

Introduction

Rapid economic growth in Asia and the Pacific during the last four decades has posed a formidable challenge to the region—that of achieving continued economic progress without compromising social and environmental sustainability. Rapid development has led to industrial pollution, degradation of natural resources, increasing levels of poverty, and inequitable income distribution.

The Earth's natural resources are finite. Therefore, to be sustainable, the sum of human activities has to be within the regenerative capacities of the Earth, a fact most often conveniently ignored. Asia and the Pacific will soon be the most dynamic economic centre of the world. However, the region's economic expansion and its huge population are likely to increase the pressure on natural resources. A sustainable world is simply not conceivable if the Asia-Pacific region fails to become sustainable.

Members of the Asia-Pacific Forum for Environment and Development (APFED) believe that the challenges that confront this region can be dealt with, but only if all stakeholders make a conscious effort to live in accordance with sustainability principles. Strong political will and sensible policies are required to keep the region peaceful, promote democracy, sustain economic growth, and strengthen social cohesion—without which sustainability cannot happen. Nothing less than a paradigm shift—to turn challenges into opportunities—is needed for the region to move towards sustainable development.

APFED was established upon ministerial deliberation during the Environment Congress for Asia and the Pacific (ECO ASIA) 2001 to: i) identify critical environment and development issues, ii) propose a new development framework that will lead to greater equitability and sustainable growth in the region, and iii) recommend necessary actions to be taken by the relevant stakeholders in the region. APFED members envision a world that allows a new paradigm to emerge. The new paradigm entails a shift in the way we view economy, society and the environment, where the quality of life and people's aspirations, not just economic growth and material wealth, will be the prime concerns for all. In such a world, basic human rights are respected, and human activities are carried out equitably within the carrying capacity of the natural environment.

Paradigm shifts are not possible by edict but must grow from extensive dialogue throughout the region. Discussions that are more open-minded are needed to understand what must be done for long-term sustainability in the region. Policy interventions by the region's governments to create the enabling environment for this paradigm shift include i) promoting/facilitating participation by all stakeholders concerned in formulating basic policies on sustainable development, ii) integration of environmental and development concerns into sectoral policies and area planning, and iii) development of institutional capacity and finance for enforcement of environmental regulations.

The APFED Report, which consists of an overview of the Asia-Pacific region, APFED's future vision for the Asia-Pacific, APFED recommendations, and action platform, was formulated through a series of meetings involving some of the region's leading figures in the field of the environment and development. These high-level deliberations were supplemented by a number of sectoral and subregional expert meetings as well as multi-stakeholder discussions to reflect varying viewpoints regarding the diverse nature of the region, and the complexity of environmental and development implications.

APFED is only a small initiative in the region, but it is a participatory and open regional forum. Its messages are not intended to be imposed upon governments, international organisations, or any other stakeholders in the region. Rather, APFED in its second stage intends to be, as agreed upon at the ECO ASIA 2004 held in Yonago, Japan, a “*knowledge management*” and “*innovation facilitation*” centre of the region. The significance of APFED recommendations is contained in the belief that continuous dialogue among stakeholders, sharing of experiences, and the proposal of challenging new ideas will increase the long-term sustainability of the region. In this respect, APFED continues to advocate a sustainable Asia-Pacific, seeking the thorough implementation of its Action Platform in collaboration with like-minded stakeholders in the region.

Part I: Overview of the Asia-Pacific Region

1. State and Perspectives of Social and Economic Factors for Change

APFED has identified several key social and economic factors upon which future directions of sustainable development of the region depend. These factors include:

A. Population and urbanisation: Although the population growth rate is decelerating in the region, the actual population itself continues to increase. In addition to rural-urban migration, international migration from developing countries to high-growth industrialised countries is significant. Population increase will intensify land use and land use changes, both in urban and rural areas, thereby generating further pressure on natural resources. According to United Nations estimation, by 2015, 15 cities in the region will become mega-cities with a total population of at least 10 million. In particular, South Asia has mega-cities like Dhaka, Karachi, Kolkata, and Mumbai that are expected to experience sharp population increases due to migration as well as natural growth. Increase in urban population has far outpaced the development of essential urban infrastructure and responsible environmental management. It has also resulted in inequitable distribution of income and productive assets. By 2030, approximately 60% of the total population of the region will live in urban areas. Prospects for sustainable development, therefore, will depend on the development of sustainable cities.

B. Economic development: Economic output in the Asia-Pacific region has quadrupled during the past two decades. Globalisation, in particular, has enabled the region to achieve such high economic gains. On the other hand, expansion of economic activities has brought about accelerated exploitation of natural resources through expanded production and consumption, as well as the increasing volume of solid waste and pollution. Deepening income inequality among different groups is also a worrying trend for sustainable social development. The economic structure of the region has changed remarkably over the past 30 years—showing the decline of the agriculture sector and the growth of the industrial and service sectors—leading to further intensification of the rural-urban gap.

C. Major social concerns: Poverty is the biggest social challenge in the region, although significant efforts have been made towards its alleviation. Poverty levels actually fell in the region between 1990 and 1999. In 1990, about 32% of the people were living on less than a \$1 a day. This figure fell to 22% by 2000. Nevertheless, slightly less than 1 billion people in the region still live in poverty. In addition to income poverty, particular attention should be given to the differences in the state of poverty between different groups of people, including urban-rural and subregional. Inequitable distribution of assets within a country and within the region underpins social conflicts, which are often resolved violently.

Nutrition and health, education, and gender discrimination are additional social factors that have significant implications for the sustainable development of the region. Since most poor people, especially in urban areas, are unemployed or underemployed, nutrition levels are low and housing is poor, thus making poor families vulnerable to unsanitary conditions and prone to disease. Poor families also tend to have lower levels of education, with boys having preference over girls for better educational opportunities and access to nutrition. The Asia-Pacific region is home to just under two-thirds of the developing world's undernourished people. More than 500 million people—10 times the population of Republic of Korea—still do not have enough food to meet basic nutritional requirements.

Social cohesion can be described as the glue that bonds society together, promoting harmony, a sense of community, and a degree of commitment to common values. Beyond the social relations that bridge ethnic and religious groups, vertical linkages relating state and market institutions with communities and peoples can further cement the cohesiveness of a society, if they are inclusive, transparent and accountable. Weak social cohesion increases the risk of social disorganisation, and has the potential to end in violent conflict. The emergence and growth of civil society is central to a nation's capacity to manage social and economic transformation and to mediate conflict.

Corruption impedes sustainable development by debasing fair and efficient economic transactions, undermining governmental legitimacy, threatening political stability, and jeopardising socio-economic

development in many countries. According to the corruption perception index (CPI), some countries in the region are high on the global list.

D. Technological development: Technological innovations have caught on in Asia and the Pacific and are transforming everyday lifestyles, production and consumption, work, and communication. Current technology innovation typically features information and communications technologies (ICTs), biotechnology, and new energy technologies. Technological change underpins the transformation of the world economy into a knowledge-based one. Heavy and resource-intensive industries, once the powerhouse of economic growth, are also being replaced. These new technologies can be positive in terms of natural resource use and their impact upon the environment, and thus provide new opportunities for environmentally sound development in the region, especially in developing countries. It is unlikely, however, that new technologies alone will result in sustainable development. Increased appreciation and promotion of traditional and indigenous technologies that play an important role in sustainable development should also be a critical component of an appropriate technology strategy.

2. Signs of Environment Stress

The expansion of the economy and population over the last 40 years, based mainly on the exploitation of cheap labour and extensive natural resources, has degraded the environment—now the most serious obstacle to continued economic and social development in the region. While these threats are significant at local and national levels, trans-boundary environmental problems constitute a major challenge in the region. Such problems include the “haze” problem in Southeast Asia; acid deposition, and dust and sand storms (DSS) in Northeast Asia; “atmospheric brown clouds,” pollution and environmental deterioration in the regional seas and international rivers; and trans-boundary movements of hazardous wastes.

Areas Exhibiting Signs of Significant Environmental Stress:

- Freshwater resources
- Marine and coastal environment
- Air pollution
- Climate change
- Natural disasters
- Land degradation
- Forest and biodiversity
- Hazardous substances and waste

3. Responses to Sustainable Development Challenges

To promote sustainable development in the Asia-Pacific region, a wide array of actions have been taken at local, national, subregional and regional levels. Although the national governments still play a leading role, various stakeholders including local governments, communities, non-governmental organisations (NGOs), and the private sector have become increasingly involved in national and local planning and in the implementation of sustainable development. Political decentralisation, being promoted in many countries in the region, has been a driving force. Besides this, regional and subregional mechanisms and initiatives have been strengthened to support national-level efforts.

Regional cooperation has become an important means of promoting environmentally sound development in the region. The regional consultation process for preparation of the World Summit on Sustainable Development (WSSD) provided a comprehensive framework to thoroughly review the region’s efforts to achieve sustainable development. Assessing the remaining challenges to be addressed by the region, the process concluded the Phnom Penh Regional Platform, proposing seven new initiatives for the region’s sustainable development. The five-yearly Ministerial Conference on Environment and Development in Asia and the Pacific (MCED) has also contributed to periodical review of the state of the environment in the region, as well as adoption of the region’s action agenda on environmentally-sound development for the subsequent five-year period. Such intergovernmental mechanisms have been complemented by informal forums such as ECO ASIA.

Intergovernmental initiatives adopted in the different subregions include the South Asia Cooperative Environment Programme (SACEP), South Pacific Regional Environment Programme (SPREP), the ASEAN Senior Officials on Environment Meetings (ASOEN), and the North-East Asian Subregional Programme of Environmental Cooperation (NEASPEC).

Local, national, and regional initiatives need to be further strengthened to meet the Millennium Development Goals (MDGs), particularly Goal 1, which is to halve poverty levels by 2015. Since the Asia-Pacific region has some of the worst poverty levels, integrated policies have to be adopted that take economic and social, as well as ecological dimensions into consideration. Policies aimed only at income poverty alleviation may work in the short term, but in the long term, these policies need to be complemented by social development that improves access of the poor to facilities such as health, education, and life's basic amenities. Social development policies promoting greater participation in economic and social activities, especially of the poor, are needed to ensure that the benefits of economic development are shared by all.

Environmental Impact Assessment (EIA) is now a legal requirement in most countries, enabling rational decision-making by integrating environmental concerns into project planning. Most environmental regulations are based on the command-and-control approach; however, market-based instruments have been progressively introduced to provide incentives and flexibility in environmental management, to increase transparency in implementation of legal requirements, and to improve the efficiency of law enforcement.

The industry in the region has exhibited a positive response to ISO 14001 by introducing consistent environmental management systems, demonstrated by a substantial shift from end-of-pipe pollution control to cleaner production engendered by prevention of adverse environmental inputs. Industries in several countries have also started to adopt voluntary business charters for sustainable development.

Part II: APFED Future Vision for the Asia-Pacific Region

1. Scenarios

The Final Report examined the four scenarios developed under the Global Environment Outlook (GEO) 3 conducted by the United Nations Environment Programme (UNEP). These four scenarios are : *(Please refer to pages 48-53 of the Final Report.)*

Market First Scenario - this envisages a world in which market-driven development converges on values and expectations that prevail in the industrialised countries ;

Policy First Scenario - strong actions are undertaken by governments in an attempt to reach specific social and environmental goals ;

Security First Scenario - assumes a world of great disparities where inequality and conflict prevail, brought about by socio-economic and environmental stress ;

Sustainability First Scenario - a world in which a new development paradigm emerges in response to the challenge of sustainability supported by new, more equitable values and institutions.

2. APFED Future Vision for Asia-Pacific

Path to Sustainable Societies

According to the scenario analysis, the unfolding future is most likely to be a mixture of elements contained in each scenario.

Unless the security situation deteriorates rapidly, the region as a whole will, in the short run, continue to move along the lines assumed under the Market First Scenario. Economic development under this scenario will certainly deal with poverty and the needs of growing populations. However, market forces tend to weaken

social cohesion, and promote unsustainable lifestyle patterns. Environmental quality will continue to deteriorate and pressures on natural resources will remain severe. Poverty will remain unsolved despite some improvements. These negative outcomes make this scenario unsustainable in the long run.

Gradually, more of the measures contained in the Policy First Scenario would be introduced in proactive countries, to seek a balance among economic, social, and environmental concerns. Consequently, small, patchy improvements could be achieved in the areas of environmental improvement and poverty alleviation, but the overall trend of unsustainable production and consumption would prevail.

Eventually, a shift towards Sustainability First societies would take place, where fundamental changes in lifestyle would mitigate against environmental pressures. To ensure long-term sustainability for the region in the face of further population expansion and economic growth, a sufficient number of people will recognise that it is not enough to simply follow the traditional pattern of economic development characterised by mass production and mass consumption. Popular pressure will demand that the region employs a new development paradigm by fully integrating social and environmental concerns into economic development.

Principles for Building Sustainable Societies

To achieve sustainable development, an innovative development path designed around principles such as those advocated by the Earth Charter should be articulated for the region. Sustainable development is a vision that places equal importance on economic, social, and ecological well-being, i.e., a holistic and integrated approach to development.

Since peace and stability underpin sustainable development, violent conflict must be avoided by addressing root causes, such as religious and ethnic differences, and disputes over resources and inequities. In this light, it is essential to strengthen democratic institutions at all levels of decision-making. Participation by civil society and individuals in decision-making should be promoted, and maximum transparency and accountability of governance should be provided. The empowerment of the individual through education, poverty eradication, gender equality, and elimination of all forms of discrimination should become the basis for sustainable societies. Encouragement through consultation and leadership particularly at the grassroots level will go a long way in achieving sustainability in the region.

Basic human needs such as drinking water, clean air, food, security, shelter, and sanitation must be met, and care must be taken to create societies that protect the disabled and the vulnerable. Governments in the region should fulfil their obligations in the short run according to the MDGs (Millennium Development Goals) set, and promote policies along sustainability principles in the long run. Ultimately, sustainable societies will only be realised if the earth's ecosystems and natural processes that sustain life are fully protected. Human activities should not exceed the regenerative capacity of natural systems or threaten the environment by the introduction of non-native organisms.

Regional Perspectives

The Asia-Pacific region is characterised by economic growth, is the most densely populated region in the world, and is the most diverse in natural and socio-cultural conditions. Challenges facing the region remain as daunting as ever, but these challenges could be turned into opportunities by building on the region's strengths. Respect for the rich human resources, traditional values, and enormous diversity treasured in the region should be the basis for the design of future sustainable societies. Clear vision, strong political will, and flexible social partnerships will enable the region to move along a truly sustainable path as the world leader in the 21st Century.

The sustainable societies that APFED envisages for the future will be diverse, and will take various forms, reflecting the socio-cultural and natural differences found in this region. Sustainable societies will be economically dynamic, and yet modest in their use of natural resources. They will be democratic, equitable, and peaceful. To realise sustainable futures of this kind, the societies should be truly participatory, encouraging mutual learning, and promoting innovation, while ensuring local diversities for future generations of the region. The ultimate aim should be achieving a less materials-intensive society, and a more service and knowledge-based society and economy. The entire society and the market need to shift their focus of production and consumption patterns to one which is more knowledge-based and which has more local value, from one currently based on mass exploitation of non-renewable as well as renewable resources.

Part III: APFED Recommendations

To promote the shift to sustainable societies, APFED has put together the following recommendations, organised into three groups. (I) **Recommendations for an Integrated Approach to Sustainable Development** primarily addresses cross-sectoral issues essential for integration of the environment into decision-making, implementation, enforcement, and monitoring of environmental and natural resource management policies, as the key element of sustainable development. (II) **Recommendations for Empowerment of Multi-Stakeholder Partnerships** addresses measures to promote synergistic participation of the three major stakeholders: civil society, private business, and the public sector. The third group is (III) **Sectoral Recommendations** to facilitate the application of the sustainability principles in the five major sectors selected, namely freshwater, marine and coastal environment, energy and clean air, land use management, and chemical issues.

1. Recommendations for Integrated Approaches to Sustainable Development

To promote environmental conservation in the context of sustainable development, the first priority is the integration of environmental concerns into basic policies of economic and social development. Recommendations for an integrated approach to sustainable development focus on measures to promote consistent and efficient development and implementation across key development sectors. The recommendations aim at strengthening the environmental foundations of the region, upon which various sectoral policies would then be formulated and implemented. Reflecting the features of new environmental policies, recommendations are centred on i) provision of incentives, ii) the promotion of stakeholders' participation, and iii) an intensified focus on trans-boundary issues.

Recommendations for Integrated Approaches to Sustainable Development:

- Institutions for environmental democracy
- Systems development for partnership
- Capacity drive for sustainable development
- Innovative financing and market mechanisms for sustainability
- International trade for sustainable development
- Innovative technologies for sustainable development

A. Institutions for Environmental Democracy

An encouraging evolution in recent years has been a shift from highly centralised and compartmentalised bureaucratic structures to decentralised and participatory governance in most countries of the region. This has resulted in promotion of grassroots community participation, decentralisation of administration, integration of national and local decision-making processes, and involvement of NGOs and the private sector in policy making. Also important are the increasing number of environmental organisations and programmes that have been initiated at the subregional and regional level.

To reinforce this trend, three layers of regional institutions are recommended to strengthen environmental democracy in the Asia-Pacific region in a manner compatible with the emergence of new environmental actors and initiatives at the national, subnational and regional levels. An open forum entitled the **Asia-Pacific Open Forum for Sustainable Development** could be built on a strengthened regional network of national committees on sustainable development. Its main function would be to set the priority agenda for sustainable development in the region, through open discussions among key stakeholders. For governments in the region, the **Asia-Pacific Environment Round (APER)** has been proposed to strengthen regional environmental governance by complementing existing intergovernmental forums, and to enhance common environmental policies. At the technical level, an **Asia-Pacific Knowledge Centre for Sustainable Development (KCSD)** is proposed. The centre will systematically accommodate in its database, knowledge and information essential for promoting sustainable development for the region.

B. Systems Development for Partnership

Several new activities are proposed in accordance with the three layers of regional institutions mentioned above. What is common to these proposals is the partnership among different stakeholders.

The *Asia-Pacific Voluntary Commitment Initiative* would be connected to the Open Forum for Sustainable Development. It would encourage action towards sustainable development by registering specific commitments by stakeholders, monitoring the implementation of these commitments, and providing small incentives for commendable actions. APER could take a lead in ensuring that any new regional conventions always include two common features—participation and result-orientation. The initiative for *Participatory Environmental Agreements* will address this concern. KCSD will be instrumental in networking various databases including those assembling good practices in terms of policies, technologies, and practices. *Good Practice Databases* could provide useful lessons learned from various initiatives introduced in the region. The value of such databases lies in their constantly updated, good-quality information.

C. Capacity Drive for Sustainable Development

Education and capacity development is key to sustainable development and active promotion of the United Nations Decade of Education for Sustainable Development is crucial for the Asia-Pacific Region. The four main aspects for enhancing capacity for sustainable development in the Asia-Pacific region are i) education, ii) training, iii) public awareness-raising via formal and informal channels, and iv) cross-sectoral approaches.

i) Education

Integrated and Empirical Education attempts to give schoolchildren direct experience of the importance of the environment and should be further promoted by facilitating the development of teaching materials and modules, student exchange programmes, and networking of practitioners. In view of the important role of higher education institutions in promoting sustainable development education, the *Inter-University Accreditation System* could be expanded among the universities engaged in sustainable development courses and programmes in the different countries in the region, thus strengthening the multidisciplinary characteristics of the programmes.

ii) Training

Increased training is needed for all leaders, drawing upon past and ongoing initiatives, such as the Network for Environmental Training at Tertiary Level in the Asia-Pacific (NETTLAP).

iii) Awareness Raising

The need for greater public awareness of sustainable development cannot be over-emphasised. All means of awareness raising, including public campaigns, exhibitions at museums, television (TV) and radio broadcasting should be extensively used. An *Asia-Pacific Environmental TV Channel*, which could engage the technology of web-based TV, would provide a variety of services and opportunities for the media, and encourage them to produce quality films for sustainable development of the region in collaboration with existing programmes, such as the National Geographic and Discovery Channels. Collaboration with existing media needs to be strengthened in parallel to or as a first step toward launching the regional environmental TV channel.

iv) Cross-Sectoral Approaches

The cross-sectoral recommendations emphasise the inter-linkages between different sectors. *Local Partnership for Education for Sustainable Development* is recommended to promote locally based, integrated, and holistic approaches in various endeavours of sustainable development education. An innovative mechanism for enhancing local-level communication, coordination and networking may be considered. This recommendation calls for strengthening of communication and coordination at all levels of formal and non-formal education. *Distance learning based on information and communication technologies* (ICTs) is a good way to promote learning on sustainable development.

D. Innovative Financing and Market Mechanisms for Sustainability

Despite an increase in overall capital inflow to the region over the last decade, the environment has not been the main beneficiary of such financing. Although global mechanisms for environmental project funding, such as the Global Environment Facility (GEF), have been initiated and have brought some additional funding, necessary financing has not been provided for a range of subregional and regional environmental problems

such as acid rain. At the national level, environmental spending has remained inadequate, with further reductions and general budget restructuring in the aftermath of the Asian financial crisis. While micro-credit and community-based finance have been commonly viewed as the only form of capital available to the majority of poor people on a sustainable basis, local finance remains under-developed in terms of both volume and sophistication.

To address this gap, a series of financial initiatives at the regional and local scale is recommended. The **Regional Environment Fund for Asia and the Pacific (REFAP)** is proposed as a new financial mechanism funded primarily by governments, to support actions to address trans-boundary environmental problems at regional and subregional levels. Local finance initiatives are also recommended. **Eco-Currencies** are known to effectively stimulate voluntary environmental activities without any external funding, usually at the community level, but a similar system could be applied in the context of multilateral enterprises with offices and factories in several countries in the region.

E. International Trade for Sustainable Development

Trade liberalisation under an increasing number of free trade agreements (FTAs) and other bilateral trade agreements is expected to bring greater prosperity and dynamism to the region. However, economic growth propelled by international trade will increase the pressure on the environment through greater exploitation of natural resources and increased polluting activities. According to a 2004 report (“Fair Globalisation: Creating Opportunities for All”) launched by the 26-member independent World Commission on the Social Dimensions of Globalisation sponsored by the International Labour Organisation, FTAs have to be designed in such a way as to be equitable, ensuring that the weaker countries benefit and do not lose out. Therefore, in negotiating trade agreements in the region, maximising the benefits, specifically of economic prosperity, while minimising the environmental costs must be addressed. Despite the fact that the implementation of Multilateral Environmental Agreements (MEAs) sometimes have the potential to conflict with existing or newly negotiated trade rules, MEAs must be implemented if the region’s sustainability is to be ensured for future generations. It is worthwhile to reiterate that Paragraph 98 of the Johannesburg Plan of Implementation (JPOI) called for the “mutual supportiveness” of the two regimes.

It is recommended that the region should take a lead in setting a sound precedent for integrating environmental considerations into trade agreements. This could be achieved by providing **Better Environmental Guidance to FTAs and Other Trade Agreements**.

Further promotion of **Region-wide Recycling** could facilitate sustainable development in the region, not only by minimising the total volume of waste that requires final disposal, but also by contributing to economic development and employment opportunities. The **Fair Trade Initiative** is intended to promote a promising instrument that could provide people at the grassroots level, low-income people, and small businesses in developing countries and countries with economies in transition with fair fruits from the global trading system, by, for example, trading organic agricultural products.

F. Innovative Technologies for Sustainable Development

Conventional technological development has been characterised by factors such as mass production, high speed, economic efficiency, central control, and standardisation. Sustainable development may necessitate a paradigm shift in technology development. The new paradigm will be characterised instead by durability, environmental friendliness, reusability, easy maintenance, decentralised control, and diversity. Nowadays, technologies based upon the new paradigm such as renewable energy technology and green chemistry are increasingly available.

Making the best use of these technologies and ensuring access to them are keys to building sustainable societies in the region. ICT is the most important technological development in the last decade. It has changed the way people work and communicate. It also has a few positive implications for the environment by way of raising environmental awareness and strengthening advocacy powers of NGOs. Though fast spreading, there is a big gap in accessibility to ICTs amongst the developed and less developed countries (LDCs). This digital divide can be overcome by providing accessibility to all. **Community Internet Kiosks** are already being promoted in the region in countries such as India and Thailand. An **Asia-Pacific Alternative Technologies Development Partnership** is proposed to catalyse internal technology development capabilities through enhanced interactions among technical institutes in the region, by joint research, and provision of research

funds for promising proposals. Establishment of *Technology Transfer Consortiums* (TTCs) is proposed as one way to address the financial barriers associated with technology transfer. TTCs would channel necessary funds in the form of soft loans, leasing, and other affordable financial devices. TTCs would also provide tailor-made consulting services to meet the needs of individual users, by networking with local technical institutions as well as with international technology information clearinghouses.

2. Recommendations for Multi-Stakeholder Partnerships

Highly centralised political systems are often identified as a characteristic of governance in Asia and the Pacific. However, this style of government has been gradually changing in response to recent socio-economic trends such as globalisation and decentralisation. Decentralised local governments have become more autonomous and the role of central governments has been gradually shifting from “implementation” to “facilitation” in promoting the sustainability agenda. At the same time, the private sector is increasingly regarded as a major driving force behind the promotion of a sustainable society in the region; civil society organisations (CSOs) have been playing an increasingly important role in setting the agenda and implementing projects for sustainability.

As opportunities for participation by all stakeholders are expanded, the form that this participation will take must be designed to take full account of factors such as culture, history, social structure, nature of the decisions in question, and the characteristics of decision-making systems. All stakeholders should participate in actions for sustainable development with a good understanding of their respective roles. Recommendations outlined below primarily aim at promoting actions of the primary actors, specifically grass roots, civil society, and the private and public sectors.

Three Primary Actors for Multi-Stakeholder Partnership:

- Empowerment of civil society organisations
- Eco-drive for the private sector
- Public sector to catalyse multi-stakeholder partnerships

G. Empowerment of Civil Society Organisations

CSOs have become an essential actor in building a sustainable society in Asia and the Pacific. Increased involvement of CSOs in environmental decision-making and their enhanced capacity are considered vital in achieving sustainability. The ability of CSOs to create trans-boundary ties between stakeholders has become important in recent times due to increased linkages between trans-boundary issues concerning sustainable development. At the same time, grassroots activities of CSOs could also act as a safeguard for traditional values, lifestyles and cultures, which tend to be neglected in this age of globalisation.

To strengthen CSOs in the region, various initiatives are recommended such as the creation of a sound environment through institutional arrangements for promoting CSO activities, development of the capacities of CSOs, mainly through intensified interaction and modest financial assistance, and reinforced regional or subregional networking amongst various types of CSOs such as women’s groups. The establishment of an *Asia-Pacific CSO Centre* could act as a regional attempt to catalyse further interaction and collaboration among CSOs working on sustainable development in the region. At the same time, the *Asia-Pacific Grassroots Initiative for Sustainable Societies* may be initiated to demonstrate the potential of grassroots social movements in Asia and the Pacific, based mostly upon traditional values such as modesty, simplicity, self-help, value of family, and respect for all other life forms. This would develop excellent examples for practitioners in other regions to learn to promote truly sustainable societies.

H. Eco-Drive for the Private Sector

With globalisation, the private sector is a critical player in sustainable development. This trend is becoming increasingly clear with the recent progress in trade liberalisation dialogues. The private sector is realising the importance of streamlining their production processes and products, which, in turn, results in a reduction of adverse ecological impacts. Thus, eco-efficiency helps not only the private sector; it also represents a benefit for both the business sector and society

The private sector has made tremendous efforts towards environmental improvement due largely to regulatory compliance, market pressure, leadership by the Chief Executive Officer, and policies for social responsibility; yet more innovative measures by the private sector will be needed. Domains for emerging efforts include the application of environmentally sound technologies, adoption of voluntary corporate initiatives, i.e., ***Voluntary Environment Agreement Initiative***, introduction of environmental management systems (especially along supply chains), eco-efficiency, and environmental reporting.

There are also signs of a positive response to the growing interest of consumers in sustainable development and health consciousness, demonstrated by increasing demand for eco-products, recycled materials, and other products with less environmental impact over their life-cycle, as well as non-toxic detergents and organic vegetables. These shifts in consumer demand open up new business opportunities for the private sector in the region, i.e., ***promotion of eco-industry***.

The informal sector provides essential services such as transportation, retailing, and waste disposal, in major cities of many developing countries. Their operations are often environmentally unsound and unsafe, but are constrained by a lack of funds and appropriate knowledge. The proposed ***Renovation of Informal Sector*** would address this issue by capitalising on synergistic opportunities that exist between the informal sector and local environmental action. Examples include introduction of electric three wheelers (e.g., in Kathmandu, Nepal), and organised recycling and composting of solid wastes.

With consumers becoming more environmentally conscious, strengthened networking among ***Environmental Consumers Cooperatives*** established in various parts of the region is proposed to promote the purchase of environmentally friendly goods and services. To overcome the uncertainty caused by a proliferation of environmental labelling schemes, an ***Asia-Pacific Green Labelling*** system is proposed, which would convey accurate and reliable product information and would appeal to consumers. This system could be set up to combine existing schemes in the region. It would also remove barriers to environmentally sound production processes associated with separate national labelling schemes.

I. Public Sector to Catalyse Multi-Stakeholder Partnerships

As globalisation, democratisation, and decentralisation progress worldwide, the roles of CSOs and the private sector have significantly expanded, along with a change in the traditional highly centralised political systems in the region.

Yet, the public sector—local and national governments and international organisations—continues to play a primary role in policy planning and coordination. Central governments set the overall framework of action, coordinating and facilitating implementation at the national level, while local governments play an increasing role in environmental enforcement and monitoring, in collaboration with other stakeholders at the local level. However, the long history of centralisation means that local governments may lack human, institutional, and financial capacities, and experience difficulties in carrying out their expected roles. International and regional organisations are playing central roles in setting the international agenda, particularly in the development of MEAs. Support channelled through international and regional organisations is essential in promoting the sustainable policy agenda at national and local levels in developing countries.

With the above in mind, recommendations for local governments are intended to strengthen their capacities through networking, multi-stakeholder involvement, training, and the empowerment of communities. Community empowerment could be attained through ***Supporting Community-based Activities for Sustainable Development***, in which local governments would provide support, in combination with various policy tools, to individual citizens, CSOs, businesses, and social groups for their voluntary actions, through day-to-day communication, campaigns, and information dissemination.

The recommendations for central governments highlight their catalytic role in providing the framework, within which other actors, such as CSOs, businesses, and local governments could operate under their own initiatives. This can only be achieved by promoting ***Transparency of the Political System and Stakeholder Participation***, including information disclosure, periodic release of national environment performance reviews, application of Green GNP and sustainable development indicators, and promotion of the full involvement of stakeholders in the environmental policy cycle.

3. Major Sectoral Recommendations

APFED has formulated sectoral recommendations for facilitating the application of the cross-sectoral recommendations in five sectors, namely freshwater, marine and coastal resources, energy and clean air, land use management, and chemical issues. These sectors have been selected through APFED consultative meetings as key areas for action to achieve environmentally sound sustainable development in Asia and the Pacific. These recommendations aim at a dematerialising and self-sufficient society.

Priority Sectors Addressed by APFED:

- Freshwater Resources
- Marine and Coastal Resources
- Energy and Clean Air
- Land Use Management – Urbanisation, Rural Development, and Forest Conservation
- Chemical Issues

J. Freshwater Resources

Increased water demand has occurred in line with economic and population growth, leading to intensified water use by the agricultural, industrial, and domestic sectors. Increased demand for water often leads to overexploitation of water resources, which, in turn, results in water shortages, land degradation, and destruction of natural ecosystems such as wetlands and estuaries. Improperly treated wastewater leads to deterioration in water quality and thereby a decrease in the total volume of available water resources. Inadequate water supply and sanitation systems hinder the health and safety of the people in the region, in particular the poor. Such critical water issues cast a shadow on sustainable development in the region, creating a need for more rational and effective management of water resources.

Integration and harmonisation of national policies in different sectors should be undertaken alongside capacity enhancement of government officials in relevant institutions at national and local levels. Participation by key stakeholders, particularly local communities, is also considered essential. For this purpose, awareness raising, creation of incentives, and strengthening of stakeholders' capacity are key elements to be addressed. Dissemination of adequate information and technology transfer are also important driving forces behind improved water management.

Mobilising financial resources from the private sector should be promoted with appropriate attention to the poor and marginalised. In this respect, community participation in the process of developing water supply and sanitation systems is considered essential. Thus, the *Strengthening Community Participation in Public-Private Partnership for Water Supply and Sanitation* is proposed.

A *System to facilitate water transfer* is proposed to help resolve disparities in water availability and to promote rational use of water resources. A system for establishing rights to access water, if properly established, would facilitate the transfer of water from areas with surpluses to those facing shortages.

Technology plays a vital role in appropriate management of water resources, therefore, development of *Technology for New Sources of Water* should be strengthened to deal with the increasing demand for water, with particular focus on the creation of non-conventional water resources, such as rainwater harvesting and seawater desalination combined with renewable energy sources.

K. Marine and Coastal Resources

The livelihoods of people in many countries of the region are closely related to coastal and marine resources, both living and non-living. On the other hand, marine and coastal resources have been under threat from expansion of non-compatible human activities. Major pressures on coastal and marine ecosystems include the overexploitation of fishery resources; land-based pollution such as industrial and agricultural water discharge and inadequate waste disposal; and sea-based pollution such as oil spills. Coastal erosion, resulting from increased land subsidence from groundwater extraction and offshore mining of sand and dredging are other notable problems.

The sectoral recommendations are provided, primarily, to establish Integrated Coastal Area Management (ICAM) to enhance stakeholder coordination and participation among governments, scientists, experts, the public sector, and NGOs and to strengthen regional cooperation on marine and coastal resources.

Water Body-Based Strategic Action Programmes, which have already been established in some water bodies, need to be developed for other water bodies of the region. Priority issues on environmental and resource use in each specific water body need to be addressed in a cost-effective and cooperative manner. This formation of the strategic action programmes will enable subregional coordination based on scientific assessments.

There is also a need to strengthen participation and awareness of the general public, which would require a region-wide expansion of existing programmes. For this purpose, the *Asia-Pacific "Save Our Sea" (SOS) Campaign* should be the immediate initial step.

L. Energy and Clean Air

Energy has fundamental implications for sustainable development. Industrial development in the 20th century depended on high-energy consumption, with fossil fuels as the main source of energy. Energy demand and consumption have increased as economic development in the region has progressed. Heavy dependence on fossil fuels and the high-energy consumption patterns in modern societies have resulted in serious environmental problems, including air pollution, global warming, and potential climate change, and hindered sound socio-economic development. Increases in levels of carbon dioxide (CO₂) have put many island-states in the Asia-Pacific region at great risk from potential climate change and associated sea-level rise. In addition, the disparity of access to electricity has been of serious concern in the region. For a sustainable future, energy use must be made more environmentally benign. Renewable energy sources such as solar, wind, biomass, micro-hydro, and geothermal have great potential, both in terms of access to energy and environmental conservation.

Quantitative Targets for Renewables determined according to different natural and socio-economic situations of each country would be a useful tool not only in putting into operation various programmes to reduce greenhouse gases and emissions of air pollutants, but also in developing and implementing clean energy strategies that link the available energy resources and technology development programmes with national security and sustainable development scenarios.

Other recommendations are provided, primarily, to:

- (i) strengthen policy and regulatory reforms to provide the necessary price signals and stronger government commitment through clear policy objectives. Sustainable engagement of the private sector is needed in the renewable energy sector;
- (ii) secure funds from private financial institutions, consumer financing schemes, and private entrepreneurship, and;
- (iii) encourage the development of indigenous technological capacities; or facilitate the acquisition/transfer of technology.

For enhanced air quality management, **Integrated Transportation Planning** should be advocated to promote environmentally sustainable transportation. Approaches, such as integrating land use planning, telecommuting, public transportation, hybrid electric vehicles, non-motorised transportation, transport awareness raising initiatives, traffic demand management, conventional emission standards, and inspection/maintenance could be considered according to local situations. In the longer term, the use of hydrogen gas for fuel cell technology as well as the possibility of using this energy for future internal combustion engines could be conceivable.

M. Land Use Management – Urbanisation, Rural Development and Forest Conservation

The Asia-Pacific region is the most densely populated region in the world, thus making land a scarce resource. Continued population increase and economic growth in the region will make land even more precious, both in rural and urban areas. Urban areas continue to expand rapidly, causing an alienation of valuable agricultural areas. Even the expansion of agricultural areas will soon reach its limit, pushing more and more farmers into marginal forest areas. Forest areas will continue to shrink, and infertile areas will increase, causing desertification and land degradation. In addition, as forests and other natural ecosystems continue to diminish, deteriorated water resources and decreasing biodiversity are emerging as even more urgent issues.

To holistically address these environmental and sustainable development problems, policies and strategies interlinking conservation efforts and environmental services in different areas are becoming important. An integrated approach to national land use planning needs to be promoted through the establishment of a ***Mechanism for Participatory Integrated Land Use Planning***, by which planning committees with multi-stakeholder representation are set up at national, provincial, and local/ grassroots levels.

The region's protected areas system needs to be strengthened for biodiversity conservation, protection of ecosystem services, and other reasons. Establishment of the ***Asia-Pacific Nature Corridor*** offers a practical model and a bridge between protected areas and sustainable production landscape, i.e., forestry and agricultural areas.

To alleviate pressure on already overcrowded and overburdened urban areas, and develop rural areas, promotion of ***Rural-Based Industry with Support from Urban Community*** should be undertaken. This would not only decrease pressure on urban areas but also act as a means to revitalise rural communities, while conserving the maximum levels of energy, water and other natural resources. It would also help to establish a material cycle that effectively combines urban and neighbouring rural areas; and to create new partnerships between urban and rural residents.

There should be expanded research and dissemination of sustainable agriculture techniques and a programme to improve and transfer these techniques.

N. Chemical Issues

The production and use of chemicals in the Asia-Pacific region has been substantial, resulting in the accumulation of stockpiles and contamination of the environment with attendant risks to human and animal health. Of particular regional concern is the extensive contamination of water, land, and air with a wide range of inorganic and organic compounds released into the environment from household, industrial, and agricultural activities. While the compounds causing greatest concern, particularly in the global context, are persistent organic pollutants (POPs), a variety of other compounds are known, or suspected, to adversely affect humans and animals in the region.

To improve management of chemical hazards, long-term national policies on hazardous chemicals must be introduced by establishing a system that would enable a ***“Cradle-to-Cradle” Management System of Chemicals*** in each country. A regional collaborative effort needs to be made as the first step in developing a set of model guidelines to address key issues in promoting the safe use, transport, storage, and disposal as well as reuse and recycling of chemicals under the “cradle-to-cradle” principle, thereby strengthening regional mechanisms for efficient and safe chemical management.

Better management of chemicals would require promotion of “Green Chemistry” for which the R&D capacity needs to be strengthened as a first step. The initiative to promote ***Green Chemistry Research and Development*** would enable regional research institutes to form a branch of the World Green Chemistry Network. Under such a network, a regional R&D initiative could be effective in promoting the development of more environmentally benign technologies for the manufacture, use and disposal of chemicals, using renewable biological resources to the greatest extent possible.

Part IV: APFED Action Platform

Although modest, APFED is an important, participatory and open regional forum. Its messages cannot be imposed upon governments, international organisations, or any other stakeholders in the region, but is intended to recommend a paradigm shift in the Asia-Pacific region through the integration of economic, social, and environmental initiatives. In its second stage, APFED intends to be, as agreed upon at the ECO ASIA 2004, a “knowledge management” and “innovation facilitation” centre of the region. The significance of APFED recommendations is based on the belief that continuing dialogue among stakeholders, sharing experiences and wisdom with others, and proposing challenging new ideas will increase the long-run sustainability of the region. Productive ideas will develop a life of their own. In this respect, APFED

continues to advocate a sustainable Asia-Pacific, seeking the thorough implementation of its Action Platform in collaboration with like-minded stakeholders.

The recommendations presented in the Final Report suggest broad directions in which the Asia-Pacific region as a whole should move to attain sustainable societies. These are to be realised over the long term at the regional, subregional, national, and local levels, taking into account potential future political, economic, social, and environmental conditions. The APFED Action Platform is put forward to initiate the first step to turn the recommendations into reality.

It highlights an action framework, within which follow-up actions to the recommendations contained in the APFED Final Report could be undertaken to facilitate and nurture sustainability initiatives in the region. A second stage of APFED (APFED II) is proposed to mobilise this region towards sustainable development, acting on the Final Report recommendations. APFED II will (i) intensify efforts to collect information on successes and failures of policies and projects for sustainable development of the region, (ii) take a lead in promoting joint research on strategic policies to promote sustainable development for the region, and (iii) play a catalytic role in sharing knowledge and experiences for sustainable development with key stakeholders in the region.

The Action Platform consists of the three broad mechanisms, each of which complements the others:

Multi-Stakeholder Interactive Channels: The Multi-Stakeholder Interactive Channels consist of a variety of consultation processes involving concerned stakeholders, that are held to discuss and, whenever possible, to develop concrete ways and means to address priority issues in realising a sustainable future for the region.

Sustainable Development Knowledge Initiative: Lessons and experiences will be accumulated from innovative actions already implemented to promote sustainable societies in the region, wisdom will be extracted from these lessons and experiences, and this wisdom will be shared with all stakeholders concerned. The Sustainable Development Knowledge Initiative is the “brain” for accumulating knowledge for a sustainable future. It will develop a network of databases that contain extensive examples of good practices for sustainable development, create mechanisms that enable lessons to be learnt from past and current actions, and organise workshops and other knowledge-sharing activities.

Innovation Showcases for Sustainable Development: Opportunities will be provided for various actors in the region to showcase innovative policies, technologies, and practices. Innovative ideas will be put into practice on an experimental basis to verify whether the proposed ideas are congruent with the prevailing political, economic, social, and natural conditions. The Innovation Showcases for Sustainable Development are intended to aid the formulation of various innovations considered appropriate for the region, and facilitate their widespread application.

Example of selected initiatives proposed under The Three Mechanisms:

Multi-Stakeholder Interactive Channels

- i) Asia-Pacific Environmental Finance Roundtable

Sustainable Development Knowledge Initiative

- i) Joint Research on Integrated Environmental Policy Design in an Economically Integrated Asia
- ii) Asia-Pacific Water Development Report (APWDR)

Innovation Showcases for Sustainable Development

- i) Clean Energy Islands

Next steps to be taken by APFED will be as follows. APFED is an ongoing initiative, and some of the activities contained in the three mechanisms proposed above are already in operation. In particular, the three activities under the Sustainable Development Knowledge Initiative (i.e., (i) the *Good Practices Database for Sustainable Development*, (ii) *Strategic Policy Research*, and (iii) the *APFED Lessons Learned Partnership*) are basically enlarged extensions of the three APFED Commitments to WSSD, i.e., Best Policy Practices (BPPs), Capacity Building Programmes (CBPs), and Networks of Researchers and Research Institutions (NetRes). Therefore, these three activities are the ones APFED II will address first in terms of

time sequence. Then, efforts will be made to set up and initiate the Multi-Stakeholders Dialogue and the Policymakers Conference. These forums will be built on, as much as possible, existing mechanisms such as the current APFED forum. These two APFED forums will provide, among other things, overall directions and basic guidance regarding the Innovation Showcases for Sustainable Development, based upon which innovative policies, technologies, and practices contained in the APFED Final Report will be piloted in various countries of the region.

APFED is an important advocate for sustainability in Asia and the Pacific. Its messages are meaningful only when other stakeholders in the region join forces with APFED. In this respect, APFED continues to seek dialogues and collaboration with other stakeholders in the region. It believes that hope for the future exists in small initiatives already undertaken in many parts of the region. What matters is having sensible ways to detect them, and effective mechanisms to nurture them. It is hoped APFED II will be successful in building on successes in the past, and using them to facilitate truly sustainable societies for the future.

Closing Comments

Though efforts are being made in the region, it is thus far clear that current development patterns constitute an important threat to environmental security, which is in itself a threat to global security. The challenges the region is confronted with can be dealt with, but only if all stakeholders make a conscious effort to live in accordance with the sustainability principles. Strong political will and sensible policies are required to keep the region peaceful, to promote democracy, to sustain economic growth, and to strengthen social cohesion, without which sustainability cannot flourish. Challenges being faced by the region need to be turned into opportunities. An essential change in the way we view economy, society, and the environment—where the quality of life and people’s aspirations, not just economic growth and material wealth, will be the prime concerns for all—is required.

Recommendations put forward by the APFED members are designed to move the region onto a sustainable path. For some ideas, uncertainty associated with them could be the barrier to their introduction. In other cases, potential losses to be imposed upon certain stakeholders may create tacit resistance to the recommendations. Still it is obvious that countries in the region have to accommodate innovations not only in technologies but also in policies and social practices to promote sustainability. Indeed, the question is not whether innovations are necessary for the region, but how soon such innovative ideas can be introduced.