members move on. Political support empowers staff to think outside the square and to innovate in ways not previously possible.</p>
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	<p>A survey of the first 20 councils found five key reasons why councils have chosen to adopt Zero Waste.</p> <ul style="list-style-type: none"> - The Zero Waste philosophy itself: 10 out of the 20 gave this as being the main reason. - Funding: 6 gave this as the main reason. For many councils this funding provided the only source of discretionary funding that they could access to implement change. - Necessity: 5 cited the necessity of finding alternatives to landfill disposal, particularly due to the imminent closure of local landfills. - Public support: 3 cited public support for the Zero Waste philosophy - To support existing waste reduction efforts: 3 saw the adoption of Zero Waste as a logical extension of their existing waste minimisation activities. <p>Other reasons that have been cited since the survey include environmental protection (especially important in tourist areas), job creation, and a growing acceptance of Zero Waste as a legitimate and effective motivator for change.</p> <p>3. Lobbying Government</p> <p>The third strategy of the Zero Waste New Zealand campaign has involved lobbying Government on behalf of the Zero Waste Network. This has involved all sorts of activities over the years including:</p> <ul style="list-style-type: none"> - Compiling 'Zero Waste New Zealand: Profile of a National Campaign', a document to provide up to date information from the Zero Waste Network as input for the government's draft waste Strategy 'Towards a National Waste Minimisation Strategy' 14 - Taking part in the Government appointed Waste Minimisation and Management Working Group - Providing best practice international examples to the Waste Minimisation and Management Working Group, e.g. The Western Australian Government's 'Waste 2020 Draft Strategy: Towards Zero Waste by 2020', 'Creating Wealth from Waste', etc. - Establishing the Zero Waste Working Party, with representatives from Zero Waste councils, community groups and recyclers to provide feedback and input for the Waste Minimisation and Management Working Group - Supporting 'The Road to Zero Waste' series of workshops. - Inviting the Minister for the Environment to launch the draft Waste Strategy for discussion at the Zero Waste New Zealand conference in Kaitia (December 2000). - Writing 'The End of Waste; Zero Waste by 2020' as resource material to assist the Zero Waste Network make submissions on the Waste Strategy. - Bringing international Zero Waste experts specialising in areas such as economics, waste legislation, resource recovery systems, community sector involvement, local authority leadership and industry programmes, to New Zealand to speak at workshops and conferences and meet with Ministry for the Environment staff. <p>The Zero Waste Academy was established in 2002 to develop the human resources who will deliver New Zealand's National Waste Strategy. The vision is to develop training, education and research programmes so New Zealander's can maximise their potential of delivering Zero Waste training requirements throughout the whole industry.</p>
Evaluation	<p>Throughout the world, innovative communities, governments and businesses are already implementing successful programmes that reduce waste to zero. Zero Waste campaigns require incentives, policies and infrastructures that favour source separation and recovery of discarded materials. By establishing a goal of zero, society can focus on eliminating waste rather than managing it.</p> <p>Three essential changes are needed:</p> <ol style="list-style-type: none"> 1. Public officials must be educated that Zero Waste strategies provide an alternative to land filling or incineration. 2. Replacement facilities for landfills and incinerators must be developed. Resource Recovery Parks must be established and the next step is to create local policies that build and support

		<p>working parks.</p> <p>3. Policies must require maximum feasible separation of discards by material type and must ensure lifecycle producer responsibility to share the cost of collecting used products and encourage product redesign.</p>
Applicability		<p>Zero Waste is already rapidly spreading around the globe. Its clear and uncompromising message is being embraced by different cultures - and at all levels of society - from NGOs and recycling industry coalitions to local municipalities, state, regional and national governments.</p> <p>The key to getting to Zero Waste is leadership. Central Government should give the responsibility to a new Zero Waste agency, which would provide the coordination and transitional funds to activate the change. One of the functions of the lead agency will be to set achievable intermediate targets. Funds must be made available to ensure success of the Zero Waste campaign. The long term savings and economic benefits from the campaign will eventually dwarf this initial investment. Rapid and accurate monitoring systems are also required to assess what waste is being produced, its composition and its source. This information needs to be fed back to the waste producer and to the community at large in a feedback loop. Feedback on the achievement of intermediate targets also needs to be made highly visible - at both local and national level.</p>
Reference		<p>Publication</p> <p>'Getting There! The Road to Zero Waste: The Strategies for Sustainable Communities' prepared for Zero Waste New Zealand Trust by Envision New Zealand, Warren Snow & Julie Dickinson. August 2003.</p> <p>'The End of Waste: Zero Waste by 2020' prepared by Zero Waste New Zealand Trust, Warren Snow and Julie Dickinson.</p> <p>'Resourceful Communities: A Guide to Resource Recovery Centres in New Zealand' (2003) by Warren Snow & Julie Dickinson..</p> <p>Website</p> <p>http://www.zerowaste.co.nz</p> <p>Resource Person</p> <p>Warren Snow, Envision New Zealand Ltd. PO Box 33 239 Takapuna, Auckland, New Zealand Telephone number: +64-9-489-2129 Fax: +64-9-489-3232 Email: mailbox@envision-nz.com, wsnow@envision-nz.com Website: http://www.envision-nz.com</p>
Sectoral Issues		3; 4
Cross-sectoral Issues		1; 4
Instruments		1.3; 3.1; 3.3; 3.8
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Title		Extended Producer Responsibility System
Country		410
Province		
Area		
Implementation level		2
Duration /Year		January 2003 onwards
Contact Person /Focal Point for Enquiry	Name	Jin-Shik Kim, Deputy Director
	Affiliation	Resource Recycling Division, Waste Management and Recycling Bureau, Ministry of Environment, Republic of Korea
Contact Information	Address	1, Jungang-dong, Kwacheon-si, Kyunggi-do
	Tel	82-2-2110-6953
	Fax	82-2-504-9289
	E-mail	Kjs2111@me.go.kr
Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		2; 3; 4
Description of the Practice	SectionA: Background & Objectives	<p>Despite various measures to resolve the worsening waste problem since the 1990s, including the separate disposal system (1990), the Volume-based Waste Fee System (1995), Waste Deposit-Refund System, the government realised shortcomings with respect to waste reduction and recycling system effectiveness and equity.</p> <p>Consumers and local authorities/government were significantly contributing to separate waste disposal and sorting. Producers, however, lacked a specific role aside from partial financial burdens like providing the waste fee and deposit refund.</p>

		<p>In other words, there lacked an incentive system to facilitate a more central role of producers, who are in an advantageous position for contributing to waste reduction at source and increased recycling.</p> <p>Also, because the recycling market was forming only in accordance with the economic motivations of recycling businesses, the reality was that much waste was not being recycling but rather landfilled or incinerated.</p> <p>In conclusion, there is a limit to how much government and consumers can do on their own to achieve a resource circulating society through waste reduction and recycling under a system of mass production and mass consumption.</p> <p>Therefore the Extended Producer Responsibility (EPR) system was introduced and put into effect since January 2003 to expand the recycling responsibilities of producers.</p>
	<p>SectionB: Outline of Practices/ Actions</p>	<p>Each year producers are given mandatory recycling targets and a penalty fee is charged if the responsibilities are not met.</p> <p>The procedure is as follows: 1) Each year before the end of September, the government announces the total recycling obligations per EPR item for the following year. 2) Producers under the EPR system each receive specific mandatory recycling obligations according to the proportion of each producer's share in the market. 3) Producers under the EPR System must submit their annual recycling plan by the end of November to the government for approval. 4) Once their recycling plan is approved, producers must fulfill their recycling obligations, either directly recycling, contracting a recycling business, or through a recycling mutual aid association, during that obligatory year. 5) Producers must then submit their progress report with the outcomes by the end of March of the following year. 6) After reviewing results, the government imposes producers that fail to meet their recycling obligations a recycling charge.</p> <p>For the stabilisation of the EPR system, 1) the Korean government established a new division to take charge of its operation (67 people, January 2003), actively conducted PR and education programs to incite participation from producers, consumers, and local government; 2) producers established a total of 11 recycling mutual aid associations to efficiently meet EPR targets; 3) to effectively meet EPR targets producers and mutual aid associations designated and fostered professional recycling businesses per area to establish an effective collection and recycling system; 4) regarding items whose collection and/or recycling is difficult, recycling technology was developed and recycling facilities/capacities were expanded.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>1) Development/Changes Since the start of the EPR system in 2003, producers have worked to improve the separate disposal system, expand recycling facilities and develop recycling technology, especially through recycling mutual aid associations. As a result the amount of recycling has increased 11% in comparison to when the Waste Deposit-Refund System was in place.</p> <p>2) Challenges Although overall recycling amounts have increased with the EPR system, there exists the need for relevant improvement given that recycling rates are still low for recycling items that lack disposal/collection systems and recycling facilities such as electronic products, paper cartons, and batteries.</p> <p>3) Positive impacts Producers, who had shown little interest under the previous Waste Deposit-Refund System, are gradually becoming actively interested in recycling.</p>

Keys for success (cause of failure)		Producers are playing a central role in increasing recycling through system improvements and facility expansions.
Evaluation		Although the EPR system is in early stages of implementation, it is clear that producers are taking a more active role in waste reduction and recycling.
Applicability		Currently, the EPR system is applied to 18 items (products and wrapping materials) including electronic products, tires, glass bottles, and PET bottles. The item list will continuously grow more inclusive.
Reference		
Sectoral Issues		2
Cross-sectoral Issues		1
Instruments		1.1; 2.2; 2.4; 3.1; 3.3; 4.1
Provider of this information	Name	Jin-Shik Kim
	Organisation	Korean Ministry of Environment
	Job Title	Deputy Director
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Title		Rest Year System in National Parks
Country		410
Province		
Area		
Implementation level		2
Duration /Year		Continued since 1991
Contact Person /Focal Point for Enquiry	Name	Young-Hong Kwon, Senior Program Officer
	Affiliation	Natural Resources Division, Nature Conservation Bureau, Ministry of Environment, Republic of Korea
Contact Information	Address	1, Jungang-dong, Kwacheon-si, Kyunggi-do
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		2, 4
Description of the Practice	SectionA: Background & Objectives	<p>The 'Nature Rest Year System' has been designed to prohibit people from entering the exploration and hiking routes, valleys, or other areas under severe environmental damage, so that these lands can restore their state of environment, while preventing further damage.</p> <p>Having concentrated visitors in valley streams, water pollution caused by night swimming, public bathing, laundry, and reckless waste discharge became a serious problem. In response, the entries into the 4 parks and 9 valleys of 20.9 km have been prohibited.</p> <p>In recent years, 55 areas in 15 national parks – including mountain summit areas, valley streams, water resource protection zones - have been managed under the system, and the 5th term of the rest year has been carried out in a 3 or 6 year span (2003-5).</p> <p>Furthermore, monitoring projects are also being promoted in the protected areas in order to conduct the assessment of policy effectiveness.</p>

	<p>SectionB: Outline of Practices/ Actions</p>	<p>Outcomes</p> <p>[The 1st Term ('91.1)] The Korea National Parks Authority first adopted and implemented the Natural Rest Year System in 1991. With this accomplishment, the exploration routes and valleys were successfully protected, while waste generation and fire accidents were reduced as well. Also, the system provided with an opportunity to increase the public awareness towards the national parks protection.</p> <p>[The 2nd Term ('94.1)] In prior to the 2nd term, the protected areas were designated along the exploration routes. On the other hand, in the 2nd term of implementation, the rest areas were selected according to the land's degree and vulnerability to the environmental threats, as well as their abilities to provide habitats to the protected plants and animals. Also, the resting period became much more flexible by arranging 3 yr., 5yr. and/or permanent periods of land rest.</p> <p>[The 3rd Term ('97.1)] - Rather than simply prohibiting the entry into the area, Korea has carried out restoration projects (Mt. Jiri Nogo Summit, Mr. Sulak Daecheong Summit) in the resting areas. Also, in order to study the effectiveness of the measures while developing scientific management measures, the "Detailed survey on Nature Rest Year System" and "Basic Eco-research /Monitoring" were conducted as well. Critical information and know-how, as well as the standards and management methods were accumulated through these efforts.</p> <p>[The 4th Term (2000.1 - 2002.12)] - The resting areas were selected based on the "Detailed survey on Nature Rest Year System" developed in the 3rd term. - The system was expanded to cover the valleys of no fauna and flora habitats, and wetlands. The fruitful results were the restoration of aquatic ecosystem, and diversification of fisheries.- Through a steady promotion of the system, Korea not only protected the national parks in success, but also restored the ecosystem while increasing the citizen's understanding.</p> <p>[The 5th Term (2003.1 - 2005 (8).12)] - Korea plans to manage valley streams by resting two upstream areas including Goocheon-dong Valley in Mt. Deok-yoo. Also, in order to protect the natural resources in a more effective manner, the 2 areas including purple eulalia field in Mt. Wol-chool will be selected for the resting period, as well as the upstream area in Mr. Sulak- a major habitat for gorals.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>Clear signs of the policy success were recognised. For example, the hard soils created by excessive stepping have been softened, while vegetation in the surrounding area has been recovered. For the areas where soils slide down along the steep slopes revealing the topsoil, restoration projects were undertaken using environmentally friendly methods. Also, by prohibiting various activities in valleys, the Googi Valley of Mt. Bukhan saw an improvement in aquatic ecosystem. Continuous implementation of the Nature Rest Year System is required for sound protection of the national parks.</p>
<p>Keys for success (cause of failure)</p>		<p>Promotion, Restriction, Prohibition</p>
<p>Evaluation</p>		
<p>Applicability</p>		<p>National Parks</p>
<p>Reference</p>		

Sectoral Issues		3
Cross-sectoral Issues		7
Instruments		1.3; 2.1; 3.1; 3.2
Provider of this information	Name	Young-Hong Kwon
	Organisation	Natural Resources Division, Nature Conservation Bureau, Ministry of Environment
	Job Title	Senior Program Officer
	Contact Address	1, Jungang-dong, Kwacheon-si, Kyunggi-do
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Title		Resident Support Program for Water Quality Protection
Country		410
Province		
Area		
Implementation level		1; 2
Duration /Year		Continued since 1999
Contact Person /Focal Point for Enquiry	Name	Jong-Ryool Kim, Senior Deputy Director
	Affiliation	Watershed Management and Policy Division, Water Quality Protection Bureau, Ministry of Environment, Republic of Korea
Contact Information	Address	1, Jungang-dong, Kwacheon-si, Kyunggi-do
	Tel	82-2-2110-6837
	Fax	82-2-504-2462
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Contact Person (2) /Focal Point for Enquiry	Name	
	Affiliation	
Contact Information	Address	
	Tel	
	Fax	
	E-mail	
Sponsor(s)		
Actors involved		2; 3; 5
Description of the Practice	SectionA: Background & Objectives	<p>After 1990, the government experienced the limitations of existing water management policies, as large- and small-scale water pollution accidents occurred and water quality continued to worsen. In response, the Comprehensive Water Quality Management Measures for the Four Major Rivers were established between 1998~2000 and are now in effect.</p> <p>The Comprehensive Measures greatly strengthen pollution prevention methods through the designation of riparian buffer zones, strengthening the functions of forests conservation of water supply, and the Total Water Pollution Load management system. Such policies markedly differ from the previous end-of-pipe approach of improving the quality of already degraded water systems. It also created the Watershed Management Fund for raising funds per river basin.</p>

		<p>This policy designated riparian protection areas in addition to existing water supply sources protection zones and special measures areas for water quality protection, and the total area with land-use restrictions therefore expanded. In consideration of the economic disadvantages for residents of areas with land-use restrictions and the benefits acquired by downstream residents, the water use charge came into force, which is collected for the Watershed Management Fund that operates support programs for upstream water supply areas and residents.</p> <p>Support for upstream water supply areas can be divided into support for residents and support for local authorities/government. The Resident Support Program aims to improve the living environment and to raise the income level of area residents who experience disadvantages from various restrictions. It was introduced in order to incite active cooperation and participation for water quality.</p>
	<p>SectionB: Outline of Practices/ Actions</p>	<p>-Policy Background Since 1994, carried out resident support programs such as income raising programs, welfare raising programs, and river basin programs, that yearly amount to 7 billion won in support for residents mostly in the agriculture and fishing industry.</p> <p>In accordance with the Acts on the four major rivers (1999~2000), around 130 million won has been yearly provided for local supporting programs.</p> <p>-Support Process The relevant mayor or local government head of the jurisdiction collects resident opinions, establishes a program plan, and obtains approval from the provincial governor before making a request to the Watershed Management Committee. The Committee takes into consideration the area and level of land-use restrictions, as well as the resident population, and then allocates funds.</p> <p>-Support Activities General Support Programs: agricultural equipment repair facilities, environmental agriculture support and income raising programs, water supply facilities, welfare programs including community halls for the elderly and town community centers, scholarships, book supplies, etc. Director Support Programs: solar energy facilities, housing remodeling projects, school tuition, scholarships, afforestation projects, support for electricity fees, medical fees, and communication/IT fees, etc.</p>
	<p>SectionC: Results/ Outcomes</p>	<p>-Progress With the Resident Support Program, area residents are showing active cooperation for water quality management, and resistance and complaints towards policies have significantly decreased.</p> <p>In Dae-po-chun of the Nakdong River Basin, voluntary water quality improvement efforts have led to the dramatic improvement of water quality.</p> <p>Residents once opposed to the designation of upstream water supply areas for protection measures, are now requesting such action and are involved in improvement efforts.</p> <p>-Problems faced with respect to execution Due to the lack of government officials to cover the Resident Support Program at the township level, related tasks became delayed such as selection of support applicants, establishment of support plans, and collection of resident opinions.</p> <p>The National Assembly and civil society organisations are requesting that indirect support activities expand and that direct support for residents decrease.</p>

Keys for success (cause of failure)		An incentive is provided that compensates residents for the disadvantages experienced from upstream water supply conservation, and which in turn, raises public confidence in water quality management policies and facilitates the active cooperation of area residents.
Evaluation		Transformed an issue of conflict into a system of mutual cooperation and benefit.
Applicability		Such Resident Support Programs for water quality protection are widely applicable in other situations where there conflicts with area residents result from environmental conservation efforts including protection of endangered species like the Siberian Tiger and biodiversity conservation.
Reference		
Sectoral Issues		1
Cross-sectoral Issues		1
Instruments		1.1; 2.3; 3.3; 4.2
Provider of this information	Name	Jong-Ryool Kim
	Organisation	Korean Ministry of Environment
	Job Title	Senior Deputy Director
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	Tel	
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	E-mail	

2-b. CBP Data File

Organiser(s)	Asian Disaster Preparedness Center (ADPC)	
Name of the Programme	ADPC's Training and Education	
Sectoral Issue	1	
Cross-Sectoral Issue	1	
Others		
Name of Places (countries) Where the Training Is Conducted	998; 999	
Nationality of Participants	999	
Target Group(s)	1; 2; 4; 5	
Skills to be mastered in the programme	1; 2; 3; 4; 7; 8	
Type of Programme	1; 2	
Contact Person	Name	Training and Education
	Affiliation	Asian Disaster Preparedness Center (ADPC)
Contact Information	Address	P.O.Box 4, Klong Luang, Pathumthani 12120, THAILAND
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	Fax	+66-2-524-5360
	Email	tedadpc@adpc.net
Website	http://www.adpc.ait.ac.th/training/te.html	
Financial Assistance	Asian Development Bank (ADB), Australian Agency for International Development (AusAID), Royal Danish Ministry of Foreign Affairs (DANIDA), UK Department for International Development (DFID), Disaster Preparedness European Community Humanitarian Office (DIPECHO), International Federation of Red Cross and Red Crescent Societies (IFRC), Japan International Corporation of Welfare Services (JICWELS), USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA), Regular training programs and consultancies, Swedish International Development Agency (SIDA), United Nations Development Programme (UNDP), UN Disaster Management Training Program, World Bank Disaster Management Facility, World Food Programme (WFP)	
Description of the Programme	<p>ADPC is a regional resource centre working towards disaster reduction for safer communities and sustainable development in Asia and the Pacific. Established in 1986, the Center is recognised as an important neutral focal point in Asia and the Pacific for promoting disaster awareness and the development of local capabilities to foster institutionalised disaster management and mitigation policies.</p> <p>The focus of ADPC's Training and Education Division is to help strengthen the capacity of countries, organisations, communities and individuals to reduce the impact of disasters through enhancing their knowledge and skills to promote and adopt disaster reduction practices as an integral part of the development process at community, national, sub-regional and regional levels.</p> <p>It provides a range of learning opportunities to managers who wish to include knowledge of disaster management in their ongoing professional development. Regular courses are conducted by the ADPC on a range of topics such as the fundamentals of disaster management, urban disaster mitigation, seismic and cyclones hazards mitigation, flood hazard mitigation, technological hazards mitigation, crisis</p>	

	<p>management, complex emergencies management, and community based approaches to disaster management. Over the past 17 years, ADPC's alumni base has expanded to more than 4500 professionals working at senior and middle management levels in national and provincial governments, NGOs, International NGOs, the academe and the private sector. With the diverse professional backgrounds and the institutional relationships that the ADPC Alumni represent, they constitute an excellent corps of qualified and dedicated individuals working towards the formulation of effective disaster management policies and demonstrated capabilities in their countries.</p> <p>The services of ADPC's Training and Education division include, training needs assessment, design training curriculum, conduct training courses and evaluation and organising study tours to meet the special needs of different audiences.</p> <p>The training course, which the ADPC offers, can be classified into 3 categories as below:</p> <p>(1) Regional Courses: These are the courses which ADPC conducts every year periodically at Bangkok. These have been developed to improve the knowledge and skills of professionals on various aspects of disaster management in the light of regional disaster management needs.</p> <p>(2) Programme Based Courses: Under different programmes, the ADPC is involved in developing and institutionalising courses at the national level in different countries with the collaboration of national level training organisations on specific aspects of disaster management. At present, the course on Urban Disaster Mitigation has been established in six countries including India, Indonesia, Lao PDR, Nepal, Philippines and Sri Lanka.</p> <p>(3) Special Courses: the ADPC is actively engaged in training tailored to suit the needs of particular groups of professionals to enhance their capabilities to meet the requirements of their programmes. These courses are developed upon request from governments, international and UN agencies, NGOs and private sector. They focus on meeting the needs expressed by requesting agencies. These courses can be organised in your country or at Bangkok.</p>
References	

Organiser(s)	Asian Institute of Technology (AIT)	
Name of the Programme	Construction Management	
Sectoral Issue	1; 3; 5	
Cross-Sectoral Issue	1; 4	
Others		
Name of Places (countries) Where the Training Is Conducted	764	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 2; 3; 4; 6; 8	
Type of Programme	1; 2	
Contact Person	Name	
	Affiliation	
Contact Information	Address	P.O. Box 4, Klong Luang, Pathumthani 12120, THAILAND
	Tel	+66-2524-6330
	Fax	+66-2524-6332
	Email	extension@ait.ac.th
Website	http://www.extension.ait.ac.th/	
Financial Assistance	World Bank, Asian Development Bank, Association for Overseas Technical Scholarship (AOTS), Southeast Asian Ministers of Education Organisation (SEAMEO), Food and Agriculture Organisation (FAO), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), International Labor Organisation (ILO), Royal Danish Ministry of Foreign Affairs (DANIDA), International Fund for Agricultural Development (IFAD), Norwegian Agency for Development Cooperation (NORAD), Swedish International Development Agency (SIDA), Universiti Sains Malaysia, University of Illinois, Royal University of Agriculture (Cambodia), Swinburne University of Technology, Vientiane Forestry University, Tribhuvan University (Nepal), Bangladesh Water Development Board, Local Government Engineering Department of Bangladesh, Ministry of Education (Malaysia), Ministry of Education (Sri Lanka), Office of National Education Commission (Thailand), Department of Technical and Economic Cooperation (Thailand), Telephone Organisation of Thailand, CARE, EBARA Hatakeyama Memorial Fund, Training and Technology Transfer, Mott MacDonald Ltd., Fredskorpset	
Description of the Programme	<p>AIT Extension has added an exciting new dimension to the AIT's work in the region. The AIT Extension brings together the AIT's highly regarded academic and outreach centres into one organisational unit.</p> <p>AIT Extension's mandate is to contribute to the development of the region through continuing education, training and consultancy. Within the scope of AIT's mission, and with the autonomy to develop market-responsive programs and services quickly and efficiently, AIT Extension aims to become known among partner institutions and organisations in the region as an innovative and responsive provider of a broad array of capacity-building programs and services.</p> <p>Training programs last from one to 12 weeks. Extension's professional staff ensure that new programs are developed on the basis of market demand. Extension offers training through its 3 divisions and a</p>	

	<p>Language Center: Agriculture, Resources and Development (ARD), Information Technology (IT), Management and Educational Development (MED), Language Center (LC) and Customised Training.</p> <p>Agriculture, Resources and Development (ARD) includes the Agriculture, Natural Resources and Rural Development Program, the Environment, Infrastructure and Urban Development Program, and Seminar-cum-Study Visit. The Environment, Infrastructure and Urban Development program are designed to provide training services to human resources of development organisations, engineers and senior technical personnel from developing countries in the region to become more competent in managing urban environmental and infrastructure development projects. Currently, the programme include the following training courses: Environmental Impact Assessment and Review, Economic Evaluation of Environmental Impacts, Environmental Risk Assessment, Seminar on Environmental and Natural Resources Planning and Management, Toxic and Hazardous Waste Management, Urban Environmental Management, Construction Management, Rural Road Development and Maintenance Management, and Planning for community water supply and waste management.</p>
References	

Organiser(s)	Asia-Pacific Center for Environmental Law (APCEL)	
Name of the Programme	Capacity Building for Environmental Law	
Sectoral Issue	1; 2; 3; 4; 5	
Cross-Sectoral Issue	1; 3	
Others		
Name of Places (countries) Where the Training Is Conducted	999	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1	
Type of Programme	1; 2	
Contact Person	Name	
	Affiliation	Asia Pacific Center for Environmental Law (APCEL)
Contact Information	Address	Faculty of Law, National University of Singapore 13 Law Link, SINGAPORE 117590
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	Fax	+65-6872-1937
	Email	lawapcel@nus.edu.sg
Website	http://law.nus.edu.sg/apcel/index.htm	
Financial Assistance		
Description of the Programme	<p>The Asia-Pacific Centre for Environmental Law was established on 15 February 1996 by the Faculty of Law, National University of Singapore, on the initiative of the Faculty of Law and the Commission on Environmental Law (CEL) of the World Conservation Union (IUCN), in collaboration with the United Nations Environment Programme (UNEP).</p> <p>The APCEL is situated in the Faculty of Law and supported by the National University of Singapore. The Faculty of Law has established itself as one of the best law schools in the region, with one of the leading law libraries in the common law jurisdiction. As a premier institution, the Faculty seeks to achieve excellence in teaching and research. APCEL's objectives include:</p> <ul style="list-style-type: none"> - To serve as a regional training centre for the teaching of environmental law; - To organise conferences, seminars and other programmes on environmental issues; - To establish and develop a collection of materials on environmental law and policy, and maintain an electronic database; and - To cooperate and collaborate with law schools, institutes, centres and such other organisations to further its objectives. <p>From 2000, several workshops were held, such as the 'Capacity Building for Biodiversity Conservation and</p>	

	Sustainable Utilisation in ASEAN Region through Skill Development in Legal and Regulatory Mechanisms (24-28 November 2003)'which was attended by participants from 7 ASEAN countries, the '11th Environmental Course for Senior Officials in Environmental and Other Ministries (21 & 22 OCTOBER 2003).'
References	

Organiser(s)	Bradford Centre for International Development, University of Bradford	
Name of the Programme	Professional Development & Training Services	
Sectoral Issue		
Cross-Sectoral Issue	1; 2; 5	
Others	Project planning and management	
Name of Places (countries) Where the Training Is Conducted	826	
Nationality of Participants	999	
Target Group(s)	1; 2; 3	
Skills to be mastered in the programme	2	
Type of Programme	1; 2	
Contact Person	Name	Jill Gulbrandsen
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Contact Information	Address	Richmond Road, Bradford, BD7 1DP, UNITED KINGDOM
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	Email	bcid@bradford.ac.uk
Website	http://www.bradford.ac.uk/acad/dppc/professional_development/	
Financial Assistance	N/A	
Description of the Programme	<p>Bradford Centre for International Development (BCID) offers a range of professional development services to complement its teaching and training programmes.</p> <p>The Centre provides consultancy and technical advice on a variety of subjects including policy and sector studies, economic and financial policy, planning and analysis, public investment programming, project cycle monitoring, and capacity-building. These can be either single assignments or over a period of time.</p> <p>In addition, the Centre offers commissioned training services in response to request from clients and to their specification. These can include training needs assessment, the delivery of courses and workshops both in the UK and overseas together with the development, management and evaluation of training capacity.</p> <p>Another aspect of the Centre's professional development services is an annual programme of scheduled professional development training courses in Bradford enabling participants to update their skills and knowledge and develop their understanding of contemporary ideas and methodologies. Courses aimed at middle- to senior-level managers or officials are run under both a management training programme and a project-planning programme and last either 6 or 12 weeks. Some of these include the opportunity to progress to a Postgraduate Certificate or Master's degree by completing assessed work to an appropriate standard.</p>	
References		

Organiser(s)	Capacity Building International, Germany (InWEnt)	
Name of the Programme	Advanced Training for Executive and Specialised Staff	
Sectoral Issue	1; 3; 4	
Cross-Sectoral Issue	1; 2; 3; 4; 5; 7	
Others	Disertification, Environmental Law, Food Security	
Name of Places (countries) Where the Training Is Conducted	276	
Nationality of Participants	999	
Target Group(s)	1; 2; 3	
Skills to be mastered in the programme	1; 2; 3; 5; 6; 7; 8	
Type of Programme	1; 2; 3; 6	
Contact Person	Name	
	Affiliation	Capacity Building International, Germany (InWEnt)
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	Tel	+49-228-2434-5
	Fax	+49-228-2434-766
	Email	info@inwent.org
Website	http://www.inwent.org	
Financial Assistance	German Federal Ministry for Economic Cooperation and Development	
Description of the Programme	<p>Capacity Building International, Germany (InWEnt) is an organisation for international human resources development, advanced training and dialogue. Established in 2002 through a merger of Carl Duisberg Gesellschaft e.V. and the German Foundation for International Development, it can draw on decades of experience that both organisations have gained in the field of international cooperation.</p> <p>Its international training and dialogue programmes are directed at experts, managers, and decision makers from business and industry, politics, public administration and civil society from all over the world. They are structured by continents and regions. InWEnt provides two types of training and programmes:</p> <p>(1) Advanced Training Programmes that invite participants from all over the world (focused particularly on junior managers and executives)</p> <p>(2) Programmes offered especially for participants from particular regions (InWEnt has programmes for Asia and Central and Eastern Europe with Central Asia)</p> <p>InWEnt's annual programme includes:</p> <ul style="list-style-type: none"> - Seminars, Conferences and Workshops (up to 3 months) - Training Programmes (3 to 6 months) - Projects (a combination of training courses, seminars, workshops, conferences, etc.) - E-Learning Programmes (advanced training programmes on the internet platform Global Campus 21) 	
References	http://www.inwent.org/en/uberinwent/zusammenarbeit.html	

Organiser(s)	Centre for Groundwater Studies (CGS) and Flinders University	
Name of the Programme	CGS Groundwater Short Course Program	
Sectoral Issue	1	
Cross-Sectoral Issue	1; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	36	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 4; 6	
Type of Programme	1; 2; 3	
Contact Person	Name	Trevor Pillar, Manager, Communication and Industry Education
	Affiliation	Centre for Groundwater Studies (CGS)
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	Tel	+61-8-8201-5632
	Fax	+61-8-8201-5635
	Email	cgs.training@groundwater.com.au
Website	http://www.groundwater.com.au/conf/content.asp	
Financial Assistance		
Description of the Programme	<p>CGS Groundwater Short Course Program aims to improve understanding of groundwater as a key natural resource. Since its inception in 1988 the CGS Groundwater Short Course Program has contributed significantly to the national awareness of the environmental impacts of groundwater processes including recharge, discharge, contamination, remediation and management.</p> <p>Through its collaborative research and education programmes CGS addresses a clear need by industry, government and the community for a greater awareness of the way groundwater behaves, and how it can be better managed and protected. Arising from this research and education the CGS Groundwater Short Course Program endeavours to extend groundwater education beyond professional development for groundwater industry staff to include technicians, non-specialists, environment community groups and all who are working in land and water management.</p> <p>In consultation with our associates in industry and government, CGS offers an annual programme of fundamental and specialist groundwater short courses to cater for a wide range of attendees.</p> <p>Fundamental groundwater courses have been designed for three levels of attendees:</p> <ul style="list-style-type: none"> - ABCs of Groundwater is a 1-day primer aimed at regional Australia, providing a basic understanding of the role of groundwater and focusing on local issues in case studies. - Groundwater Fundamentals is a 1-day course for technical and management staff who require an overview of groundwater practice and policy. 	

	<p>- The Australian Groundwater School is a 5-day comprehensive professional-development course in groundwater science, technology and management.</p> <p>Specialist groundwater courses are also offered to help expand knowledge in key areas such as groundwater contamination, groundwater modelling and aquifer recharge. A CGS initiative is now under way to provide some specialist groundwater courses via the Internet.</p>
References	<p>http://www.scieng.flinders.edu.au/courses/groundwater/</p>

Organiser(s)	Centre for Groundwater Studies (CGS) and Flinders University	
Name of the Programme	CGS Groundwater Short Course Program	
Sectoral Issue	1	
Cross-Sectoral Issue	1; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	36	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 4; 6	
Type of Programme	1; 2; 3	
Contact Person	Name	Trevor Pillar, Manager, Communication and Industry Education
	Affiliation	Centre for Groundwater Studies (CGS)
Contact Information	Address	GPO Box 2100 Adelaide, SA, 5001 AUSTRALIA
	Tel	+61-8-8201-5632
	Fax	+61-8-8201-5635
	Email	cgs.training@groundwater.com.au
Website	http://www.groundwater.com.au/conf/content.asp	
Financial Assistance		
Description of the Programme	<p>CGS Groundwater Short Course Program aims to improve understanding of groundwater as a key natural resource. Since its inception in 1988 the CGS Groundwater Short Course Program has contributed significantly to the national awareness of the environmental impacts of groundwater processes including recharge, discharge, contamination, remediation and management.</p> <p>Through its collaborative research and education programmes CGS addresses a clear need by industry, government and the community for a greater awareness of the way groundwater behaves, and how it can be better managed and protected. Arising from this research and education the CGS Groundwater Short Course Program endeavours to extend groundwater education beyond professional development for groundwater industry staff to include technicians, non-specialists, environment community groups and all who are working in land and water management.</p> <p>In consultation with our associates in industry and government, CGS offers an annual programme of fundamental and specialist groundwater short courses to cater for a wide range of attendees.</p> <p>Fundamental groundwater courses have been designed for three levels of attendees:</p>	

	<ul style="list-style-type: none"> - ABCs of Groundwater is a 1-day primer aimed at regional Australia, providing a basic understanding of the role of groundwater and focusing on local issues in case studies. - Groundwater Fundamentals is a 1-day course for technical and management staff who require an overview of groundwater practice and policy. - The Australian Groundwater School is a 5-day comprehensive professional-development course in groundwater science, technology and management. <p>Specialist groundwater courses are also offered to help expand knowledge in key areas such as groundwater contamination, groundwater modelling and aquifer recharge. A CGS initiative is now under way to provide some specialist groundwater courses via the Internet.</p>
References	<p>http://www.scieng.flinders.edu.au/courses/groundwater/</p>

Organiser(s)	Clean Air Initiative for Asian Cities (CAI-Asia)	
Name of the Programme	Clean Air Training Network (CATNet)	
Sectoral Issue	2; 3	
Cross-Sectoral Issue	1; 4; 5	
Others	urban transport	
Name of Places (countries) Where the Training Is Conducted	999	
Nationality of Participants	999	
Target Group(s)	1; 3	
Skills to be mastered in the programme	1; 2; 3; 4; 5	
Type of Programme	1; 5; 6	
Contact Person	Name	Charles Melhuish, Lead Transport Sector Specialist
	Affiliation	Asian Development Bank (ADB)
Contact Information	Address	6 ADB Avenue, Mandaluyong City, 0401 Metro Manila, PHILIPPINES
	Tel	+63-2-632-6463
	Fax	+63-2-636-2198
	Email	cmelhuish@adb.org
Website	http://www.cleanaimet.org/caiasia/	
Financial Assistance	Asian Development Bank (ADB), Australian Department of the Environment and Heritage, German Agency for Technical Cooperation (GTZ), Governments of Finland, Japan, Netherlands and Norway, US Asia Environmental Partnership (USAEP), The World Bank Group, Hewlett Foundation, US Environmental Protection Agency (USEPA)	
Description of the Programme	<p>The Clean Air Initiative for Asian Cities (CAI-Asia) promotes and demonstrates innovative ways to improve the air quality of Asian cities through partnerships and sharing experiences. The World Bank and the Asian Development Bank (ADB) have agreed to serve as the Secretariat for the Clean Air Initiative for Asian Cities at the stage of establishment. The CAI-Asia Secretariat is based at the Asian Development Bank and the World Bank. The CAI-Asia is comprised of several groups of members: city members from Asian countries; national government agencies from Asia-Pacific region; NGOs and academia; international development agencies and foundations; and private sector companies.</p> <p>The goals of the CAI-Asia programme include:</p> <ul style="list-style-type: none"> - Sharing knowledge and experiences on air quality management, - Improving policy and regulatory frameworks at the regional level, - Piloting projects to encourage innovation, and - Assisting cities in implementing integrated air quality strategies. <p>The Clean Air Training Network (CATNet), which is one activity of the CAI-Asia, was designed at a 'stakeholder' workshop, held in Manila, the Philippines, at the ADB, 28-31 May 2002 to improve air quality in Asia by delivering a comprehensive, regional training programme based on collaboration, commitment,</p>	

	<p>and sustainability. The CATNet-Asia is a key component of the Clean Air Initiative for Asian Cities. The outline of the training programme includes:</p> <ul style="list-style-type: none"> - Training courses on Air Quality Management through the Clean Air Training Network for Asia (CATNet-Asia), which focuses on in-service training, - Training courses on the development of fuel quality strategies, - Training courses on the development of improved Inspection and Maintenance of Vehicles, - Provision of Website dedicated to air quality management in Asian Cities: http://cleanairnet.org/caiasia (from 16 December, now at http://worldbank.org/cleanair/caiasia), - Organisation of largest annual regional workshop on air quality management: Better Air Quality 2003 workshop, - Implementation of hands on pilot projects to improve knowledge on air quality and to strengthen local capacity: including (a) health effects of air pollution research, (b) diesel emission reduction, and (c) sustainable urban transport.
References	<p>http://www.cleanairnet.org/caiasia/1412/article-34023.html</p>

Organiser(s)	Cranfield University at Silsoe	
Name of the Programme	Short courses	
Sectoral Issue	1; 3; 4; 5	
Cross-Sectoral Issue	3; 4; 5	
Others		
Name of Places (countries) Where the Training Is Conducted	826	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 2; 3; 4; 6; 8	
Type of Programme	2	
Contact Person	Name	
	Affiliation	Cranfield University, Silsoe
Contact Information	Address	Cranfield University, Silsoe, Bedfordshire MK45 4DT UNITED KINGDOM
	Tel	+44-1525-863327
	Fax	
	Email	silsoecpd@cranfield.ac.uk
Website	http://www.silsoe.cranfield.ac.uk	
Financial Assistance		
Description of the Programme	<p>Cranfield University at Silsoe provides a wide range of taught courses, higher degrees by research and continuing professional development programmes. Full and part-time programmes of research leading to the degrees of MSc, MPhil, PhD and EngD are offered in all departments. The projects are of a strategic nature and of clear relevance to industry, and are usually undertaken in association with industry.</p> <p>Among them, short courses cover, engineering IT, GIS and statistics, soils, water, environmental, medical and sports surfaces. The environmental short courses include:</p> <ul style="list-style-type: none"> - Biological, Physical and Engineering Principles - Current Methods in Tropical Forestry - Ecosystem Auditing - Ecological Restoration - Emergency Water Supply & Environmental Sanitation - Environmental Auditing in Practice - Environmental Data Analysis - Environmental Impact Assessment - Environmental Law - Environmental Legislation - Environmental Management of Rivers - Environmental Modelling and Risk Assessment - Environmental Monitoring I - Physical Methods - Environmental Monitoring II - Chemical Methods 	

	<ul style="list-style-type: none"> - Environmental Monitoring III - Biological Methods - Environmental Sustainability - Flood Risk Management - Integrated Waste Management - Landscape Bioengineering - Land Resource Planning - Managing & Financing Water & Wastewater - Modelling Hydrological Systems - Remedial Technologies for Water Treatment - Remedial Technology for Gaseous and Solid Waste - Social & Economic Aspects of Development - Society & Water Policy Evaluation - Society & Water Policy Evaluation -Understanding IPPC - a practical introduction. <p>The water short courses include:</p> <ul style="list-style-type: none"> - Catchment Management of Water Quality - Construction for Land and Water Engineering - Communities and Development - Emergency Water Supply & Environmental Sanitation - Environmental Management of Rivers - Flood Risk Management - Groundwater Boreholes: Supervision of Construction - Groundwater Development - Groundwater Monitoring: Data Handling and Interpretation - Groundwater Monitoring: Sampling Methodology - Irrigation for Sports Surfaces - Irrigation Engineering - Irrigation Management and Optimisation - Managing & Financing Water & Wastewater - Modelling Hydrological Systems - Remedial Technology - Water Treatment - Society & Water Policy Evaluation - Soil and Water Engineering - Surface and Groundwater Hydrology - Water Law - Water Politics & Globalisation - Water Quality Monitoring - Water Table Control - Water Technology - Water Treatment - Watershed Management - Wetland Water Management and Water Table control.
References	http://www.silsoe.cranfield.ac.uk/short_courses/

Organiser(s)	Danish Hydraulic Institute (DHI) Water & Environment	
Name of the Programme	Vocational Training Programme	
Sectoral Issue	1; 3; 5	
Cross-Sectoral Issue	1; 4; 5; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	208; 356	
Nationality of Participants	999	
Target Group(s)	1; 2; 3	
Skills to be mastered in the programme	1; 2; 4; 6; 8	
Type of Programme	1; 2; 3	
Contact Person	Name	Mrs. Jennifer Oakley, Course Administrator
	Affiliation	DUI Water & Environment
Contact Information	Address	Agem Allé 11, DK-2970 Horsholm, DENMARK
	Tel	+45-4516-9200
	Fax	+45-4516-9292
	Email	courses@dhi.dk
Website	http://www.dhi.dk/courses	
Financial Assistance		
Description of the Programme	<p>DHI offers a wide range of different courses within water and environment for professionals working with water and/or environment as well as public and private sectors. Courses are offered either at regular intervals or on demand. Our goal is to offer courses that are:</p> <ul style="list-style-type: none"> - Making state-of-the-art technology easy to understand - Combining advanced theoretical knowledge with practical experience - Providing practical skills for problem solving. <p>DHI courses can be characterised by: introductory courses in systems and tools; highly specialised technical training; short, intensive workshops; in-depth topic training; and tailored courses - matching client requirements.</p> <p>Courses to be offered at DHI include:</p> <ul style="list-style-type: none"> - Integrated Environment and Water Management (IEWM) - Integrated Coastal Zone Management (ICZM) - Shoreline Management and Optimisation of Coastal Structures - Integrated Water Resources Management (IWRM) - Environmental Impact Assessment, and - Water Supply and the Environment. 	
References		

Organiser(s)	Department of Science and Technology / Industrial Technology Development Institute (DOST/ITDI)	
Name of the Programme	Integrated Program on Cleaner Production Technologies/Trainings & Seminars	
Sectoral Issue	3	
Cross-Sectoral Issue	4; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	999	
Nationality of Participants		
Target Group(s)	1; 3; 4	
Skills to be mastered in the programme	1; 2; 4; 6	
Type of Programme	1; 2	
Contact Person	Name	Dr. Ernesto P.Lozada, Director ITDI
	Affiliation	Industrial Technology Development Institute (ITDI)
Contact Information	Address	G/F Metrology Bldg., DOST Science Complex, General Santos Avenue, Bicutan, Taguig, Metro Manila, PHILIPPINES
	Tel	+63-2-837-3167
	Fax	+63-2-837-6160
	Email	epl@agham.dost.gov.ph
Website	http://mis.dost.gov.ph/itdi/	
Financial Assistance	The Government of the Philippines	
Description of the Programme	<p>The Industrial Technology Development Institute (ITDI) is one of seven research and development groups within the Department of Science and Technology (DOST), Government of the Philippines, generally charged with offering a variety of technical extension and support programmes to Philippine industry, including Cleaner Production and Cleaner Technologies.</p> <p>The Integrated Program on Cleaner Technologies(IPCT) is one of the programmes of the ITDI that provides technical and/or technology assistance to the industry sector in the selection and implementation of cleaner production technologies. Such activity is in line with Executive Order (EO) 128 of the Philippines that mandates the DOST to provide central direction, leadership and coordination of scientific and technological efforts to ensure that the results herein are geared and utilised in areas of maximum economic and social benefits for the people.</p> <p>To achieve this, IPCT undertakes the following activities to ensure that the transfer of technologies, specifically environmental technologies, are made sustainable through:</p> <ul style="list-style-type: none"> - Conduct cleaner production audits and recommend eco-efficient practices and technologies for the industry sector and the general public; - Undertake policy research, technology assessment, feasibility and technical studies; - Enhance technological capabilities through manpower training, infrastructure and institution building; - Develop and maintain an information system on evaluated environmental technologies, which include fact sheets, website, newsletters, trainings and seminars, and industry-specific best management 	

	<p>guidebooks.</p> <p>The IPCT conducts trainings/workshops and seminars and develops training manuals to complement the activities of the programme in building the technical capabilities of the DOST personnel, industries, the academe, LGUs and other stakeholders.</p> <p>One is the Cleaner Production Assessment Training (CPAT). The CPAT constitutes the principles, approaches and guidelines in the conduct of an assessment procedure that will encourage generation of Cleaner Production options by small and medium enterprises (SMEs). Duration is two days.</p> <p>Second is the Waste Minimisation in Auto Repair Shops. This seminar discusses the hazardous wastes generated in auto repair shops and its properties. The seminar includes discussion of the route of entry of toxic chemical groups commonly found in waste from auto repair shops.</p> <p>The third is ECO 201, the Basic Ecology and Economics for Small Businesses. The ECO 201 is a fundamental course towards adopting cleaner production options that would increase productivity, improve quality and reduce waste generation. The training intends to promote the eco-efficiency of Philippine industries by raising the level of awareness on environmental, economic and social issues and by providing information on eco-profit tools to SME entrepreneurs and their staff.</p>
References	<p>http://cptech.dost.gov.ph/trainings.htm</p>

Organiser(s)	Development Planning Unit, University College London (UCL)	
Name of the Programme	Diploma in development and planning studies	
Sectoral Issue	3	
Cross-Sectoral Issue	1; 2; 4	
Others		
Name of Places (countries) Where the Training Is Conducted	826	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 5	
Skills to be mastered in the programme	1; 2; 8	
Type of Programme	2	
Contact Person	Name	Sheilah Meikle
	Affiliation	Director of MSc Social Development Practice
Contact Information	Address	9 Endsleigh Gardens London WC1H 0ED UNITED KINGDOM
	Tel	+44-20-7679-1111
	Fax	+44-20-7679-1112
	Email	s.meikle@ucl.ac.uk
Website	http://www.ucl.ac.uk/dpu/courses/	
Financial Assistance		
Description of the Programme	<p>The purpose of planned economic and social development is to bring about improvement in the quality of life. The current development debate, which is taking place in a world which is in the process of rapid political and economic change, gives emphasis to an integrated approach to achieving sustainable changes in economic productivity and the alleviation of poverty which are essential if the lives are to be improved. Such planned changes are brought about through a variety of policy, programme and project interventions, the character and outcome of which are determined, in large part, by the nature of the international and national environment in which they are executed. Different political, economic and social contexts result in a diversity of development and institutional transformations.</p> <p>The Development Planning Unit (DPU) of the University College London (UCL) offers a diploma course, short courses and individual study programmes. The diploma course in development and planning studies is designed to assist participants in acquiring an understanding of how a continually changing world order affects national and local development and brings about institutional transformation. It aims to introduce participants to concepts and tools which will enable them to intervene and influence development and planning at a national, regional and local (rural and urban level). The DPU Short Course Programme includes 8 and 12 week courses of study in urban and regional environmental management, social development policy and gender policy and planning. These Short Courses can be taken as formal taught courses or as tutored study programmes, combining a selection of modules from ongoing courses in DPU and individual tutorials that cover the particular training needs of the participant or the organisation for which she/he works.</p>	
References	http://www.ucl.ac.uk/dpu/courses/courses_pdf/ucladmin.pdf	

Organiser(s)	Dresden University of Technology, United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) FRG, and Federal Environmental Agency (UBA), FRG, and Technische Universität Dresden (TU Dresden), FRG	
Name of the Programme	UNEP/UNESCO/BMU International Training Programme on Environmental Management for Developing and Emerging Countries	
Sectoral Issue	1; 2; 3; 4	
Cross-Sectoral Issue	1; 4; 5; 6; 7	
Others	Biodiversity	
Name of Places (countries) Where the Training Is Conducted	276	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 5	
Skills to be mastered in the programme	1; 2; 8	
Type of Programme	2	
Contact Person	Name	
	Affiliation	Center for International Postgraduate Studies of Environmental Management (CIPSEM)
Contact Information	Address	Technische Universität Dresden, UNEP/UNESCO/BMU International Postgraduate Training Programme on Environmental Management D - 01062 Dresden, GERMANY
	Tel	+49-351-497-9910
	Fax	+49-351-495-1215
	Email	unep@mailbox.tu-dresden.de
Website	http://www.tu-dresden.de/cipsem	
Financial Assistance	Dresden University of Technology, United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) FRG, and Federal Environmental Agency (UBA), FRG, and Technische Universität Dresden (TU Dresden), FRG	
Description of the Programme	<p>CIPSEM is offering various courses on environmental management. All are conducted in the English language. One main course on integrated environmental management of 6 month duration covers a broad range of environmental relevant aspects. Besides this course, there are several Short Courses of about 2 to 4 weeks duration on specific topics (e.g. water management, waste management, etc.) of special concern for developing and emerging countries.</p> <p>The course curricula concentrate on a broad and interdisciplinary conveyance of knowledge and acquisition of skills. Professors and experts from the various faculties of Technische Universität Dresden as well as from other German governmental and non-governmental environment related institutions, the German business sector but also experts from abroad are invited to convey and to share their knowledge and experience with the course participants. A Curriculum Committee of TU Dresden guarantees the high level of education.</p>	
References		

Organiser(s)	Environmental Management Corporation (EMC)	
Name of the Programme	Training Program	
Sectoral Issue	2; 3; 5	
Cross-Sectoral Issue	4; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	410	
Nationality of Participants	999	
Target Group(s)	1; 3	
Skills to be mastered in the programme	1	
Type of Programme	6	
Contact Person	Name	Mr. KIM Young Jun, Coordinator
	Affiliation	Environmental Management Corporation (EMC)
Contact Information	Address	San 26-4, Hasanun-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-430, REPUBLIC OF KOREA
	Tel	+82-31-781-2723
	Fax	+82-31-781-2725
	Email	kyj21999@emc.or.kr
Website	http://www.emc.or.kr	
Financial Assistance		
Description of the Programme	<p>The Environmental Management Corporation (EMC) was established in 1987 as a non-profit public organisation under the Ministry of Environment in South Korea, in accordance with the Act of Environmental Management Corporation (EMC). The EMC specialises in the performance of various projects and activities for pollution control and environmental improvements.</p> <p>Major Projects of the EMC include:</p> <ul style="list-style-type: none"> - Management and operation of environmental telemeter system; - Water quality improvement of water supply sources; - Assistance in the construction and operation of publicly owned facilities; - Test, measurement and analysis of all the environmental pollutants; - Development and dissemination of environmental technology, and international cooperation; - Management and operation of National Environmental Technology Information Center; - Financial support for environmental improvement; and - Public activities. <p>The EMC is seeking to operate effectively all publicly owned facilities by providing new technologies and practical knowledge for the officials and private environmental technicians. At present, the EMC's training courses are waste disposal and wastewater treatment.</p>	
References		

Organiser(s)	EPCEM Secretariat	
Name of the Programme	European Postgraduate Course in Environmental Management (EPCEM)	
Sectoral Issue	1; 2; 3; 4; 5	
Cross-Sectoral Issue	1; 4; 5; 6; 7	
Others	Environmental Management	
Name of Places (countries) Where the Training Is Conducted	528	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 3; 4; 8	
Type of Programme	2; 5	
Contact Person	Name	Drs. A. Rooseboom, Assistant Manager
	Affiliation	EPCEM Secretariat
Contact Information	Address	Institute for Environmental Studies- Vrije Universiteit De Boelelaan 1087 1081 HV Amsterdam, THE NETHERLANDS
	Tel	+31-20-444-9580
	Fax	+31-20-444-9553
	Email	epcem@ivm.vu.nl
Website	http://www.epcem.org	
Financial Assistance	EPCEM is financially supported by: the MATRA Programme of the Dutch Ministry of Foreign Affairs, the Dutch Ministry of Housing, Physical Planning and the Environment (VROM), the Foundation of the Open Society Institute, and the PHARE/TEMPUS Programme of the European Union.	
Description of the Programme	<p>The dimensions of environmental policy and management in Europe have become increasingly inter-sectoral and international. The European Union has been exerting a growing influence on the national environmental policy of its member states. Non-member countries are also affected by EU environmental policy in a variety of ways. Nonetheless, considerable differences in environmental policy and management remain among European countries. The challenge of effectively tackling environmental issues demands cooperation between governments, enterprises and other organisations. At both national and international levels, a need for skilled experts who can operate effectively in government departments, private enterprises and non-governmental organisations (NGOs) has arisen. These experts should be trained to analytically deal with complex environmental problems. Environmental problem-analysis and problem solving require an integrated and interdisciplinary approach to environmental issues.</p> <p>By organising an up-to-date, advanced Master programme in environmental policy and management, EPCEM aims:</p> <ul style="list-style-type: none"> - to strengthen inter-sectoral and international networking and cooperation in the field of environmental 	

	policy and management - to enhance environmental expertise in European countries, and - to harmonise environmental policy and environmental management in Europe.
References	http://www.profetas.nl/epcem/forms/BrochureEPCEM04-05.pdf

Organiser(s)	Government of the United States and United States Agency for International Development (USAID)	
Name of the Programme	Accelerating Growth for Investment and Liberalisation with Equity Program (AGILE)	
Sectoral Issue		
Cross-Sectoral Issue	2; 3; 5	
Others		
Name of Places (countries) Where the Training Is Conducted	608	
Nationality of Participants	608	
Target Group(s)	1; 2	
Skills to be mastered in the programme	1; 2; 8	
Type of Programme	6	
Contact Person	Name	Dr. Joseph Ryan, Mission Economist
	Affiliation	United States Agency for International Development (USAID)
Contact Information	Address	N/A
	Tel	N/A
	Fax	N/A
	Email	joryan@usaid.gov
Website	http://tcbdb.wto.org/trta_project.asp?prjcd=216-0027-02-K&ctry=94	
Financial Assistance	Governments of the United States	
Description of the Programme	<p>The Government of the United States and Government Procurement - USAID/Philippines, through the Accelerating Growth, Investment and Liberalisation with Equity (AGILE) Program, provides technical assistance for public and private agencies working to improve the business climate, create jobs, and reduce poverty. Through AGILE, USAID assists the Philippines to open markets to broaden investment and trade opportunities, reduce corruption and increase competition, improve governance and implement policy more transparently, improve management of infrastructure, and stabilise and deepen financial and capital markets.</p> <p>Services provided through AGILE take the form of training, consultants, production of information materials, and study tours to provide Filipino counterparts with information to help inform their decision making. They are provided by the AGILE's consultants (mostly Filipino professionals mobilised from the Philippines' leading firms and universities). They are supervised by a steering committee, supervised by the Philippine Government and USAID and chaired by the Philippine Department of Finance.</p>	
References	http://usembassy.state.gov/posts/rp1/wwwhagil.html	

Organiser(s)	Institute of Social Sciences	
Name of the Programme	Postgraduate Diploma Programmes	
Sectoral Issue	3	
Cross-Sectoral Issue	1; 2; 3; 4; 5; 7	
Others	Globalisation; human development	
Name of Places (countries) Where the Training Is Conducted	528	
Nationality of Participants	999	
Target Group(s)	1; 2; 4	
Skills to be mastered in the programme	1	
Type of Programme	2	
Contact Person	Name	Student Office
	Affiliation	Institute of Social Sciences (ISS)
Contact Information	Address	P.O. Box 29776 2502 LT The Hague, THE NETHERLANDS
	Tel	+31-70-426-0460
	Fax	+31-70-426-0799
	Email	student.office@iss.nl
Website	http://www.iss.nl/navFrame/frame2.html?content=/tprogrs/diploma.html	
Financial Assistance		
Description of the Programme	<p>The ISS offers a series of Postgraduate Diploma Programmes of 6 to 10 weeks directed to the needs of mid-career professionals in developing countries and transition economies. Courses have been developed especially for professionals working in national, provincial and local government, non-governmental organisations, and academics in universities, research institutes and other educational organisations.</p> <p>The Diploma Programmes are policy-oriented, issue-driven and skill-intensive and comprise coursework with exercises, case studies and individual and group assignments based wherever possible on real-life situations.</p> <p>Programmes to be offered in 2004 include:</p> <ul style="list-style-type: none"> - Effective Social Policies for Human Development - Universalising Socio-economic Security for the Poor - Modelling and Accounting for Sustainable Development - Governance, Democratisation and Public Policy - Globalisation and Development - Policy Analysis Skills for Transition Economies. 	
References		

Organiser(s)	International Institute for Geo-Information Science and Earth Observation	
Name of the Programme	ITC Education Programmes	
Sectoral Issue	1; 3	
Cross-Sectoral Issue	4; 6; 7	
Others	GIS, earth sciences, biodiversity	
Name of Places (countries) Where the Training Is Conducted	528	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 4; 5; 6; 8	
Type of Programme	2; 3; 5	
Contact Person	Name	
	Affiliation	International Institute for Geo-Information Science and Earth Observation
Contact Information	Address	ITC - Education Affairs P.O. Box 6, 7500 AA Enschede, THE NETHERLANDS
	Tel	+31-53-487-4444
	Fax	+31-53-487-4238
	Email	education@itc.nl
Website	http://www.itc.nl/education/programme_info/default.asp	
Financial Assistance		
Description of the Programme	<p>ITC is one of the world's foremost international education and training establishments in the field of geo-information science and earth observation. ITC's educational courses are modular in structure, facilitating a multidisciplinary approach to problem solving for development purposes, and considerable emphasis is placed on remote sensing and GIS. Although this educational system is intended primarily for mid-career professionals and scientists from developing countries, increasingly professionals from industrialised countries are registering in order to specialise in ITC's scientific fields.</p> <p>ITC offer 6 educational programmes, most with different specialisations, leading to diplomas and Professional Master (PM) and Master of Science (MSc) degrees. It provides the three-week modules open to participants who do not wish to follow an entire programme.</p> <p>ITC also offers short courses which can be given either at ITC, on-site (including refresher courses), or online. A number of programmes and specialisations leading to an ITC degree, diploma or certificate are offered abroad through educational partnerships with reputed national educational institutions in Bolivia, Iran, Egypt, China, Philippines and India.</p>	
References	http://www.itc.nl/education/register/default.asp	

Organiser(s)	International Institute of Rural Reconstruction (IIRR)	
Name of the Programme	International Training Courses	
Sectoral Issue	1; 3	
Cross-Sectoral Issue	1; 4; 5	
Others		
Name of Places (countries) Where the Training Is Conducted	458; 608; 764	
Nationality of Participants	999	
Target Group(s)	1; 2; 4	
Skills to be mastered in the programme	1; 2; 5; 6; 7; 8	
Type of Programme	2; 3	
Contact Person	Name	Education and Training Program
	Affiliation	International Institute of Rural Reconstruction (IIRR)
Contact Information	Address	Y.C. James Yen Center Silang 4118, Cavite, PHILIPPINES
	Tel	+63-46-414-2417
	Fax	+63-46-414-2420
	Email	Education&Training@iirr.org
Website	http://www.iirr.org/intlcourses.htm	
Financial Assistance	Donation from Development Agencies, NGO, Foundations, other Companies, Institution, Individuals	
Description of the Programme	<p>Through International Training courses, the Education and Training Program of the IIRR develops the capacities of development managers and practitioners so that they can use field based experiences to promote people-centered development.</p> <p>Courses to be offered in 2004 include:</p> <ul style="list-style-type: none"> - SEA Regional Training of Trainers Course on Gender Mainstreaming in Integrated Water Resources Management (IWRM) - Participatory Monitoring and Evaluation - Rural Development Management - Participatory Approaches to Agricultural Extension - Participatory Action Research for Community-based Natural Resources Management - Community-based Integrated Watershed Management 	
References	http://www.iirr.org/downloads/trng_app_form.doc	

Organiser(s)	IRC International Water and Sanitation Center	
Name of the Programme	Advisory and Training Services	
Sectoral Issue	1; 3	
Cross-Sectoral Issue	1; 4; 5; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	528; 999	
Nationality of Participants	999	
Target Group(s)	1; 3; 4	
Skills to be mastered in the programme	1; 2; 4; 8	
Type of Programme	1; 2; 5; 6	
Contact Person	Name	
	Affiliation	IRC International Water and Sanitation Center
Contact Information	Address	P.O. Box 2869, 2601 CW Delft, THE NETHERLANDS
	Tel	+31-15-219-2939
	Fax	+31-15-219-0955
	E-mail	training@irc.nl
Website	http://www.irc.nl/content/view/full/4541	
Financial Assistance	The Netherlands Ministry of Housing, Spatial Planning and the Environment and the Ministry of Foreign Affairs	
Description of the Programme	<p>The overall objective of IRC training activities is to provide those involved in the water supply and sanitation sector with the opportunity to update and supplement their knowledge on sector issues, and to improve their skills to plan, implement and manage projects.</p> <p>Training activities includes training of trainers and briefing programmes in the Netherlands and training courses for sector professionals mostly in partner institutions in the South.</p> <p>For implementation of training courses for sector professionals, IRC works in a network of partners. Training of Trainers helps to meet the challenge for IRC and its partners to also bring courses closer to professionals in the field in terms contents and in terms of costs, whilst maintaining quality and continuously expanding the number of areas in which courses are provided. Briefing Programmes are intended to prepare persons working in the water supply and sanitation sector for new assignments abroad, or to update their knowledge on a certain topic. They are designed on an individual basis or for small groups. Through Training Courses for Sector Professionals people can update their knowledge and skills on issues such as hygiene promotion, cost-recovery and monitoring. Such courses usually take 2 to 3 weeks.</p>	
References	http://www.irc.nl/content/view/full/4547	

Organiser(s)	Japan International Cooperation Agency (JICA)	
Name of the Programme	Technical Training of Overseas Participants	
Sectoral Issue	3; 5	
Cross-Sectoral Issue	1; 2; 3; 4; 5; 6	
Others	Support for economic development (infrastructure)	
Name of Places (countries) Where the Training Is Conducted	392	
Nationality of Participants	999	
Target Group(s)	1; 2; 4	
Skills to be mastered in the programme	1; 2; 3; 4; 5; 6; 7; 8	
Type of Programme	1; 2; 5	
Contact Person	Name	
	Affiliation	Japan International Cooperation Agency (JICA) Headquarters
Contact Information	Address	6-13F, Shinjuku Maynds Tower 1-1, Yoyogi 2-chome, Shibuya-ku, Tokyo 151-8558x JAPAN
	Tel	+81-3-5352-5311
	Fax	N/A
	E-mail	jicampi@jica.go.jp
Website	http://www.jica.go.jp/english/activities/schemes/01tec.html	
Financial Assistance	Government of Japan	
Description of the Programme	<p>Since its establishment, the Japan International Cooperation Agency (JICA) has supported socio-economic and human resource development in order to facilitate the autonomous, sustainable development of developing countries, as one of Japan's Official Development Assistance (ODA) implementing bodies. The JICA is mainly responsible for implementing technical cooperation for developing countries.</p> <p>The JICA invites engineers (and skilled workers) and government officials from developing countries to Japan for training in a variety of fields. To developing countries, the JICA dispatches experts with the skill and knowledge suited to the country's needs. It provides the equipment needed to transfer technology appropriately and effectively. It also sends various study groups to draw up development plans for developing countries and regions.</p> <p>The technical training of overseas participants program is targeted at key administrators, technicians and researchers in developing countries and regions. It involves the transfer of knowledge and technology required by specific countries through the medium of training conducted by the JICA in Japan and in developing countries with their collaboration. This is the most fundamental 'human development' programme implemented by the JICA.</p> <p>The programme has grown steadily in scale, diversity and sophistication since its launch in 1954. In fiscal</p>	

	<p>1999, 7,722 people from 145 countries and regions took part in this programme in Japan, while a further 8,454 people participated in developing countries.</p> <p>In addition to training activities in Japan, there is also an 'overseas training' programme that involves organisations in developing countries fostered through Japanese technical cooperation providing training for people from their own or neighbouring countries. Depending on the type of skill to be taught, the overseas training is the most effective training method because it is conducted in a developing country with similar technical levels and social conditions. Training provided to participants in their own countries is referred to as 'local in-country training (second-country training), ' while training aimed at participants in neighbouring countries is known as 'third-country training. ' Use of these training methods in accordance with specific situations is likely to enhance the effects of Japanese technical cooperation.</p>
References	

Organiser(s)	Kokonut Pacific Pty Ltd	
Name of the Programme	Training for Extracting Virgin Coconut Oil	
Sectoral Issue	3; 5	
Cross-Sectoral Issue	4; 6	
Others	Empowerment	
Name of Places (countries) Where the Training Is Conducted	998; 999	
Nationality of Participants	998; 999	
Target Group(s)	2	
Skills to be mastered in the programme	4; 5; 7	
Type of Programme	5	
Contact Person	Name	Dr. Dan Etherington
	Affiliation	Kokonut Pacific Pty Ltd
Contact Information	Address	PO Box 88, Hawker, ACT 2614, AUSTRALIA
	Tel	+61-2-6254-5606
	Fax	+61-2-6455-2651
	E-mail	dan@kokonutpacific.com.au
Website	http://www.kokonutpacific.com.au	
Financial Assistance		
Description of the Programme	<p>We train individuals, groups, communities in the establishment, maintenance and productive use of our Direct Micro Expelling (DME) method of extracting Virgin Coconut Oil within 1½hours of opening the coconuts. Our most recent training exercise was in Makassar, Indonesia for the COREMAP AusAID project. Our most recent training exercise was in Makassar, Indonesia for the COREMAP AusAID project. The Manager, Robert Kingham, wrote:</p> <p>' I've just returned from Makassar, wildly impressed with the development there - and seeing a bunch of comparative city slickers getting down with farmers and island people doing a good days work. One of the best on-the-job training activities I have ever seen. An excellent Asia-Pacific exchange. Thank you.'</p>	
References		

Organiser(s)	Korea Water Resources Corporation (KOWACO)	
Name of the Programme	International Training Program	
Sectoral Issue	1; 3	
Cross-Sectoral Issue	1; 4; 5; 6; 7	
Others		
Name of Places (countries) Where the Training Is Conducted	410	
Nationality of Participants	999	
Target Group(s)	1	
Skills to be mastered in the programme	2; 4	
Type of Programme	1; 2; 6	
Contact Person	Name	Mr. KIM Soo-Sik, Coordinator
	Affiliation	KOWACO Human Resources Development Center
Contact Information	Address	462-1 Jonmin-dong, Yusung-gu, Daejeon 305-730, REPUBLIC OF KOREA
	Tel	+82-42-860-0218
	Fax	+82-42-860-0249
	E-mail	kim1@kowaco.or.kr
Website	http://english.kowaco.or.kr/	
Financial Assistance	Korea International Cooperation Agency (KOICA)	
Description of the Programme	<p>Since its foundation in 1967, KOWACO has continued its quest for technological development and improved management of national water resources. Following three courses are provided as international training by KOWACO.</p> <p>The course of the Water Resource Management introduces KOWACO's advanced technology and experience. Topics range from water resources surveys, development, utilisation and management of water treatment for engineers and policy makers who are in charge of water resources development and management. It provides an integrated approach to the efficient development and management of water resources. The course include: Water Resources Management in Korea; Hydroinformatics; Design & Operation of Hydrological Experimental Watershed; Multi-purpose Dam Reservoirs Operations; GIS in Water Resources Management; Water-Supply Systems in Korea; Using Information Systems in Water Resources Management; and Field study on Construction and Operation sites.</p> <p>The course of the drinking water management is designed to assist in planning and designing water treatment facilities. Topics include water monitoring, water treatment processes, water related regulations and policies. The course include: Water Resources Management in Korea; Hydroinformatics; Design & Operation of Hydrological Experimental Watershed; Multi-purpose Dam Reservoirs Operations; GIS in Water Resources Management; Water-Supply Systems in Korea; Using Information Systems in Water Resources Management; and Field study on Construction and Operation sites.</p>	

	<p>The course of groundwater management promotes efficient utilisation of groundwater by providing the basic knowledge and skills of groundwater development and management. The course include: Water Resources Management in Korea; Hydroinformatics; Design & Operation of Hydrological Experimental Watershed; Multi-purpose Dam Reservoirs Operations GIS in Water Resources Management; Water-Supply Systems in Korea; Using Information Systems in Water Resources Management; and Field study on Construction and Operation sites.</p>
References	

Organiser(s)	Overseas Development Group, University of East Anglia School of Development Studies	
Name of the Programme	Training Programs	
Sectoral Issue	3	
Cross-Sectoral Issue	1; 4; 5; 7	
Others	gender mainstreaming, human rights, peace building	
Name of Places (countries) Where the Training Is Conducted	826	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 6; 7; 8	
Type of Programme	1; 2; 6	
Contact Person	Name	Jane Donaldson
	Affiliation	Training Manager
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	Tel	+44-1603-592340
	Fax	+44-1603-591170
	E-mail	odg.train@uea.ac.uk
Website	http://www.uea.ac.uk/dev/odg/pages/training.html	
Financial Assistance	The World Bank, United Nations Development Programme (UNDP), International Fund for Agricultural Development (IFAD), Food and Agriculture Organisation (FAO) and other UN organisations.	
Description of the Programme	<p>Since founded in 1967, the Overseas Development Group (ODG) has made a major contribution to the training of development professionals through its programme of scheduled short courses in the United Kingdom, tailor-made training programmes for groups and individuals and specialised training outside the UK.</p> <p>In 2004, ODG offers courses such as Indicators for Sustainable Development; Land Degradation and Sustainable Livelihoods: Field Assessment; Livelihoods Analysis for Poverty Reduction; and Monitoring and Evaluating for Development Activities. The ODG Professional Training programme, on the other hand, is designed to provide tailor-made, specialist study and training for those whose needs are outside the scheduled short courses generally available. This programme is for Development Professionals (whether from public, private or voluntary sector) and allows individuals or small groups, to take time out from their work routine to benefit from the provision of an environment and access to facilities that will enable them to enhance their professional skills and capabilities.</p>	
References	http://www.uea.ac.uk/dev/odg/pages/application.html	

Organiser(s)	Oxfam Community Aid Abroad Trading P/L	
Name of the Programme	Capacity Building Work with Craft Artisans	
Sectoral Issue	3	
Cross-Sectoral Issue	3; 4	
Others		
Name of Places (countries) Where the Training Is Conducted	36; 998; 999	
Nationality of Participants	36; 998; 999	
Target Group(s)	2	
Skills to be mastered in the programme	7	
Type of Programme	5	
Contact Person	Name	Paul Deighton
	Affiliation	Oxfam Community Aid Abroad
Contact Information	Address	PO Box 184, Kilkenny, SA 5009 AUSTRALIA
	Tel	+61-8-8341-1422
	Fax	+61-8-8341-2958
	E-mail	pauld@oxfamtrading.org.au
Website	http://www.oxfamtrading.org.au	
Financial Assistance		
Description of the Programme	We do capacity building work with craft artisans in many countries on an as-need, as-possible basis. Recently we did some work with women weavers in East Timor, on utilizing traditional TAIS weaving techniques and materials in products that may be saleable in the west. We've had many examples over the years, including recent programs with marginalised weavers, hand-block printers, soapstone carvers and others in India.	
References		

Organiser(s)	Spatial Ecology Research Programme, Department of Ecology and Systematics, University of Helsinki	
Name of the Programme	Symposium and Workshop on Spatial Ecology	
Sectoral Issue	3	
Cross-Sectoral Issue	1; 4; 5; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	246	
Nationality of Participants	999	
Target Group(s)	4	
Skills to be mastered in the programme	1; 6; 7	
Type of Programme	1	
Contact Person	Name	Dr. Johan Kotze
	Affiliation	Department of Biological & Environmental Sciences, University of Helsinki
Contact Information	Address	P.O Box 65 (Viikinkaari 1) FIN-00014 Helsinki, FINLAND
	Tel	+358-9-1911
	Fax	+358-9-191-57694
	E-mail	johan.kotze@helsinki.fi
Website	http://www.helsinki.fi/ml/ekol/spatial_ecology.html	
Financial Assistance	Academy of Finland	
Description of the Programme	<p>The Spatial Ecology Research Programme was established by the Division of Population Biology, University of Helsinki. The programme is funded by the Academy of Finland. The programme brings together different approaches to spatial ecology: metapopulation ecology, landscape ecology, large-scale spatial dynamics, levels of selection in spatially structured populations, and spatially-extended evolutionary genetics. Since 1998, the Programme has hosted various symposia, conferences, workshops pertinent to spatial ecology in Helsinki. In 2003, the Programme organised the symposium on Environmental Problems and Policies in Growing Urban Areas: a multidisciplinary approach jointly in collaboration with the Maj and Tor Nessling Foundation.</p>	
References		

Organiser(s)	The Centre for the study of Environmental Change and Sustainability, The University of Edinburgh	
Name of the Programme	Diploma in Environmental Sustainability	
Sectoral Issue	3; 4	
Cross-Sectoral Issue	1; 2; 4; 5; 7	
Others	sustainable development	
Name of Places (countries) Where the Training Is Conducted	826	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 3; 8	
Type of Programme	1; 2	
Contact Person	Name	
	Affiliation	Centre for the study of Environmental Change and Sustainability (CECS)
Contact Information	Address	University of Edinburgh John Muir Building, The King's Buildings Mayfield Road, Edinburgh EH9 3JK UNITED KINGDOM
	Tel	+44-131-650-4866
	Fax	+44-131-650-7214
	E-mail	cecs-office@ed.ac.uk
Website	http://www.cecs.ed.ac.uk/introduction/index.html#teaching	
Financial Assistance		
Description of the Programme	The Centre for the study of Environmental Change and Sustainability (CECS) was established in 1997 to promote interdisciplinary environmental research within the University of Edinburgh, by bringing together researchers from different departments to address key environmental issues. The Centre offers a Diploma programme in Environmental Sustainability (1 1/2 full-time) as well as short courses (3 to 10 weeks) on management and planning for sustainable development, for international participants and mature professionals.	
References	http://www.cecs.ed.ac.uk/msc/apply.html	

Organiser(s)	The Energy and Resources Institute (TERI)	
Name of the Programme	Training of Industry Personnel	
Sectoral Issue	2; 3; 4	
Cross-Sectoral Issue	1; 4; 5	
Others	corporate environmental management	
Name of Places (countries) Where the Training Is Conducted	356	
Nationality of Participants		
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 3; 4; 6; 8	
Type of Programme	1; 2; 6	
Contact Person	Name	Dr. Sunil Pandey
	Affiliation	Center for Environmental Studies, TERI
Contact Information	Address	Darbari Seth Block, Habitat Place, Lodhi Road, New Delhi - 110 003 INDIA
	Tel	+91-11-2468-2100
	Fax	+91-11-2468-2144
	E-mail	corp-env@teri.res.in
Website	http://www.teriin.org/envserv/envserv_dt.htm#training	
Financial Assistance		
Description of the Programme	<p>Sharing knowledge and experience with the industry has been an integral part of TERI's activities. A popular forum for such exchange is the large number of training programmes covering one or more aspects - policy, managerial, and technical - and aimed at both senior and mid-level professionals. Such programmes make the corporate managers aware of the risks and opportunities for sustainable business. Given TERI's global reach and experience, such programmes also address new competencies, skills, or topics that are yet to enter the commercial arena in the country but could be of immense value to the corporate sector.</p> <p>TERI offers training programs on the following topics:</p> <ul style="list-style-type: none"> - Programme on Energy, Environment, Resources, and Sustainability - Environmental Management Systems - Integrated Concepts in Environmental Management - Waste Management - Issues in Climate Change - Basics on Environmental Pollution - Energy Management 	
References	http://www.teri.res.in/teriin/peers/about.htm#particip	

Organiser(s)	The Institute for Housing and Urban Development Studies (IHS)	
Name of the Programme	Short/Diploma Courses	
Sectoral Issue	3	
Cross-Sectoral Issue	1; 2; 4; 5	
Others		
Name of Places (countries) Where the Training Is Conducted	528	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 2; 3; 8	
Type of Programme	2	
Contact Person	Name	The Admission Office
	Affiliation	The Institute for Housing and Urban Development Studies (IHS)
Contact Information	Address	P.O. Box 1935 3000 BX Rotterdam, THE NETHERLANDS
	Tel	+31-10-402-1523
	Fax	+31-10-404-5671
	E-mail	admission@ihs.nl
Website	http://www.ihs.nl/index.html	
Financial Assistance		
Description of the Programme	<p>The short/diploma courses programme comprises a range of intensive four-week courses. The short courses are tailored to meet the practical needs of urban management professionals working in transition and developing countries. Each course addresses a topic that is of vital interest to urban managers. The courses combine keynote presentations by experts with case studies, field visits within the European Union and interactive exercises.</p> <p>Courses to be offered in 2004 include:</p> <ul style="list-style-type: none"> - Public Management and Urban Governance in Transitional Countries - International Course on Housing and Urban Development - Land Management and Informal Settlement Regularisation 	
References	http://www.ihs.nl/education/Application%20Form%20Short%20course.DOC	

Organiser(s)	The Regional Community Forestry Training Center for Asia & the Pacific	
Name of the Programme	RECOFTC Courses and Study Tours	
Sectoral Issue	1; 3	
Cross-Sectoral Issue	1; 4; 5; 7	
Others	Tourism	
Name of Places (countries) Where the Training Is Conducted	764	
Nationality of Participants	999	
Target Group(s)	1; 2; 4	
Skills to be mastered in the programme	1; 2; 5; 6; 8	
Type of Programme	2; 6	
Contact Person	Name	
	Affiliation	The Regional Community Forestry Training Center for Asia & the Pacific (RECOFTC)
Contact Information	Address	PO Box 1111, Kasetsart University, Bangkok 10903, THAILAND
	Tel	+66-2-940-5700
	Fax	+66-2-561-4880
	E-mail	contact@recoftc.org
Website	http://www.recoftc.org/03region/courses/intro.html	
Financial Assistance	Biodiversity Research and Training Program, Danish Cooperation for Environment and Development (DANCED), Department of International Development (DFID), Indonesia, Food and Agriculture Organisation (FAO), Ford Foundation, World Conservation Union (IUCN), The Keenan Institute, Ministry of University Affairs, Royal Government of Thailand, Petroleum Authority of Thailand, SMRP, MRC-BMZ (Germany), Swedish International Development Cooperation Agency (SIDA), Swiss Agency for Development and Cooperation (SDC), The Toyota Foundation	
Description of the Programme	<p>The Regional Community Forestry Training Center for Asia & the Pacific (RECOFTC) offers training courses on community forestry related topics. Courses use field-tested methodologies and processes in community forestry and build upon experiential learning techniques to provide participants with the necessary skills to carry out community forestry activities. RECOFTC provides both skill and competency based courses as well as topical training courses.</p> <p>Courses to be offered in 2004 include:</p> <ul style="list-style-type: none"> - Community-based Tourism for Conservation & Development - Participatory Watershed Management - Community Forestry: Principles and Practices Today - Participatory Action Research for Community-based Natural Resource Management 	
References	http://www.recoftc.org/03region/courses/registration.asp	

Organiser(s)	The World Conservation Union (IUCN)	
Name of the Programme	IUCN Environmental Law Programme (ELP) Capacity Building Initiative	
Sectoral Issue	3; 5	
Cross-Sectoral Issue	1; 2; 3; 4; 5	
Others		
Name of Places (countries) Where the Training Is Conducted	999	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 8	
Type of Programme	1; 2	
Contact Person	Name	
	Affiliation	IUCN Environmental Law Center
Contact Information	Address	Godesberger Allee 108-112, 53175 Bonn, GERMANY
	Tel	+49-228-2962-231
	Fax	+49-228-2062-250
	E-mail	Secretariat@elc.iucn.org
Website	http://www.iucn.org/themes/law/elp06.html	
Financial Assistance		
Description of the Programme	<p>The Environmental Law Programme(ELP) of IUCN is an integrated programme of activities that assists decision makers with information, legal analysis, advisory services, legislative drafting, mentoring and capacity building at national, regional and global levels. The Programme also provides the opportunity and the forum for governments, non-government organisations and others to network and to share information and discuss ideas.</p> <p>IUCN ELP Capacity Building Initiative include:</p> <ul style="list-style-type: none"> - Capacity Building Initiative Pamphlets: Overview - Matrix - ECOLEX - WSSD: 'Type 2' Partnership Initiatives: ECOLEX (IUCN, UNEP, FAO) - IUCN ELP Capacity Building Initiative - WSSD: IUCN Position Papers: Governance for Sustainable Development, and - IUCN UNEP Judicial Portal: Fact Sheet - Application Sheet. <p>From the earliest roots of the Environmental Law Programme (ELP), 'capacity building in environmental law' has been one of the most critical elements of the Programme's mission. This key objective of the ELP is fulfilled in an ever increasing variety of ways, including through:</p> <ul style="list-style-type: none"> - Fellowships/ Internships - Workshops - Lectures/courses - Visiting delegations 	

	<ul style="list-style-type: none"> - and Researchers. <p>As well as through:</p> <ul style="list-style-type: none"> - Technical Assistance and Capacity Building projects - Regional Centres of Excellence - The proposed IUCN Academy of Environmental Law, and - Publications and ECOLEX. <p>Regarding workshops, the ELP's capacity-building programme includes a mix of workshops and seminars. Many of these programmes are designed to provide materials, information and advice of practical value to attorneys working in specialised and developing fields. Recent workshops and seminars have included specialised work addressing legal issues in the fields of Biosafety, Wildlife Trade Enforcement, Alien Invasive Species, Conservation Finance, Liability, Environmental Flows, and River Basin Management.</p> <p>Regarding Lectures/courses, the ELP is often called upon to provide lecturers and faculty members with specialised expertise in particular aspects of conservation and sustainable use law, to a variety of meetings, venues and programmes. This type of participation allows the Programme to reach out to non-lawyer conservation and sustainable use professionals, to build co-operative relationships with other organisations and institutions, and to share its special expertise on conservation and sustainable use issues.</p>
References	

Organiser(s)	UNESCO-IHE Institute for Water Education	
Name of the Programme	International Postgraduate Programmes	
Sectoral Issue	1; 2; 5	
Cross-Sectoral Issue	1; 2; 4; 5; 6	
Others		
Name of Places (countries) Where the Training Is Conducted	528	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 2; 3; 4; 6; 8	
Type of Programme	1; 2; 5	
Contact Person	Name	
	Affiliation	UNESCO-IHE Institute for Water Education
Contact Information	Address	P.O. Box 3015 2601 DA Delft, THE NETHERLANDS
	Tel	+31-15-215-1715
	Fax	+31-15-212-2921
	E-mail	info@unesco-ihe.org
Website	http://www.ihe.nl/education/intro.htm	
Financial Assistance	N/A	
Description of the Programme	<p>UNESCO-IHE conducts a wide range of short, specialised courses annually in addition to the Masters and PhD programmes. These short courses are aimed at upgrading or refreshing the knowledge and skills of mid-career and senior experts. Short courses provide participants with exposure to applications of conventional, modern and innovative technologies. The duration of short courses varies from 1 week to 2 months. Focus and content vary from specialised and technical matters to challenges and approaches in management.</p> <p>UNESCO-IHE also offers tailor-made courses designed for institutional clients that require upgrading of technical, managerial, strategic and operational skills, and for staff that will be able to apply these skills at work immediately. Special group trainings are customised with the client for professionals from one country and one sector (strengthening sector performance), from one country and different sectors (improving cross-sector cooperation) or from different countries and one sector (improving cross-border cooperation and peace-building). Short courses and group training programmes incorporate a mixture of training instruments, including lectures, workshops, group work, presentations, role-plays, case studies and study tours to project sites throughout Europe or the region where training takes place.</p>	
References	http://www.ihe.nl/downloads/forms/ShortC_applicationform.pdf	

Organiser(s)	United Nations Educational, Scientific and Cultural Organisation (UNESCO)	
Name of the Programme	Global Renewable Energy Education and Training Programme (GREET)	
Sectoral Issue	2; 3	
Cross-Sectoral Issue	1; 4; 5; 6	
Others		
Name of Places (countries) Where the Training Is Conducted		
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4	
Skills to be mastered in the programme	1; 2; 4; 5	
Type of Programme	1; 2	
Contact Person	Name	Dr. Osman Benchikh
	Affiliation	Division of Engineering and Technology, UNESCO
Contact Information	Address	1 Rue Miollis - 75732 Paris, cedex 15, FRANCE
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	Fax	+33-1-4568-5820
	E-mail	o.benchick@unesco.org
Website	http://portal.unesco.org/sc_nat/ev.php?URL_ID=2669&URL_DO=DO_TOPIC&URL_SECTION=201&reload=1071248523	
Financial Assistance	N/A	
Description of the Programme	<p>Launched in 1997, the Global Renewable Energy and Training Programme (GREET) is defined within the World Solar Programme 1996-2005 as a strategic programme with universal value that corresponds to the UNESCO mission. GREET Programme includes education and training activities that target the organisation of summer schools and 'training of trainers' sessions, designed to enhance the knowledge of managers, engineers, technicians and trainers on the use, application and management of renewable energy technologies. A 'Renewable Energy Training Platform' comprises an adapted training tool for diffusing renewable energy knowledge for decentralised electrification.</p> <p>Within the GREET Programme, the training activities aim at enhancing knowledge of managers, engineers, technicians and trainers on use, application and maintenance of renewable energy technologies. The learning/teaching materials produced within the GREET Programme serves as a tool to assist in teaching courses on renewable energy in universities and</p>	
References	http://www.insula.org/solar/grottke2.html	

Organiser(s)	United Nations Environment Programme/Regional Office for Asia and the Pacific	
Name of the Programme	Leadership Programme On Environment And Sustainable Development	
Sectoral Issue	1; 2; 3; 4; 5	
Cross-Sectoral Issue	1; 4; 5; 6	
Others	Environmental Management	
Name of Places (countries) Where the Training Is Conducted	156	
Nationality of Participants	998; 999	
Target Group(s)	1; 2; 3	
Skills to be mastered in the programme	1; 2; 3; 4	
Type of Programme	1	
Contact Person	Name	Mr. Mahesh Pradhan, Regional Environmental Affairs Officer
	Affiliation	United Nations Environment Programme Regional Office for Asia and the Pacific
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	E-mail	pradhan@un.org
Website	http://www.rrcap.unep.org/unepTongji/	
Financial Assistance		
Description of the Programme	<p>The current trends in consumption imply that we will require 3 earths to fulfil these growing demands. To avert such a precarious situation, there is a need to promote awareness of sustainable consumption patterns, and bring about visible consciousness within the next generation itself. To do so, we have to focus on educating the current and future leadership.</p> <p>Tongji University is one of the leading universities in China with a demonstrated track record on environmental engineering and related environmental disciplines. A new institute known as the UNEP-Tongji Institute for Environment and Sustainable Development was established in May 2002. The objectives of this institute are:</p> <ul style="list-style-type: none"> - To develop educational programmes to build capacity for research, technical and managerial skills among developing countries of the region; - Contribute to UNEP's global and regional environmental assessments and - Disseminate information on best practices and technology developments. <p>Emerging leaders from the Asia-Pacific are expected to attend this week long leadership programme to be convened at Tongji University in Shanghai during 26-31 July 2004. Expectations are follows:</p> <ul style="list-style-type: none"> - Trained leaders in government, civil society and private sector in the Asia-Pacific region able to reach decisions based on holistic thinking. - Development and dissemination of third generation environmental education material that integrate 	

human, environmental and sustainable development dimensions.
 - Foundation for a graduate degree programme on 'Environment for Sustainable Development' in the Asia-Pacific region, offered on the basis of an inter-university Consortium on Environment for Sustainable Development.

OUTLINE OF LEADERSHIP PROGRAMME

Module 1: Conceptual Framework (Day 1)

The conceptual framework for the course will be presented by the organisers of the leadership programme. This will be followed by a presentation on the key issues and challenges in the Asia-Pacific region, by UNEP. The introduction will explain the global-regional-sub-regional-national-local linkages, in the context of the Asia-Pacific region.

Module 2: Human Dimensions (Day 2)

Three sessions focusing on the mind, body and soul in relation to environment and sustainable development will be presented. The significance of participants, including demonstration of practical exercises. A case study will be presented to participants integrating the three elements of the mind, body and soul.

Module 3: Environment Dimensions (Day 3)

Detailed presentations on air quality, water resources management, and land degradation, including biodiversity, will be made. These will focus on the Asia-Pacific context. A case study on an integrated ecosystems approach will be the final session of this module.

Module 4: Field Trip (Day 4)

Participants will be provided an opportunity to visit some relevant sites in Shanghai and/or its vicinity. The field trip will demonstrate practical applications of the earlier presentations during the leadership programme. The field trip will also provide an opportunity to expose participants to state of the art environmental management technologies and practices.

Module 5: SD Dimensions (Day 5)

The integration of the three pillars of sustainable development will be carried out in Day 5, following the field visit. Individual sessions on the social, economic and environmental aspects will be presented. Participants will go through an integrated case study linking the three pillars of sustainable development as the final session.

Module 6: Tools for Integration (Day 7 am)

Participants will be exposed to tools for effective integration, such as strategic environmental assessments, environmental legislation and compliance, environmental management systems, etc. The human-environment-sustainable dimensions will be reinforced during this practical session.

Module 7: Summary and Synthesis (Day 7 pm)

The organisers will present a summary of the workshop, and synthesise the relevant outcomes and recommendations. An evaluation of the training programme will also be undertaken.

Closing

An eminent personality from China or the region will be invited to distribute course certificates, as well as make a valedictory address to the participants.

References

Organiser(s)	United Nations University (UNU), United Nations Environment Programme (UNEP), UNEP/GRID-Arendal, Agder University College (AUC)	
Name of the Programme	Global Virtual University	
Sectoral Issue	1; 3	
Cross-Sectoral Issue	1; 2; 5	
Others	Environmental Management	
Name of Places (countries) Where the Training Is Conducted	999	
Nationality of Participants	999	
Target Group(s)	1; 2; 3; 4; 5	
Skills to be mastered in the programme	1; 2; 3; 4; 5; 7; 8	
Type of Programme	3	
Contact Person	Name	Brendan Barrett, Academic Programme Officer
	Affiliation	United Nations University (UNU)
Contact Information	Address	53-70 Jingumae 5-chome, Shibuya-ku, Tokyo 150-8925 JAPAN
	Tel	+81-3-5774-1975
	Fax	+81-3-3406-7347
	E-mail	barrett@hq.unu.edu
Website	http://www.gvu.unu.edu/	
Financial Assistance		
Description of the Programme	<p>The Global Virtual University (GVU) is an online network university for sustainable development, and has a particular objective to meet the educational needs of the developing world. The GVVU was officially opened in Arendal, Norway, on 17 June 2003 by Kjell Magne Bondevik, the Prime Minister of Norway. The United Nations University (UNU) and the United Nations Environment Programme (UNEP) and a number of universities pledged their support and partnership.</p> <p>As an internationally based e-Learning Programme, the GVVU</p> <ul style="list-style-type: none"> - Provides access to a range of professional academic milieus in the world. - Is distributed to all corners of the world with the installation of an effective technology package at each study centre. - Promotes the involvement of universities and research institutions in the developing world. - Is cost effective compared to standard fellowship programmes. - Is continuously and quickly updated regarding both academic content and technological solutions. - Stimulate scientific cooperation both on a personal and an institutional level. <p>GVU network provides the 2-year M.Sc. programme in Global Environment and Development Studies (GEDS) and a short web course on Global Environmental Outlook.</p>	
References		

Organiser(s)	Yale School of Forestry & Environmental Studies	
Name of the Programme	Corporate Environmental Leadership Seminar	
Sectoral Issue	1; 2; 3; 4	
Cross-Sectoral Issue	1; 4; 5; 7	
Others	Environmental Management	
Name of Places (countries) Where the Training Is Conducted	840	
Nationality of Participants	999	
Target Group(s)	1; 2; 3	
Skills to be mastered in the programme	1; 2; 3; 8	
Type of Programme	1; 2; 6	
Contact Person	Name	
	Affiliation	The Corporate Environmental Leadership Seminar, Yale School of Forestry and Environmental Studies
Contact Information	Address	205 Prospect Street, New Haven, CT 06511 U.S.A.
	Tel	+1-203-432-5117
	Fax	+1-203-432-3809
	E-mail	yff@yale.edu.
Website	http://www.yale.edu/cels/	
Financial Assistance	Yale University	
Description of the Programme	<p>The environmental conditions in which private and public firms operate are changing dramatically. In many cases, even the direction of this change is not what has been anticipated. Successful management will require both understanding these changes and developing management strategies that account for them.</p> <p>The Corporate Environmental Leadership Seminar (CELS) at Yale University offers high-level, solution-oriented training in environmental management and policy. It provides expert assessments of the changing paradigms of resource availability, demand, manufacture, regulation, economic development, policy, and management – both nationally and internationally. It also offers an opportunity to link ideas offered in the Seminar with strategic issues raised by each participant's 'leadership project.'</p> <p>The Seminar brings together executives from a broad range of private business, government managers from state, federal, and international agencies; and representatives of non-governmental organisations - in the belief that learning from each other is essential and occurs both inside and outside the Seminar classroom. Faculty members are drawn from Yale and elsewhere.</p>	
References	http://www.yale.edu/cels/admitform.htm	

3. LIST OF SUSTAINABLE DEVELOPMENT INITIATIVE IN ASIA AND THE PACIFIC

3.1 Matrix of Key Programmatic Areas and Activities related to Environment and Development

*(The following initiatives include major undertakings, as submitted by the respective agencies, and is not necessarily an exhaustive list)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Environmental Quality and Human Health (Regional)						
<p>Promotion of Cleaner Production Policies & Practices in Selected DMCs</p> <p style="text-align: center;">Implementing Agency: ADB</p> <p>The primary objective of the project are to (i) assist India, Indonesia, Philippines, Thailand, and Viet Nam in developing a policy and institutional framework for integrating CP principles as a priority element in national environmental and industrial development strategies and to (ii) recommend financing mechanisms for implementation of CP strategies. A secondary objective is to facilitate coordination and cooperation among govts, private sector organizations, academic institutions, NGOs, the Bank, and other aid agencies in developing national CP action plans and addressing technical requirements to promote the application of CP approaches.</p>	<ul style="list-style-type: none"> • Status reports and national CP action plans from participating DMCs including planned policy reforms and options to improve CP programs • Background paper on funders' activities and regional CP action plan • Case Studies in emerging CP areas • A network to provide coordinating mechanism for regional CP activities 	<p>India, Indonesia, Philippines, Thailand and Vietnam</p>	<p>20 Apr 1999 to 11 Mar 2004</p>	<p>US\$ 600,000</p>	<p>ADB</p>	<p>Agenda 21 Ch. 30</p>
<p>Transboundary Environmental Cooperation in Northeast Asia</p> <p style="text-align: center;">Implementing Agency: ADB</p> <p>The main objective of the project is to promote regional cooperation for environmental protection among the countries of Northeast Asia. The TA will build human and organizational capacities for (i) environmental protection in relation to coal-fired power plants and (ii) environmental monitoring. It will facilitate the improvement of ambient air quality in a cost-effective way. It will also foster a cooperative relationship among countries in the region, based on a factual understanding of the regional air quality situation and long-term solutions to transboundary pollution. The components of the TA are: (i) regional training for reducing pollution from coal-fired power plants, (ii) regional network for transboundary environmental monitoring, and (iii) action plan for improving the efficiency of particulate abatement systems in existing power plants.</p>	<ul style="list-style-type: none"> • Training curricula, manuals, and materials for reducing pollution from coal-fired power plants • Regional environmental monitoring network • Action plans for efficiency improvement of particulate abatement systems in existing power plants 	<p>China, Korea, Japan, Mongolia and the Russian Federation</p>	<p>13 Oct 1999 to 30 Jun 2004</p>	<p>US\$ 350,000</p>	<p>ADB</p>	<p>Agenda 21 Ch. 9</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Environmental Quality and Human Health (Regional)						
<p>Subregional Environmental Monitoring & Information System (SEMIS), Phase II</p> <p style="text-align: center;">Implementing Agency: ADB</p> <p>The overall objective of SEMIS is to build upon the achievements of SEMIS I, which provided mechanisms to allow sharing of information on environmental and natural resources issues in a timely manner for decision-making purposes. SEMIS II will undertake pilot demonstration projects to (i) increase the capacity of national govts to make informed decisions regarding development investments relating to sustainable utilization of natural resources; (ii) enhance the ability of national govts to conduct integrated economic and environmental planning with relevant data; (iii) increase and strengthen the capacity of national govts to collect accurate data; and (iv) conduct, store, manipulate, and share actual integrated planning information using the data collected in pilot projects</p>	<ul style="list-style-type: none"> • Subregional network utilizing national databases established • Identification of "hotspots" particularly in sensitive border areas • Demonstration of application for subregional planning and management 	<p>Nepal, Vanuatu, Cambodia, Sri Lanka, Thailand and China</p>	<p>29 Dec 1999 to 30 Apr 2004</p>	<p>US\$ 600,000</p>	<p>Environmental or Natural Resource Agencies in each country / UNEP</p>	<p>Agenda 21 Ch. 40 / 37</p>
<p>Strategies for Poverty Reduction Through Urban Environmental Improvement</p> <p style="text-align: center;">Implementing Agency: ADB</p> <p>The objective of the project is to improve the knowledge and information base for use by national and urban DMC govts to address the urban environment and poverty nexus.</p> <p>The project will evaluate the relationship between environment poverty, poverty reduction, and public health. This will be accomplished by preparing a detailed literature review and consulting with experts undertaking related work in the region and supported by at least four case studies.</p>	<ul style="list-style-type: none"> • Improved information base on environment quality, extent of poverty, and state of public health in selected cities • Case studies showing the relationship between environment, poverty and health 	<p>Cambodia, China, Korea, Lao PDR, Malaysia, Mongolia, Philippines, and Vietnam</p>	<p>27 Sep 2000 to 23 Feb 2004</p>	<p>US\$ 500,000</p>	<p>ADB</p>	<p>Agenda 21 Ch.3 / 6</p>
<p>Kitakyushu Initiative for a Clean Environment Network Development and Pilot Implementation</p> <p style="text-align: center;">Implementing Agency: ESCAP</p> <p>The project is to promote the implementation of the Kitakyushu initiative for a Clean Environment adopted at the Ministerial Conference on Environment and</p>	<ul style="list-style-type: none"> • Regional network established to transfer/ replication of the best practice measures for improving urban environment conditions 	<p>Australia, Bangladesh, Cambodia, China, Fiji, France, India, Indonesia, Iran Japan,</p>	<p>15 months</p>	<p>US\$ 143,500</p>		<p>Agenda 21 Ch. 34 / 37</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Environmental Quality and Human Health (Regional)						
<p><u>Implementing Agency: ESCAP (CONT.)</u></p> <p>Development in Asia and the Pacific 2000, by a) identifying successful measures ("best practices") used in improving urban environmental conditions, b) establishing a regional network to facilitate the transfer/replication of the successful measures; and c) develop quantitative indicators to monitor measurable progress in improvement of the urban environment.</p>		<p>Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, The Netherlands, Turkey, Vietnam (provisional)</p>				
<p><i>Capacity building in strategic planning and management of natural resources (including environment, energy and water resources) in Asia and the Pacific</i></p> <p>Implementing Agency: ESCAP</p> <ul style="list-style-type: none"> To strengthen the capacity of the developing countries in the region in strategic planning and management of natural resources development and environmental protection: activities include development of guidelines on strategic planning in energy and water resources management in energy and water resources management: regional/sub-regional workshops for adaptation and application 	<ul style="list-style-type: none"> Guidelines developed on strategic planning in energy and water resources management 	<p>Two countries from five sub-region for the country studies and application: Regional workshops open for wider participation</p>	<p>2000-2004: development of guidelines: 2001 adaptation: 2002-2003 regional workshops: 2001-2004</p>	<p>US\$ 738,000</p>		<p>Agenda 21 Ch. 37</p>
<p><i>Using knowledge of surface and underground conditions of land resources to improve and support urban planning and development</i></p> <p>Implementing Agency: ESCAP</p> <p>The project will increase national capabilities to formulate policies aimed at improving the quality of planning and natural disaster management in densely populated areas by 1) increasing expertise; 2) enhancing awareness; 3) improving interdisciplinary communication between scientist/planners</p>	<p>Improved quality of planning and natural disaster management</p>	<p>Mainly South/Central Asia: Armenia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Iran, Kazakhstan, Laos, Maldives, Mongolia Myanmar, Nepal, Pakistan, Philippines, Russian Federation, Sri Lanka, Thailand, Uzbekistan, Vietnam</p>	<p>Mar 2001 – Feb 2002</p>	<p>US\$ 80,000</p>	<p>CITYNET (representative urban author); ECO (regional repres.); UNDP (local assistance)</p>	<p>Agenda 21 Ch. 10</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Environmental Quality and Human Health (Regional)						
<p><i>“Good Urban Governance” Campaign.</i></p> <p>Implementing Agency: UNCHS (HABITAT)</p>	<p>Urban Governance launched in India, Philippines, and Sri Lanka.</p> <ul style="list-style-type: none"> Regional Level: Improved Asia Regional information exchange and expert group networking amongst the SCP demonstration cities. Documentation of lessons learnt as contributions to the “Declaration on – Norms”, “Illustrative Cities Initiative”, “Good Urban Governance Toolkits” 					<p>Agenda 21 Ch. 37</p>
<p><i>Air Pollution in The Megacities of Asia project</i></p> <p>Implementing Agency: UNEP</p> <ul style="list-style-type: none"> The project goal is to assist government in the promotion of air pollution management in Asian megacities and enhance their authorities’ capacities to manage their air pollution problems. The project also increases public awareness about the health and environmental impacts of urban air pollution. 	<ul style="list-style-type: none"> Reports on the current state of air pollution; air quality management capabilities especially in urban area; best practice on air pollution management Regional networks on urban air pollution management in Asia 	<p>Korea, India, Japan, Thailand, China, Nepal, Philippines, Singapore</p>	<p>Phase I:</p> <ul style="list-style-type: none"> Sept 2001 – July 2002 <p>Phase II:</p> <ul style="list-style-type: none"> Nov 2002 – onwards 	<ul style="list-style-type: none"> US\$ 200,000 	<ul style="list-style-type: none"> WHO Korea Environment Institute (KEI) Korean Ministry of Environment (MOE) Stockholm Environment Institute (SEI) Asia-Europe Environment Technology Centre (AEETC) 	<p>Agenda 21 Ch. 9</p>
<p><i>Regional Clean Air Initiative for Cities in Asia</i></p> <p>Implementing Agency: World Bank</p> <p>The goal of the Initiative is to assist developing country governments in the region to effectively manage urban air quality and protect public health. More project info at: www.worldbank.org/cleanair/caiasia/projects/projects.htm</p>	<ul style="list-style-type: none"> regional platform to share knowledge, Establish south-south city exchanges pilot programs to reduce air pollution 	<p>Korea, Thailand, China, Philippines, Vietnam, Malaysia, Singapore, Japan, Indonesia, Bangladesh, India, Sri Lanka, Mongolia</p>	<p>Activities ongoing throughout 2002</p>	<p>unspecified</p>	<ul style="list-style-type: none"> ADB Ford Motor Company Government of Japan SDC GTZ 	<p>Agenda 21 Ch. 9</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Biodiversity (Regional)						
<p><i>Regional Cooperation for Sustainable Mountain Development in Central Asia</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The broad goal of the project is to stimulate regional cooperation in sustainable development in the mountain areas of Central Asia and Xinjiang. The immediate objective is to obtain agreement on a regional approach to sustainable mountain development. The Central Asian Republics have initiated movement in this direction with establishment of the Central Asian Mountain Information Network. The project will encourage the expansion of these cooperative efforts to include Xinjiang Province, and then to utilize more effectively the information already available.</p>	<ul style="list-style-type: none"> • Common Approach to sustainable mountain development • Information and technology communication system on mountain development shared 	<p>Kyrgyzstan, China, Tajikistan and Uzbekistan</p>	<p>16 Dec 1999 to 31 Dec 2003</p>	<p>380,000</p>	<p>ADB</p>	<p>Agenda 21 Ch. 13</p>
<p>GCP/RAS/177/JPN: <i>Assistance for the implementation of the model forest management for sustainable forest management</i></p> <p><u>Implementing Agency: FAO</u></p>		<p>Four countries: China, Myanmar, the Philippines and Thailand</p>	<p>13 February 2000 - 31 August 2002</p>	<p>US\$ 1,580,144</p>	<p>Japan</p>	<p>Agenda 21 Ch. 11</p>
<p>GCP/RAS/173/EC: <i>Information Analysis for Sustainable Forest Management: Linking National and international Efforts in South Asia and Southeast Asia</i></p> <p><u>Implementing Agency: FAO</u></p>		<p>13 countries: Bangladesh, Bhutan, Cambodia, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam</p>	<p>1 April 2000 - 1 April 2003</p>	<p>US\$ 1,842,280</p>	<p>EC</p>	<p>Agenda 21 Ch. 11</p>
<p>GCP/RAS/163/NET: <i>Forestry Research Support Programme for Asia and the Pacific</i></p> <p><u>Implementing Agency: FAO</u></p>		<p>19 countries: Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, PNG, Solomon Islands, Sri Lanka, Thailand, Vanuatu, Viet Nam,</p>	<p>1 January 1996 to 31 December 2001</p>	<p>US\$ 2,852,308</p>	<p>The Netherlands</p>	<p>Agenda 21 Ch. 15</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Biodiversity (Regional)						
<p>UNEP/GEF Biosafety Project</p> <p>Implementing Agency: UNEP</p> <p>The project aims to prepare countries for the entry into forces of the Cartagena Protocol on biosafety by assisting countries to prepare their national biosafety frameworks. The project also aims at promoting regional and sub-regional collaboration and exchange of experience on issues of relevance to the national biosafety frameworks, mainly through a series of capacity building and training workshops.</p>	<ul style="list-style-type: none"> • 4 Sub-regional Assessment Workshops for South Asia, Southeast Asia, Central Asia, and the Pacific Islands • National Workshops on Advance Informed Agreement and Risk management • Preparation of executive summary and other papers for regional/sub-regional workshops 	<p>Bangladesh, India, Indonesia and Sri Lanka (thus far)</p>	<p>June 2001 – Dec 2004</p>	<p>US\$ 38.9 million</p>	<p>The Steering Committee (Co-chaired by GEF secretariat and UNEP)</p>	<p>Agenda 21 Ch. 15 / 37</p>
<p>Conservation of Freshwater Biodiversity and Wetlands Using an Integrated River Basin Management approach in selected Asian countries</p> <p>Implementing Agency: UNEP</p> <p>The integrated River Basin Management approach is used in India, China and Bangladesh Its aims are to encourage the countries to include considerations for conservation of wetlands and freshwater biodiversity into their strategies and action plans both at national and regional level. This approach also assists to develop and agree on appropriate legislation and policy instruments to facilitate implementation of the management plans.</p>	<ul style="list-style-type: none"> • Enhanced utilization of wetland systems for water quality enhancement • Greater Use of Environmental Impact Analyses (EIA) and Strategic Environmental Assessment (SEA) to ensure integrated economic and environmental management • Exchange of best practice in implementing these approach between different countries 	<p>China, India and Bangladesh</p>	<p>2002-2003</p>	<ul style="list-style-type: none"> • US\$ 1.3 million 	<ul style="list-style-type: none"> • Wetlands International Asia-Pacific • Global Environmental Centre, Japan • IUCN, Bangladesh 	<p>Agenda 21 Ch. 15 / 18</p>
Coastal and Marine Environment (Regional)						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>RAS/98/G33 – Building Partnerships for Environmental Protection and Management of the East Asia Seas</i></p> <p><u>Implementing Agency: UNDP</u></p> <p>The programme aims at reducing or removing the critical barriers to effective coastal and marine management in the East Asian Seas Region, as part of GEF's international waters programme. Approaches adopted are ICM and risk assessment/management.</p>	<ul style="list-style-type: none"> • Programme start-up in October 1999 • Thailand component launched in May 2001, with PEMSEA-TH (Chonburi Governor) signing ceremony • Thailand activities implementation 	<p>Cambodia, DPR Korea, Indonesia, Malaysia, China, Philippines, Republic of Korea, Thailand, Vietnam</p>	<p>1999-2004</p>	<p>US\$ 28.545 m – GEF: US\$ 16.224 m; Gov't: US\$ 3.313 m; SIDA: US\$ 3.910 m; UNDP: US\$ 3.148 m; IMO: US\$ 0.720 m; others: US\$ 1.230 m.</p>	<p>National Governments</p>	<p>Agenda 21 Ch. 17</p>
<p><i>Promoting the Development and Use of a Wetlands Inventory for Sustainable Wetland management in Asia</i></p> <p><u>Implementing Agency: UNEP</u></p> <ul style="list-style-type: none"> • The objectives of the project is to revise and update information on wetlands of national and international importance in Asia, which the information will also be used to analyse and monitor trends of wetland status in Asia particularly in the sensitive area to ecological decline. It also supports the core information for International Conventions and Treaties on wetlands, climate change, biodiversity, migratory species and desertification. Lastly, the project plans to implement integrated training courses for wetlands. 	<ul style="list-style-type: none"> • Increased capacity of government agencies to implement wise use management principles with respect to wetlands and other land management units, • Better planing for development and conservation of wetlands on national and sub-regional levels throughout the region • Published "Status and Trends Overview for Asian Wetlands" to review on priority regions and wetland types for conservation 	<p>Cambodia, China, India, Indonesia</p>	<p>2nd half 2001</p>	<ul style="list-style-type: none"> • PDF A US\$ 25,000 • Total funding project 2.85 million 	<ul style="list-style-type: none"> • Wetlands International Asia Pacific 	<p>Agenda 21 Ch. 18 / 36</p>

Coastal and Marine Environment (Regional)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>Sustainable Management of the Bay of Bengal Large Marine Ecosystem</i></p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to develop adequate measures for the Sustainable Management of the Bay of Bengal to protect the health of ecosystem and manage the living resources.</p>	<p><u>Outputs of PDF B:</u></p> <ul style="list-style-type: none"> • 8 national reports • 8 papers summarizing findings • Selected regional thematic papers • Study on regional coordination mechanisms • Draft synthesis document • Reports of the workshops convened • Draft Project Document for GEF financing/donor co-financing 	<p>Maldives, Sri Lanka, India, Bangladesh, Myanmar, Thailand, Malaysia and Indonesia</p>	<p>2001-2003</p>	<ul style="list-style-type: none"> • PDF B US\$ 349,800 • Total estimated funding project US\$ 1,078,400 	<p>FAO</p>	<p>Agenda 21 Ch. 15 / 17 and 18</p>
<p>Freshwater Resources (Regional)</p>						
<p><i>Regional Cooperation in Flood Control and Management in Asia and the Pacific, Phase 2</i></p> <p><u>Implementing Agency: ESCAP</u></p> <ul style="list-style-type: none"> • Strengthening capacity in participatory planning and management for flood mitigation and preparedness 	<ul style="list-style-type: none"> • Capacity strengthened in planning and management for flood mitigation and preparation 	<p>Australia*, Bangladesh, Cambodia, China, India, Indonesia, Japan*, Lao PDR, Malaysia*, Myanmar, Netherlands*, Pakistan, Philippines, Sri Lanka, Thailand, USA* and Vietnam (denotes self-financed basis)</p>	<p>Feb 2001- Jan 2002</p>	<p>US\$ 80,000</p>	<p>AIT / FAO</p>	<p>Agenda 21 Ch. 11 / 13</p>
<p>Desertification and Land Degradation (Regional)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>GEF/PDF/A Application of Project on “Prevent and Control of Sandstorm in NE Asia” and first National Stakeholders Consultation Meeting, Project Steering Committee Meeting, Project Technical Committee Meeting and NE Asia Sub-Regional Meeting on Project Management and Mandate from 13-17 May, 2002 in Beijing.</i></p> <p><u>Implementing agencies: UNCCD and ESCAP, UNEP.</u></p>	<ul style="list-style-type: none"> ➤ Basic information for preparing a GEF sub-regional project proposal on yellow sands control in NE Asia; ➤ Basic data collection on the disasters of sandstorm in some parts of the world ➤ Involvement of stakeholders in the project; ➤ Set up Steering Committee; ➤ Set up Technical Committee; ➤ Mandate of concerned agencies. 	<p>Mongolia, South Korea, Japan, Australia.</p>	<p>June 2001 to June 2002</p>	<p>75,000US\$</p>	<p>UNEP, ESCAP, UNCCD</p>	<p>-China and Mongolia-NAP to Combat Desertification; -Asia-RAP to Implement theUNCCD;</p>
<p><i>Publication of REGIONAL CHALLENGE AND INITIATIVES: UNCCD AND NAP IMPLEMENTATION IN ASIA. This plan will be completed in collaboration with UNEP, UNESCO, ESCAP and UNCCD.</i></p> <p><u>Implementing agency: UNCCD and ESCAP</u></p>	<ul style="list-style-type: none"> ➤ Document for Review Conference of the Implementation of the UNCCD; ➤ Review and assessment of regional status on UNCCD and NAP implementation in the region; ➤ Information sharing with affected countries. ➤ Printing of 3000 copies (200 pages). 	<p>China, Mongolia, India, Iran, Kazakhstan, Myanmar, Pakistan, Uzbekistan, Turkmenistan.</p>	<p>Oct. 2001 to Nov. 2002</p>	<p>10,000US\$</p>	<p>ESCAP, UNCCD, UNEP, UNESCO</p>	<p>-MoU Between UNEP-ESCAP, Between UNCCD-ESCAP,</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>International Seminar on Women's Role in Combating Desertification.</p> <p><u>Implementing agencies: UNCCD, ESCAP, GM of UNCCD, UNEP and et al.</u></p>	<ul style="list-style-type: none"> ➤ Therotical awareness of the issues; ➤ Study measures and approaches to control the issues; ➤ Community level Exchange among people in different regions; ➤ Strengthening technique transfer among the countries of the parties of the UNCCD. 	<p>3 African Countries, 3 Asian Countries, 3 Latin American Countries, some donor countries.</p>	<p>Sept 16-20.2002</p>	<p>95,000US\$</p>	<p>ESCAP, UNCCD, UNEP, UNESCO, GM/UNCCD and et al.</p>	<p>-MoU and Agreement between concerned agencies; -UNCCD.</p>
<p>GCP/RAS/167/AUL: FAO Programme for Community IPM in Asia for Rice IPM Phase IV (GCP/RAS/172/NOR)</p> <p><u>Implementing Agency: FAO</u></p>		<p>Bangladesh, Cambodia, China, India, Indonesia, Korea R, Malaysia, N. Zealand, Philippines, Sri Lanka, Thailand, Viet Nam, Nepal</p>	<p>1 July 1998 - 31 December 2002</p>	<p>8,347,957</p>	<p>Australia</p>	<p>Agenda 21 Ch. 14</p>
<p>GCP/RAS/168/AUL: IPM in vegetable growing in south and south east Asia</p> <p><u>Implementing Agency: FAO</u></p> <p>GCP/RAS/164/NET: IPM Cotton</p> <p><u>Implementing Agency: FAO</u></p>		<p>7 countries: Bangladesh, Cambodia, Indonesia, Laos, Philippines, Thailand, Vietnam</p> <p>6 countries: Bangladesh, China, India, Pakistan, Philippines, Viet Nam</p>	<p>1 April 1996 - 30 June 2001</p> <p>1 October 1999 - 16 October 2004</p>	<p>3,622,556</p> <p>12,254,287</p>	<p>Australia</p> <p>The Netherlands, EC</p>	<p>Agenda 21 Ch. 14</p> <p>Agenda 21 Ch. 14</p>
<p>Address problems and issues of desertification and land degradation through national, subregional and regional action programmes in accordance with the UNCCD Regional Implementation Annex for Asia and the Regional Action Programme 2001-2005 endorsed by the Kitakyushu Ministerial Conference</p>	<ul style="list-style-type: none"> • Development of regional desertification ,map for Asia Establishment of web site • To Conduct regional studies on agroforestry & soil conservation 	<p>Asian contracting parties</p>				<p>Agenda 21 Ch. 12</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: UNCCD</u></p> <p>Thematic Programme Network 1 on Monitoring and assessment (Network host /Task Manager: China)</p> <ul style="list-style-type: none"> • Workshop on assessment & monitoring • Thematic Programme Network 2 on Agroforestry & soil conservation (Network host/Task Manager: India) • Thematic Programme Network 3 <p>Range management & sand dune Stabilisation (Network host/Task Manager: Iran)</p> <ul style="list-style-type: none"> • TPN4 – 6 under preparation 	<p>practices</p> <ul style="list-style-type: none"> • TPN-3 Yadz, Iran 7-11 May launched • 2nd Regional workshop Beijing, June 2001 					
<p>Globalization and Policy Integration (Regional)</p>						
<p><i>Capacity Building in Environmental Economics</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The objective of the project is to establish a regionally focused program to "train the trainers" and thereby strengthen the teaching of environmental law in the DMCs. The RETA will also increase cooperation among legal educators and academic institutions in the DMCs</p>	<ul style="list-style-type: none"> • Publication of Teaching Materials • Substantive sectoral and subsectoral laws including international environmental law objectives • Training program for lecturers in environmental law throughout the region • Quarterly progress reports to be transmitted to the Management Committee 	<p>Asia Pacific Region</p>	<p>15 Dec 1995 to 31 Dec 2000</p>	<p>US\$ 600,000</p>	<p>The World Conservation Union (IUCN)</p>	<p>Agenda 21 Ch. 36</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>Strategic Environmental Framework for the Greater Mekong Subregion (GMS)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The overall goal is to improve environmental protection by helping to ensure the environmental sustainability of economic development undertaken within the context of the GMS Program specifically and within the GMS generally. The primary objective is to prepare a strategic environmental framework that promotes the integration of environmental considerations in economic development planning and implementation within the GMS Program. Secondary objectives include (i) identifying opportunities for improvements in environmental management in the GMS through TA and environmental investments; (ii) building awareness and capacity in regional environmental assessment; (iii) identifying how public participation in GMS decision making can be enhanced; and (iv) defining a set of environmental parameters and mechanisms to initiate a monitoring program.</p>	<ul style="list-style-type: none"> • Data inventory/collection/collation • Case Studies • Strategic Framework • Workshops/ Consultative Meetings 	<p>Cambodia, China, Lao, Myanmar, Thailand, and Vietnam</p>	<p>20 Mar 1998 to 31 Dec 2002</p>	<p>US\$ 1,600,000</p>	<p>ADB</p>	<p>Agenda 21 Ch. 30</p>
<p>Globalization and Policy Integration (Regional)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Capacity-Building on Trade and Environment: Various Country Projects</p> <p>Implementing Agency: UNEP</p> <p>The main objective of these initiatives are to build the capacity of developing countries in the region in terms of promoting trade whilst protecting the environment</p>	<ul style="list-style-type: none"> National Studies on use of economic instruments towards sustainable use of natural resources; Case studies on leather and tropical timber industries; Training Modules on Trade, environment and Development; National Stakeholder Workshops 	<p>Indonesia, India, Malaysia, Vietnam</p>	<p>2002</p>	<p>Approx: US\$ 60,000</p>	<p>UNCTAD CUTS (NGO) WWF Malaysia</p>	<p>Agenda 21 Ch. 33</p>
<p>SCP joint facility to strengthen environmental governance in the Asia and Pacific Region enable the SCP to continue to:</p> <p>Implementing Agency: UNCHS (HABITAT)</p> <ul style="list-style-type: none"> consolidate and build upon the achievement made to date at the city-level; ensure continued efficient and effective response to the Asia Regional demand for city-level EPM support; upscale these achievements through national replication strategies establish the foundations to Regionalise EPM support through network of national and sub-regional "Capacity-Development and Support Institutions" by 2005: 	<ul style="list-style-type: none"> City Level: Improve environmental governance capacities through SCP core support in at least 7 cities. National Level: Replication strategies under discussion amongst the demonstration cities and national-level partner institutions in China, India, the Philippines and Sri Lanka. National Good 	<p>India, China, Philippines, Sri Lanka, I.R. of Iran, Vietnam, Thailand</p>	<p>January – June 2001</p>	<p>\$137,500</p>	<p>UNEP</p>	<p>Agenda 21 Ch. 37</p>
<p>Assistance to the national and regional preparation for the World Summit on Sustainable Development. on-going global project</p> <p>Implementing Agency: UNIDO</p>		<p>Thailand, Malaysia, Vietnam and Other countries Asia and the Pacific and other regions</p>	<p>From now until September 2002</p>	<p>US\$ 300,000</p>	<p>UNDP, UNESCAP, UNEP</p>	<p>Agenda 21 Ch. 37 / 38</p>

Climate Change (Regional)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>A study of a Least-Cost Greenhouse Gas Abatement Strategy</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The main objective of the project is to enhance the ability of DMCs to gather & analyze data on greenhouse gas (GHG) emissions. In addition, the TA will emphasize the generation of cost-effective, technical feasible & economically viable action that will result in a net reduction of GHG emissions</p>	<p>Group training workshops</p> <ul style="list-style-type: none"> • Study Tour • Regional Workshops • In-country training • Tripartite monitoring review <p>Progress report, technical and other reports</p>	<p>Bangladesh, China, India, Indonesia, Korea, Mongolia, Myanmar, Pakistan, Philippines, Thailand and Vietnam</p>	<p>4 Aug 1994 to 31 Dec 2001</p>	<p>US\$ 8,862,363</p>	<p>ADB</p>	<p>Agenda 21 Ch. 9</p>
<p><i>Greenhouse Gas Emission Reduction from Industry in Asia-Pacific (GERIAP)</i></p> <p><u>Implementing Agency: UNEP</u></p> <ul style="list-style-type: none"> • The objective is related to 1) Greenhouse Gas Emission, 2) Sustainable Use of Natural Resources and, 3) Poverty Alleviation 	<p>Capacity building, demonstration of energy efficiency/CP methodologies in key industrial sectors, review and recommendations for national policies</p>	<p>China, India, Indonesia, Malaysia, Nepal, Mongolia, Philippines, Sri Lanka, Thailand, Vietnam,</p>	<p>April 2002 – 2005</p>	<p>2.1 million US\$</p>	<ul style="list-style-type: none"> - Sida - National Institutions of each participating countries 	<p>Agenda 21 Ch. 9</p>
<p>Sustainable Energy Development (Regional)</p>						
<p><i>Promotion of a regional sustainable energy development strategy for the twenty-first century</i></p> <p><u>Implementing Agency: ESCAP</u></p> <p>To assist in capacity-building of selected developing countries in developing sustainable energy policies: activities include national level studies</p>	<ul style="list-style-type: none"> • Capacity-building enhanced developing sustainable energy policies 	<p>Bangladesh, Cambodia, Lao PDR, Mongolia, Nepal</p>	<p>2001-2002</p>	<p>US\$ 80,000</p>		<p>Agenda 21 Ch. 37</p>
<p>Sustainable Energy Development (Regional)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Commercialization of Biomass Technology</p> <p>Implementing Agency: ESCAP</p> <p>A Regional Seminar on Commercialization of Biomass Technology will be held in Guangzhou, China from 14-18 May 2001, focusing on experiences of projects already being carried out to create greater awareness of commercial potential of biomass energy technologies.</p>	<p>Recommendations for regional measures to reinforce national activities plans for regional cooperation will be developed including TCDC on biomass energy</p>	<p>Bangladesh, China, India, Indonesia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam</p>	<p>2001</p>	<p>US\$40,000</p>		<p>Agenda 21 Ch. 9 / 16</p>
<p>GCP/RAS/154/NET: Regional Wood Energy Development Programme in Asia</p> <p>Implementing Agency: FAO</p>		<p>Bangladesh, Bhutan, Cambodia, China, India, Laos, Indonesia, Nepal, Malaysia, Maldives, Myanmar, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam</p>	<p>Third Phase 1 July 1994 31 December 2001</p>	<p>8,843,244</p>	<p>The Netherlands</p>	<p>Agenda 21 Ch. 4 / 9 / 14</p>
<p>RAS/00/090- Support to Regional Cooperation on Sustainable Energy Development and Climate Change Mitigation</p> <p>Implementing Agency: UNDP</p> <p>The project,executed by ESCAP, seeks to facilitate the building of regional multi-stakeholder and intergovernment consensus on sustainable energy development, Climate change mitigation and poverty eradication. The project will also promote partnerships between ESCAP,UNEP, UNDP,GEF and other involved organizations.</p>	<ul style="list-style-type: none"> Organization of a regional NGO symposium on sustainable energy and development held in conjunction with the High-level Meeting on Energy for Sustainable Development held in Bali, Nov. 2000 Financial support for NGOs participation in international for a during 2001 for WSSD. 	<p>Asia-Pacific Region</p>	<p>2000- 2001</p>	<p>UNDP Regional SPPD: US\$ 49,000</p>	<p>ESCAP</p>	<p>Agenda 21 Ch. 9 / 27</p>

Environmental Quality and Human Health (Sub-Regional)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Regional Environmental Action Plan (REAP)</p> <p><u>Implementing Agency: ADB</u></p> <p>The objective of the project is to strengthen regional cooperation among the five CARs in the area of improvement environmental management, by supporting the process of and the mechanism for REAP development and implementation.</p> <p>To achieve the objective, the project will focus on both the process and the product, by developing the mechanism and building the institutional capacity to prepare and implement an ambitious but feasible regional environment action planning process; and preparing of the first REAP as the starting point for national actions, which will lead to effective regional cooperation.</p>	<ul style="list-style-type: none"> Regional strategies for sustainable management of natural resources and environmental management information and technology communication system on regional environmental management shared 	<p>Kazakhstan, Kyrgyz, Tajikistan, Turkmenistan, and Uzbekistan</p>	<p>19 Sep 2000 to 31 Dec 2003</p>	<p>US\$ 500,000</p>	<p>ADB</p>	<p>Agenda 21 Ch. 37</p>
<p>Capacity Building for Promoting Traditional Environmental Management in PDMCs</p> <p><u>Implementing Agency: ADB</u></p> <p>The objective of the project is to help the Pacific developing member countries (PDMCs) to sustainably use their natural resources by promoting the use of traditional environmental management practices, knowledge, & values. The project will incorporate information on traditional environmental management practices and values into existing formal and nonformal education programs; and disseminate information to decision makers, govt personnel, NGOs, and the general community on the importance of preserving and using traditional knowledge, alongside new technical knowledge and practices. The project will review implementation on the national environmental management strategies and lessons learned, particularly on components related to traditional environmental management practices.</p>	<ul style="list-style-type: none"> Formal and nonformal education materials (e.g. booklets, posters, training manuals, CD-ROM) Recommendations for strengthening the role of traditional leaders Strengthened regional information network using standard information transfer systems and Internet-based technologies Information on the successes and failures of the National Environmental Management Strategies (NEMS), lessons learned, and recommendations 	<p>Micronesia, Vanuata and the Cook Islands</p>	<p>10 May 2000 to 31 Jul 2003</p>	<p>300,000</p>	<p>South Pacific Regional Environment Programme (SPREP)</p>	<p>Agenda 21 Ch. 34 / 36</p> <p>SPREP Action Plan No. 5.1</p>
<p>Environmental Quality and Human Health (Sub-Regional)</p>						
<p>Technical Assistance for Transboundary</p>	<ul style="list-style-type: none"> Subregional centers 	<p>China, Democratic</p>	<p>Feb 2001 – July</p>	<p>US\$ 350,000</p>	<p>ADB</p>	<p>Agenda 21</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>Environmental Cooperation in Northeast Asia: RETA 5865</i> <u>Implementing Agency: ESCAP</u></p> <ul style="list-style-type: none"> The project is to build human resources and organizational capacities for (i) environmental protection in relation to coal-fired power plants and (ii) environmental monitoring in the subregion, through a) establishment of the subregional centers, b) development and implementation of training programs, and c) improvement of factual understandings on the environmental situation in the subregion. 	<ul style="list-style-type: none"> established Training programs implemented Better understanding of environmental situation in the subregion. 	<p>People's Republic of Korea, Mongolia, Japan, Republic of Korea, Russian Federation</p>	<p>2003</p>			<p>Ch. 9 / 36</p>
<p><i>Support to the implementation of Regional Haze Action Plan of ASEAN member countries</i> <u>Implementing Agency: ESCAP</u></p> <ul style="list-style-type: none"> The project is to enhance capacities in participating ASEAN countries for monitoring and modeling smoke and haze and provide early warning on forest fires for emergency response 	<ul style="list-style-type: none"> An early warning system on forest fires for emergency response established 	<p>Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand</p>	<p>Jul 2000 – Dec 2001</p>	<p>US\$ 250,000</p>	<p>WMO</p>	<p>Agenda 21 Ch. 11 / 13</p> <p>SPAE 1999-2004 Objective 1 & 2</p>
<p><i>Sub-regional Capacity-Building Workshops on Effective Implementation and Chemical and Hazardous Waste related Conventions</i> <u>Implementing Agency: UNEP</u></p>	<ul style="list-style-type: none"> Increased understanding of officials on chemical related MEAs, inter-linkages amongst them, and means of implementation and enforcement 	<p>ASEAN Countries; Northeast Asia sub-region; South Asia</p>	<p>September 2001- mid 2002</p>		<p>ASEAN SEPA, China SAARC FAO, Basel /POP/ PIC Convention Secretariats</p>	

Environmental Quality and Human Health (Sub-Regional)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Sub – Regional Project on Cleaner Production</p> <p><u>Implementing Agency: UNIDO</u></p>	<p>Assisting Thailand and Lao PDR in introduction and application of cleaner production approach in the manufacturing sector.</p>	<p>Thailand and Lao PDR</p>		<p>On going</p>		<p>Agenda 21 Ch. 9 / 30</p> <p>SPAE 1999-2004 Objective 13 / 14</p>
<p>Regional assessment and management of persistent toxic substances (may not be exact title)</p> <p><u>Implementing Agency: SPREP</u></p> <p>Through the preparation of Regional Persistent Toxic Substances (PTS) Report and presentation at the priority setting workshop, the project aims to assess and enhance PIC capabilities for effective management of hazardous materials, including eliminating hazards posed by existing waste stockpiles, and improve compliance with international convention requirements</p>	<ul style="list-style-type: none"> • Endorsement of regional report by Members and acceptance by UNEP 	<p>Selected Pacific Island Countries</p>		<p>122,346</p>	<p>- AusAID - UNEP</p>	<p>Agenda 21 Ch. 6 / 19</p> <p>SPREP KRA 2.2 (Hazardous Waste Pollution)</p>
<p>Awareness and preparedness for emergencies at local level in SE Asia</p> <p><u>Implementing Agency: UNEP</u></p> <ul style="list-style-type: none"> • The Objective is the prevention of industry accidents and their impact on environment, health, property. 	<p>Survey and recommendation on status of emergency preparation in SE Asia. Regional consultations and training on APELL and preparation of regional APELL plan</p>	<p>Malaysia, , Philippines, Thailand, Singapore, Vietnam</p>	<p>Dec 2002 – Dec 2003</p>	<p>171 000 US\$</p>	<p>- Asian Disaster prevention Center</p>	<p>Agenda 21 Ch. 20 / 30</p> <p>SPAE 1999-2004 Objective 1 - 3</p>

Biodiversity (Sub-Regional)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>THA/99/007 and RAS/97/G42 – Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme</p> <p>Implementing Agency: UNDP</p> <p>The project aims at developing a full GEF Project Brief for Mekong Basin wetland biodiversity conservation and sustainable management in Lao PDR, Cambodia, Thailand and Vietnam. Expected outputs include (a) a chain of demonstration models of participatory management and sustainable use of wetlands in specific sites of high biodiversity value of global significance; (b) policy development and capacity building at national and regional levels; and (c) regional activities (i.e., support to the Mekong River Commission in developing a multilateral framework for strategic wetlands action plan and environmental impact assessment, training, information exchange and sharing of lessons, as well as establishment and strengthening of regional networks.</p>	<ul style="list-style-type: none"> • Project extension request submitted to UNDP/GEF • Fourth Steering Committee meeting in Phnom Penh to review GEF submission and initial reaction from the GEF Secretariat; Back-to-back regional NGO consultation • Donors meeting in Bangkok to mobilize resources for project implementation • Endorsed Project Brief and Document submitted to UNDP/GEF 	<p>Lao PDR, Cambodia, Thailand and Vietnam</p>	<p>1999-2001; new request (extension) being submitted for GEF approval</p>	<p>US\$ 421,834 of which: GEF funds US\$347,000; UNDP TRAC/Add-On funds US\$74,233 Additional fund requested for 8 to 10 months extension.</p>	<p>National Governments, IUCN</p>	<p>Agenda 21 Ch. 15</p> <p>SPAE 1999-2004 Objective 4 / 9</p>
<p>Mekong Wetland Biodiversity Programme (full project)</p> <p>Implementing Agency: UNDP</p> <p>The programme is designed to focus on regional wetland biodiversity conservation and sustainable use in the Mekong River Basin, involving four lower Mekong countries.</p>	<ul style="list-style-type: none"> • Project Brief and Document submitted to GEF Council • Funding secured from donors for regional and Thailand components • PSC and/or LPAC meeting 	<p>Lao PDR, Cambodia, Thailand and Vietnam</p>	<p>Planned; 2002-2005</p>	<p>US\$32.68 m (GEF: 10.72 m, other donors & Gov't co-funding: 21.96 m) – Thailand component: US\$4.7 m.</p>	<p>National Governments, IUCN</p>	<p>Agenda 21 Ch. 15</p> <p>SPAE 1999-2004 Objective 4 / 9</p>

Coastal and Marine Environment (Sub-Regional)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>Coastal & Marine Resources Management & Poverty Reduction in South Asia</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The overall objective of the project is to promote regional cooperation among the participating countries in strengthening management of environmentally sensitive coastal and marine resources using integrated coastal zone management (ICZM) approaches. In particular, in each participating country, the TA aims to (i) help formulate strategies for regional cooperation in ICZM development planning, capacity building, and information exchange; (ii) identify ecologically sensitive geographical areas requiring priority investment support; and (iii) develop appropriate ICZM strategies to develop and manage the areas identified under (ii) and pilot test such strategies at selected sites.</p>	<ul style="list-style-type: none"> Regional strategic plan encompassing recommendations for regional cooperation and collaboration including mechanisms for information exchange, database development and management, and capacity building A compendium of high priority geographical areas (HPAs) of highest environmental and ecological significance and sensitivity Policy, institutional, regulatory, and other constraints that act as barriers to effective Strategy developed for application of ICZM approaches in the HPAs which addresses constraints and uses opportunities 	<p>Bangladesh, India, Maldives, Pakistan and Sri Lanka</p>	<p>6 Mar 2001 to 31 Sep 2003</p>	<p>US\$ 600,000</p>	<p>ADB</p>	<p>Agenda 21 Ch. 3 / 17</p> <p>SACEP No. 3 / 4</p>
<p><i>Preparation of a Strategic Action Programme (SAP) and Transboundary Diagnostic Analysis (TDA) for the Tumen River Area, its coastal regions and related Northeast environs</i></p> <p><u>Implementing Agency: UNDP</u></p>			<p>Ongoing</p>	<p>US\$ 10.57 Full project GEF: US\$ 5.2 million</p>		<p>Agenda 21 Ch. 17</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>Awareness Public threatened ecosystems of local, regional and international significance (not exact title)</i></p> <p><u>Implementing Agency: SPREP</u></p> <p>Objectives of the project are to (i) identify sites and provide on-going technical and financial support to development and maintenance of activities;(ii) to support SPREP members to establish at least two new marine protected areas;(iii) to develop awareness and education programme for policy makers; and(iv) to provide training to environment official/NGOs.</p>	<ul style="list-style-type: none"> • Demonstration sites of "Best Practice" in aspects of community-based Marine Protected Areas (MPAs) identified • Target Sites identified for transfer of experience of "BEST Practice in aspects of community-based MPA 	<p>Selected Pacific Island Countries</p>		<p>A \$ 231,378</p>	<ul style="list-style-type: none"> - Aus-AID - NZODA - UNDP-GEF - C-SPODP - ADB 	<p>Agenda 21 Ch. 17</p>
<p><i>Reversing Environmental Degradation Trends in the South China Sea</i></p> <p><u>Implementing Agency: UNEP</u></p> <p>This overall goals of the project are to: create an environment at the regional level, in which collaboration and partnership in addressing environmental problems of the South China Sea and Gulf of Thailand, between all stakeholders, and at all levels is fostered and encouraged; and to enhance the capacity of governments to integrate environmental considerations into national development planning</p>	<ul style="list-style-type: none"> • Improved regional co-operation in the management of the environment of the South China Sea • Adopted water quality objectives and standards 	<p>Cambodia, China, Indonesia, Malaysia, Philippines, Thailand & Vietnam</p>	<p>2002-2007</p>	<p>Full project USD 31.683 million, approx US\$ 16 million GEF</p>	<p>EAS/RCU and Ministries of Environment of each country.</p>	<p>Agenda 21 Ch. 15 / 17</p> <p>SPAE 1999 - 2000: Objective 2 and 3</p>
<p><i>Strategic Action Programme (SAP) for The International Waters of the Pacific small Island Developing States</i></p> <p><u>Implementing Agency: UNDP</u></p> <p>This is to achieve global benefits by developing and implementing measures to conserve, sustainably manage, and restore coastal and oceanic resources in the Pacific Region. The IWP has two main components, which are the oceanic and coastal components. For the oceanic one, The focus is on the management and conservation of tuna stocks in the Western Central Pacific. For the other, the focus is on integrated coastal watershed management through on implementation of fourteen demonstration projects that demonstrate best practice and provide lessons for community-based management of threatened habitats, as well as promote options for the sustainable use of natural resources.</p>	<ul style="list-style-type: none"> • Improved capacity for the sustainable management and conservation of resources and habitats in the Pacific Islands region. • Improved local community capacity and processes for the design and implementation of sustainable resource management and conservation programmes in the Pacific Islands region. 	<p>Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu</p>	<p>July 2000-Ongoing</p>	<p>USD 20 million</p>	<p>SPREP/SPC and FFA</p>	<p>Agenda 21 Ch. 15 / 17</p> <p>SPREP Action Plan: Key area no. 5.1 (nature conservation)</p>

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Freshwater Resources (Sub-Regional)						
<p><i>Assisting 2 participating countries in the region in removing barriers for the introduction of cleaner artisanal gold mining and extraction technologies.</i> A global GEF project on international water protection. Pipeline project</p> <p>Implementing Agency: UNIDO</p>		Lao PDR, Indonesia,		US\$ 7 millions	UNDP and GEF	Agenda 21 Ch. 20
<p>Environment Programme Components A.1. <i>Water Quality and Transport Loads</i></p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	A functioning WQMN for the Mekong River Basin Map of water quality of Mekong River Basin water bodies	Cambodia, Lao PDR, Thailand and Viet Nam	2001-2005	USD 5,347,980	Through the National Mekong Committees in the countries	Agenda 21 Ch. 18 SPAЕ 1999-2004 Objective 13
<p>A2. People and aquatic ecosystems</p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	Map of Area where people are highly dependent on aquatic ecosystem productivity A system to monitor aquatic ecosystem and how changes effect people and their livelihood in the Mekong River Basin	Same as above	2001-2005	USD 2,973,135,	Same as above	Agenda 21 Ch. 7 / 18 SPAЕ 1999-2004 Objective 9 / 15
<p>A3. Integrated Environmental Analysis and Ecosystem modeling</p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	A system for agencies to manage and share information on aquatic ecosystem Improved capacity and system to monitor and assess cross border environmental conflicts	Same as above	Same as above	USD 3,009,765	Same as above	Agenda 21 Ch. 18 SPAЕ 1999-2004 Objective 8 / 15

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>B. Environmental Management Support System</p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	<ul style="list-style-type: none"> SEA, EIA system and guideline for MRC Environmental Information support system for sector aspects of aquatic ecosystem management 	<p>Same as above</p>	<p>Same as above</p>	<p>USD 3,015,870</p>	<p>Same as above</p>	<p>Agenda 21 Ch. 18</p> <p>SPAE 1999-2004 Objective 13 / 15</p>
<p>C. Strategic Networking and Co-ordination</p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	<ul style="list-style-type: none"> Information system for the development assistance of the Mekong River Basin Improved co-ordination of development initiatives related to environmental issues Better dialogue between MRC and other agencies involved in environmental aspects of development 	<p>Same as above</p>	<p>Same as above</p>	<p>USD 1,221,833</p>	<p>Same as above</p>	<p>Agenda 21 Ch. 2 / 18</p> <p>SPAE 1999-2004 Objective 8 / 15</p>
<p>Freshwater Resources (Sub-Regional)</p>						
<p>D1 – Capacity Building</p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	<ul style="list-style-type: none"> Improved exchange of information and experiences on environmental management among professional Improved capacity of government staff to minimize cross-boundary impact of development initiatives in the Mekong Basin 	<p>Same as above</p>	<p>Same as above</p>	<p>USD 3,968,250</p>	<p>Same as above</p>	<p>Agenda 21 Ch. 18 / 37</p> <p>SPAE 1999-2004 Objective 7 / 15</p>

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<p>D2 - <i>Awareness Building</i></p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	<ul style="list-style-type: none"> Improved capacity in environmental awareness creation Information resources for the international community on issues related to the environment of Mekong River Basin 	Same as above	Same as above	USD 1,144,077	Same as above	<p>Agenda 21 Ch. 18 / 36</p> <p>SPAE 1999-2004 Objective 13 / 15</p>
<p>E. <i>Support Studies and Research Facilitation</i></p> <p>Implementing Agency: Mekong River Commission (MRC)</p>	<ul style="list-style-type: none"> A system of document information facilitating research and supporting development initiatives A process to identify and list areas of research and studies in the field of environment A process to select small research proposals for funding under MRC issues stipends developed 	Same as above	Same as above	2,777,775	Same as above	<p>Agenda 21 Ch. 18 / 36</p> <p>SPAE 1999-2004 Objective 7 / 13 / 15</p>
<p>Freshwater Resources (Sub-Regional)</p>						
<p><i>Water Utilization Programme</i> (WUP) – main components:</p> <p>Implementing Agency: Mekong River Commission (MRC)</p> <p>A. Basin Model Package and Knowledge Base</p> <p>B. Development of Rules for Water Utilisation</p> <p>C. Project and Program Management Support and Cap. Building</p>	<ul style="list-style-type: none"> Basin Modeling Package and rules for information sharing Rules for water quality and quantity, Training package for capacity building 	Same as above	2000-2006	USD 16.3 millions	Same as above	<p>Agenda 21 Ch. 18 / 37</p> <p>SPAE 1999-2004 Objective 7 / 13 / 15</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Globalization and Policy Integration (Sub-Regional)						
<p>Promotion of integrated environmental assessment, resource use management and planing tools (<i>may not be exact title</i>)</p> <p>Implementing Agency: SPREP</p> <p>The project aims to enhance regional and national capacity for integrated environmental decision making by (i) following outcomes of environmental economics workshop (Apia 2000); (ii) designing and implementing at least two community-based sustainable resource use and conservation projects that target issues relating to integrated coastal watershed management; (iii) Promotion and awareness raising of environmental planing tools.</p>	<ul style="list-style-type: none"> Pilot projects demonstrating integrated environmental assessment resource use management and planing tools 	Selected Pacific Island Countries		545,512	<ul style="list-style-type: none"> NZODA NZODA UNDP-GEF France 	<p>Agenda 21 Ch 17 / 37</p> <p>SPREP KRA 4.1 (Integrating Environment and Development)</p>
Climate Change (Sub-Regional)						
<p>Effective technology Transfer Framework related to climate change (<i>may not be exact title</i>)</p> <p>Implementing Agency: SPREP</p> <p>The project aims to develop frameworks for analyzing impacts and vulnerability by (i) assisting PICs to accept and test the Technology transfer Framework; (ii) coordinating training and provide advice on training material;(iii) assisting PICs to identify their Technology Needs;(iv) undertaking HRD national assessments and feed information on training needs into Training Database; and (v) assisting PICs with their prioritisation of Technology Needs.</p>	<ul style="list-style-type: none"> Formal acceptance of Technology Transfer Framework and needs assessment in at least 6 PICs. 	Selected Pacific Island Countries		<ul style="list-style-type: none"> 302,051 	<ul style="list-style-type: none"> AusAID CIDA UNDP-GEF DANIDA 	<p>Agenda 21 Ch. 9</p> <p>SPREP KRA 3.3 (Impacts and Vulnerability)</p>

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Climate Change (Sub-Regional)						
<p>Effective phase out of ozone depleting substance (ODS) <i>(may not be exact title)</i></p> <p><u>Implementing Agency SPREP</u></p> <p>This project aims to enhance the continuing development of policies in PICs in cooperation with multi-stakeholders at all levels by (i) assisting and facilitating the development of NACPs for PICs; (ii) assisting in preparation/development of training strategy and awareness raising programme for PICs; (iii) Coordinating and organizing training of Custom officers and Refrigeration technicians in the region with assistance from UNEP; (iv) developing guidelines for preparation of policy statements and legislation; (v) providing guidelines for PICs for accession to the Protocol; and (vi) establishing database and network forum for ODS focal points to exchange information.</p>	<ul style="list-style-type: none"> • NACPs developed by 7 countries and submitted to the Multilateral Fund for financial assistance • Increased awareness of PICs through 3 sub-regional training for custom officers and Refrigeration technicians • Draft ODS legislation prepared with policy statements submitted to respective Cabinets for endorsement in at least 3 PICs. • Ratification or accession by three non-parties. • Improved information network and well established database for PICs. 	<p>Selected Pacific Island Countries</p>		<ul style="list-style-type: none"> • 279,656 	<ul style="list-style-type: none"> • DANIDA • UNEP 	<p>Agenda 21 Ch. 9 SPREP KRA 3.5 (Development on Climate Change)</p>
<p><i>Reducing Greenhouse Gas Emissions by Promoting Bioenergy Energy Technologies in South Asia</i></p> <p><u>Implementing Agency: UNEP</u></p> <p>The project aims to reduce GHG emissions through promoting and dissemination of clean and efficient biomass energy technologies in seven countries. It also identifies the most beneficial and suitable biomass energy technologies for the region and develop strategies for implementation.</p>	<ul style="list-style-type: none"> • Increased adoption of renewable energy by removing barriers and reducing implementation costs. • A national and regional position to adopt biomass energy technologies with low/zero emissions • Regional expert workshops to establish the public awareness on the current status of biomass technologies and information 	<p>Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka</p>	<p>Starting mid-2002</p>	<ul style="list-style-type: none"> • PDF B Funding US\$ 428,000 	<ul style="list-style-type: none"> • FAO/ RWEDP • GEF 	<p>Agenda 21 Ch. 9 / 16</p>

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Sustainable Energy Development (Sub-Regional)						
<p><i>Rational and efficient use of energy and water resources in Central Asia</i></p> <p style="text-align: center;"><u>Implementing Agency: ESCAP</u></p> <ul style="list-style-type: none"> Jointly implemented by ECE and ESCAP under SPECA to find regional solutions to common priority problems in the fields that hinder economic and social development; preventing conflicts over the issues of controlling and sharing scarce water and energy resources; promoting region-wide economic and technical cooperation among the participating states and their integration in the world economy and strengthening institutional capacity of the states and their public administrations using available human and technical resources from the region. Activities in the energy sector includes: group training in energy auditing for managers for energy intensive enterprises; subregional workshop on promotion of public awareness of energy efficiency and conservation 	<ul style="list-style-type: none"> Decreased conflicts over the issues of controlling and sharing scarce water and energy resources Strengthened economic and technical cooperation among the participating states 	<p>Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan</p>	<p>2000-2002</p>	<p>US\$ 300,000- ESCAP US\$ 1,750,000 - Total</p>		<p>Agenda 21 Ch. 4 / 18</p>

Matrix of Key Programmatic Areas and Activities related to Environment and Development

*(The following initiatives include major undertakings and is not necessarily an exhaustive list)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Environmental Quality and Human Health (National)						
<p>TA Cluster for Environmental Management at the State Level</p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>The main objective of the TA cluster is to strengthen environmental management in the states and territories of India by (i) providing alternative solutions and programs for industry to comply with environmental standards other than use of "end of pipe" waste treatment technologies; (ii) strengthening environmental management mechanisms and the local human resource base to provide expertise to all aspects of environmental management; and (iii) strengthening the cooperation and information exchange between the states in testing new approaches to environmental management, as well as monitoring & enforcing environmental laws and regulations.</p>	<ul style="list-style-type: none"> • Administration of the EIA process and integrated economic and environmental planning at the state level improved • Improved compliance with the environmental rules, regulations and standards • An environmental management institute established • Policies and guidelines for financing cleaner production developed and enforced • Demonstration projects on pollution control in Calcutta completed. 	<p>India</p>	<p>22 Mar 2000 to 31 Dec 2004</p>	<p>US\$ 3,620,000</p>	<p>Ministry of Environment and Forests</p>	<p>Agenda 21 Ch. 30 / 35 / 39</p>

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Sustainable Chennai project, India</p> <p><u>Implementing Agency: UNCHS (HABITAT)</u></p> <p>Since late 1995, Habitat has been helping the city institutionalise a process of systematic problem and solution analysis, and strategic plan prepared implementation and implementation. The approach is based on broad consultation, shared analysis, and collaboration among public and private bodies.</p>	<ul style="list-style-type: none"> • <i>Environmental Profile completed in 1995 and revised in March 1997</i> • <i>City Consultation on environment issues conducted in Sep.1997</i> • <i>Consultation on Sanitation Provision in city-poor and peri-urban areas held in Feb 1998</i> • <i>Consultation on Traffic and Air Quality Management held in June 1998</i> 	<p>India</p>	<p>1995-</p>	<p>UNDP \$605,200 as technical cooperation funds; Added more \$35,300 (1997); includes \$100,000 seed capital Development Fund to support neighborhood based demo projects</p>	<p>UNDP</p>	<p>Agenda 21 Ch. 7 / 27 / 28 and 37</p>
<p>Environmental Quality and Human Health (<i>National</i>)</p>						
<p><u>Implementing Agency: UNCHS (HABITAT) (CONT.)</u></p> <p>The Chennai Metropolitan Development Authority implements the project on behalf of the Tamil Nadu State Government, which is the executing agency for the Government of India</p>	<ul style="list-style-type: none"> • <i>Some 15 demo projects implemented 1998-2000</i> • <i>Documentation: Joint Fukuoka Regional Office/SCP senior Regional Adviser Mission Report</i> • <i>Sanitation Strategy Implementation Profile</i> • <i>Traffic and Air Quality Sanitation Strategy Implementation Profile</i> • <i>Waterways Strategy Implementation profile</i> • <i>Institutional Development Programme</i> 					

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<p>Environmental Monitoring & Management Capacity Building II Implementing Agency: ADB</p> <p>The objective of the project is to strengthen planning & decision making in environmental management by improving the capacity of key institutions in environmental monitoring & data management with maximum impacts on poverty reduction</p> <p>The objective will be achieved by (i) preparing an environmental poverty reduction strategy; (ii) implementing a training program in three oblasts and developing training case studies; (iii) expanding the data management system; and (iv) maintaining support to Ministry of Environmental Protection's oblast monitoring departments, its laboratory, and other participating laboratories. Workshops and seminars, as well as materials and equipment, will be provided for training purposes.</p>	<ul style="list-style-type: none"> • Recommendations on how to maximize poverty reduction through environmental improvements. • 30 local experts trained • Data Management network in two more oblasts. • Laboratories and their cooperation strengthened. 	<p>Kyrgyz Republic</p>	<p>11 Sep 2000 to 30 Apr 2003</p>	<p>US\$ 650,000</p>	<p>Ministry of Environmental Protection</p>	<p>Agenda 21 Ch. 3</p>
<p>Environmental Quality and Human Health (<i>National</i>)</p>						

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<p>Sustainable Shenyang and Wuhan Project, China In the face of the fact that these challenges need to be addressed from early on this 2 projects were initiated to promote balanced economic, social, and environmentally sustainable development approaches.</p> <p><u>Implementing Agency: UNCHS (HABITAT)</u></p> <p>The Shenyang and Wuhan Environmental Protection Bureaus implement the projects on behalf of China's International Centre for Technology Exchange, as executing agency for China.</p>	<ul style="list-style-type: none"> • Small-scale demo projects implemented in Shenyang in 1998/1999 and Wuhan in 1999/2000, <i>documented and analysed for upscaling/replication citywide early 2000</i> • Strategy Review, Investment and Sub-regional Replication Workshops held in Shenyang in Oct.1999 and in Wuhan in May 2000. <i>Senior SCP Regional Adviser Mission Reports to shenyang and Wuhan Int'l</i> • <i>Consultancy support to Shenyang and Wuhan in preparation of their Capacity Building and Institutional Development Programmes</i> 	<p>People's Republic of China</p>		<p>UNDP \$300,000 as technical cooperation funds UNEP/IETC \$54,500 for each city</p>	<p>UNDP, UNEP/IETC</p>	<p>Agenda 21 Ch. 7</p>
<p>Promotion of Clean Technology (Cluster) Subproject C-legislative Support for Clean technology</p> <p><u>Implementing Agency: ADB</u></p> <p>The overall goal of the project is to help improve national-level policies, institutional capacity, and financing mechanisms for the promotion, and application of clean technologies to achieve sustainable environmental development. The objective of the project is to support the use of cleaner production (CP) technology and associated pollution reduction by (i) improving the policy framework to remove current barriers and constraints; (ii) building the capacity of the concerned agencies to strengthen environmental management;</p>	<ul style="list-style-type: none"> • Policy guidelines for development, demonstration, and application of cost effective clean technology concepts in small and medium-scale industrial enterprises, including township and village enterprises (TVEs). 	<p>People's Republic of China</p>	<p>29 Sep 1998 to 30 Jun 2004</p>	<p>US\$3,500,000</p>	<ul style="list-style-type: none"> • State Development Planning Commission (SDPC) • Ministry of Science and Technology (MOST) • State Economic and Trade Commission (SETC) 	<p>Agenda 21 Ch. 30 / 33 / 34 and 40</p>

Environmental Quality and Human Health (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: ADB (CONT.)</u></p> <p>(iii) improving access to information on successful, financially attractive clean technology experiences, and (iv) developing new project financing concepts and market-oriented incentives to introduce and adopt clean technology in a cost-effective manner in small and medium-size enterprises including township and village enterprises. The work financed under the TA cluster will play a key role in promoting cost-effective and self-financing environmental improvement investments that use CP technology save energy, and reduce air and water pollution in urban & rural area</p>	<ul style="list-style-type: none"> • Integrated institutional framework in place to improve awareness through improved access to high quality, financially relevant information that will encourage increased adoption of clean technology measures. • International training programs and study tours, and domestic training programs convened. 				<ul style="list-style-type: none"> • Environment and Resource Protection Committee (ERPC) • State Environmental Protection Administration (SEPA) • Ministry of Agriculture (MOA) 	
<p>Local EPM project, Philippines</p> <p><u>Implementing Agency: UNCHS (HABITAT)</u></p> <p>Project formulation started October 1997, with project document signature May-1998 and SCP technical co-operation commencing November 1998.</p> <p>The Department of Environment and Natural Resources (DENR) is the executing agency for the Government of the Philippines, with three demonstration-cities (Lipa, Tagbilaran, and Cagayan de Oro) as implementing agencies; each to establish an EPM-Unit with responsibility for introducing, applying, adapting and supporting replication of the EPM process.</p>	<ul style="list-style-type: none"> • <i>City Environmental Profiles for Cagayan de Oro, Lipa and Tagbilaran drafted October, validated with stakeholders and completed November/ December 1999</i> City consultations held Nov./ Dec. 1999 • Issue-specific cross-sectoral working groups established Jan. / Feb. 2000 • Strategy consensus reached April 2000 • First demo-project underway June 2000 (for Cagayan de Oro) 	<p>Philippines</p>	<p>1997-</p>	<p>UNDP allocated \$ 2,142,650 as technical cooperation funds over three years, with \$75,000 cost sharing</p>	<p>UNDP</p>	<p>Agenda 21 Ch. 7 / 37</p>
<p>Environmental Quality and Human Health (National)</p>						

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<p>Capacity Building for Environmental Assessment & Monitoring</p> <p>Implementing Agency: ADB</p> <p>The objective of the project is to build Ministry of Environment capacity to ensure environmentally sustainable development, by strengthening environmental institutions for improving environmental planning, assessment, and monitoring.</p> <p>The objective will be achieved by (i) proposing organizational and functional improvements based on a review of the current conditions & practices; and (ii) implementing a training-of-trainers program for environmental management, assessment, and monitoring.</p>	<ul style="list-style-type: none"> • Recommendations on how to improve the organization of MOE and its functional relationships with other relevant organizations • 24 local experts trained • Four sector guidelines for environmental assessment, monitoring, and data management prepared, including for the transport and energy sectors • Database established for the monitoring information • Outlines prepared on developing human and other resources for the country. 	<p>Republic of Tajikistan</p>	<p>21 Dec 2000 to 30 Jun 2003</p>	<p>US\$600,000</p>	<p>Ministry of Environment (MOE)</p>	<p>Agenda 21 Ch. 28 / 37</p>
<p>Integrating Cleaner Production into Industrial Development</p> <p>Implementing Agency: ADB</p> <p>The project's main objective is to assist the Govt in reducing industrial pollution by employing CP strategy and practice in industrial development, thereby integrating environmental concerns into industrial development.</p>	<ul style="list-style-type: none"> • Policy paper on integrating cleaner production (CP) into the industrial development program to facilitate industries(e.g., small and medium-size enterprises and industrial estate developers and operators) to implement CP strategy and practice. • Policy, action plan, and program to implement CP prepared 	<p>Sri Lanka</p>	<p>25 Jan 2001 to 30 Sep 2003</p>	<p>US\$800,000</p>	<p>Ministry of Economic and Industrial Development (MEID)</p>	<p>Agenda 21 Ch. 30 / 36 / 40</p>

Environmental Quality and Human Health (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: ADB (CONT.)</u></p> <p>The project's scope will involve three components: (i) formulate draft policies to integrate CP strategy and practice into industrial development, (ii) develop industrial estates by employing CP strategy and practice, and (iii) promote CP in industrial activities.</p>	<ul style="list-style-type: none"> • Proposal developed on incentive programs to encourage industries and industrial estate developers and operators to implement CP • Guidelines prepared to institutionalize CP strategy and practice for planning, establishing, and operating industrial estates • Planning document prepared for establishing industrial estates in selected areas of southern part of Sri Lanka 					
<p>Sustainable Colombo Core Area Project, Sri Lanka</p> <p><u>Implementing Agency: UNCHS (HABITAT)</u></p> <p>UNCHS is the executing agency for the Government of Sri Lanka, implementation is through five EPM project offices: one in each of the three Municipal Councils (Colombo, Dehiwela-Mt Levinia, Kotte; each being responsible for introducing EPM at the "local-level"), one in the Western Provincial Council (to strengthen the devolution of functions to the Municipalities, capture lessons, and replicate the best practices to other local authorities in the Province), and one in the Ministry of Housing and Urban Development (responsible for national-level replication of lessons learned to Municipalities outside the Western Province).</p>	<ul style="list-style-type: none"> • <i>Environmental Profile completed October 1997</i> • Colombo Core-area City Consultation on environment issues November 1997 • Colombo Core-area Sanitation Consultation completed March 2000 <p>Cross-sectoral Working Groups established in the three Municipalities to improve solid waste management, and on water supply/drainage (in Colombo) May 2000</p>	<p>Sri Lanka</p>	<p>1997-</p>	<p>UNDP \$102,500 in 1997 \$250,330 as technical co-operation funds for Phase 2 of the SCP/EPM project cycle, with \$ 75,000 in Municipal budget counterpart contributions for demonstration projects from the five Sri Lankan partners.</p>	<p>UNDP</p>	<p>Agenda 21 Ch. 7 / 21/ 27 and 28</p>
<p>Environmental Quality and Human Health (National)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Capacity Building for regional Environment Offices Implementing Agency: ADB</p> <p>The overriding objective of the project is to strengthen Thailand's capacity for environmental management at the regional level. Special focus will be given to the promotion and dissemination of CP principles and practices. The specific objectives are to strengthen the capacity of Ministry of Science, Technology and Environment's (MOSTE) (i) regional offices, in cooperation with local government, the private sector, and NGOs to undertake their mandate through practices appropriate to local conditions; and (ii) Center for Transfer of Cleaner Technology (CTCT) to promote CP technology and practices. A key element in achieving both objectives will be the strengthening of linkages and coordination mechanisms between central and regional offices of MOSTE and the establishment and strengthening of linkages between CTCT and other Govt and nongovernment agencies working in the region.</p>	<ul style="list-style-type: none"> • Business Practices for regional environment offices • Regional environment action plans • Capacity enhanced 	<p>Thailand</p>	<p>8 Dec 2000 to 31 Oct 2003</p>	<p>US\$900,000</p>	<p>Ministry of Science, Technology and Environment (MOSTE)</p>	<p>Agenda 21 Ch. 27 / 28 / 30</p>
<p><i>THA/92/G52, THA/95/G52, THA/98/G52 -- Thailand GEF Small Grant Programme</i></p> <p>Implementing Agency: UNDP</p> <p>The GEF/SGP aims at promoting outreach and awareness regarding global environmental concerns; building capacity of communities and NGOs to address the global concerns; and providing a mechanism for demonstrating and disseminating community-level and community-led solution to global environmental problems. The primary objectives of the Operational Phase II is to assist in securing global environmental benefits in the areas of biodiversity, climate change, and international water through community-based approaches that also generate local benefits.</p>	<ul style="list-style-type: none"> • Biennial Programme Review workshop organized; Report submitted to New York; 2001 First Steering Committee meeting to discuss progress and issues on project implementation • Second Operational Phase II (2000-2001) projects completed • Project selection and implementation of Third Operational Phase II (2001-2002) 	<p>Thailand</p>	<p>1994-2002</p>	<p>First Operational Phase II: US\$ 132,794; Second Operational Phase II: US\$ 407,037; Third Operational Phase II: US\$150,000</p>	<p>Communities, NGO's, civil society organisations and local governments</p>	<p>Agenda 21 Ch. 27 / 28 and 36</p>
<p>Environmental Quality and Human Health (National)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>THA – Support to GEF Operational Focal Point</i></p> <p><u>Implementing Agency: UNDP</u></p> <p>Resources approved by GEF Council to assist Thailand (OEPP) to strengthen national coordination activities of the GEF Focal Point in access to GEF Internet information, disseminate GEF documents in Thai language, and organization of meetings</p>	<ul style="list-style-type: none"> • Work plan concluded • Activities start • Stakeholders seminar 	<p>Thailand</p>	<p>2000-2001</p>	<p>GEF: US\$ 8,500</p>	<p>Office of Environmental Policy and Planning</p>	<p>Agenda 21 Ch. 2 / 36</p>
<p><i>10-year Review of Agenda 21 for Thailand: A National Strategy for Sustainable Development</i></p> <p><u>Implementing Agency: UNDP</u></p> <p>Assistance to OEPP to undertake assessment of Agenda 21 implementation and develop Agenda 21 action plan as preparation for World Summit on Sustainable Development (WSSD)</p>	<ul style="list-style-type: none"> • Draft final National Agenda 21 Review and Strategy Report completed; Draft Report submitted to Agenda 21 Sub-Committee • Consultative meetings to prepare for attending WSSD • Support government representatives to participate at the WSSD 	<p>Thailand</p>	<p>2001-2002 Conceptually accepted, project document being prepared for negotiation with DANCED and UNIDO</p>	<p>DANCED: US\$ 150,000; Parallel funding: UNIDO: US\$ 20,000 (approx.)</p>	<p>Office of Environmental Policy and Planning, UNIDO</p>	<p>Agenda 21 Ch. 38</p>
<p>To enhance participation of young people in voicing their opinions on issues close to their hearts and taking part in decisions affecting their lives.</p> <p><u>Implementing Agency: UNICEF</u></p>	<p>A national youth seminar organized by the Young Environment Envoy Club</p>	<p>Thailand</p>	<p>June 4 – 5 2001</p>	<p>US\$4,222</p>	<ul style="list-style-type: none"> - UNEP - The Young Environment Envoy Club - The Association for Life and Environment 	<p>Agenda 21 Ch. 25</p>

Environmental Quality and Human Health (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
To raise public awareness through support the production of publication. <u>Implementing Agency: UNCEF</u>	Publication – Thailand's Children and the Environment	Thailand	Dec 2001	-	- Department of Environment Quality Promotion	Agenda 21 Ch. 36
Support experience sharing and participation of children & youth through seminars as well as international meetings and conferences. (Such as the 9 th World Lake Conference – Pre-student Session, 10-12 Nov. 2000, Junior Eco-Club National Festival 2001, and World Water Day, 22 Marcy 2001) <u>Implementing Agency: UNICEF</u>	<ul style="list-style-type: none"> - Participation of children - Ability to play active role in their schools & communities 	Thailand	on going	US\$ 3,405.- US\$ 4,191.- US\$ 327.-	<ul style="list-style-type: none"> - Government University and NGO - UNEP, Japan - UNIS 	Agenda 21 Ch. 25
Biodiversity (National)						
Bangladesh-GEF Aquatic Biodiversity and Conservation Project <u>Implementing Agency: World Bank</u> The objective is to increase fish and shrimp production for domestic consumption and exports in consistent with sustainable resource management and conservation of aquatic biodiversity	<ul style="list-style-type: none"> • Inland open-water fisheries management improved through the development of sustainable, community-based institutions • The capacity of DOF to manage and support the fisheries sector improved • Long-term sustainability and national fisheries policy developed 	Bangladesh	July 99 - Dec 2001	US\$ 60.8 million	GEF and Ministry of Fisheries and Livestock, Bangladesh	Agenda.21 Ch. 15 / 18
National Biodiversity Strategy and Action Plan and First National Report to the Conference of Parties of the Biodiversity Convention <u>Implementing Agency: FAO</u>		Cambodia	01/04/00 – 31/10/01	US\$298,612		Agenda 21 Ch. 15
Biodiversity (National)						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Biodiversity & Protected Area Project</p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to assist in achieving long-term utilization of Cambodia's natural resources, particularly its mountain forest ecosystems</p>	<ul style="list-style-type: none"> Strategy for the National Protected Areas system developed Legal and regulatory constraints reviewed, and public awareness reinforced through related educational programme 	Cambodia	Feb 2000 - Dec 2003	US\$ 4.91 million	GEF and Ministry of Environment Cambodia	Agenda 21 Ch. 15 / 36
<p>1. Afforestation, Forestry Research, Planning & Devmt in the three North Region, Ph II</p> <p>2. Rehabilitation of Affected Forests, Afforestation and Restoration of the Biodiversity in Ezhou Municipality of Hubei Province</p> <p><u>Implementing Agency: FAO</u></p>		China	<p>1. 01/06/98 – 31/12/02</p> <p>2. 22/06/00 – 31/01/03</p>	<p>1. 1,669,526 US\$</p> <p>2. 1,451,892 US\$</p>		Agenda 21 Ch. 11
<p>China: Lop Nur Nature Sanctuary Biodiversity Conservation</p> <p><u>Implementing Agency: UNEP</u></p>		China	Nov.-98 – Jan-02	US\$ 1.507 millions	GEF	Agenda.21 No. 15
<p>China- Preparation of National Biodiversity strategy and Action Plan and First National Report to the Convention on Biodiversity</p> <p><u>Implementing Agency: UNEP</u></p>		China	Feb-97 – Ongoing	US\$ 0.0594 millions	GEF	Agenda.21 No. 15
<p>China - Sustainable Forestry Development Project</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to develop conservation management and sustainable use of forest resources and its biodiversity so as to reduce unsustainable exploitation of forest resources and to protect the natural environment.</p>	<ul style="list-style-type: none"> Conservation management and sustainable use of forest resources and associated biodiversity developed and adopted in project sites 	China	On going	US\$ 214.58 million	GEF and Local government sector (SFA)	Agenda 21 Ch. 13 / 15

Biodiversity (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Arun Valley Sustainable Resources Use and Management Pilot Demonstration Project</p> <p>Implementing Agency: UNEP</p> <p>The proposed project aims to mitigate the major threats to natural resources, especially the forest and the water from anthropogenic activities, and design and evolve a pilot management project with locally tested and proven solutions for integrating local community participation in the management of natural resources</p>	<ul style="list-style-type: none"> • Effective policy and economic incentives for facilitating the effective participation of local community in natural resource management • Capacity building • Workshops 	<p>Nepal</p>	<p>Feb 2001 – Jan 2004</p>	<p>US\$ 800,000</p>	<p>Rural Reconstruction Nepal</p>	<p>Agenda 21 Ch. 13/ 11/ 15 / 27 / 28 / 30 and 32</p>
<p>Pakistan- Preparation of National Biodiversity Strategy and Action Plan and Forest National Report to the Convention on Biological Diversity</p> <p>Implementing Agency: UNEP</p>		<p>Pakistan</p>	<p>Feb-98 – Ongoing</p>	<p>US\$ 0.0384 million</p>	<p>GEF</p>	<p>Agenda.21 No. 15</p>
<p>Protected Areas Management Project – Pakistan</p> <p>Implementing Agency: World Bank</p> <p>The project aims to improve the participatory planning and management of three priority protected areas, which are Hingol, Machiara and Chitra Gol National Park, across a range of ecosystem types.</p>	<ul style="list-style-type: none"> • Park management strengthened through elaborating detailed management plans, improving park infrastructure and protection, restoring key ecosystem components and conducting targeted biodiversity research and monitoring • A public awareness campaign and human resource development for park management 	<p>Pakistan</p>	<p>May 2001 – ongoing</p>	<p>US\$ 26.84 million</p>	<p>GEF and Local government sectors (Wildlife Department, Forestry Department)</p>	<p>Agenda 21 Ch. 15</p>
<p>Biodiversity Conservation Project</p> <p>Implementing Agency: World Bank</p> <p>The project aims to conserve globally important habitats, and species in three protected areas of Pakistan, within mountain, arid rangeland, estuarine, and marine ecosystems.</p>	<ul style="list-style-type: none"> • Protected area biodiversity management developed 	<p>Pakistan</p>	<p>On going</p>	<p>US\$ 10.75 million</p>	<p>GEF and Local government sector (MELGRD)</p>	<p>Agenda 21 Ch. 13 / 15</p>

Biodiversity (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: World Bank (CONT.)</u></p>	<ul style="list-style-type: none"> • Public/private cooperation for long-term biodiversity conservation promoted • An institutional capacity building training program with topics ranging from legal, policy reform and tourism management created 					
<p>Implementation of the Convention on Biological Diversity</p> <p><u>Implementing Agency: ADB</u></p> <p>The major objective is to improve the national capacity to implement the Convention on Biological Diversity by strengthening the National Biodiversity Strategy and Action Plan, which will serve to guide Govt and other agencies, including donors and NGOs, in integrating biodiversity conservation activities into their work.</p> <p>The project scope is comprised of three main activities: (i) information collection and analysis, (ii) workshops and meetings and (iii) final report production</p>	<ul style="list-style-type: none"> • Meeting/Workshop/Consultation Proceedings • Annex to National Biodiversity Strategy and Action Plan (NBSAP), Map, CD-ROM • Geographic Information System (GIS) Database • Web site • Phase II Proposal • Data Gathering • National Planning Meeting • Asia Regional Experts Meeting • Regional Consultation Meetings • National Workshop • Preparation and dissemination of reports and related materials <p>Phase II proposal preparation</p>	<p>Philippines</p>	<p>21 Jan 2000 to Dec 2002</p>	<p>US\$120,000</p>	<p>Protected Areas and Wildlife Bureau (PAWB)</p>	<p>Agenda 21 Ch. 15</p>
<p>Biodiversity (National)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Solomon Islands – Biodiversity Clearing House Module <u>Implementing Agency: UNEP</u>		Solomon Islands	Oct-98 – Ongoing	US\$ 0.0067 million	GEF	Agenda.21 No. 15
Solomon Islands- Preparation of National Biodiversity strategy and Action Plan and First National Report to the Convention on Biodiversity <u>Implementing Agency: UNEP</u>		Solomon Islands	Aug-96 – Ongoing	US\$ 0.123 millions	GEF	Agenda.21 No. 15
National Biodiversity Strategy and Medicinal Plant Conservation Project <u>Implementing Agency: World Bank</u> The objective is to promote a forestry sustainable use in Sri Lanka to conserve significantly medical plants, habitats, species and genomes.	<ul style="list-style-type: none"> Existing nurseries and research propagation improved for the expansion of ex-situ cultivation and conservation An appropriate legal and policy environment promoted through the information and institutional support 	Sri Lanka	Dec 1997 - June 2003	US\$ 5 million	GEF and Local government sector (MTEWA)	Agenda 21 Ch. 15 / 37
Elephant Care Manual for Mahouts and Managers <u>Implementing Agency: FAO</u>		Thailand	16/05/00 – 30/11/01	191,000 US\$		Agenda 21 Ch. 26
<i>EC-UNDP/GEF/SGP Promotion of Tropical Forestry Project</i> <u>Implementing Agency: UNDP</u> The four-year programme for promotion of tropical forest will be implemented by UNDP/GEF/SGP. The project aims to empower traditional forest dwellers and rural poor people in Thailand (as well as other three pilot countries – Vietnam, Philippines, Pakistan) to maintain, reintroduce, develop, and practice traditional ways of sustainable forest use and conservation of forest biodiversity	<ul style="list-style-type: none"> Project start-up preparation mission for Thailand is scheduled on 26-28 April 2001 Undertaken the formulation of project document (full project framework and work plan for the first 12 months of implementation) for Thailand Stakeholders consultations 	Thailand	Planned; in the pipeline, Phase 1 start-up activities in FY01, possibly implemented in Thailand in FY02	European Commission: EUR 3,783,125 (US\$ 3,404,810 equi.) for Thailand	EC, local communities	Agenda 21 Ch. 11 / 15

Biodiversity (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Vanuata- Add-ons Assessment of Capacity-Building Needs for Biodiversity Participation in CHM and Preparation of a Second National report</p> <p><u>Implementing Agency: UNEP</u></p>		Vanuatu	Sep-00 – Ongoing	US\$ 0.204268 millions	GEF	Agenda.21 No. 15
<p>Vanuatu – Clearing House Module</p> <p><u>Implementing Agency: UNEP</u></p>		Vanuatu	Jun-98 – Ongoing	US\$ 0.0131 million	GEF	Agenda.21 No. 15
<p>Vanuatu- Preparation of National Biodiversity strategy and Action Plan and First National Report to the Convention on Biodiversity</p> <p><u>Implementing Agency: UNEP</u></p>		Vanuatu	Jan-97 – Ongoing	US\$ 0.28736 millions	GEF	Agenda.21 No. 15
Coastal and Marine Environment (National)						
<p><u>Implementing Agency: FAO</u></p> <p>1. Empowerment of Coastal Fishing Communities for Livelihood Security 2. Empowerment of Coastal Fishing Communities for Livelihood Security (STS)</p>		Bangladesh	<p>1. 22/06/00 – 31/12/02</p> <p>2. 22/06/00- 31/12/02</p>	<p>1. 1,814,200</p> <p>2. 95,000</p>		Agenda 21 Ch. 14
<p>Coral Reef Rehabilitation and Management Project (COREMAP)</p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to establish viable, operational and institutionalized coral reef management systems in priority coral reef sites in Indonesia</p>	<ul style="list-style-type: none"> Coral reef management system strengthened in 5 eastern Indonesian provinces 	Indonesia	Mar 1998 - Oct 2003	US\$ 60.28 million	GEF and local government sector (Indonesia Institute of Sciences, Bappens)	Agenda 21 Ch. 14 / 15
Coastal and Marine Environment (National)						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: World Bank (CONT.)</u></p>	<ul style="list-style-type: none"> Management capacity and inter-agency coordination improved Public awareness and participation in coral reef management created 					
<p>Coastal and Marine Biodiversity Conservation in Mindanao - Philippines</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to finance the incremental costs of promoting coastal and marine biodiversity conservation and sustainable use in the coastal waters of Mindanao, Philippines</p>	<ul style="list-style-type: none"> Community-based management of marine sanctuaries established Policy and action plans for marine biodiversity conservation developed 	Philippines	On going	US\$ 60.5 million	GEF and local government sector (Department of Environment and Natural Resources	Agenda 21 Ch. 15 / 17
<p>Coastal Wetlands Protection and Development Project</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to reestablish the coastal mangrove wetland ecosystems along the Mekong delta, and protect its aquatic nurturing for the development of the sustainable coastal protection</p>	<ul style="list-style-type: none"> Project management and training for forest conservation implemented Plans for environmental assessment of bio-diversity and socioeconomic impacts resettled 	Vietnam	Nov 1999 - Sept 2006	US\$ 65.6 million	GEF and Local government sector (MARD & PROV. People Committee)	Agenda 21 Ch. 15 / 17
Freshwater Resources (National)						
<p>Gorai River Restoration</p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to prevent environmental degradation in the Southwest region of Bangladesh</p>	<ul style="list-style-type: none"> Building capacity to utilize the fresh water flows efficiently during the wet season by restoring in the Gorai river 	Bangladesh	On going	US\$ 122.2 million	Bangladesh Water Development Board	Agenda 21 Ch. 11 / 14

Desertification and Land Degradation (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Implementing Agency: FAO</p> <ol style="list-style-type: none"> 1. Food Security thru Sustainable Crop Production 2. Food Security thru Sustainable Crop Production 3. Livestock Development for Food Security 4. Participatory Community Seed production 5. Programme of Improved Varieties of Food Crops in Northern Afghanistan 6. Progressive Control of Major Transboundary Animal Diseases in Afghanistan and Neighbouring Countries 7. Rehabilitation of Sustainable Potato Production 8. Distribution of Wheat Seed, etc. to the Poor Drought Affected Regions 		Afghanistan	<ol style="list-style-type: none"> 1. 1997 - 31/12/03 2. 01/05/97 – 31/12/03 3. 1996 – 31/12/01 4. 1996-31/12/01 5. 01/01/01 - 30/06/01 6. 07/07/00 - 30/06/01 7. 01/10/99 – 31/08/01 8. 30/04/01 - 31/12/01 	<ol style="list-style-type: none"> 1. 698,228 2. 7,652,266 3. 496,700 4. 6,942,110 5. 228,972 6. 364,000 7. 245,000 8. 459,695 (US\$) 		Agenda 21 Ch. 14
<p>Implementing Agency: FAO</p> <ol style="list-style-type: none"> 1. Thana Cereal Technology Transfer & Identification (STS) 2. Thana Cereal Technology Transfer & Identification 3. Integrated Pest Management (STS) 4. Integrated Pest Management 5. Utilization of Agro-Ecological Zones Data Base and Installation of GIS for Agri Dev. 6. Utilization of Agro-Ecological Zones Data Base and Installation of GIS for Agri Dev. 7. Integrated Horticulture and Nutrition Dev. 8. Integrated Horticulture and Nutrition Dev. (STS) 9. Smallerholder Livestock and Diary Development 10. Community Livestock and Diary Dev. 11. Study on Affectes of Using Arsenic Contaminated Water on Crop Production 12. SPFS Bangladesh – SSC with China 13. Agricultural Marketing Information Improvement 14. On-Farm Water Management Pilot Programme in support of the Special Programme for Food Security (Phase II) 15. Crop Yield Forecasting and Agrometeorology Soil Testing and Fertility Management Project 		Bangladesh	<ol style="list-style-type: none"> 1. 11/06/95 – 31/12/01 2. 11/06/95 – 31/12/01 3. 17/06/95 – 30/06/01 4. 01/05/96 – 30/06/01 5. 01/07/95 – 30/06/01 6. 01/07/95 – 30/06/01 7. 22/06/00 – 31/12/02 8. 22/06/00 – 31/12/02 9. 15/07/99 – 31/12/03 10. 01/07/99 – 31/12/04 11. 01/01/00 – 31/12/01 12. 02/12/99 – 30/06/02 13. 17/03/00 – 31/12/01 14. 23/01/01 – 31/07/01 15. 20/03/00 – 31/12/02 16. 20/03/00 – 31/12/02 	<ol style="list-style-type: none"> 1. 57,950 2. 4,536,749 3. 84,504 4. 986,680 5. 87,500 6. 1,481,090 7. 1,352,040 8. 100,500 9. 157,950 10. 734,000 11. 184,000 12. 269,400 13. 256,500 14. 83,000 15. 402,000 16. 332,513 (US\$) 		Agenda 21 Ch. 14

Desertification and Land Degradation (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Strengthening National Capacities for Food Control and Effective Participation in Codex</p> <p><u>Implementing Agency: FAO</u></p>		Bhutan	23/06/00 – 31/12/01	US\$272,000		Agenda 21 Ch. 14
<p><u>Implementing Agency: FAO</u></p> <ol style="list-style-type: none"> 1 Participatory Natural Resources management in the Tonlesam Region, Phase II 2 Tech. Support to the Cambodia IPM Training Programme (part of reg. Community IPM) 3 Special Programme for food Security in Cambodia 4 Forest Crime Monitoring and Reporting 5 FAO Provision of TA to the WB/RGC Agriculture Productivity Improvement Project (APIP) 		Cambodia	<ol style="list-style-type: none"> 1. 01/09/98 - 31/08/01 2. 21/07/99 – 20/07/01 3. 01/10/97 – 31/12/01 4. 01/10/99 – 31/12/01 5. 01/11/99 – 31/10/02 	<ol style="list-style-type: none"> 1. 1,249,080 2. 338,295 3. 303,888 4. 658,777 5. 382,959 (US\$)		Agenda 21 Ch. 14
<p><u>Implementing Agency: FAO</u></p> <ol style="list-style-type: none"> 1. IPM Programme in China 2. Strengthening Capacity to Control Residues of Toxic Chemicals in Meat and Other Food of Animal Origin. 3. Capacity Building in Forage Seed Production in Xinjiang Autonomous Region 4. Integrated Pest Management and Storage of Chestnuts in Xinxian County, Henan Province 		China	<ol style="list-style-type: none"> 1. 01/05/99 – 30/11/03 2. 20/03/01 – 28/02/02 3. 12/04/00 – 31/12/01 4. 01/02/00 – 31/08/01 	<ol style="list-style-type: none"> 1. 461,000 2. 297,000 3. 369,500 4. 231,000 (US\$)		Agenda 21 Ch. 14
<p><u>Implementing Agency: FAO</u></p> <ol style="list-style-type: none"> 1. Development of Hybrid Rice Tech. Large Scale Adoption 2. Strengthening the National Codex Committee 3. Pilot Project for the Elimination of Micronutrient Malnutrition in Tamil Nadu 4. Follow-up to Operation Flood III, India 		India	<ol style="list-style-type: none"> 1. 13/05-99 – 31/12/01 2. 02/11/00- 31/07/02 3. 01/12/98 – 30/11/01 4. 01/04/96- 25/03/02 	<ol style="list-style-type: none"> 1. 73,500 2. 18,200 3. 178,000 4. 146,330 (US\$)		Agenda 21 Ch. 14

Desertification and Land Degradation (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: FAO</u></p> <ol style="list-style-type: none"> Livestock Development and Vegetable Production Special Prog. for Food Security in DRK Improved New Vegetable Cultivation Technologies Improved Management of Rice and Maize Pests 		Korea DPR	<ol style="list-style-type: none"> 01/05/99 – 31/07/01 31/12/98 – 31/03/01 16/03/01 – 31/12/02 01/07/00 – 31/12/01 	<ol style="list-style-type: none"> 82,470 275,000 365,000 357,500 (US\$) 		Agenda 21 Ch. 14
<p><u>Implementing Agency: FAO</u></p> <ol style="list-style-type: none"> Improved Cereal production Technology Pastoral Risk Management Strategy 		Mongolia	<ol style="list-style-type: none"> 19/05/00 – 30/11/01 07/07/00 – 01/12/01 	<ol style="list-style-type: none"> 282,000 US\$ 281,000 US\$ 		Agenda 21 Ch. 14
<p>Training in Agricul. Research</p> <p><u>Implementing Agency: FAO</u></p>		Pakistan	19/06/83 – 31/12/01	261,722 US\$		Agenda 21 Ch. 14
<ol style="list-style-type: none"> Control of Foot Mouth Disease (Phase I and Phase II) Technical Support to Rural Development and Agrarian Reform (TSARRD II) <p><u>Implementing Agency: FAO</u></p>		Philippines	<ol style="list-style-type: none"> 01/12/96 – 30/11/01 01/06/97 – 31/12/01 	<ol style="list-style-type: none"> 5,958,071 US\$ 465,179 US\$ 		Agenda 21 Ch. 6
<p>Assisting Thailand in Phasing Out MeBr as a fumigant in grain storage. On-going MP project</p> <p><u>Implementing Agency: UNIDO</u></p>		Thailand	1999-2001	US\$ 300,000		Agenda 21 Ch. 14

Desertification and Land Degradation (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
1. Participatory Watershed management in Hoanh Bo District 2. Strengthening National Food Information System, Vietnam 3. Technical Support for the Five Million Hectares Reforestation Programme 4. Aquaculture in Northern Uplands <u>Implementing Agency: FAO</u>		Vietnam	1. 01/01/00 – 31/12/02 2. 07/06/00 – 31/05/03 3. 12/09/00 - 30/06/02 4. 13/01/00 – 31/12/01	1. 1,313,390 2. 227,000 3. – 4. 216,000 (US\$)		Agenda 21 Ch. 14
Globalization and Policy Integration (National)						
Capacity Building for Decentralization of the EIA Process <u>Implementing Agency: ADB</u> The project will help strengthen the implementation of the Environmental Impact Assessment (EIA) Regulation at the national, provincial, and district/municipality levels. It will assist the Government to improve the environmental management of development projects by preparing guidelines for implementation of the Environmental Management Act and the associated EIA Regulation.	<ul style="list-style-type: none"> • Various guidelines developed for implementation of EIA Regulation including, but not limited to; guidelines for EIA process in permit systems; EIA review process; strategic environmental assessment (SEA); public participation mechanisms; institutional framework and arrangements for EIA implementation • Publication of guidelines (in English and Bahasa Indonesia) for wide distribution. • Establishment of EIA clearance as part of the permit systems. 	Indonesia	3 Sep 1999 to 30 Jun 2002	US\$ 420,000	BAPEDAL (Environmental Impact Management Agency); and BANGDA (Directorate General for Regional Development of the Ministry of Home Affairs)	Agenda 21 Ch. 28 / 36 / 37
Globalization and Policy Integration (National)						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><u>Implementing Agency: ADB (CONT)</u></p>	<ul style="list-style-type: none"> Improved EIA review process. Greater public participation mechanisms in EIA process Decentralization in environmental management, particularly institutional arrangements for EIA implementation promoted 					
<p>Strengthening Environmental Management</p> <p><u>Implementing Agency: ADB</u></p> <p>The project will support the implementation of the national environmental strategy, and thereby improve environmental quality in Kazakhstan, by building capacity for planning, implementing, and monitoring environmental strategy management measures.</p> <p>The project objective will be achieved by providing (i) review and recommendations for the priority areas of the environmental strategy, (ii) training and workshops, (iii) training materials, and (iv) training of trainers. Equipment and facilities for the training and case studies will be provided. The review work will provide background and materials for the training activities.</p>	<ul style="list-style-type: none"> Review and recommendations prepared for environmental regulations and standards strategy. Prevention Series of training workshops convened on environmental economic analysis, monitoring and inspection, cleaner production, and pollution New laws and decrees drafted Guidelines prepared for incorporation of environmental economics into the strategy operations and training. 	<p>Kazakhstan</p>	<p>20 Dec 1999 to 31 Oct 2002</p>	<p>US\$ 700,000</p>	<p>Ministry of Environment and Natural resources</p>	<p>Agenda 21 Ch. 36 / 37</p>

Globalization and Policy Integration (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Transjurisdictional Environmental Management</p> <p><u>Implementing Agency: ADB</u></p> <p>(i) The project aims to Strengthen the environmental management capacity in SEPA and the provincial environmental protection bureaus (EPBs) on transjurisdictional environment management.</p> <p>(ii) Develop legislation, implementing rules, and regulations in riparian provinces that are coordinated to address transjurisdictional pollution and identify the need for national legislation for a river basin environmental management law.</p> <p>(iii) Develop transjurisdictional environmental monitoring information and enforcement mechanisms for the EPBs and Yellow River Basin Water Resources Protection Bureau (YRBWRPB)</p>	<ul style="list-style-type: none"> • Develop Provincial legislation (January 2002) and its implementing • Rules and regulations addressing transjurisdictional water pollution implemented • Monitoring and enforcement program for transjurisdictional environmental management implemented • Convene a training Provincial people congresses(PPC) legislative drafters on the concepts and principles of incorporating transjurisdictional environmental management into local legislation. • A cooperation mechanism developed for EPBs to address the potential causes of transjurisdictional water pollution and conflicts taking into account the resources available and the requirement under local legislation. 	<p>People's Republic of China</p>	<p>11 Dec 2000 to 28 Feb 2005</p>	<p>US\$ 2,100,000</p>	<p>State Environmental Protection Administration (SEPA)</p>	<p>Agenda 21 Ch. 18 / 39</p>
<p>Globalization and Policy Integration (National)</p>						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Promotion of Market-Based Instruments for Environmental Management</p> <p><u>Implementing Agency: ADB</u></p> <p>The primary objective of the project is to assist the Govt in analyzing the most suitable MBIs for Thailand, and in formulating a program for their adoption for environmental improvement, with special reference to the implications of the recent policy reforms brought about by the currency crisis.</p>	<ul style="list-style-type: none"> • Analysis of the effect of the financial crisis on the environment, review of existing policies, evaluation of results of current MBIs, new institutional requirements to introduce MBIs, and an action plan required legal aspects • Action plan drafted for MBIs implementation and for pilot testing • Workshops convened 	<p>Thailand</p>	<p>5 May 1998 to 30 Jun 2002</p>	<p>US\$ 605,000</p>	<p>Office of Environmental Policy and Planning (OEPP)</p>	<p>Agenda 21 Ch. 33 / 37 / 40</p>
<p>Climate Change (National)</p>						
<p>Second Beijing Environment Project - China</p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to improve the quality of life for the citizens of Beijing by alleviating the city's air and water pollution problems particularly in reduction China's GHG emissions</p>	<ul style="list-style-type: none"> • Energy conversion and wastewater treatment strengthened • Environment capacity-building developed 	<p>China</p>	<p>On going</p>	<p>US\$ 462 million</p>	<p>GEF and Local government sectors 9 Heating Energy Conservation Center of Beijing Real Estate Bureau</p>	<p>Agenda 21 Ch. 9</p>
<p>Renewable Energy Development – China</p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to reduce China's heavy reliance on coal by supplying electricity to rural households and institutions.</p>	<ul style="list-style-type: none"> • Windfarm and solar PV technologies developed to supply PV/wind hybrid system to household and institution in remote areas 	<p>China</p>	<p>On going</p>	<p>US\$ 408 million</p>	<p>GEF and local government sector (State Economic and Trade Commission)</p>	<p>Agenda 21 Ch. 4 / 9</p>

Climate Change (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>West Java/Jakarta Environmental Management Project - Indonesia</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to reduce methane gas emissions from municipal solid waste</p>	<ul style="list-style-type: none"> Landfill dumping practice reduced 	<p>Indonesia</p>	<p>On going</p>	<p>US\$ 27 million</p>	<p>GEF and Local government sector (Ministry of Public Work)</p>	<p>Agenda 21 Ch. 9 / 21</p>
<p>Assisting Malaysia in phasing out CFC in the refrigeration and foam sectors. MP projects</p> <p><u>Implementing Agency: UNIDO</u></p>		<p>Malaysia</p>	<p>On going</p>	<p>Several investment projects ranging from US\$ 50,000 to US\$ 350,000</p>		<p>Agenda 21 Ch. 9 / 19</p>
<p>Mongolia-Enabling Activities for the Preparation of Initial National Communication Related to the UNFCCC</p> <p><u>Implementing Agency: UNEP</u></p>		<p>Mongolia</p>	<p>Oct-97 – Ongoing</p>	<p>US\$0.2395 millions</p>	<p>GEF</p>	<p>Agenda 21 Ch. 9 / 19</p>
<p>Technology Needs Assessment in Energy Sector - Mongolia</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to identify climate change technology needs in energy sector</p>	<ul style="list-style-type: none"> Building Capacity to address climate change technology needs created Climate change education and awareness developed 	<p>Mongolia</p>	<p>On going</p>	<p>US\$ 0.098 million</p>	<p>GEF and Local government sector (Mongolian Environment and Nature Conservation)</p>	<p>Agenda 21 Ch. 9 / 36</p>
<p>Improved Household Stoves in Mongolia Urban Centers - Mongolia</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to reduce the GHG emissions from urban stoves 25% and fuelwood consumption as well as forest loss in Bogd Khan Reserve</p>	<ul style="list-style-type: none"> 100 engineers trained for modification, installation and troubleshooting Cost-effective knowledge on advantages of upgrading current stove to the urban dwellers provided 	<p>Mongolia</p>	<p>On going</p>	<p>US\$ 0.775 million</p>	<p>GEF</p>	<p>Agenda 21 Ch. 9 / 13</p>

Climate Change (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Nepal-Enabling Activities for the Preparation of Initial National Communication Related to the UNFCCC</p> <p><u>Implementing Agency: UNEP</u></p>		Nepal	Mar-98 – Ongoing	US\$ 0.31 millions	GEF	Agenda 21 Ch. 9 / 19
<p>Niue-Enabling Activities for the Preparation of Initial National Communication Related to the UNFCCC</p> <p><u>Implementing Agency: UNEP</u></p>		Niue	Sep-97 – Ongoing	US\$ 0.296 millions	GEF	Agenda 21 Ch. 9 / 19
<p>Pakistan-Enabling Activities for the Preparation of Initial National Communication Related to the UNFCCC</p> <p><u>Implementing Agency: UNEP</u></p>		Pakistan	Dec-98 – Ongoing	US\$ 0.274 millions	GEF	Agenda 21 Ch. 9 / 19
<p>Palawan New and Renewable Energy and Livelihood Support Project- Philippines</p> <p><u>Implementing Agency: World Bank</u></p> <p>The project aims to reduce the long-term growth of GHG emissions</p>	<ul style="list-style-type: none"> • Barriers to commercial utilization of renewable energy systems removed • The use of diesel generators in Palawan reduced 	Philippines	On going	US\$ 2.55 million	GEF and Local government sector (Center for Renewable Resources and Energy Efficiency (CRREE))	Agenda 21 Ch. 4 / 9
<p>Metro Manila Urban Transport Integration Project - Marikina Bikeways Project Component - Philippines</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to promote use of non-motorized transport as an alternative to fossil-fuel burning motorized transport</p>	<ul style="list-style-type: none"> • Facilities provided for bike and path lanes and parking • Public awareness and safety campaign created 	Philippines	On going	US\$ 2.061 million	GEF and Local government sector (The city of Marikina - Metro Manila	Agenda 21 Ch. 9

Climate Change (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>THA/93/G61 – <i>Institutional Strengthening for Phase-Out of ODS in Thailand</i></p> <p>Implementing Agency: UNDP</p> <p>The project aims at assisting Ozone Layer Protection Unit within the Department of Industrial Works to plan, organize, direct, and coordinate all activities required for the implementation of Thailand’s strategy in all areas related to the Phase-out of Ozone Depleting Substances under the MP.</p>	<ul style="list-style-type: none"> • DIW/DTEC/UNDP meeting on project implementation issues • DIW appointed an internal committee to set up a new implementation guidelines • TPR meeting to discuss APR 2000 • Project completion 	<p>Thailand</p>	<p>1993-2001</p>	<p>Multilateral Fund for the Implementation of Montreal Protocol: US\$ 400,000 (1993); additional: 266, 667 (1998)</p>	<p>Department of Industrial Works</p>	<p>Agenda 21 Ch. 9 / 19</p>
<p>THA/9X/GXX (various) – <i>Montreal Protocol investment projects</i></p> <p>Implementing Agency: UNDP</p> <p>The programme aims at assisting Thailand in phasing out CFCs, halons, and other ODS through technology transfer investment projects. The programme is executed by UNOPS.</p>	<ul style="list-style-type: none"> • Approved 53 projects, of which 47 project were completed in December 2000 • 6 on-going projects are scheduled to be completed in April/May 2001 	<p>Thailand</p>	<p>1993-2001</p>	<p>Multilateral Fund: US\$ 11, 966,561</p>	<p>Department of Industrial Works, UNOPS</p>	<p>Agenda 21 Ch. 9 / 19 / 34</p>
<p>THA/97/G32 – <i>Enabling Thailand to Prepare its First National Communication in Response to its Commitments to UNFCCC (Phase 1 & 2)</i></p> <p>Implementing Agency: UNDP</p> <p>During Phase 1, the project aimed at assisting OEPP in updating the Inventory from 1990 to 1994 using IPCC’s 1996-revised guidelines and local emission factors, assessing abatement options, preparing the first National Communication to be submitted to UNFCCC. In Phase 2, the objective is to strengthen national capacity on technology transfer and assessment of technology needs, systematic observation network, and improvement of emission factors.</p>	<ul style="list-style-type: none"> • Consultation for Technology Transfer • Consultation for technology need assessment and capacity building on systematic observation network • Workshop for national programmes for improvement of emission factors 	<p>Thailand</p>	<p>1998-2002</p>	<p>GEF: US\$ 189,500 for Phase 1 (activities completed), GEF: US\$ 100,000 additional fund – 12-month extension to implement Phase 2 activities)</p>	<p>Office of Environmental Policy and Planning</p>	<p>Agenda 21 Ch. 9 / 34</p>

Climate Change (National)

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Assisting Thailand in enhancing energy efficiency and reducing CO2 emissions in industrial sectors such as: ceramics, brick, cement, rubber processing, lime, paper, etc. Non-project activities</p> <p><u>Implementing Agency: UNIDO</u></p>		Thailand	On going			Agenda 21 Ch. 9 / 30
<p>Vietnam-Enabling Activities for the Preparation of Initial National Communication Related to the UNFCCC</p> <p><u>Implementing Agency: UNEP</u></p>		Vietnam	Nov-98 – Ongoing	US\$ 0.2125 millions	GEF	Agenda 21 Ch. 9 / 19
Sustainable Energy Development (National)						
<p><i>THA/99/G31 – Removal of Barriers to Biomass Power Generation</i></p> <p><u>Implementing Agency: UNDP</u></p> <p>The project aims at reducing greenhouse gas emission by accelerating the growth of biomass co-generation and power generation technologies to replace current fossil fuel consumption in Thailand. The immediate objectives are to build capacity in information services and management, improve regulatory framework, increase access to financing, and demonstrate two pilot sites on viability and risk reduction.</p>	<ul style="list-style-type: none"> • Final approval from GEF • Discuss Final ProDoc • Signing ceremony; Project Steering Committee appointed by the Sub-Committee on Climate Change of the NEB • Recruitment and procurement • Implementation / monitoring processes 	Thailand	2001-2008 GEF grant signing in May/June 2001, DANCED starts in June/July 2001	GEF: US\$ 6.805 m; parallel funding over US\$ 100 m	National Energy Policy Office	Agenda 21 Ch. 9 / 16
Sustainable Energy Development (National)						

BRIEF DESCRIPTION OF KEY PROJECTS / ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>Mae Moh Environmental Evaluation</p> <p><u>Implementing Agency: ADB</u></p> <p>The overriding objective of the project is to clearly identify and thoroughly analyze the environmental and social problems caused by the Mae Moh power projects, including the development of the Mae Moh mine and recommend the most effective remedial measures and implementation plan for a fundamental resolution of the problems. To achieve this objective, the project will (i) provide a thorough analysis of the environmental impacts from the Mae Moh power plant and mine; (ii) identify and analyze the existing and/or reported environmental and social problems; (iii) evaluate the effectiveness of previous remedial measures; (iv) formulate and recommend remedial measures with relevant cost estimates to fundamentally resolve the problems; (v) recommend the most effective implementation plan for the recommended measures on a short-, medium-, and long-term basis, and a monitoring program thereafter; (vi) disseminate the TA's major findings, recommendations, and implementation plan to the people concerned, including the resident of the nearby villages and (vii) ensure the involvement of the concerned NGOs and the local and provincial administrations in the monitoring program</p>	<ul style="list-style-type: none"> • A comprehensive report prepared on the environmental impact of the Mae Moh power plant and mine, and recommendations of effective remedial measures, an implementation plan, and a monitoring program • An objective understanding of the problems of the affected people • Participatory activities conducted by NGOs for the people living in nearby villages and communities 	<p>Thailand</p>	<p>14 Dec 2000 to 31 Mar 2002</p>	<p>US\$ 500,000</p>	<p>Electricity Generating Authority of Thailand (EGAT)</p>	<p>Agenda 21 Ch. 6 / 9</p>
<p>Promotion of Electricity Energy Efficiency - Thailand</p> <p><u>Implementing Agency: World Bank</u></p> <p>The objective is to promote saving use of electricity power in Thailand</p>	<ul style="list-style-type: none"> • Energy efficient and equipment and processes adopted to achieve savings • The use of fossil fuels for electricity reduced 	<p>Thailand</p>	<p>1995 - 2000</p>	<p>US\$ 189 million</p>	<p>GEF and Local government sector (Electricity Generating Authority of Thailand)</p>	<p>Agenda 21 Ch. 6 / 9</p>

3-2. Matrix of Key Programmatic Areas and Activities related to Environment and Development (2002 and 2003 TA Projects from ADB)

BRIEF DESCRIPTION OF KEY PROJECTS/ ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc.)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Environmental Quality and Human Health (Regional)						
<p>Better Air Quality Management in Asia</p> <p><u>Implementing Agency: ADB</u></p> <p>The TA will make a significant contribution, through (i) improved awareness of decision makers, and (ii) the integration of air pollution in environmental policy making and implementation as well as in planning and implementing specific sector policies that regulate sectors that influence air pollution levels.</p>	<ul style="list-style-type: none"> improved knowledge of the economic and social implications of local and regional air pollution by decision makers in Asia from local and national governments, private sector, and NGOs; formulation of appropriate response strategies (legislation, policies, and project activities) at local, national, and regional levels, which will contribute to prevention and abatement of local and regional air pollution; and strengthen regional dialogue and exchange of information on air quality management and identification of regional approaches to improve AQM. 	no specific countries	Nov 2003 to Apr 2005	\$300,000	ADB	Agenda 21 Ch 9
<p>Clean Air Initiative for Asian Cities(CAI-Asia)</p> <p><u>Implementing Agency: ADB</u></p> <p>The primary objectives of the CAI-Asia are to share knowledge and best practices on air quality management, improve policy and regulatory frameworks at the regional level, promote integrated air quality management strategies and undertake selected pilot projects to encourage innovation to address mobile, stationary and area sources of air pollution.</p>	<ul style="list-style-type: none"> establish the organization; knowledge management and communications; implementation of pilot projects and studies; air quality management action plans formulation of CAI-Asia Business Plan 	no specific countries	May 2003 to Aug 2004	\$150,000	ADB	Agenda 21 Ch. 9
Globalization and Policy Integration (Regional)						
<p>Promoting Effective Water Management Policies and Practices</p> <p><u>Implementing Agency: ADB</u></p> <p>The TA will start a coherent program of activities to promote effective water</p>	<ul style="list-style-type: none"> promotion and public awareness knowledge base and capacity building pilot demonstration 	developing member countries in Asia and the Pacific region	April 2002 to June 2004	\$4,000,000	ADB	Agenda 21 Ch. 18

BRIEF DESCRIPTION OF KEY PROJECTS/ ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc.)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
management policies and practices at regional, subregional, and country levels and thereby catalyze the implementation of ADB's water policy in the Asia and Pacific region, including within ADB itself.	<ul style="list-style-type: none"> • water partnerships • regional events and initiatives • coordination, monitoring, and evaluation 					
Climate Change (Regional)						
<p><i>Climate Change Adaptation Program for the Pacific</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The goal of the TA is to ensure that developing member countries (PDMCs) of the Asian Development Bank (ADB) adapt to CCV. The purpose of the TA is to mainstream adaptation through risk reduction (AtRR), on a pilot basis, in development planning and management in selected PDMCs and ADB operations.</p>	<ul style="list-style-type: none"> • review of completed and ongoing programs on climate variability and risk management, risk reduction, and climate change vulnerability and adaptation, with specific regard to relevance, appropriateness, and applicability of AtRR; • mainstreaming AtRR into ADB project operations to better respond to country needs; and • at the country level, two PDMCs selected to undertake mainstreaming of AtRR on a pilot basis at the national development planning, sector programs, and project activities levels. 	Pacific developing member countries (PDMCs)	Nov 2002 to Dec 2004	\$800,000	ADB	Agenda 21 Ch. 9
Environmental Quality and Human Health (Subregional)						
<p><i>Prevention and Control of Dust and Sandstorms (DSS) in Northeast Asia</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The objective of the TA is to promote establishment of a regional cooperation mechanism for prevention and control of DSS and to facilitate cooperation for and coordination among interventions by the major stakeholders of the region.</p>	<ul style="list-style-type: none"> • an initial regional institutional framework that will enable international policy and operational coordination among the major DSS stakeholders at a regional level; • a regional master plan for alleviating DSS, based on a comprehensive assessment of scientific findings. • a public awareness program to disseminate the project information and mobilize public support • workshops and seminars for exchange of experiences and participatory consultation 	PRC, Mongolia	an 2003 to Mar 2005	\$1,215,000	ADB	Agenda 21 Ch. 12

BRIEF DESCRIPTION OF KEY PROJECTS/ ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc.)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
Globalization and Policy Integration (Subregional)						
<p><i>Capacity Building in Environmental Information Management Systems in Central Asia</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The overall goal of the TA will be to help achieve sustainable development by mainstreaming environment into national development planning processes, and strengthening regional cooperation on transboundary environmental management. Building on past achievements and lessons learnt, and complementing the efforts of other donors such as UNEP and UNDP, the purpose of the TA is to enhance regional cooperation in addressing transboundary environmental issues by strengthening national environmental management capacities with specific reference to (i) environmental information and knowledge management; (ii) harmonized environmental standards across the region against the most critical environmental indicators (such as air, water, hazardous waste, land degradation); and (iii) a nationally driven strategic program of implementation for existing environment related action plans with a timeframe and budgetary commitments.</p>	<ul style="list-style-type: none"> • a transparent and accessible EIMS in each participating CAR linked to SIC of ICSD to ensure systematic environmental monitoring; • environmental standards, harmonized across CARs against the most critical environmental indicators; and • a consolidated strategic program of implementation of all the existing environment-related action plans with national ownership and realistic budgetary commitments. 	Central Asia Republics	Jan 2004 to Dec 2005	\$1,000,000	ADB	Agenda 21 Ch. 37, 40
<p><i>Formulation of the Pacific Region Environmental Strategy 2004-2006</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The main purpose of the PRES is to produce a strong and well-articulated regional environmental strategy that will review major environmental challenges in the region and clearly formulate the strategic objectives and activities for ADB's assistance for 2004–2008. The focus will be on a clearly defined operational strategy detailing specific modalities for intervention, both through</p>	<ul style="list-style-type: none"> • state of the environment (SOE) section including an SOE summary for the Pacific region with a review of major environmental issues facing the region and a summary set of environmental indicators/data at the regional and when possible country level; • evaluation section with a summary assessment review of the implementation progress in the last decade, an analysis of past assistance and lessons learned, and a review of priority frameworks for action; • intervention strategy section (a) identifying the strategic objectives for ADB 	Pacific Region	Jul 2002 to Dec 2004	\$400,000	ADB	Agenda 21 Ch. 38, 40

BRIEF DESCRIPTION OF KEY PROJECTS/ ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc.)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p>country or regional environmental assessments and lending programs, and the inclusion/mainstreaming of environmental priorities in the non-environmental projects pipelines. This strategic framework with its various components will constitute an important pre-Pacific regional strategy (2004–2008) 12 thematic assessment, and as such can be considered the most significant part of the proposed (regional) CEA for the Pacific.</p>	<p>environment assistance during 2004–2008, in terms of both lending and non-lending interventions; (b) including a review of operational modalities to achieve the stated objectives and a review of opportunities for development partners' coordination with respect to environmental operations and mainstreaming of environmental priorities across all other interventions; and (c) constituting a major input into the new Pacific regional strategy for 2004–2008; and</p> <ul style="list-style-type: none"> country environmental analysis section for strategy/program integration, (a) reviewing individual existing country CSPs¹³ and CSP updates to identify areas for environmental mainstreaming, and as much as possible, incorporating the outcome of the intervention strategy into the CSPs and CSP updates, and (b) including an initial outline of project pipelines for funding from the Global Environment Facility/Kyoto¹⁴ mechanisms and/or other multilateral funding mechanisms and/or ADB channel financing funds. 					
<p><i>Integrating Environmental Considerations into Development Policies, Plans, and Programs</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The main objectives of the TA are to help governments (i) develop and disseminate an accurate and comprehensive understanding of the national environmental management regimes among the wide range of policy makers and development planners, with clear contextual linkages to the national economic development goals; and (ii) identify priority areas in policy, institutional, and legislative mechanisms, and programs/projects that will improve synergy between environmental/natural resources management and national economic development planning, including planned and potential support from ADB.</p>	<ul style="list-style-type: none"> greater and clearer awareness and better understanding among national level policy-making and economic planning authorities about the key environmental and natural resources management issues and their linkage with macro-level economic and social development plans. preparation of CEA report for each CAR, Azerbaijan, and Mongolia, covering key environmental challenges, environmental implications of main development policies, the country's capacity to deal with the challenges, ADB and other key agencies' past environmental assistance and effectiveness, and recommended ADB assistance and partnerships. improved CSPs that reflect environment and natural resources management as a main stream in the development planning. 	CARs, Azerbaijan and Mongolia	Mar 2003 up to fDec 2004	\$550,000	ADB	Agenda 21 Ch. 37

BRIEF DESCRIPTION OF KEY PROJECTS/ ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc.)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>National Performance Assessment and Subregional Strategic Environment Framework in the GMS</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To promote sustainable development in the GMS through the creation of national and sub-regional environmental performance assessment systems in the GMS countries, and development of national and sub-regional capacities for implementing this assessment. The primary purposes of the TA are to facilitate at the national and sub-regional levels (i) informed decision making through better understanding of environmental conditions, trends, and impacts; (ii) effective and efficient national environmental program management and improved public accountability for results; and (iii) reporting of national, sub-regional, and international environmental information and performance assessment on environmental issues of regional and global importance.</p>	<ul style="list-style-type: none"> • baseline information, and specific information on plans, programs, and projects • measured trends and future projects • targets and goals for sustainable human development • guidelines and recommendations to governments, aid agencies, and other stakeholders. 	GMS (Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam, and Yunnan Province, PRC)	Jan 2003 up to Dec 2005	\$800,000	ADB	Agenda 21 Ch 38, 39, 40
Sustainable Energy Development (Subregional)						
<p><i>Renewable Energy and Energy Efficiency Program for the Pacific</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The purpose of the TA is to help create an environment that will enable the development of a market-based rural energy sector, in which mature renewable energy and energy efficiency applications play a key and increasing role. This process will involve the development of the required policy, legal, and institutional framework. The TA will also facilitate mobilization of external financing by building a pipeline of potential renewable energy and energy efficiency projects for funding/ co-financing by ADB, GEF, and/or other sources.</p>	<ul style="list-style-type: none"> • review of, consultations on, and dissemination of lessons from past renewable energy and energy efficiency assistance in the Pacific; • an action plan for the adoption of appropriate policies, institutional arrangements, legal/regulatory measures, and financial schemes including venture capital, as well as private sector and household-level incentive mechanisms for promoting commercially viable renewable energy and energy efficiency services; • a training needs analysis and training curricula for private and public sector key players in the two PDMCs; • a pipeline of projects for funding by ADB, GEF, and/or other relevant financing 	2 Pacific developing member countries	Jun 2003 to Jan 2006	\$ 750,000	ADB	Agenda 21 Ch. 9

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	<p>sources; and</p> <ul style="list-style-type: none"> based on outcomes and progress made in the two selected countries, final consultations and dissemination of lessons learned from the TA to other PDMCs with a focus on establishing policy frameworks, building capacity, and replicating/ disseminating good practices. 					
Environmental Quality and Human Health (National)						
<p><i>Study of Control and Management of Rural Nonpoint Source Pollution (PRC)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The main objectives of the TA are to (i) help prepare national policies, plans, and programs for the control and prevention of rural NSP, based on better understanding of the status and trends of the problem; and (ii) strengthen national and local institutional capacity for controlling and managing rural NSP.</p>	<ul style="list-style-type: none"> Identify key problems and underlying causes of rural NSP; set priorities to control and prevent rural NSP, and preparing a medium-term national action plan with a focus on livestock pollution, in consultation with all key stakeholders; and build institutional capacity and improving Government staff expertise in NSP control and management. 	PRC	Oct 2002 to Nov 2004	\$770,000	ADB	Agenda 21 Ch. 10, 14, 18
<p><i>Promotion of a Cleaner Production (PHI)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The TA's primary purpose is to enhance DOST's capacity to promote sustainable development in the Philippines, and to strengthen the competitiveness of its industry sector through the understanding and adoption of cleaner production practices. The TA will (i) build the capacity of DOST staff, concerned government agencies, and industry to identify, evaluate, develop, and promote CP; and (ii) assist industries, especially SMEs, to adopt an environment management system and practices through training and demonstration programs.</p>	<ul style="list-style-type: none"> environmental performance indicators CP and environmental management systems for SMEs business plan for promotion of cleaner production environmental technology verification protocols cleaner production technical manuals capacity building training programs 	Philippines	Nov 2002 to Aug 2004	\$1.12 million	ADB	Agenda 21 Ch. 9, 10, 18, 37, 40

BRIEF DESCRIPTION OF KEY PROJECTS/ ACTIVITIES (recent/ongoing)	OUTCOME/PRODUCTS (Meetings, publications, etc.)	PARTICIPATING COUNTRIES	TIME FRAME	PROJECT SIZE (e.g., Cost, if known)	MAIN COLLABORATING AGENCIES	Linkage to Agenda 21/ Sub-regional action plan
<p><i>Metro Manila Solid Waste Management (PHI)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The main objectives of the TA are overall improvements in Metro Manila solid and medical waste management for increased environmental quality and public health. The TA will provide planning, design, training, and other assistance to develop and strengthen an integrated SWM system.</p>	<ul style="list-style-type: none"> • capacity building and TA 9003 implementation support to selected Metro Manila LGUs • medical waste management • capacity building and RA 9003 implementation support for NSWMD and MMDA • waste disposal • specialist consultant support 	Philippines	Mar 2002 to Dec 2004	\$1,800,000	ADB	Agenda 21 Ch. 19, 20, 21
<p><i>Industrial Environmental Management (Pakistan)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The Program will assist the Government in formulating an Industrial Environmental Management Program, combining policy and institutional reforms, and capacity building with a detailed action plan, an investment package that includes specific environmental investments, and a line of credit for the sub-project, and institutional capacity building.</p>	<ul style="list-style-type: none"> • formulation of a policy framework with prioritized sequencing of reforms for introduction of market-based incentives consistent with supporting environmental improvement programs. • plan for financing CETP • plan for financing private sector • capacity building of agencies dealing with industrial efficiency and improved environmental management • review policies and formulate policy for energy efficiency and preventing/controlling industrial pollution by introducing market-based incentives for environmental management, and outline a plan for their introduction • conduct place-based and sector-based feasibility studies to identify opportunities for investments common effluent treatment plants • determine procedures and criteria for identification, screening, private sector investments in industrial efficiency and identify financing institutions for channeling funds 	Pakistan	Dec 2002 up to Dec 2004	\$840,000	ADB	Agenda 21 Ch. 9, 10, 18, 37, 40

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	<ul style="list-style-type: none"> outline capacity building requirements for improved environment management, and for environmental improvement financing. 					
<p><i>Improving the Environmental Performance of Small and Medium Enterprises by Promoting Cleaner Production (Indonesia)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The TA aims to assist the Government in minimizing environmental problems associated with SME development, and increasing SME productivity through systematic cleaner production implementation. The immediate objective is to assist the Government in facilitating SMEs, particularly those in casting and electroplating industries, to improve their environmental performance by reducing pollution and conserving resources, and at the same time, improve their productivity and working environment through cleaner production.</p>	<ul style="list-style-type: none"> pilot models on implementing COP in casting and electroplating industries operations manual for implementing CP in SMEs of casting and electroplating industries performance-based monitoring systems for SMEs based on the pilot models for casting and electroplating industries policy for implementing CP in SMEs 	Indonesia	May 2002 up to 31 May 2004	\$650,000	ADB	Agenda 21 Ch. 9, 10, 18, 37, 40
<p><i>Effective Waste Management and Recycling (Tuvalu)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To improve overall waste management on the island of Funafuti by building a permanent and sustainable waste management program, reduce indiscriminate waste disposal, and promote awareness of appropriate sanitation and waste management.</p>	<ul style="list-style-type: none"> improvement of separation, collection, treatment, and disposal of solid waste (both organic and inorganic) promotion of markets for recycled products, compost, and organic fertilizer by supporting community and home gardening initiatives capacity building of the Funafuti Kaupule and the Department of Environment (specifically the Waste Management Unit). 	Tuvalu	28 Feb 2005	\$150,000	ADB	Agenda 21 Ch. 19, 20, 21
<p><i>Arsenic Mitigation Review and Strategy Formulation (Bangladesh)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To provide safe drinking water and improve the health and economic well being of the population exposed to arsenic and other groundwater contaminants.</p>	<ul style="list-style-type: none"> an inventory of completed and ongoing mitigation activities and their progress and lessons an assistance strategy and priority interventions and approaches that may be pursued by ADB and /or any interested external funding agencies a roadmap that synthesizes the actions and their timeframe assisted by external funding agencies to address critical issues comprehensively. 	Bangladesh	Jan 2004 up to May 2004	\$150,000	ADB	Agenda 21 Ch. 6

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Freshwater Resources (National)						
<p>Greater Colombo Wastewater Management Sector Review (Sri Lanka)</p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To assist the Government in developing a strategy to provide the institutional framework and the investment criteria required for a viable project investment in the wastewater infrastructure</p>	<ul style="list-style-type: none"> • a strategy to improve the performance of the existing system • recommendations to achieve optimal financing of wastewater infrastructure (including user charges and taxes) • an outline investment plan to increase access to appropriate sanitation (by increasing sewer connections or access to appropriate on site sanitation) • recommendations on areas that need amendments after reviewing existing legal instruments 	Sri Lanka	Nov 2003 up to Jul 2004	187,000	ADB	Agenda 21 Ch. 8
<p>Integrated Water Resources Management (TIM)</p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To create a national water policy that will lead to the adoption and progressive implementation of integrated water resources management in Timor Leste.</p>	<ul style="list-style-type: none"> • national water policy • water resources management • establish a system for rainfall and river flow monitoring system • prepare a water reserve management plan • implementation of water use licensing • capacity building progress to train the government unit to manage and implement water policy 	Timor-Leste	Mar 2003 up to Feb 2005	\$706,000	ADB	Agenda 21 Ch. 18
<p>Songhua River Water Quality and Pollution Control Management</p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To improve water quality in the Songhua River. The TA will strengthen the capacity of the Government for policy analysis and pollution control management, and assist the Government in developing a long-term vision and plan for pollution control in the SRB. The immediate objectives are to assist in identifying lines of institutional responsibility, developing basin wide, regulatory enforcement and</p>	<ul style="list-style-type: none"> • collection or validation of basic data allowing for technical analysis and decision making • clear lines of institutional responsibility, development of basin-wide legal, regulatory enforcement and executing mechanisms • refined and prioritized Government pollution control plans. 	People's Republic of China	Mar 2003 up to Jun 2005	S\$1,300,000	ADB	Agenda 21 Ch. 18, 37

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executing mechanisms, and refining and prioritizing short- to long-term pollution control plans.						
Globalization and Policy Integration (National)						
<p><i>Institutional Strengthening for Drainage and Wastewater Management (Samoa)</i></p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To strengthen the policy, procedural, and legislative base of key agencies involved in the water and sanitation sectors as well as strengthen urban management and planning capacity generally.</p>	<ul style="list-style-type: none"> • development of competencies in urban management and planning, and drainage and wastewater management to Management and Staff of Planning and Urban management Agency (PUMA), Samoa Water Authority (SWA), and Ministry of Works Transport and Infrastructure. • preparation of drainage and wastewater management plans for the remaining priority drainage areas in the Apia urban area • training and development program in urban management and planning and drainage and wastewater management for PUMA, SWA, and MWTI. • revised Building Code as it relates to upgrading on-site sanitation systems, with attention to the needs of low-lying areas • documented and implemented processes and procedures to support implementation of regulatory framework and ongoing operations of PUMA, SWA, and MWTI • draft legislation to enable wastewater management and environmental monitoring, including provision of sanitation • implementation of the approved geographic information system design for PUMA 	Samoa	Apr 2004 up to Mar 2005	\$475,000	ADB	Agenda 21 Ch. 18, 37

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<p><i>Strengthening Environmental Sector Capacity (Bhutan)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To contribute to Bhutan's sustainable development in line with the 1990 Paro Declaration and 5-Year Plans that followed. The purpose of the intervention is to establish an enabling environment for improving the effective adoption and implementation of the Environmental Assessment Act 2000 and its Regulation..</p>	<ul style="list-style-type: none"> • update environmental assessment process manual • update six existing EA sectoral guidelines • develop EA sectoral guidelines on tourism and urban development and applicable environmental codes of practice • update environmental standards • disseminate outputs to promote private sector development in using the EA sectoral guidelines, environmental codes of practice and environmental standards. 	Bhutan	Sep 2003 up to Jul 2004	\$150,000	ADB	Agenda 21 Ch.37, 40
<p><i>Capacity Building in Water and Sewerage Services (Fiji)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The TA will help enhance water and sewerage services management by improvements in health and safety, community understanding of water issues, trade waste management, environmental management, and tariffs. It will also help build capacity for improved service delivery and environmental management</p>	<ul style="list-style-type: none"> • a trade waste program • a community awareness and education program • a health and safety system for the public works department and its successor, the water and sewerage department/water and sewerage corporation • recommendations on environmental legislation and regulations • water and sewerage tariffs recommendations • enhanced capacity of staff 	Fiji	Feb 2004 up to Jul 2005	\$978,000	ADB	Agenda 21 Ch. 18

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<p><i>Industrial Environmental Management Capacity Building (Pakistan)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To assist the Government promote industrial environmental management to improve industrial efficiency and competitiveness</p>	<ul style="list-style-type: none"> • strengthen institutional capacity and technical capability of PAK-EPA, provincial EPAs, and local governments and other organizations involved in promoting industrial environmental efficiency • develop environmental action plans for industries to establish a baseline of their current environmental performance and set benchmarks for future performance • train financial institutions to appraise investments for cleaner production and environmental management • draft regulations and guidelines for implementing new market-based incentives and policies for industrial environmental management. 	Pakistan	Feb 2004 up to Feb 2006	\$1.25 million	ADB	Agenda 21 Ch. 18, 37, 40
<p><i>Institutional Development for Improved Environmental Strategic Planning and Policy</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To help the Government strengthen institutional capacity for environmental strategic planning, policy formulation, and coordination among government agencies and donors involved in environment management.</p>	<ul style="list-style-type: none"> • establish an environmental policy and planning center under MNP with strong capability to develop and evaluate environmental policies, taking into account externalities and the view of different stakeholders • facilitate finalization of the fifth NEAP • improve coordination among government agencies in environmental management and among donors in environmental assistance 	Tajikistan	Jan 2004 up to Apr 2005	\$265,000	ADB	Agenda 21 Ch. 37
<p><i>Legal and Institutional Strengthening of Environmental Management</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To assist the Government in developing an integrated system of regulations, bylaws and laws that together will provide the institutional mechanisms for the effective and coordinated implementation of Environment Act 2003. The focus is on formulating appropriate regulations and bylaws to facilitate compliance and enforcement, and the review of legislation that</p>	<ul style="list-style-type: none"> • a report presenting a comprehensive review of sectoral legislation that needs to be revised to insure overall coherence, including recommendations for their improvement and amendment • a core system of environmental regulations, bylaws, monitoring and compliance procedures for effective environmental management, and institutional coordination in implementing Environment Act 2003 • new and revised operational guidelines, working procedures, and detailed 	Cook Islands	Apr 2004 up to Jun 2005	\$440,000	ADB	Agenda 21 Ch. 37, 39

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<p>may now require amendment as a result of the enactment of the Act.</p>	<p>institutional mechanisms applicable to the National Environment Service (NE) or Tu'anga Taporoporo, the island Environment Authority and other agencies involved in implementing the environmental legislation</p> <ul style="list-style-type: none"> • an implementation action plan for effective follow up of the legislative and institutional reforms in accordance with stakeholders consensus • improved interagency and institutional coordination for effective environmental management (including recommended institutional responsibilities and coordination among the agencies) • improved capacity of all stakeholders including officials of government agencies or permitting authorities, communities, and NGOs to contribute to the overall legislative process, • a training program for environmental management consisting of training modules for a multiphase capacity building program for both central government and outer islands environment staff. 					
<p><i>Strengthening the Regulatory Framework for Water Supply and Sanitation</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The TA will help develop and disseminate regulations for the water sector within the framework of the PUC to facilitate credible, independent, autonomous, accountable, and transparent regulation for WSS providers in Sri Lanka. The goal of the TA is to promote good governance in the WSS sector and to create enabling conditions that are conducive to participation by the local government and the private sector.</p>	<ul style="list-style-type: none"> • finalizing the draft Water Reform Act • guidelines to implement the various provisions of the Water Reform Act • training in sector reform and regulatory issues for staff in key water sector institutions. 	Sri Lanka	Mar 2003 up to Nov 2004	\$360,000	ADB	Agenda 21 Ch. 10, 18, 37,

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Climate Change (National)						
<p><i>Carbon Sequestration through the Clean Development Mechanism(Indonesia)</i></p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To assist the Government to earn certified emission reduction (CER) units for the reduction of GHG emissions through the CDM, and promote sustainable forest development</p>	<ul style="list-style-type: none"> • review of previous studies and a synthesis of lessons learned on carbon sequestration • land use inventory and simulation of land use, land use change, and forestry in two pilot districts, with and without CDM participation • preparation of project design documents and obtaining of CER approval from the CDM executive board • demonstration of the processes involved in earning CERs through carbon sequestration • documentation and dissemination of the processes for earning CER units • assessment of the global market for carbon and the potential share of Indonesia in this market • suggested processes for the development of base line data, registration procedures, and monitoring and verification procedures. 	Indonesia	Sep 2003 up to Feb 2005	\$875,000	ADB	Agenda 21 Ch. 9, 11
<p><i>Opportunities for the Clean Development Mechanism in the Energy Sector(PRC)</i></p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To improve the global environment through reduction of GHGs. The TA will promote reduction of GHGs through examining the opportunities for CDM in the PRC's energy sector, develop a set of guidelines, and propose a strategy to promote such opportunities.</p>	<ul style="list-style-type: none"> • guidelines for small-scale CDM activities and an action plan detailing strategies to promote them • four GHG reduction project designs that could be eligible for CDM financing • an institutional assessment report • dissemination materials for TA findings. 	People's Republic of China	May 2002 up to Jun 2004	\$975,000	ADB	Agenda 21 Ch. 9

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Sustainable Energy Development (National)						
<p><i>Renewable Energy for Poverty Reduction (PRC)</i></p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>To improve economic and social welfare of poor and rural areas by improving energy and electric service delivery in a sustainable manner. The TA objectives are to (i) assess least-cost options for supplying energy in underserved areas of Zhangye; (ii) assess willingness to pay for, and affordability of, energy in poor and rural areas; and (iii) develop a corresponding business plan that will optimize financial and economic benefits to poor and rural customers.</p>	<ul style="list-style-type: none"> • assessment of renewable energy and energy efficiency potential in designated poverty areas of the province • definition of enabling requirements for commercial renewable energy and energy efficiency investments using different corporate/ organizational approaches • region-specific proposals for new renewable energy and energy efficiency projects and services • at least two project proposals developed for commercial investment, and other potential projects identified • an assessment of poverty reduction potential due to improved energy services using renewable energy and energy efficiency • dissemination and discussion of study findings in a provincial (or national) seminar and via the internet. 	People's Republic of China	May 2004 up to May 2005	\$750,000	ADB	Agenda 21 Ch. 9, 3
<p><i>Off-Grid Renewable Energy Development (UZB)</i></p> <p style="text-align: center;"><u>Implementing Agency: ADB</u></p> <p>The TA will undertake a comprehensive assessment of the potential for renewable energy options in small towns and rural areas. The TA also aims to develop a viable pilot scheme of renewable energy options in selected off-grid areas.</p>	<ul style="list-style-type: none"> • a review and assessment of the potential for renewable energy development • an action plan to improve renewable energy • designs of pilot projects for the most appropriate renewable energy options • detailed feasibility assessment for the increase of pilot projects including an assessment of financing mechanisms • dissemination of TA findings 	Uzbekistan	Oct 2003 up to Nov 2004	\$500,000	ADB	Agenda 21 Ch. 9

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<p><i>Support to Policy and Institutional Reforms in the Water Sector (UZB)</i></p> <p><u>Implementing Agency: ADB</u></p> <p>The TA will support the Government in implementing policy and institutional reforms in the water sector by (i) strengthening the newly reorganized institutions at national, basin, and provincial levels, (ii) providing policy advice, and (iii) developing policy and legal documents related to water sector management.</p>	<ul style="list-style-type: none"> • water sector reform support unit is established within MAWR and became operational in year 1 • key staff of Ministry of Agriculture and Water Resources are trained in water policy analysis and implementation • national cost recovery policy and implementation plan, and UWA guidelines • water delivery fee system and introduced in 5 project districts by end of year 4, and replicated to the whole province by end of year 6. 	Uzbekistan	Apr 2004 up to Jun 2005	\$740,000	ADB	Agenda 21 Ch. 18
<p><i>Development of an Energy Conservation Program</i></p> <p><u>Implementing Agency: ADB</u></p> <p>To assist in developing an energy conservation program. A key objective will be to make all consumers aware of the potential for saving energy and to encourage them to use delivered energy more efficiently and to reduce wastage.</p>	<ul style="list-style-type: none"> • action plan, including demand side management initiatives for reduction of energy consumption especially by public enterprises • improve existing legal and regulatory framework in support of energy conservation 	Tajikistan	Dec 2002 up to Dec 2003	\$120,000	ADB	Agenda 21 Ch. 9