

Best Practice on Environmental Policy in Asia and the Pacific: Chapter 7

Participation of Civil Society in Management of Natural Resources

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Governments are increasingly involving local communities and non-governmental organizations in the management of natural resources. The ways in which different stakeholders are involved varies from being consulted to taking a central role in planning and monitoring, and—infrequently—being given the legal right to manage resources. There can be many benefits from involving a wider group of stakeholders in natural resource management, including reducing the burden on government agencies, reducing conflicts, and greater resource efficiency. This is part of a series of eight linked papers in this special issue of the *International Review for Environmental Strategies* describing a study to draw from the RISPO Good Practices Inventory useful lessons for environmental policymakers in developing countries. The study was based on analysis of case studies collected by the project Research on Innovative and Strategic Policy Options (RISPO), which was led by the Institute for Global Environmental Studies, Hayama, Japan. This study highlights how participation by different stakeholder, governments, local/indigenous people, NGOs and the private sector, in natural resource management in Asia leads to resource efficiency for the government, contributes to broader devolution of power, and reflects the changing attitude of governments towards people's participation. The findings should encourage governments to extend community management of natural resources to other ecosystems, such as coastal fisheries or production forests.

Keywords: environmental policy, RISPO, natural resource management, community-based tourism, civil society, environmental education, participation

1. Introduction

Experiences in co-management of natural resources since the latter half of the twentieth century have shown that where the right incentives are offered and roles are clearly defined, management of natural resource through participatory processes can work. Today, local communities and civil society organizations are important actors in designing and implementing policies aimed at improving environmental management and pursuing sustainable development. Government decentralization policies, which confer decision-making authority and fiscal autonomy on local governments and, in some cases, to local communities, have helped local people and organizations to play a leading role in developing and undertaking environmental management and sustainable

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development projects. Economic liberalization has also provided local people and communities with diverse opportunities to pursue alternative sustainable livelihoods.

Governments are increasingly recognizing a need to allow greater participation in environmental responses, including natural resource management. When environmental problems first started to gain international attention as a potential policy issue, governments initially tried to deal with them on their own. They generally did this by imposing rules, norms and limits upon those perceived as most responsible for environmental degradation. This early exclusion of other stakeholders, especially local communities, from natural resource management and environmental protection efforts can be attributed to governments' lack of confidence in participatory processes and their perception that local people were a main cause of environmental degradation.

Time and experience have shown that governments are not always in a strong position to put into place the right policies and implement effective programs and projects to manage natural resources. As a result, other stakeholders such as communities, non-governmental organizations (NGOs), and the private-sector are being included more frequently in environmental responses. Different countries are at different stages of this policy evolution, depending on their ecological, socio-economic, political and cultural conditions. Some of the reasons that have prompted decentralization and an expanded role for civil society include: increased environmental problems; limitations on government capacity and resources; a greater need for accountability, transparency, and promotion of good governance and sustainable management, particularly due to pressure from donors; increased public awareness; and the urgency of dealing with environmental issues. In some cases, this change has been gradual whereas in others it has seen a complete policy reversal.

Local participation can be more effective if the community understands the value of its participation, what is required of it, and the necessity of working jointly with the government and other organizations. NGOs have generally been the main providers of environmental education and public awareness raising, particularly in developing countries. They have also helped communities to launch and run community-based tourism projects and to use the community's first-hand knowledge, which has been accumulated over centuries, to manage and protect their local environments.

This chapter presents the findings of a recent study on the overall theme of the policy trend towards the retreat of "big" government and the greater involvement of civil society in natural resource management. The study aimed to find valuable lessons for policymakers in developing countries. It took as its main dataset good environmental policy practices documented as part of the IGES-led Research on Innovative and Strategic Policy Options (RISPO) on the inter-related topics of promoting environmental education by NGOs, facilitating management of protected areas using community-based tourism, and promoting sustainable resource management based on local and indigenous knowledge. As such it forms part of a series of linked papers that is presented in this issue of the *International Review for Environmental Strategies*.

2. Literature review: participation in environmental policymaking

2.1. *The rise of participatory processes in the environmental sphere*

The promotion of active participation by stakeholders other than the government, especially in the management of natural resources, can be traced back to the late 1960s, during the preparatory phase for the United Nations Conference on the Human Environment in 1972. Since then several important international conventions and forums, such as the World Commission on Environment and Development (Brundtland Commission) in 1987, have reiterated the importance of public participation for better management of the environment and natural resources. The Brundtland Commission's report, *Our Common Future*, states that "sustainable development requires a political system that secures effective citizen participation in decision making" (World Commission on Sustainable Development 1987, p. 65). The extent to which public participation has been actively sought by governments has varied depending on many factors, such as the issues involved and the time and resources available. Since the mid-1990s, public participation in developed countries has focused on public inputs to local government planning, whereas in developing countries there has been a gradual move towards greater decentralization of decision making and participatory forms of democracy, providing mechanisms for community empowerment (Holmes and Scoones 2000).

Many factors have contributed to changing the approaches of governments from unilateral decision making regarding matters in the public domain to involving a variety of stakeholders. These factors include: increase in democratization, as mentioned above; concern among multilateral donor agencies corruption and lack of transparency in governments (Gaventa and Robinson 1999); expansion of NGOs and extension of their role into developing countries (Zazueta 1995); improvements in, and extended coverage of, education (Zazueta 1995); budget constraints, making governments look for cost-effective ways to provide services; and positive experiences with early participatory initiatives.

Some trends have been noted in public attitudes to the state as awareness about, and interest in, environmental and governance issues have improved. These include: a growing dissatisfaction with existing political structures for handling policymaking, especially with regard to environmental policymaking (Selman and Parker 1997); lack of confidence in elected representatives' ability to capture the diverse social and economic interests of the people (Selman and Parker 1997); declining faith in planning for, and the malleability of, society (Vos 2003); concerns about the effectiveness of government policies and their implementation; recognition of the complexity and uncertainty of environmental problems; and recognition of the role of values, ethics, and issues of justice as keys to environmental problems (Holmes and Scoones 2000).

Interest in participatory approaches has grown dramatically, especially in the area of local environmental planning such as Local Agenda 21 initiatives, approaches to watershed management, and development of community and local-area economic strategies (Healey 1998). Agenda 21, the global sustainable development strategy agreed at the 1992 United Nations Conference on Environment and Development (Earth Summit) in Rio de Janeiro, stressed the need for public involvement in designing and implementing many forms of environmental policy (Eden 1996). Local Agenda 21 (local

implementation of Agenda 21) has supported the development of innovative methods for working with and for the community (Freeman, Littlewood, and Whitney 1996). A survey in 2001 by the International Council for Local Environmental Initiatives (ICLEI; now renamed Local Governments for Sustainability) found that at least 6,400 local governments in 113 countries had been involved in the Local Agenda 21 planning process (ICLEI 2002). International bodies such as the UN Commission on Sustainable Development and the Organisation for Economic Co-operation in Development (OECD) have also played a role in the proliferation of multi-stakeholder processes (Meadowcroft 2004).

Participation can be attractive to governments by reducing the budgetary burdens of environmental protection. For example, in the case of protected area management, once involved in the process and given the right incentive, local communities on their own initiative help to patrol, stop poaching, and report cases of encroachment and other illegal activities (Schroeder 1999).

Participation can not only improve the quality of decision making by leading to better policy but it can increase the likelihood that policy implementation will be more legitimate, effective, efficient, and sustainable (Healey 1998; Holmes and Scoones 2000). Non-government stakeholders are more likely to support and comply with environmental policies if their own concerns are built into policy decisions and there is consensus about the way forward (Pelletier et al. 1999). There are numerous examples in developing countries where policies have failed due to their inability to match the needs and priorities of the “intended beneficiaries” because of lack of involvement of those “beneficiaries” when crucial decisions were made (Gaventa and Robinson 1999). Wider participation raises the public’s confidence in the decision-making process while providing a focus for construction of common perspectives, agreed solutions, and interactions to realize commonly desired objectives (Meadowcroft 2004).

Another factor contributing to the rise of public participation, especially in developing countries, is the heavy reliance of government agencies on foreign development aid. This has made multilateral, bilateral, and international agencies particularly influential in shaping policy in developing countries. Since the donor community has long accepted the concept of participation, donors often make the inclusion of participatory processes a condition for funding. Donors’ concerns regarding good governance and strengthening of civil society have also contributed to an increasing interest in participation in policy-making (Gaventa and Robinson 1999) and to ensure that checks are placed on companies that exploit natural resources, such as those in the timber industry. They see participatory processes as a way of ensuring that their funds are used wisely, increasing transparency and counteracting government corruption.

2.2. Defining civil society

Non-governmental organizations refers to independent non-profit groups of citizens that build on voluntarism and whose activities generally have an altruistic purpose have a long history. Many of the educational or social services provided by the state in modern secular societies were in earlier times provided by churches and religious orders (for example, the medieval Christian church in Europe from 1200). The earliest example of the modern type of NGO was the International Committee of the Red Cross, formed in Switzerland in 1865 (Toulmin 1994). Since World War II there has been a continuous growth in the number and variety of NGOs. Many NGOs are viewed as being free of ulterior motives—

grinding no axes, acting according to equitable principles rather than favoring one country or group over another, speaking not for any government but for the people, and so on. Some international NGOs have the ability to mobilize responses around the world through their advocacy of humanitarian, environmental, medical, or human rights causes (Toulmin 1994).

Civil society is defined as referring to the arena of “uncoerced collective action around shared interests, purposes and values” by the Centre for Civil Society of the London School of Economics (London School of Economics 2004), and includes, along with the more traditional NGOs, trade unions, business associations, some research institutes, grassroots organizations, women’s groups, and others. Its role has evolved and expanded due to political trends causing a diminishing of “big government” across the world. It has also contributed to greater participation of non-government stakeholders in the policy arena. In developing countries, grassroots organizations and NGOs have been encouraged to scale up their operations to take on delivering services that would normally be the responsibility of the state (Zazueta 1995). This has usually resulted from the government’s lack of ability to provide basic facilities such as health and education. Holmes and Scoones (2000) observe that since the 1980s, these organizations have begun to take on a greater advocacy and collaborative role, for example demanding that citizen’s voices be heard during the formation of government regulations and policies. According to Zazueta (1995), the role played by NGOs in awareness raising on critical issues has expanded the environmental knowledge of the public and policymakers alike. NGOs often bring expertise, commitment, and the public’s views of issues to the policymaking process. They also provide early-warning and information-gathering services that help in setting the policy agenda and carry out independent monitoring of policy implementation. NGOs bring to policymaking a much greater range of information, perceptions, and potential solutions than official bodies could hope to generate on their own, since they work more closely with people on the ground. These functions are increasingly valuable to governments in developing countries as more of them are elected by popular vote and thus depend on developing policies to meet the needs and aspirations of the people they serve to stay in power (Tamang 1994). According to the NGO Freedom House, 122 of the world’s 192 nations were electoral democracies in 2006 (Puddington 2006).

2.3. Institutionalizing participation

In places where there have been social movements to empower local citizens, such as in Indonesia and Thailand, this role has frequently been officially recognized by policymakers. In 1997, the new Thai Constitution ensured civil rights and civil liberties related to participation, including public participation in state decision-making processes, including policymaking. The provisions included guaranteeing the right to know (this was revolutionary in the sense that it requires bureaucrats to change their long entrenched unwillingness to share information with the public); freedom of the press; decentralization; and public involvement in natural resource management. Indonesia has made changes in this direction by devolving greater autonomy to the regions, allowing greater involvement of local-level authorities and of communities in resource management—and thus giving more power to the people (Institute for Global Environmental Studies 2005; Usman 2002).

The right to information and public participation on environmental policy matters has gained the force of international law through the United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (Aarhus Convention), which was adopted in 1998 and entered into force in 2001. The Aarhus Convention has so far been ratified by 24 nations in Europe and Central Asia and signed by 40 (APFED 2005).

Representatives of civil society and the private sector are increasingly involved in joint forums with governments, UN agencies, and international organizations such as the World Bank (Zazueta 1995). Some of the mechanisms deployed to encourage greater participation include dialogue and consensus building instruments such as public enquiries, referendums, citizens' juries, mediation, conventions, and roundtables. These and other participatory policymaking approaches are discussed by Meadowcroft (2004).

Although governments are making efforts to give more say to the public in decisions concerning them, participation is bound to be limited until more reflexive institutional forms emerge that are genuinely responsive to new ways of thinking and acting (Holmes and Scoones 2000). Many unresolved questions in the literature need to be answered before participation becomes fully integrated into policy processes and not some routine charade that governments perform to fulfill their obligations to donors or international treaties.

2.4. Participation in natural resource management

Governments are increasingly involving stakeholders in the management of natural resources, including forests and other protected areas. The importance of local and indigenous knowledge (LINK) has been acknowledged in international forums since the early 1990s. Co-management of protected areas is also now recognized as an important way of sharing responsibility and helping in conflict resolution. Indigenous or traditional knowledge can be especially useful in natural resource management since it has been accumulated, adapted, modified, and used by communities over several generations so as to minimize ecological damage and degradation (Institute for Global Environmental Studies 2005; Sawhney 1998). McLain and Jones (1997) suggest that local people often have a strong dedication to the well-being of their local ecology and possess an intimate knowledge of its socio-ecological particularities. Indigenous knowledge thus provides a more suitable base for management of resources at the local level than those defined by central governments, and can enrich and complement scientific knowledge and techniques of resource management. The importance and potential of this knowledge has been repeatedly emphasized in international discourse for achieving sustainable development in the past two decades, for example in Agenda 21 (United Nations 1992). Thus, the inclusion of civil society in traditional areas can improve the knowledge base for the design of policies by bringing into decision making more information and a wider range of experiences—both of which can contribute to more realistic policies (Holmes and Scoones 2000; Pelletier et al. 1999; Zazueta 1995). There are lessons to be learned from where participation has failed to improve the policies by addressing the causes of failure.

The value of indigenous knowledge and local communities' motivation to protect their natural environment is reflected in participatory management of protected areas, particularly when it is done

through nature-based tourism. Increasingly, community-based tourism—defined as the management of natural resources by the communities themselves or in conjunction with other stakeholders such as NGOs, government, and the private sector—is being viewed as a way of providing non-destructive management of protected areas (Hatton undated; Institute for Global Environmental Studies 2005; Mountain Institute 2000). McLain and Jones (1997) suggest that local people often have a strong dedication to the wellbeing of their local ecology and possess an intimate knowledge of its socio-ecological particularities as reflected by the case of protected areas management. Increasingly, community-based tourism is being viewed as a way of providing non-destructive management of protected areas (Hatton undated; IGES 2005; Mountain Institute 2000). Tourism helps to stop deforestation and poaching since protected areas that are well maintained—that is, have rich flora and fauna—attract the most tourists, and the presence of people inside the protected area deters poachers and illegal loggers (Sawhney 1998, 2003). Local communities can provide many of the needed goods and services to visitors, and can, if integrated with the management of the natural areas, actively protect the natural resources of protected areas (Moisey 2002). Community-based tourism in protected areas can enhance local prosperity as it generates supplementary income and increases employment opportunities. Given a chance to benefit from tourism, and a say in its management, people living in or close to a protected area come to value it more and see that protection of the resource will provide sustained benefits for them (IGES 2005).

The CAMPFIRE program in Zimbabwe is based on a philosophy of sustainable rural development that enables rural communities to manage and benefit directly from local wildlife. The Zimbabwean government in 1981 passed an amendment to the existing law that enables districts and local communities to benefit from wildlife resources. CAMPFIRE re-empowers local communities by providing them with access to, control over, and responsibility for natural resources, asserting the right to make decisions regarding those natural resources and activities that affect them, and providing benefits to local communities from exploitation of natural resources (International Institute for Environment and Development 1994). The five main activities under the CAMPFIRE program are sustainable trophy hunting, sale of live animals, harvesting of natural resources, tourism, and sale of wildlife meat.

3. Approach and methodology

3.1. Research question and hypotheses

The main defining theme of this study was the observed international policy trend of the retreat of “big government”—that is strong state control of a wide range of issues from national down to local level—and the greater co-optation of civil society into natural resource management. Seeing the increasing involvement of local communities and NGOs in the management of natural resources, this paper addresses the central research question, does people’s participation in natural resource management reflect a genuine and permanent change in the role of the state?

While we cannot know the future, this study works on the assumption that for the change towards co-optation of civil society into natural resource management to be permanent, participation must bring

genuine benefits for the government, the public, or both. The literature points to some likely areas of benefit. For governments, participation would bring attractive benefits if it reduced burdens on government. For communities, greater participation could allow them greater control and say in the management of their lives and environments. Thus the study tests two hypotheses:

Hypothesis 1: People's participation in natural resource management reduces demand on government resources.

Hypothesis 2: Participation leads to greater empowerment and mobilization of communities for effective natural resource management.

3.2. Data

Table 1. Details of the case studies used in the study on participation of civil society in management of natural resources

Subtheme	Case studies	Countries	Partner institutes
Promoting environmental education by NGOs	17	Indonesia, Japan	Indonesian Institute for Forest and Environment (RMI). Local research collaborators included: University of Indonesia, University of Gadjah Mada, Yayasan Sebahat Aqua, Ministry of Environment, Ministry of Education, Indonesia
Facilitating protected area management using community-based tourism	13	India, Indonesia, Japan, Thailand	Indonesian Ecotourism Network, Kasetsart University (Thailand),
Promoting local and indigenous knowledge-based sustainable resource management	16	Bangladesh, China (mainland and Hong Kong), Japan, Thailand	University of Hong Kong (China), Mahidol University (Thailand), National Institute for Environmental Studies (Japan), Bangladesh Resource Centre for Indigenous Knowledge, Centre for Natural Resources and Environmental Studies, Vietnam National University, Vietnam.

3.3. Analysis

The case studies were analyzed based on their individual content and then collectively, using a textual pattern-matching method as suggested by Yin (2002). The pattern matching identified and counted occurrences of some 540 variables that were expected to influence the success of an environmental policy. These were roughly divided into three groups: variables related to the different actors involved in the environmental policy and their roles and attitudes; variables related to the policy processes, such as formulation, implementation, evaluation, and revisions; and variables related to the content of the policy. The most significant patterns emerging from this exercise are included in the analysis below. A detailed description of the methodology used can be found in chapter 3 of this linked series of papers (King and Mori 2007).

4. Findings

4.1. Actor variables

The first set of variables studied in the textual pattern-matching exercise were related to the actors involved in the good practices and the roles they played. Selected results from the pattern matching on stakeholder and institutional actor variables are given in table 2. A large majority (85 percent) of the 46 case studies mentioned the involvement of stakeholders other than government, and a smaller majority (61 percent) mentioned the involvement of multiple stakeholders. This suggests that governments are increasingly involving non-government stakeholders in natural resource management and in sectors that were traditionally managed mainly by the government, such as education.

Table 2. Most frequently encountered stakeholder and institutional actor variables, as percentage of all case studies

Variables	Environmental education (n = 17) (%)	Community-based tourism (n = 13) (%)	LINK (n = 16) (%)	Total natural resource management cases (n = 46) (%)	All case studies (n = 139) (%)
2. Stakeholders	100	100	56	85	77
2.2. Civic engagement and public participation	100	100	50	83	75
2.2.1 Willingness to participate	100	100	50	83	73
2.2.1.3 Private-sector involvement	0	69	0	20	30.2
2.2.1.6 Formal public-private partnerships	35	85	0	37	24
2.2.1.7 Networking	100	46	6	52	33.1
2.2.1.9 Multiple stakeholders	88	46	44	61	37
3. Institutional factors	100	100	56	85	91
3.4 Funding source	53	92	38	59	68
3.4.1 National government	0	69	6	22	27
3.4.2 External sources	29	38	25	22	28
3.4.3 Local government	0	31	13	13	22
3.4.4 Private sector	12	15	19	30	35
3.4.5 User pays	0	6	0	13	21

Note: LINK = Local and indigenous knowledge-based sustainable resource management.

Of the 46 cases analyzed, 33 case studies had some element of people's participation in natural resource management. This varied from involvement in management of tourism activities in protected areas, coastal resource management, forest management, or forest regeneration projects to promoting environmental awareness and changing people's attitude and perception towards the environment and natural resource management. Thus, not surprisingly, governments are entering into partnerships with

the other stakeholders (37 percent of cases) and forging networks (52 percent) for carrying out development activities.

In the case of community-based tourism, governments have involved both the local people and the private sector in operating tourism activities, saving the government costs related to tourism management and for patrolling and controlling illicit activities inside the protected areas. Once given a stake with clearly defined roles and a share of the profits in tourism and protected-area management, people are willing to help in maintaining the areas' resources and in stopping others from damaging them. In the case of ecotourism in Ban Khao Lek village at Chalerm Rattanakosin National Park, Thailand, a joint management committee was set up between the park and the local people as a government pilot project for co-management of the park's resources. The committee created a communication platform between the park authorities and the local people, which helped to enlist local people's cooperation in the conservation of park resources.

Table 3. Most frequently encountered process variables, as percentage of all case studies

Variables	Environmental education (n = 17) (%)	Community-based tourism (n = 13) (%)	LINK (n = 16) (%)	Total natural resource management cases (n = 46) (%)	All case studies (n = 139) (%)
4. Policy formulation process	6	8	88	52	78
4.2 Formulation phase	0	69	75	46	65
4.2.7 Screening of policy impacts	0	15	0	4	21
6. Policy implementation	6	100	50	48	79
6.6 Ease of implementation	0	62	19	24	47
6.6.4 Technical support for implementation	0	62	19	24	40
6.6.4.1 Capacity strengthening	0	38	19	17	24
6.6.4.2 Awareness raising	0	54	0	15	32

Note: LINK = Local and indigenous knowledge-based sustainable resource management.

Table 4. Most frequently encountered policy content variables, as percentage of all case studies

Variables	Environmental education (n = 17) (%)	Community-based tourism (n = 13) (%)	LINK (n = 16) (%)	Total natural resource management cases (n = 46) (%)	All case studies (n = 139) (%)
8. Policy content	24	100	56	57	78
8.1 Command and control	0	69	0	20	34
8.1.4 Permits and restrictions	0	62	0	17	25
8.2 Market-based instruments	0	77	0	22	48
8.2.1 Aimed at producer behavior	0	54	0	15	32
8.6 Creation of new markets	6	92	25	37	29
8.6.2 Facilitating market creation	0	62	0	17	14

Note: LINK = Local and indigenous knowledge-based sustainable resource management.

The good practice on coastal marine resources and security of the poor and landless in Bang Khunsai and Ban Laem, Thailand, was a good example of how people can organize themselves into associations for the protection of natural resources on which their livelihoods depend and thus successfully protect the resources from overexploitation while continuing to generate income from them for the local communities.

As for funding, the cases illustrated that resource conservation efforts do not always require government funding. Of the cases analyzed, only 22 percent had government funding (mostly community-based tourism cases). In the rest, NGOs and communities used their own labor and funds for the management of environmental resources. Most of the cases studies in environmental education illustrated that NGOs used their own funds or funds from international organizations to support their activities, while none of the cases indicated receipt of funding from the national or the local government. In the case of a wetland in Hong Kong, World Wildlife Fund Hong Kong, with the consent of the government, took over active management of the site and implemented a preservation program (Lee 2003). In the LINK cases, activities were carried out by the people themselves or with external assistance from source other than the government. In some cases people were willing to pay for reviving and maintaining sustainable practices, as in the case of Shishitsuka-oike pond, Ibaraki, Japan, where local people started growing rice organically in abandoned paddies and then marketing it (Aoyagi 2004).

4.2. Process variables

The occurrence of the most frequently encountered process variables is shown in table 3. Compared to all the cases analyzed under the RISPO project, the cases analyzed in this paper reflect less attention being given to policy formulation (52 percent) and policy implementation (48 percent), implying a greater need on the part of governments to promote stakeholder participation in natural resource management. Analysis of the different steps involved in the policy formulation process reveals very little attention being paid to policy formulation processes and screening of potential policy impacts,

suggesting the need for more careful weighing of options before proceeding. Overall, there is evidently a need for additional attention to be paid to the formulation, implementation, and screening processes in order to increase the chances of policies aimed at encouraging people's participation being successful .

4.3. Policy content variables

The occurrence of the most frequently occurring policy content variables is shown in table 4. A surprising feature is the contrast between the policy measures adopted in environmental education and those adopted in the area of community-based tourism. Command-and-control measures predominate in community-based tourism, while the cases in environmental education reflect a complete lack of such measures. This points to the potential for intervention by stakeholders other than government in natural resource management, especially related to community-based tourism. On the other hand, more intervention by government in LINK and environmental education could provide NGOs and local communities with incentives to strengthen their role in natural resource management.

Market factors are becoming increasingly important with local people's growing involvement in resource management. Market-based instruments (77 percent of all cases) and creation of new markets (92 percent) appeared frequently in the cases of community-based tourism. Promotion of tourism provides financial benefits to people living in and around protected areas, helps in preventing conflicts, and also leads to better protection and monitoring. People have helped in reporting illegal encroachment and in garbage collection in the protected areas and have an opportunity to participate in tourism activities. In developing countries, the government usually does not have enough resources or manpower to monitor and patrol protected areas sufficiently. Thus local people's involvement provides dual benefits, both to the government and to the local people.

5. Conclusions

Multiple stakeholder involvement in natural resource management has been strongly promoted over the last few decades. One reason for this is that experience has shown that natural resources cannot be managed by the government or the local people acting alone. The cases analyzed in this study illustrate the growing trend of multi-stakeholder participation. The cases also reflect that in a few places participation has replaced the traditional role of the government. In the environmental education cases, NGOs had not only used their own resources but had also provided vital training to the local people and to government officials on the importance of protecting the environment and natural resources. In the case of community-based tourism and LINK, the good practice case studies reflected that participation had worked: local communities' involvement had resulted in better management of resources. Though not going all the way, the public participation analyzed in this study had proved to be resource-efficient for the government and thus supported hypothesis 1, that "People's participation in natural resource management reduces demand on government resources."

On the other hand, local people's involvement in a policy, plan, program, or project gives them a greater sense of ownership of the process and its outcomes. Agreements are always likely to be more sustainable if they emerge from wider understanding and a genuine sense of ownership. This reduces the risk of subsequent conflict, damage, and resistance (Interact undated). The good practices in the areas of

LINK and community-based tourism confirmed that when given a stake in the management of resources, people tend to manage them much better, either by sharing the government's responsibility or by taking over the government's role entirely. Though legal transfer of rights has not taken place in community-based tourism and the control still rests with governments, governments have provided room for people to express their opinions and to get involved in tourism and management activities, thus supporting hypothesis 2, that "participation leads to greater empowerment and mobilization of communities for effective natural resource management."

Thus participation not only improves governments' resource efficiency but also helps in building trust between the government and the public and in giving people more say in regulating and managing resources. For developing countries, where people still depend largely on natural resources for their livelihoods, participation helps in building synergies between the different actors and can be effective in sustainable management of resources. Despite some cases of failures of policies related to participatory natural resource management, the findings from this study should encourage governments to consider other areas where they could involve people in natural resource management, including coastal resource management and production forestry.

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