

**AFTER THE ROMANCE:
Rethinking Community, Participation, and
Sustainability**

A Review of Philippine CBNRM¹

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Chapter 1. Introduction: CBNRM as a Mode of Environmental Governance

Community-based natural resource management (CBNRM) has become a key strategy in addressing the deeply linked issues of rural poverty, environmental degradation, and democratic governance. Indeed, CBNRM is often held up as an ideal model of environmental governance. As the Philippines was an early pioneer in adopting CBNRM, the Ford Foundation's Manila office sponsored a review of the Philippine CBNRM experience in the irrigation, forestry, and coastal sectors.³ The final project synthesis report provides both excerpts and analyses of project findings. This paper is based on the first three chapters of that report. For the full set of project papers, particularly the three sectoral reports, the reader is directed to the working paper series entitled *Philippine CBNRM Review*.⁴

Environmental Governance

The environment is increasingly recognized as a lynchpin for concerns about poverty, injustice, and democracy. The intimate connection between the well-being of nature and of local communities has been a frequent theme in environmental literature, policy, and programs worldwide in the past twenty years. The triumph of this notion is evident in the global effort to define and promote "sustainable development." The strong connection between the environment and civic political action is also beginning to be noticed. The surge of demands for popular participation in the U.S. in the 1970s was fueled in part by the new and growing environmental movement. Elsewhere in the world, one also finds a pattern of environmental crisis as a spark for political action by average citizens. Demands for redress of environmental problems are often a path to more participatory democracy.

In the Philippines, one can point to a number of links between resource depletion, poverty, and injustice. The penetration of the increasingly global market, pilloried as cause and hailed as solution, is clearly one important link. However, the market is neither an independent nor a single entity. It remains important to focus on who has power over local, national, and international markets in natural resources (Watts 2000). Corroborating this point, assessments of resource depletion in the Philippines generally point to the impact of the nation's political and economic power-holders as the primary underlying force (Vitug 1993; Kummer 1992). In the natural resource-based economy of the Philippines, resource control has been a major strategy for maintaining political control. Reciprocally, traditional politics in the Philippines has been oriented toward maintaining elite control over the nation's land and other resources. This has created a dualistic economy, where the welfare of the elite and the masses are not just separate but often in opposition. In this context, growth may actually reinforce inequity rather than reduce it (Jensen 1993).

At the level of policy and programs democratizing environmental governance, the Philippines has much to be proud of. The nation has been a pioneer in efforts to devolve control of rural

³ This report will refer to them by their current acronyms: PIM (participatory irrigation management), CBFM (community-based forest management), and CBCRM (community-based coastal resource management).

⁴ Philippine CBNRM Review: Working Paper Series. 2002.

development to farmers. Its experiment with participatory irrigation in the 1970s provided a model for much of Asia. Its early successes with community-based coastal resource management on Apo and Sumilon islands similarly provided inspiration for other countries. Its progressive legislation on social and later community forestry has continued to give the Philippines a prominent position in the growth of community forestry in Asia. The 1998 law on indigenous peoples' rights gave indigenous communities enormous powers to (re)claim territorial control. Progressive policies continue to emerge.

The problem, at one level, is the inadequate translation of these policies and programs into broader improvements in the well-being of both rural peoples and nature. The late-twentieth-century story of inexorable deforestation, declining fish catch, and supply problems of both water and food has provided a pessimistic counterpoint to the moments of optimism represented in the triumphs above. The palpable threat to the welfare of both upland and lowland people caused by this steady resource depletion has sparked increasing interest in environmental issues by Philippine advocates of social justice. The problem, at another level, is a political economy that perpetuates control of economic assets and political power by a small grouping of wealthy families. The problems of democracy subverted are thus intimately tied to those of disappearing natural resources and continuing widespread poverty and inequity.

The impact of political ecology⁵ on longstanding problems of social justice, democracy, and conservation is particularly clear in the Philippines. Natural resource access and control is a fundamental path to rural livelihoods that are both adequate and secure, especially for the poorest members of rural society. At the same time, it is a path to power for the elite. Natural resource governance is a fundamental political issue in the Philippines and a crucial avenue for promoting civic participation. A focus on environmental governance, a term that captures the institutional working out of these links between political power and the natural and social worlds, is a necessary strategy in addressing these problems.

The Rise of CBNRM

CBNRM is both an approach to resource management and a social-political movement. As the former, it can be argued that it follows on community management initiatives that have existed in small-scale forms in Asia and elsewhere for centuries. However, the rise of significant state support and international funding for such initiatives is a phenomenon of only the past two decades. It is the success of CBNRM as a movement that is largely responsible for this shift. The notion of CBNRM arose during the 1970s and '80s as an outgrowth of the participatory development model and its intersection with environmentalists' new agenda of sustainable development. This latter agenda had arisen from environmentalists' recognition that the needs of the rural poor had been ignored at great cost to their welfare, as well as to the condition of the natural resource base.

In addition to this new support for the rights and interests of the rural poor, the rise of CBNRM was also a consequence of frustration over state inability to manage the vast natural resources under its control. State incapacity was attributed to lack of financial and/or human resources,

⁵ Defined for the purposes of this study as the political economy of natural resource control.

corruption, and lack of political will, among other factors. After several decades of financial and technical support, with little demonstrated improvement in the pattern of destruction or degradation of the resource base, bilateral and multilateral donors were ready to look elsewhere. CBNRM's notion of community stakeholders was highly complementary to the increasingly favored notions of decentralization and privatization in the 1980s (the era of structural adjustment). Because of the strength of this particular combination of factors, support for CBNRM, particularly in forestry, grew relatively quickly.

The Philippines was an early leader in this field. As noted above, early experiments in the 1970s devolving management to irrigators' associations became a model for communal irrigation elsewhere in Asia and influenced the development of community forestry in the Philippines. Community-based forest management (CBFM) has benefited from considerable funding and government support over the past two decades. The World Bank, USAID, the Asian Development Bank, and other donors have provided considerable support for CBFM, and in 1995 CBFM was enshrined as the nation's core strategy for sustainable forest management. More recently, similar support has been growing in the development of community-based coastal resource management (CBCRM) regimes. And lastly, protected areas are a new category of resource area for CBNRM; community-based management schemes are a growing component of protected area management. Projects in this area are particularly challenging, as the livelihood needs of residents have to be balanced with a very high priority on biodiversity conservation.

A Brief History of CBNRM⁶

Pre-Spanish period – Indigenous natural resources management systems

- Communities (barangays, tribes or clans) were politically independent of each other. There was low population density, and the communities were largely isolated from one other; each with its own customs and practices. The barangay or tribe was the supreme political unit, laying claim to natural resources either as community property or private property (of the Datu or individuals). Natural resources were either *res nullius* (therefore open for use by anyone) or claimed (used/ controlled/ managed) by the community or by individuals directly. Control of labor (people) was a far greater concern in this era than control of land and resources.
- Today there are a few natural resource management practices that may be traced back to pre-Spanish times – e.g. the Ifugao practice of building and irrigating rice terraces, the maintenance of *muyongs* by the Bontoks, fishing practices of the Mataw fishermen. It is difficult to say that the practices observed now, or as recorded by researchers in the past, were the same during pre-Spanish times (likely to have changed over 400 years). At best, the indigenous NRM practices that survive today hint at what may have been the community management traditions then.

Colonial to Commonwealth period: consolidation of management control over natural resources

- Barangay/ tribal political system was supplanted by a centralized colonial government system. Spanish laws on management and control of natural resources were introduced, eventually replacing traditional management systems.

⁶ For specific individual histories of CBFM, CBCRM, and PIM, see the full team reports in the working paper series. This outline is derived from the team reports and other historical sources.

- In theory, the Crown claimed sovereignty from the time the Spaniards arrived, but it was not until the late 19th century that direct government administrative structures and regulations were put in place (e.g., Bureau of Forestry, Law on Waters). In the 17th and 18th centuries, control over agricultural or natural resources was more often exercised by individuals or groups favored and licensed by the Crown. However, a community could still exercise management control over resources, as in the case of the establishment of *zanjeras* at the end of the 18th century. The *zanjeras* were self-initiated, self-contained, community-managed systems for ensuring the supply and equitable allocation of irrigation water.
- Colonization brought about expanded trade and connections to international markets. Demand for timber (for ship-building) made forestlands a particular concern of the Spanish colonial government. Timber and other natural resources were declared as property of the Crown. Large-scale (commercial) exploitation of timber resources, and even fishery resources, was reserved for the elite. Traditional/ subsistence use was allowed but increasingly regulated.
- Centralized state control over natural resources was maintained and expanded during the American and Commonwealth periods with the growth of a modern bureaucratic state.

Post-war period through seventies: height of commercial exploitation

- A tremendous increase in demand for timber and other products occurred in this era -- initially for use in domestic and international post-war reconstruction, and later to fuel economic growth in the U.S., Japan, and elsewhere.
- The administrative system for controlling and allocating privileges to exploit natural resources remained in the hands of the state. Policy focus was to encourage investments in resource extraction and agricultural production (Green Revolution, Blue Revolution). Policies favored those who had capital, so money was made by a privileged few.
- Government attitude towards resident communities was to regulate traditional/ subsistence use and criminalize *kaingin*, providing increasing penalties over time.

Seventies through early eighties: period of experimentation with community management

- In the seventies, policies still favored maximal resource exploitation, but a number of resource assessment studies confirmed a growing concern that timber and fishery resources are being depleted at an alarming rate.
- A shift in state attitudes toward marginal upland communities begins. Practical reasons: realization that criminalization of *kaingin* and increasing restrictions on traditional uses were not working to halt the depletion of resources. Political reasons: recognition that restrictions on traditional uses (which were the main livelihood activities) could fuel social unrest as the upland population grew. Appears that Marcos used CBFM (its 1970s predecessor -- *kaingin* management regulations, later ISF) as a tool to broaden mass support, suppress social unrest yet control activities in the uplands.
- Era of external (international) interest in and funding for participatory development projects, as well as conservation-oriented projects. In the uplands, funding of large government projects such as World Bank-supported CVRP, which incorporated community organizing as method for involving communities in development and conservation activities.
- NIA concern for management effectiveness in irrigation leads to willingness to experiment with participatory irrigation management, with Ford Foundation support. Participatory approach in irrigation then serves as model for the Upland Development Program.

- In forestry, convergence of resource conservation concerns, participatory development objectives, and external funding support gives rise to ISF (later CBFM). In coastal, small experiments by Silliman University involving communities in conservation at Sumilon and Apo Islands.

Post-EDSA through the nineties: period of expansion and challenges to institutionalization

- Policy environment favorable to participatory management: 1987 Constitution enshrined concepts of devolution, preferential use of natural resources by marginalized sectors, indigenous people's rights to ancestral domains. Translated to laws and policies: Local Government Code, NIPAS, Fisheries Code, Mining Act, IPRA, CBFM, etc.
- Inflow of loans and grants to fund rehabilitation and resource conservation projects, either through the government (forestry/uplands, protected areas) or through the NGOs (flourishing of CBCRM projects). Growing base of experience, many small success stories.
- Explosion of NGO involvement in participatory development, as prior concerns for political-civil human rights evolves in post-EDSA period into working for social-economic needs/rights of marginal sectors. Community organizing method carried over to new work.
- Scaling up challenges: taking note of local successes in CBCRM, government and donors package huge programs: FSP, CEP, etc., but questions arise whether the big programs adhere to CBNRM principles
- Huge decentralization program in 1990s, but limited effect on NRM as DENR devolves very little responsibility and authority to LGUs.

The premises and promises of CBNRM

Give local people a stake in the future availability of the resource, and they will conserve it. That, in essence, has been the rationale for these shifts in the management of forest, coastal, and groundwater/riparian resources. It is an argument with enormous common-sense appeal, particularly in light of the failure of central government management. CBNRM's premise has been that sustainable development (specifically, the combination of resource conservation and meeting local consumption needs) is more attainable when the community is managing the resource. And in managing the resource, the community is empowered and democracy strengthened.

This promise of sustainable development with empowerment is a compelling one. It speaks simultaneously to more effective conservation and greater social justice. CBNRM has thus seemed the answer to a variety of interested groups -- international donor institutions, international and local conservation organizations, international and local supporters of participatory community and/or rural development, indigenous people's rights supporters, proponents of decentralized governance structures, and an array of others. Raymond Williams' oft-quoted phrase about the word "community" being a "warmly persuasive word ... [that] seems never to be used unfavorably" (Williams 1976: 15) could equally well apply to CBNRM.

At the project level, CBNRM generally pursues a set of goals that includes empowerment, conservation of resources, and improving the economic well-being of poor, rural people. In pursuing these goals, as Zerner (2000) has noted, CBNRM has two core elements: it is community-based, and it is market-linked. Evaluations of project difficulties in the Philippines

have tended to focus more on the latter, on how to improve the effectiveness of the market's potential for beneficial impact. This tends to lead to concerns for either improving tenure arrangements or improving marketing strategies and supportive infrastructure. (These concerns are examined in Chapter 4 of the synthesis report.)

Missing from much of the literature on Philippine CBNRM is an exploration of the first element, namely what it actually means to be “community-based.” Most of the governance-related issues, however, are deeply tied to this aspect of CBNRM. Questions of top-down participation programs, of problems with institutionalization, of the relationship of CBNRM to broader democracy and social justice movements, of local versus national identity all are integral to the intersection of CBNRM with governance concerns. In addition, basic economic goals of improving equity and livelihood opportunities are intimately related to identifying who are the targets of such opportunities. Anecdotal evidence made it clear that there are a number of definitions of “community” in operation, and this was assumed to have clear repercussions on the outcomes of such projects. This report therefore takes the problematizing of community as its starting point, the question underlying and linking all others.

Scope of the Project and Contents of the Report

Focus and Assumptions (Before and After the Research):

The CBNRM Review project was not premised on proving that CBNRM does or does not “work.” Nor was it interested in providing an ultimate definition of CBNRM (though we do discuss definitional issues throughout the report). Rather, the interest was a pragmatic one – namely, to make sense of the model's strengths and weaknesses for the Philippine context. However, in the course of analyzing the three team reports, the project coordinators have ended up with an argument for a particular view of CBNRM in light of the problems identified. The final chapter of the synthesis report discusses the institutional framework we see as necessary.

CBNRM in the Philippines is a term applied both to community-based conservation and conservation-based community development.⁷ The confusion of ends and means is an obvious problem. Our approach to this dilemma has been to assume that, being natural resource management, the point is conservation; this is logically the true end of CBNRM. In practice, however, it is clear that natural resources cannot be separated from the people who are dependent on them for survival, or who consider the resources as part of their way of life. Sustainability is and will remain a contested definition balancing human needs and the health of multiple ecosystems. Regardless of the definitions science works out (and hopefully those definitions will continue to improve our understanding and management capacity), the decisions on what happens are made by humans through whatever decision-making structures exist. Sustainability is defined in practice through political processes (Susskind 1996).

As a pragmatic policy strategy, we would argue that NRM should more explicitly focus on people (and power) – precisely because of the inseparability of people from the resources. Thus,

⁷ CBFM is largely conservation-oriented, while the priority of most CBCRM projects is community development. However, the coastal sector also has a wide range of efforts (not all explicitly labeled CBCRM) that focus primarily on conservation.

while asserting that conservation is the ultimate end of CBNRM (the end that sets this apart from other programs that prioritize poverty alleviation and social justice), we argue that the only way to get there is through the messy maze of local political and institutional struggles. Working through this maze is therefore the ultimate focus of the project's final report.

Research Design:

Given the considerable amount of existing documentation on participatory irrigation, CBFM, and CBCRM, the project was focused on reviewing this large quantity of secondary data and relating it to current debates in the literature on CBNRM. The distinctiveness of the study is to be found in its attempt to make comparisons across all three sectors and to explore the underlying premises that make all of these "community-based."

As noted above, the notion of community was identified at the outset as an area of inquiry. Related to this was an interest in examining the role of local governments in CBNRM projects, as key actors that can alternately be considered part of the community or part of the state. In addition, several areas of focus came out of the many interviews conducted during the design phase. One of the most important was the need to examine the current status of non-project, or self-initiated, examples of CBNRM. Indigenous examples are often cited as models for current attempts to institute CBNRM. Thus, it is particularly valuable to learn what factors enable a community to create and maintain its own rules for resource management and to see how these self-initiated systems have adapted to changes such as migration and the penetration of local and global markets.

The research was designed and conducted with considerable participation from a range of local practitioners and researchers of CBNRM. A series of interviews and focus group discussions was held with practitioners around the country during the design phase. This process identified important studies and issues and generated a set of nine questions to form the initial analytic framework of the study. Three teams of researchers were brought together during this period, one for each ecosystem. Two papers on specific topics were also commissioned.⁸ After a systematic review of the documentation on each issue, each team sought validation of their hypotheses and further information through field interviews and convening of a number of fora for practitioners. The questions were consolidated for the write-ups into three broad chapters on community, governance, and sustainability. Each team produced a report of their findings, and these three reports form the base of this synthesis report. This report breaks the governance area into separate considerations of participation and decentralization.

⁸ The forestry team consisted of Ernesto Guiang and Salve Borlagdan of the Institute for Philippine Culture (IPC) at Ateneo de Manila University and Juan Pulhin of the College of Forestry of the University of the Philippines-Los Banos, with contributions by Oliver Agoncillo of IPC. The coastal team consisted of Elmer Ferrer of the CBCRM Resource Center at the University of the Philippines-Diliman, Annette Juinio-Menez of the Marine Science Institute of UP Diliman and Elmer Mercado of USAID Ecogovernance Project, with contributions by Sol Dalisay of the Anthropology department of UP Diliman. The irrigation team consisted of Sylvia Bagadion-Engracia and Carlos Isles of IPC and Honorato Angeles, Romeo Saplaco, Cora Coloma and Aurora Paderes of the Water Resources Center of Central Luzon State University. Additional commissioned research was provided by Antonio LaVina of World Resources Institute and Vicente Yu of Friends of the Earth.

The research is meant not simply to explore answers to a specific set of questions but also to promote discussion across the three types of area under study. Thus, in addition to the research reports, the project has also created a comprehensive collection of materials pertaining to CBNRM in the Philippines (available in the libraries of the project's partner institutions) and an annotated bibliography of these materials.⁹

Contents of the Overall Report

We have divided our overall analysis into three parts. The first analyzes what it means to be *community-based* (assuming the purpose is natural resource management). This is presented in two chapters that review relevant literature, synthesize project findings, and offer a set of strategic or operational considerations. The second part has a similar two-chapter structure of issues and approaches; it looks at what is necessary for *sustainable natural resource management* (assuming the mode is community-based). And the third tries to tie the two previous discussions together with some practical suggestions for an improved institutional framework for CBNRM in the Philippines.

The project attempts to bridge the gap between the practitioner and the academic communities. It therefore brings both project and theoretical literature together. While hoping to make a contribution to the theoretical literature, we want to make clear that the project is primarily interested in practical application of its findings. Our priority is to assist those attempting to bring CBNRM and other forms of decentralized, participatory NRM into being.

Some Notes on Definitions and Illustrative Cases

"Community-based"

We begin with a very broad categorization of CBNRM -- any project that labels itself as such is included, as are programs and projects for NRM that use the participatory approach. As becomes clear, there is great diversity in principles and approaches in these projects. Towards the end, as we explore the dimensions of what it means to be simultaneously CB and NRM and propose a framework, we limit our understanding of CBNRM to those that fit the framework.

In this context, we make a distinction between community resource management (CRM) and *community-based* resource management (CBRM). This distinction will be discussed further in the chapter on community, but it is important enough to merit a brief note here. By CRM we mean direct management of resources by a local community. By CBRM we mean a range of mechanisms which enable local control and benefit-sharing but not necessarily direct community management. The relative efficacy of one mode over the other depends considerably on issues of scale and of resource type.

This issue is of particular salience in the coastal setting, where a debate over the meaning of CBCRM exists. CBCRM is commonly understood by its adherents as direct management by

⁹ The irrigation collection is available at IPC (Ateneo de Manila) and at the Water Resources Center (Central Luzon State University). The forestry collection is available at the UPLB College of Forestry and at IPC. The coastal collection is available at the CBCRM Center of the College for Social Work and Community Development, UP Diliman.

local communities (organized into POs).¹⁰ Instances where a local community organization shares power with government instrumentalities are often described as *co-management*. We try to limit our use of the term “CBCRM” to the meaning it currently has, but we do include co-management models in our discussion. We do not wish to suggest that the (largely NGO) proponents of CBCRM must change their focus. However, we do wish to argue that in the larger landscape, if it is to achieve the enormous shifts in power and resources implied by the term, the community-based model needs to be able to be applied across a wide range of scales. Direct community management may be appropriate at smaller scales, but at larger scales it obviously becomes problematic.

“NRM”

Participatory irrigation management (PIM) does not contain a natural resource conservation dimension. Water flow is approached primarily with respect to efficiency and distribution concerns, not the adequacy of supply from the surrounding watershed. Strictly speaking, therefore, it is not NRM, but management of an infrastructure – the irrigation system. Nevertheless, we have included it because a number of lessons from its experience in participatory resource management are highly relevant to CBNRM. In addition, it is a direct predecessor of social forestry in the Philippines. And lastly, we would expect that in the not too distant future, the direct link between irrigation and watershed conservation will need to be an aspect of irrigation management at all scales.

Illustrative Cases

Where we discuss a particular case without citing a source, the information comes from site visits undertaken by the coordinators in 1999 and 2001. These cases were not picked at random; they were selected as some of the most successful or innovative instances of CBNRM. They are cited here in order to link our theoretical treatments with actual field experiences. We wish to emphasize that if we critique them here, it is not to find fault or belittle their achievement. Quite the reverse, actually. The point is that many of their struggles related to structural or policy problems, and therefore it is all the more remarkable that they have achieved their successes.

Acknowledging Limitations and Pushing Boundaries

This study pulls together a large body of literature. In reading and writing reports, much important information gets left out. One reads of organizations being formed, of activities being conducted, but the messy texture of real life is absent. You don’t hear the voices of the poor as they struggle with the powerful, the desperation of those who will leap at any opportunity to improve their livelihood, the commitment and pride of those who have given much and have seen it make a difference, or the anger and skepticism of those who were not part of a project or who saw their efforts thwarted by forces beyond their control. You don’t hear the stories people

¹⁰ A “people’s organization,” or “PO,” is the Philippine term for what is often called a community organization (CO) in other countries. It is a ubiquitous label for a group of local residents organized for a particular purpose (setting up a cooperative, applying for tenurial rights, participating in a project, etc.). Most POs are formally registered with the government as legal entities. While a PO is run and led by the members, initial formation is almost always facilitated by an NGO or a government agency through targeted community organizing programs.

tell, the issues they raise. In conducting this research, we (the researchers and coordinators) have heard a few of those voices, but we do not claim to speak for them. Most of the project's information comes from observers, not community members, and this fact should be kept in mind.

In light of the predominance of secondary data, it should be emphasized at the outset that the project findings are *suggestive* rather than *conclusive*. Many of the questions with which the project began could not be answered by available data. And the data that was available is sometimes of uncertain reliability. Areas for further research and experimentation are indicated throughout the report. Finally, we wish to emphasize that some recommendations are intentionally provocative. They are meant to provoke discussion and experimentation, not provide the final word on a subject. More concrete solutions will require both field testing and observation.

The study thus has some clear and admitted limits. But in other respects it pushes existing boundaries. The project's ambitious scope has forced us to focus on the larger picture, a viewpoint rarely found in the project literature. There is a rich wealth of detail in current writings on Philippine CBNRM, particularly in terms of case studies. But there are few analyses that aggregate and examine the implications of this information. And none that has looked across the different natural and social environments in which CBNRM takes place in the Philippines. Most of our own insights have been gained in the struggle to put things together in this larger perspective. In sharing our insights, and in synthesizing the insights of others, we hope to help push forward the next phase of participatory, decentralized environmental governance in the Philippines. Much has been accomplished, much remains to be done.

Chapter 2. Conserving Natural Resources: Core Issues in *Community-Based Management*

Community and participation are concepts at the center of the CBNRM model, inwardly expressing core values and externally providing operational guidelines. Community-based management is largely a synonym for participatory management.¹¹ However, “community-based” is perhaps more useful as a term because it makes the power relations of such management immediately obvious. CBNRM makes strong claims to address social injustice and support genuine democratic governance. In the Philippine context, any effort at such redress must deal immediately with the nation’s extreme inequities in social, economic, and political life. Transferring or sharing power does not come easily, and this is a major factor in the struggles of CBNRM and other participatory programs to accomplish their goals. Power is the invisible thread linking many prospects and problems in CBNRM. Central as these concepts are, it is clear from a survey of both the theoretical and project literature in the Philippines that they are vaguely defined and unevenly applied.

In this chapter, we examine various ideas and practices concerning community, participation, and power-sharing. In community, we look particularly at the notion of homogeneity and other bases for social cohesion. We note the problems with the current prevailing equation of community with a people’s organization (PO). We then look at various understandings of participation, particularly the notion that participation must have power, or more specifically the altering of power relations, at its core. In this section, we assess the major CBNRM programs at the macro-level in terms of their approach to participation as power-sharing or efficiency. Recognizing that CBNRM will continue to be implemented through projects (though not exclusively), we look at participation in this micro-context as well. Finally, we look briefly at current debates over where power should lie in CBNRM and how it should be shared.

Rethinking community: the uses and problems of prevailing myths and practices

Recent assessments of the notion of community in CBNRM have pointed to the largely undefined (though generally positive) nature of this core concept. At the crudest level, community tends simply to mean a grouping of people in a particular rural locale. Implicit in much of the CBNRM literature, however, is the image of a community as a relatively small, homogeneous, and isolated group, which left to its own devices would manage resources sustainably and equitably (Agrawal 1997; Agrawal and Gibson, 1999; Brosius et al. 1998; Li 1996; Watts 2000). The reality in the Philippines and elsewhere, of course, is far more complex.

Homogeneity and other myths

The myth of the homogenous community is undercut by the realities of difference in the Philippines. Social scientific research has highlighted significant economic, cultural, gender, and other differences within local communities that shape the not-necessarily equitable access to resources and other benefits. As one legal anthropologist has put it:

¹¹ See Korten 1986 as an early description of community management. The full spectrum of definitions of CBNRM will be discussed later in this chapter.

“All societies and cultures are riven by divisions. In the Philippines, relevant divisions which divide communities are male and female, those favoring a given course of change and those who do not, rich and poor, literate and non-literate, different ethnicities, the politically powerful or connected and those who are not, old and young, the multi-lingual and those who speak only their own language, religious converts and non-converts, those with access to resources and those who have less or no such access, families, clans, and lineages, the aggressive and the pacific, old-time residents and newcomers, among others. These divisions are rarely the focus of Philippine ethnographic studies, reflecting complicity in the myth of homogeneity.” (Gatmaytan, 2000: 56)

In CBNRM, not only is it assumed that the community is homogeneous in composition, but that in particular all the members share a common interest in the conservation and utilization of the natural resources. A quick look at the above list of differences should make it clear that in most communities common interests in resource use are the exception rather than the rule.

A vision of small social groupings living undisturbed in remote areas is implicit in much of the discussion of early community-based management. An important corollary to this vision is the supposition that, if left alone, the natural tendency of the community is to practice sustainable use of natural resources. It is under this assumption that advocates of CBNRM have often looked to examples of indigenous practices that have survived into the present as models of CBNRM. But these assumptions of isolation have also come into question. Historical research has demonstrated in a number of instances the long existence of market relationships for remote communities previously considered isolated.¹²

Equally important, the myth of the changeless community is belied by the constancy of change. No community is a static entity; trade, urbanization, disaster, and opportunity have kept Filipinos moving around the islands, altering and being altered by their new communities. Even the indigenous practices used as models of sustainable management have evolved as a consequence of interactions with other communities, governments and the market. Philippine local communities thus come across as complex social formations with a variety of internal differences and a wide array of external relationships to state and market.

Uses and Dangers of the Myths

While community may be inaccurately and overly simply portrayed in CBNRM literature, it is important to remember the usefulness of such a portrayal in larger policy struggles. This is a reflection of the politics of CBNRM as a movement. Li (1996) notes that rather than being a naïve assertion of ultimate reality, this simple and positive notion of community has been a weapon in a larger battle over property rights and access; a battle fought by local peoples and their advocates against larger political and economic forces at the national and international levels. “Images of successful intact resource-managing communities are used as a basis to advocate stronger legal rights and government recognition for community-based systems, and a shift of resource control away from the state and private capital towards the rural people whose

¹² The Tagbanua of Palawan, for instance, were trading almaciga resin and other products with Chinese merchant ships as early as the first millenium A.D. [Eder 1997]

livelihoods depend most directly upon those resources.” (Li 1996: 504)¹³ There are times, clearly, when community is best left in its ideal formulation.

These myths have remained largely unchallenged and have been used unquestioningly as a basis for policy formulation. However, given the array of favorable policies in the Philippines concerning local participation in decision-making and local community resource access and control, it can be argued that the battle over policy has largely been won. The issue now is how these policies can be operationalized; how participation, access, and the benefits that flow from them can be made real. It is in this context that the simplicity and inaccuracy of the CBNRM movement’s ideal notion of community presents a danger rather than a strategic advantage.

Operational Dilemmas: the PO as the Community

Community has tended to be operationalized in Philippine CBNRM as either a people’s organization (PO) or a cultural/kinship grouping such as a clan or tribe.¹⁴ There are a number of problems arising from this model. Both these formations tend to reflect existing internal/local power differentials and thus are unlikely to alter local socio-economic inequities. Both also tend to exclude other poor and marginalized groups in an area, particularly distress migrants. In addition, the large scale of certain areas designated for CBNRM raises questions about the appropriateness of POs as proxies for “community.” Thus, issues of equity, representation, inclusiveness, and cohesion are serious challenges to the PO model of community.

Inclusiveness and Representation Across Scale and Resource Type

Of the three types of social-ecosystem under review, irrigated farmlands provide perhaps the most appropriate site for an equation of community with a PO. In *zanjeras*¹⁵ and the communal irrigation systems (CIS) patterned after them, the basic irrigation association (IA) is composed of farmers with contiguous lands needing irrigation. The *zanjera* or IA is a community created for irrigation system management, but the members also belong to other communities; in many cases, the farmers may have contiguous farmlands but actually live in different *barangays*¹⁶ (Philippine CBNRM Review: Irrigation Report, 2002). The IA or *zanjera* members work together to dig canals, set up a system of distribution, and maintain the canals. Several IAs or

¹³ See Lynch and Talbott, 1988 and 1995, for examples of this argument in the Philippines.

¹⁴ For example, Executive Order No. 263, establishing community-based forest management as the nation’s core forestry strategy, supports full and meaningful participation of “communities as immediate stakeholders.” It speaks of “participating organized communities,” which the implementing rules and regulations translates into “local communities as represented by their organizations” (Sec.1, Art. II, DENR Administrative Order No. 96-29). Completing the transition from community to PO, the rest of the IRR focuses solely on the participating PO which is entitled to incentives (including resource use rights) and responsibilities (which include developing and implementing equitable benefit-sharing arrangements among its members) with no mention of benefits flowing to the larger community the PO supposedly represents (Sec 3(iv), Art. II, DAO 96-29).

¹⁵ A *zanjera* (literally “canal”) refers to an indigenous irrigation association established in the Northern Philippines during the Spanish colonial period; they are generally considered exceptionally well-organized (Siy 1989).

¹⁶ The *barangay* is the smallest political unit with a legally-delineated territory and elected officials; several *barangays* form a municipality or city.

zanjeras may be joined together to form a federation, which manages the dam and main canal where the constituent IAs draw their water.

Irrigators associations (IAs) are reasonably accurate representations of the relevant stakeholders, as it is fairly clear who physically benefits from an irrigation canal. Membership is determined not by the residence of the farmers but by proximity of the farms to the canals. Membership is limited to farmers whose lands are irrigated by the system; farmers whose lands are cut off from the system (or lost through erosion by the river, as in the case of *Zanjera Diniega*) lose their membership in the association. The IA deals almost exclusively with efficient distribution of water to the farms it serves. However, if one moves from the irrigation system to the larger watershed area, farmers of irrigated lands are only one among many users and residents. For this area, the IA is obviously not the appropriate set of social boundaries of the community.

In community forestry areas, POs tend to face problems arising from only partially representing the residents and resource users of a particular area. The PO is understood as a “social fence,” a group of people who take responsibility for protecting a forest area from degradation by others. But PO formation can be a divisive process in an area when non-members are excluded from CBFM activities and benefits ([Philippine CBNRM Review: Forestry Report, 2002](#)). A typical example would be the STCMPC¹⁷ of Puerto Princesa, which has been granted a CBFM agreement covering 5000 hectares. The site is spread over three *barangays* and occupies about 20% of the combined land area. The STCMPC is an organization of about 400 members, or approximately 11% of the @3600 residents in the three *barangays*. As explained by the *Barangay* Captain of Concepcion, non-members complain that only the PO members benefit from utilization of the forest resources in the site (because they are the only ones granted the rights), as well as from employment generated by reforestation efforts. They also resent PO members who conduct patrols and arrest those who gather forest products without permits. In that sense, the PO serves as a very different kind of social fence, barring non-members from benefits enjoyed by their neighbors.¹⁸

Clearly, there is another definition of community (*barangay* or *sitio*¹⁹-based) at play in people’s minds. Who then, they argue, is the PO to claim what should be for all? PO members may rightfully point out that they have done all the hard work of reforestation, conservation, and protection. This indeed should entitle them to compensation. But we would argue that giving them sole rights to the income generated by a CBFM site is misplaced; the rights should be given to the entire local community (here, the *barangay*). In practice, given how little income most of these sites generate, this may mean that little or no income flows to the *barangay* once the PO takes its management fee. But the clear principle that the resources belong to all would go some

¹⁷ San Rafael, Tanabag and Concepcion Multi-Purpose Cooperative, Inc.

¹⁸ It should be noted, however, that membership is open to all residents of the three *barangays*. This is not always the case in PO formation in CBFM. We do not mean to single out STCMPC but simply to show that even well-regarded POs with demonstrated accomplishments run into local opposition, because a PO’s social boundaries do not match local people’s sense of identity and entitlement when it comes to local resources.

¹⁹ A *sitio* (in some areas called a *purok*) is a territorial area below the level of the *barangay*; it refers to a cluster of households or a settlement.

distance toward restoring a sense of local equity, and it would provide the needed underpinning for the *barangay* to support enforcement of resource use restrictions (a critical issue).

By contrast, the Ikalahan case is an example where the PO appears to be a reasonable representative for the community. The agreement on community forest stewardship they negotiated in 1974 (and later solidified as an ancestral domain under subsequent legislation) gave the Kalahan Educational Foundation (KEF) management control over the vast Nueva Vizcaya watershed area inhabited by the Ikalahan people. This case is interesting as a rare example of a tenurial instrument matching community social boundaries. Though there is argument about the degree to which KEF actually represents the whole Ikalahan cultural community (Resurreccion 2000), the relative ethnic homogeneity of the area makes PO management a reasonable proxy for community-based management.²⁰ *One wonders, however, whether the combination of the irrigator associations and the Ikalahan as the first examples of community-based management in the Philippines led to the unthinking adoption of the PO model for all CBNRM efforts.*

POs in coastal areas have the greatest problems in representing the user community. This is due to the multiple (often mobile) resources used by different social groups in any given spatial area. In coastal NRM, community is generally equated with poor fisherfolk, and a PO is selected or organized to manage an area. Management in this context most often means the establishment of a marine protected area and/or the formation of non-government law enforcement groups (*bantay-dagat*²¹) to ward off big commercial fishermen from the municipal waters. These are activities that potentially affect other resource users and local residents. If the scale is small and nearly all residents are marginalized fishermen, this is not a problem. It is to the credit of many POs that their concern for the coastal environment is broader than just sustaining the fisheries. However, they can hardly represent the interests of other coastal users: the resort owners or the coastal commercial and industrial interests, who also have stakes in the development and utilization of the coastal zone.

A unique example of a PO representing well the local community is found in Purok Honda Bay, Puerto Princesa, Palawan. It is often noted as a successful CBCRM site. One of its advantages in terms of bounding community is that it is a narrow strip of land jutting into the sea. Access to the area is thus easily controlled. In addition, the residents benefit from cultural homogeneity, as over 90% have migrated from the same region in the Visayas and speak the same dialect. The residents' ability to control access to local residence has been important in maintaining their hard-won agreement not to compete with one another for the tourist boat trade. Almost all of the residents are engaged in ferrying tourists to the islands in Honda Bay as a livelihood. Intense competition had reduced the income of the boat-operators to barely above cost-level. It had also generated tourist complaints of harassment and mistreatment to the city government. With some organizing and technical assistance from a local NGO, HOBBAI²² worked out an equitable

²⁰ It is clear to the KEF that they are holding title to the lands and other resources therein in behalf of all Ikalahans, not just the members of the organization (Rice, interview).

²¹ Literally "watch the sea"

²² Honda Bay Boatmen's Association Inc.

rotation system. The city government, anxious to avoid tourist problems, has given the PO a monopoly on the boat-hiring business. The rare ability to generate income from eco-tourism has been a further contribution to this group's success. It is an interesting case study for just how many inter-related factors are needed to make this kind of effort work.

Externally initiated CBNRM often covers significant land areas, much larger than any self-initiated community-managed site. CBNRM on the scale of a watershed or a bay involves such a huge number of stakeholders that the notion of a single "community" managing such a resource area is meaningless. A comparison of scaling-up processes in irrigated and coastal lands is helpful here:

- In the case of the *zanjeras* and communal irrigation systems, a federation structure is generally created to manage larger systems. The federation council coordinates the work contributions of the member IAs. This coordination work involves facilitating communication, as the council does not direct the work itself. (Siy 1989) While there is community identity as an IA, there is no identity as a federation community. However, the scaling up is relatively simple because all IAs in the federation have the same interest -- namely, water distribution.
- In coastal areas, at municipal or bay-wide scales, scaling up through a federation of fisherfolk POs will only represent a single sector. Commercial fishers, resort owners, shipping and ports developers, and commercial or industrial users of the coast will have competing and often incompatible interests with each other and with marginalized fishers. In this case, there is no community of common interest that can be relied on at the larger scale. As the area becomes larger, the issues become more complex and the interests more varied. Management arrangements must become more sophisticated in order to factor in the interests of many stakeholders. In some cases, stakeholders don't only fight for a fair size of the pie but want to make and eat different pies altogether from the same ingredients.

In both cases, it would be a stretch to say that a community exists at the scale of a large irrigation system or a municipal coastline, let alone a bay. But in the case of the irrigation system, the clear and common interests of the constituent groups make scaling up through federation a workable solution. In the coastal case, the variety of interests mean that there is a stronger bond among fisherfolk POs in an entire bay than there is among all stakeholder groups in a municipality. Thus, management by "a community" must be understood differently, as the subsequent chapter suggests.

Community cohesion

Apart from the issues of where the boundaries of community are drawn and whether all within those boundaries are represented in the local organization, there is the equally important issue of the degree of internal cohesion of the community. This is a crucial element in their ability to take on collective responsibility and action in conserving and managing the resources.

The forestry report notes the distinction between an "organic" community and an "incipient" one. The former is characteristic of self-initiated CBNRM sites, such as the *muyong* system of the Bontoc, while the latter is how they describe most externally-initiated CBFM:

The idea of organic community espoused in this report fits quite well with some characteristics of indigenous communities in the self-initiated CBFM sites visited. These communities satisfy the sociological, geographic, and psychological aspects associated with the definitions of community that may be gleaned from the literature.²³ That is, they consist of “persons, in social interaction within a geographic area and having one or more common ties” (Hillery 1955:111). Other than shared territory, such “common ties” include history, interests, norms, and a sense of identity. The cursory assessment of self-initiated CBFM indicates that these social bonds – closely associated with the current characterization of social capital – have helped promote sustainable forest management in these areas.²⁴ This assertion corroborates with recent literature that attempts to link the idea of social capital to the conservation and improvement of natural capital, including the forest (see, for instance, Magno [1997], and Pretty and Ward [2001]).

Incipient communities, in contrast, do not share the above-mentioned commonalities. They may have different ethnic backgrounds, may actually identify themselves only with their own (smaller) social group, and, as in the case of recent migrants, may not actually share common norms or a distinct sense of identity. (Philippine CBNRM Review: Forestry Report 2002)

In some cases, such as the Ikalahan or even Honda Bay, the degree of cultural homogeneity is a strong factor in local community cohesiveness. In most cases, however, the community established through an external project is likely to contain a mixture of long-term residents and more-recent migrants. Shared norms and/or shared interests are therefore the presumed basis for the PO’s cohesion – they share an interest in the long-term availability of the resources, for their children and grand-children. The education components of CBNRM projects are often geared towards helping people realize their common attachment and collective dependence on the natural resources. A project itself may also create new bonds, such as through employment or other livelihood opportunities. But once the project is finished, the frequent dissipation or dissolution of the PO is evidence that these ties were not very binding.

²³Some of the more classic reviews of the various definitions and characterizations of community are found in Hillery (1955), Kaufman and Bailey (1965), Bender (1978), and Gusfield (1978). More recent literature that links the idea of community to issues on natural resources and the environment includes Dove (1982), Kemp (1988), Gilmour and Fisher (1991), Cernea (1992), Hirsch (1993, 1998), Vira (1993), Brosius, Tsing, and Zerner (1998), Kothari and others (1998), Ife (1999), and Agrawal and Gibson (1999). [Full citation in Philippine CBNRM Review: Forestry Report 2002]

²⁴Interest in the idea of social capital has mounted in recent years, particularly in the 1990s. Important contributions on this topic include Coleman (1988, 1990), Putnam and others (1993), Levi (1996), Harris and de Renzon (1997), Narayan and Pritchett (1996), Carney (1998), Flora (1998), Grootaert (1998), Ostrom (1999), Pretty (1998), Scoones (1998), Uphoff (1998), and Pretty and Ward (2001). In the Philippines, there are limited materials that relate social capital to forest management. Among these are Magno (1997), Contreras (2000), and Pulhin and Gata (2001). [Full citation in Philippine CBNRM Review: Forestry Report 2002]

By contrast, the continuity of many IAs after the systems are turned over to them by NIA is evidence that a shared interest in irrigation water is indeed a powerful binding force ([Philippine CBNRM Review: Irrigation Report 2002](#)). The organization continues to function, the canals are maintained, and water continues to flow to farms. What, then, is the difference between the notion of shared interest in this case and in most CBNRM POs? The most obvious is the immediate, tangible link between collective action and individual benefit. Without the canal, your farm gets no water; the canal must be maintained in order for your farm to flourish. There is a similarly clear link for marine sanctuaries (ban fishing in an area to protect nurseries, and the fish catch goes up). This is the likely reason for the establishment of small marine sanctuaries as the predominant conservation activity in CBNRM ([Philippine CBNRM Review: Coastal Report 2002](#)). The link is not so clear for watersheds, however. Clean air, an abundant water supply, all the myriad services performed by a healthy forest, are benefits that are broadly dispersed and insufficiently tangible (at least, until the wells and springs dry up). By contrast, the benefit of cutting down a tree is very tangible indeed – income from the timber and cleared land to farm. Thus, it is not surprising that the notion of common interest in conserving natural resources has a much harder time in forestry and in coastal areas. The implications of this for incentives for collective action will be discussed in Chapters 4 and 5.

Politics

Given that one powerful rationale for CBNRM is that conservationists must include the community because they are “there,”²⁵ it is perhaps not surprising that the PO model developed as a response. A PO in this sense is a convenient grouping of local individuals willing to support the outsiders’ goals. Apart from problems in how representative they are, the PO model also tends to gloss over local politics and the multiplicity of political interactions with outside actors. For instance, in the case of STCMPC, both the PO and the *barangay* leadership have claims to authority over the local land area. At the outset this was not a problem, as the leadership of the PO was largely the same as the leadership of the *barangays*. But after a time, new *barangay* leadership was elected. *Barangay* and PO leaders seek (understandably) to make use of their relationships with the city government, the local DENR office, and even the central DENR office to pursue their different agendas. All these interactions, obviously, can have a major outcome on resource management outcomes. Ignoring local political interactions (and institutions) is often a rather fatal flaw in the PO model of community.

In sum, to adequately address CBNRM’s stated goals of improving equity in both resources and power, the PO model will need to be altered. Rethinking community to allow for representation of internal differences in power and interest (implicit in differences in gender, ethnicity, and social status) as well as broader inclusiveness is a serious challenge to current CBNRM models in the Philippines. And CBNRM’s resource conservation goals will not go far without a more sophisticated acknowledgement of the role of local politics and therefore of local government institutions.

²⁵ See [Wells and White, 1995](#) for an example of this in the coastal context.

Participation

Like community, participation is a positive word with multiple meanings, allowing it to be used for very different goals. With the seeming triumph of participatory development as a model at the beginning of the twenty-first century, participation is a mandatory descriptor of any attempt at social change. It thus risks becoming a ubiquitous label that masks more than it reveals. A number of authors have pointed to the various meanings currently in play: a strategy for increased project efficiency and/or effectiveness; a vehicle for local self-sufficiency and freedom from dependence on the state; a path to more equitable power relations; a mode of practicing good governance (Chambers 1995; Leeuwis 2000; Nelson and Wright 1995; Okamura 1986; Peters 1996; World Bank 1997). Perhaps the most important distinction is that between an *instrumental* notion of participation as a means to achieve an externally-determined goal, and a *transformative* notion of participation embodying a ‘shift in power,’ an end in itself.

We would argue that both instrumental and transformative notions of participation are evident in Philippine CBNRM. Government agencies such as DENR and NIA use participation in ways that largely mean that rural people should take part in government-directed projects and programs. Some NGOs also follow this pattern of bringing people into pre-existing plans and projects, while others (particularly in the CBCRM field where most of the NGOs have a human rights background) view CBNRM primarily as a vehicle for community empowerment.

Participation for What? Power-sharing versus Efficiency Goals

CBFM, CBCRM, and PIM are major programs that were intended to bring poor farmers and fishers into the management of resources they depend on. The enormous power of the Philippine state (colonial and post-colonial) in resource management might thus be expected to have decreased as a result of these programs. However, a review of the three sectors reveals limited success in irrigation and coastal areas, with forestry the most problematic. CBFM is in reality a mis-named continuation of central control. Well-intentioned policies have unfortunately contained fundamental defects (examined later in the report), and this has enabled self-interested bureaucracies to inhibit the sharing and transfer of power.

The history of social forestry indicates an initial concern for the control of *kaingin* and the control of social unrest. Social control, not empowerment, was clearly on the state’s agenda when social forestry programs first appeared in the 1970s. The 1980s’ shift from conservation to upland development altered the rhetoric from control to participation; but participation in this context was “to respond” to government programs (Okamura 1986). The creation of the Upland Working Group during this time created some tension in the instrumentalist model, as there was a clear interest in empowerment coming from the NIA experiment. Some participation in decision-making and implementation has occurred, but power has remained strongly with the DENR because of its control of tenure and its control over funding for CBFM. Community-based forest management thus remains largely a system of centralized control (Gauld 2000; Philippine CBNRM Review: Forestry Report 2002).

Participation in CBCRM is a more varied experience, perhaps because of the lack of clear state control of waters that has enabled other loci of power to contend. CBNRM in the coastal sector has been able to be initiated by NGOs and academics, as well as government, a clear difference from the forestry sector. NGO-initiated CBCRM has built itself on a model of empowerment

that takes community control as its primary goal. (This model is premised on the community “asserting” power against the state, as opposed to the forestry and irrigation sectors in which power is “received” from the state.) This, however, has been most successful in more remote small island areas. Both university and government-initiated CBNRM have been motivated more by the desire to protect marine resources and the recognition that community involvement is necessary to achieve this goal, a highly instrumental notion of participation.²⁶

Participatory irrigation itself, the showcase model of participation in the Philippines, is arguably a case of the triumph of efficiency concerns over empowerment. NIA has proved its resilience in maintaining control wherever feasible; its “transformation” lasted only as long as the tenure of its participation-committed leadership. It should be noted, however, that the transfer of communal systems management to irrigators associations (IAs) is indeed a genuine example of empowerment. The IAs decide for themselves how to run their systems, share responsibilities, and share benefits. However, it is an open question as to whether NIA’s interest in turning over such systems is really one of power-sharing. NIA clearly has never had the human or financial resources to manage all the nation’s irrigation systems. Even initially, participation was adopted by NIA on the grounds of greater efficiency and effectiveness. One might argue that the empowerment, while genuine, is a by-product rather than a goal. If one looks at the larger scale national systems, it is clear that NIA is maintaining control and simply consulting farmers. This is defended as an efficiency measure, though it is also evident that some reluctance to devolve control to farmers is because it would throw bureaucrats out of employment ([Philippine CBNRM Review: Irrigation Report 2002](#)). Bureaucratic self-interest would seem a better explanatory model than participatory development in assessing NIA’s decisions on when to devolve management to farmer groups. While the initial experiments in the 1970s were clearly motivated by a desire to turn over control to farmers, once the leadership at NIA changed, devolution no longer received the support necessary to counter bureaucratic inertia and self-interest.²⁷

Thus, while transformations of power may be implied by the names of the projects and programs, the reality is that the state (i.e., the national government) has maintained its control rather effectively. Participation in these programs is overwhelmingly instrumental in nature, with little genuine empowerment. Reform of the existing approaches is therefore needed, and we suggest some strategic approaches in the next chapter. (The synthesis report’s final chapter on crafting institutions takes up more concretely several possibilities for enhancing community empowerment and looks at current and potential institutional means of transforming power relations.)

Participation in Projects: Incentives and Opportunism

We argue in this chapter that participation and empowerment must go hand in hand. Yet in past and current projects and programs, it is participation and incentives that seem truly to be inseparable. At the micro level, where most discussions of participation focus, the concern is

²⁶ The contrast between CBNRM as community-based conservation and as conservation-based community development is most clear in the coastal sector, where both models are in operation.

²⁷ The Local Government Code has mandated a different form of devolution, but as noted later in this report, LGU control of community irrigation systems is actually a step backward from farmer control.

generally one of what enables (or causes) people to participate in a particular project or activity. Sustainability in the CBNRM world is most commonly understood to mean sustainability of project results, rather than sustainability of the ecosystem or the livelihoods dependent on it. Participation in projects is seen as crucial for sustainability, a highly instrumentalist vision. Participation thus becomes a matter of providing adequate incentives to take part in project activities.

Costs and Benefits

The notion of opportunism as the engine of participation is very strong in most projects. In the prevailing rational economic actor model, people are understood to participate in projects when the benefits sufficiently outweigh the costs. Thus, for example, when one considers why a farmer would become a member of an irrigators association, the question is what benefits he or she is receiving that outweigh the opportunity costs of the maintenance work and meeting attendance. The provision of adequate benefits is a recurring theme in project documentation -- employment, credit, and other livelihood programs are all considered “benefits” of project participation. These project components are meant to address poverty alleviation as part of the overall package of CBNRM goals. Nevertheless, it is clear that they are also recognized as enormously important inducements for people’s participation in PIM, CBFM, and CBCRM projects ([Philippine CBNRM Review: Forestry, Irrigation, and Coastal reports 2002](#)).

In forestry, benefits of PO membership include a daily wage for reforestation work, the right to stay on the land one is occupying, and the right to use forest resources. Historically, the benefits derived from the exploitation of forests have gone to a favored elite, facilitated by the centralized control of privileges to extract natural resources. It was only in the late ‘80s that government moves towards social equity gained ground because of strong domestic and international pressure ([Fairman 1998](#); [Vitug 2000](#)). Nevertheless, even after the adoption of CBFM as the core of the nation’s strategy for sustainable forestry, local actors have principally gained subsistence benefits with commercial values going elsewhere. This is a pattern found in decentralized NRM programs in other countries as well ([Agrawal and Ribot 1999](#)).

If one defines participation as labor contributions or membership in a PO, then the CBFM program has considerable participation. If, however, one defines full participation as implementing a management plan, then there are very few cases. As the forestry report notes, only 98 of 4,000 CBFM communities are reported to have a management plan. The reasons for this vary: some are primarily reforestation projects and thus have little need for a management plan; for those that do need a management plan, the technical requirements for putting together a plan raise a very high barrier for communities without the means to afford technical assistance ([Philippine CBNRM Review: Forestry Report 2002](#)).

In irrigation, water comes to those who are members of an IA and also to those who are not members. Payment of the irrigation service fee (ISF) is all that is required. Why then would one wish to belong to an IA? An obvious benefit of IA membership (though not one explicitly articulated by farmers in project documentation) is the representation of one’s interests in deciding on schedules for cropping and water distribution. The most commonly recognized benefits of IA membership in project documents appear to be access to credit and to the marketing and other services provided by many IAs to their members ([Philippine CBNRM Review: Irrigation Report 2002](#)). Whether this is an accurate representation of farmers’ opinions

or whether it represents the project mentality of those writing the documents is a question for further research.

Benefits of PO membership in coastal communities, as in the other cases, center around access to livelihood opportunities such as credit or wages. The notion of opportunism as motivator can, however, backfire. One case of perverse incentives is found in Bolinao, where the Marine Science Institute of the University of the Philippines had convinced local people to plant mangroves voluntarily. Once DENR began paying for mangrove reforestation, however, people would no longer plant unless paid (Menez 2000, pers comm). There is a need for further research into non-economic motivations for conservation work.²⁸ Compensation (which we suggest in Chapter 4 is a more accurate and less paternalistic term for many “incentives”) could be developed to provide support for other valued services or experiences. The notion of compensation (financial and otherwise) is explored further in Chapters 4 and 5 of the synthesis report.

Catalyst or Ongoing Subsidy?

One might argue that the very need for incentives implies low or no reason for participation otherwise (and therefore poor odds for project sustainability). We do wish to note, however, that this instrumentalist view of participation is quite understandable, given the reality of CBNRM being undertaken primarily through foreign-assisted projects. Externally defined goals and limited timeframes require that implementers find a way of enabling or enticing people to meet those goals in the time allotted. Furthermore, the selection or creation of non-“organic” communities as managers increases the difficulties of participatory management. To use the language of the prevalent paradigm, social capital is insufficient in these groups, and transaction costs must thus be lowered through some form of incentive. Creatively addressing the constraints in this situation is a challenge for CBNRM advocates.

While incentives will continue to be a likely necessity in project-driven CBNRM, we would argue that careful attention be given to designing incentives that can serve as catalysts rather than ongoing subsidies. The latter merely contribute to a culture of dependency on the government and donor subsidy-givers. Thus, opportunities for loans or for training are initial investments in people’s capacity, which they can build on in the future. By contrast, employment (a major incentive in CBFM with its heavy reforestation needs) should not be treated as an incentive. It is a labor cost of the project and contributes nothing to people’s future capacities to manage their resources or livelihoods.

Direct or Representative Participation: In Search of the Optimal Mode

Recognizing the centrality of the question “Why do people participate?” raises a prior question of what expectations are or should be for participation. Is participation inevitably equated with direct collective action? When is participation through one’s representatives appropriate or even preferable? All three sectoral reports note the far greater likelihood of broad participation in project implementation than in the planning stages. (The power of the state and of the donor is at

²⁸ See Fernholz (1996) for a suggestive discussion of non-economic factors in the forestry sector. She notes access to exposure trips, to perceived status benefits, and other social factors as reasons given for individuals to engage in conservation activities even when the economic benefits were quite long-range.

its most evident here.) In addition, all note that *barangay* or *sitio* level activities are where participation is greatest and broadest, whereas municipal and higher levels increase the odds of participation through community representatives (*barangay*, PO, and other local leaders). To what extent is this a problem, and to what extent an optimal balance? While we argue that power-sharing should be the core concern of participation, we also recognize that efficiency concerns have a valid place. The distinction here is that efficiency should serve the participation interests of all stakeholders, rather than participation serving the state's interest in efficiency.

In exploring the conditions under which direct or representative participation should be the goal, several issues are relevant to consider. The irrigation report notes the useful distinction between maximum and optimum participation; optimum participation factors in both the opportunity costs to individuals of participation as well as efficiency concerns relating to large decision-making structures and lengthy processes. The forestry report also notes the different forms participation may take at the ideal level, with direct and broad participation required for problematic situations, but representative structures predominating if a distribution system is working well. In looking across sectors, it appears that the specific form of participation results from interplay among a number of factors -- particularly an area's scale, the type of its resources, and the nature or complexity of an activity.

Scale:

The scale question relates to the problem of representing a diversity of interests. When is the scale so big that representation becomes problematic, simply because the representative cannot possibly represent accurately the interest of a large constituency with too wide a range of internal sub-interests? In some cases, adding more representatives will not help, as it results in an unwieldy institution with so many participants that no decision can be made in an efficient manner.

As noted earlier, when an irrigation system increases in size, it does not significantly increase in management complexity. The uses of the resources (namely irrigated farming), and thus also the users, remain the same regardless of scale. Cropping and water distribution schedules, system maintenance activities, and other management decisions can therefore be made by a federation of irrigators associations (IAs). Forestry is arguably a similar case, as the competition continues to be for the same resources and among the same groups -- small and commercial-scale users of timber, non-timber forest products, and minerals. Coastal areas, however, appear dramatically different on this issue. As the scale of an area increases, the different uses and users increase in complexity -- so that small fishers compete not only against commercial fishers but also against resort owners, port developers, etc. The challenge of ensuring smaller voices are heard in representative, large-scale structures is thus particularly acute for coastal areas.

The PAMB (protected area management board) is an interesting case study for this issue. The management unit must be large enough to match the ecological scale of the area. The two Apos provide a good contrast in scale -- one is a small island, the other a mountain that sits across several provinces. Apo Island has a small population of municipal fishermen. Mount Apo has a very large number of different settlement areas of the tri-people of Mindanao (indigenous, Muslim, and Christian), plus a wide array of commercial and industrial interests, and several tiers of government agencies. All of them are stakeholders that must be represented. Ideally, there should be at least one representative from each. In the case of Mount Apo, the sheer

number of representatives means it is difficult to call meetings and hard to get anything done, especially if the rule is consensus. Membership rules mandated in the NIPAS law also create an imbalance, as the body is dominated by government representatives [municipal and *barangay*]. An executive committee is one solution to unwieldy size, but then the members of the policy-making body no longer accurately represent all interests. Much work needs to be done in improving both the structure and processes of the PAMBs. The chapter on decentralization will take up the scale question as a key issue.

Nature of activity:

Participatory irrigation provides some contrasts between the developing of resource allocation regimes and the regular functioning of such regimes. It also provides a contrast between resource allocation processes and system construction processes. Irrigation is an interesting case, as these systems arguably move from being projects (construction, major rehabilitation, establishment of distribution regimes) to being a regular part of rural life.

Deciding on the cropping calendar and water distribution schedule is typically a bottom-up planning process, with decisions and negotiations within each farmer-irrigator group, moving up to turnout service areas, and then reconciling and negotiating all these schedules within the irrigation association (IA) as a whole. It is a highly participatory process, with collective action the desired norm. However, once this process has taken place it is not repeated each year, unless changes are deemed necessary. The norm for decision-making in these other years is representative participation, with the leaders of each turnout service area representing the farmers in their areas in the IA decision-making body, the general assembly.

By contrast, the planning and construction of the irrigation systems themselves show a great variation in the levels of participation. In the communal systems the higher degree of farmer involvement in design processes is attributed to the need for NIA to turn over the system to the farmers within 6 months after construction. In the national systems, where NIA retains ownership, farmer participation is largely limited to consultation.

The coastal report observes that participation seems to vary more with the nature of the activity than the level/scale of the management unit. The report points to the passing of municipal fishery ordinances and the establishment of marine protected areas (MPAs, also known as fish sanctuaries) as the most common activities where primary users (fishers) directly participate. By contrast, planning and decision-making tend to be handled by local leaders, together with project partners. At the municipal level, this is aided by the fact that local governance structures such as local development councils and FARMCs (fish and aquatic resource management councils) have mandatory representative structures. For coastal areas, as noted above, the increasing complexity of the management activity and the increase in size of an area often occur together. This appears to lead to participation through community representatives as one goes up either scale.

While it does not explicitly examine representative and direct participation, the forestry report does note complex management activities as an obstacle to direct participation. This is particularly the case in resource allocation planning, where direct participation is hindered by DENR requirements for management plans under the CBFM program. Community management plans have complex technical requirements similar to large-scale timber license agreements.

This forces local residents to rely on the assistance and/or guidance of NGOs or consultants. Representative participation appears necessary but insufficient to accomplish this activity. Management planning in this context puts the locus of power clearly outside the community. This is a case, therefore, where power relations need to be resolved first, before any form of participation can genuinely take place. The forestry report thus recommends simplifying the requirements of the management plan, so that communities can be in control of the allocation process.

One point is clear: when the issue is allocating resources, all stakeholders must be involved. Whether it is establishing the distribution of irrigation water, the boundaries of fish sanctuaries, or the areas for harvesting forest products, all users of the resource need to be part of the negotiations. This is where a broad definition of community – one that goes beyond the PO to include all users – is essential. Direct participation should be the norm, though final negotiations may well be among representatives of particular interest groups. The irrigation example provides a good model. Once the allocation regime is established, other decisions can be made through a representative structure.²⁹ *Multi-stakeholder negotiations on resource allocation should form the core of any participatory approach to resource management.*

Issues in Power-sharing

Community-based management is intended as a replacement of central government management. But what is the role of the state³⁰ in CBNRM? Does it even have a role in community-based management? This is the subject of considerable debate, particularly in CBCRM (Christie and White 1997; Hirschmann 1999; Pomeroy 1995; Pomeroy and Berkes 1997; Rivera 1997). This section will briefly examine current notions about the state and about arrangements such as co-management in which the state shares power with non-state actors.

The state vs. the community?

The opposition between community and state is a common notion in CBNRM. Yet as Li (1997) and Zerner (2000) point out, this is a mistakenly simplistic characterization of the relationship.³¹ Perhaps flowing from the current popularity of civil society as an alternative or a distinct partner to the state, local communities tend to be subsumed under civil society, together with NGOs, religious groups, business groups, and others. Setting local communities in opposition to the state tends to blur a more complex relationship. Rural Filipinos may oppose a state project such

²⁹ Whether that structure is a multi-stakeholder body or another institutional form is a discussion to be taken up in the decentralization chapter. We wish to highlight the distinction between multi-stakeholder *negotiations* and multi-stakeholder *bodies* – the negotiations are a temporary arrangement for a particular type of decision. It is not always necessary to create a permanent management institution based on that model.

³⁰ While acknowledging that the state, as a legal concept expressing the notion of a people, territory, government and sovereignty, is theoretically not separate from the people, we use the term here as is popularly understood – namely, as a synonym for government, the administrative structures of a nation.

³¹ While not expressed this way in the literature, globalization might well be viewed as the new antithesis of community. It combines state and market into the notion of a disadvantageous set of economic rules that benefit powerful states and local elites.

as a dam in one area but request state resources to build a clinic or school in another. The state is a provider of goods and services desired by some rural peoples and rejected by others (Li 1997). It is not a simple set of oppositional relationships.

Defining and locating the community, as noted earlier, is a challenge. Likewise, defining and locating the state is not always simple. In part this is because the state is not a single entity. Like community, the state is a heterogeneous entity with multiple interests, each sub-entity (cabinet departments, bureaus within a national agency, local governments) capable of alliances with outside actors to further its internal political struggles. Interactions between rural peoples and state actors are thus capable of many different outcomes.

Locating the state is also difficult because the line between state and community is not always clear. The *barangay* in particular is a gray zone: is it part of the state, or is it a locus of the community? The simple answer is that it is often both, and therefore establishing its role in CBNRM is anything but simple. *The process of change then cannot be a straightforward transfer of power from a homogeneous state to a homogeneous community.*

In most of the literature on CBNRM, there is some form of agreement that the state plays an important role in natural resource management, even community-based NRM. At a minimum, government (particularly local government) is important in providing an enabling legal and policy framework through which community decisions are carried out (Rivera 1997). The state's role as a facilitator of economic and social development is also widely pointed to (World Bank 1997). For some, it is the scale and complexity of the resource management problems that makes government involvement likely:

It is unlikely that the solutions to the dire state of natural resources on which the livelihood of millions depend on can be provided by the fisher sector alone nor through community-based initiatives alone. Lessons and experiences in CBCRM in the past two decades demonstrate that goals and objectives are best pursued within a holistic, integrated and multi-sectoral framework. To further increase the likelihood of attaining ecological and socioeconomic sustainability, CBCRM should be placed within the broader framework of integrated coastal management (ICM). ICM takes into account ecological processes and connectivities (e.g. man and nature, among ecosystems, land and sea) and attempts to harmonize conflicting uses of various stakeholders in the coastal areas. (Menez 2002)

Complex issues require complex institutions to tackle them, institutions that can manage fairly the multiple conflicts among all the interested parties. (In this context, it should be remembered that government is a stakeholder with its own interests, and different parts of government such as the LGU and DENR may have quite different interests.)

Other rationales for government involvement involve specific powers of the state. A local group may decide to establish management rules for its coastal waters or its forest area. However, a non-government institution does not have the power to exclude or withhold privileges, unless there is a delegation from or recognition of that power by government. For this reason, CBCRM efforts now recognize the need for their management (and exclusionary) rules to be recognized and legitimized thru local law. Similarly, authority to sanction transgressors is a state power requiring specific delegation. A PO may have obtained the authority to make arrests but it

cannot levy fines, much less use the fines to finance enforcement operations, since only the state can collect and appropriate. Local *barangay* authorities may be convinced to support the PO (assuming good relations exist between them), but it is exceedingly difficult for the PO to enforce its sanctions on individuals who may live a longer distance away, perhaps in another municipality altogether. In addition, enforcement is both financially and often politically costly. This is a problem for both forest and coastal CBNRM sites.

When State and Non-State Actors Share Power

Government involvement may be necessary, but there are enormous differences in how power-sharing is viewed within CBNRM. The central paradox is how to obtain state involvement without state dominance. The latter is a de facto return to centralized control, with all the attendant limitations (particularly the inability to be responsive to large variations in local conditions). Participation implies state and non-state actors working together, but there are a number of problems in the institutional working-through of such arrangements. The range of forms of state involvement will be discussed at length in Chapter 4. Here we simply wish to note the importance of the issue of power imbalance among the various actors “participating.”

Perhaps because of the possibilities for independent community or NGO-initiated NRM in some coastal areas, the debate is strongest within CBCRM. Co-management has become the preferred term for some CBCRM practitioners, while others view it as a synonym for co-optation. Co-management aims to achieve joint responsibility and authority for resource management through cooperation between the government and local resource users (Pomeroy 1995; Pomeroy and Berkes 1997)³² Recent co-management arrangements emerged from a realization that the earlier anti-state position of community management had not been particularly productive (Christie and White 1997; Hirschmann 1999). From the state standpoint, as noted earlier, the argument for co-management is generally based on improving efficiency and responsiveness in addressing local issues.

At first glance, co-management seems to be a happy middle-ground between centralized government control and direct community control, and represents genuine devolution. However, a closer look at co-management in practice reveals the reality of enormous power imbalances in the dynamics among stakeholders. The voice of marginalized sectors often gets drowned out (observations and interviews in Mt. Apo, Mt. Kanlaon, El Nido PAMBs, 1998/1999; see also Rivera and Newkirk 1997). This is a dilemma found in other countries with co-management arrangements, such as the Australian national parks that are co-managed with resident indigenous peoples (Weaver 1991). Hesitation on the part of civil society to engage with government in “partnership” efforts seems justified, given the reality of power imbalances in existing arrangements.

In addition, there are occasions where state power-sharing and decentralization arrangements are actually a re-insertion of state control, the very opposite of what is implied by the term. One clear example of this is Apo Island, the shining early model of community coastal management

³² While the term is associated with coastal management, the concept has general applicability. In forestry, joint forest management is the equivalent concept, though the term is not used in the Philippines.

in the Philippines. After its recent declaration as a protected area, there was a switch in governance structure from PO management to a PAMB, where government is dominant. In this situation, the community lost their previous control through the insertion of co-management. A more appropriate solution might have been for government to recognize an existing community management arrangement and provide the supporting legal and policy infrastructure to institutionalize it. A related example is the situation of communal irrigation systems (CIS) in the 1990s after the implementation of the Local Government Code. NIA's role in providing technical and financial support was devolved to the LGUs. However, this has actually had the effect of inserting a new layer of government control over the management of previously devolved CIS ([Philippine CBNRM Review: Irrigation Report 2002](#)).

The above discussion does not lead us, however, to reject power-sharing models. Instead, we wish to stress the importance of focusing on the *mechanisms* of decision-making. Simply identifying the relevant *actors* in the management structure (LGU, PAMB members), which is the more common approach, is obviously insufficient. Rather than engaging the current actor-focused argument on the merits of "community" or "co-management" models, we feel it is more productive to assume that negotiations of power are inevitable in any resource management regime. Therefore the focus should be on *how* state and non-state actors of all kinds interact. This requires that issues of representation, power, and accountability be addressed in every NRM situation.

Chapter 3. Strategic approaches to Community, Participation and Shifting Power

Who decides? Who does the work? Who reaps the benefits? These are traditional concerns for participatory management. While there will be variation in the institutional modalities, we would argue that the basic issues remain the same. A focus on the relevant actors is therefore understandable. However, we would argue that *how* these questions are decided is as important as *who* decides them. Conflict is an inherent part of any bid to alter power relations. A key aspect of our argument is that participation should be thought of most broadly as negotiation of conflict, rather than engagement in planning and implementation. Thus, the challenge is not to settle the answers to the basic questions but to establish equitable processes where people can negotiate their own answers (and re-negotiate them as conditions change over time). Using a negotiation framework, we point out some basic issues that any management structure will need to engage. Subsequent chapters in the synthesis report take up these ideas and explore some concrete practical possibilities for implementing them in the present-day Philippines.

A Strategic Approach to Community: the Ideal and the Real

Attempts to define and/or create a community as managing unit are generally the starting point for CBNRM projects. In this process, there is a fundamental tension between the needs for flexibility in defining a community and the needs for clear guidelines to operationalize policies of local access and control over resources and decision-making. We would certainly argue for continuing flexibility in defining community. As the previous discussion makes clear, a simple equation of PO with community is misguided, as is the frequent equation of community with a

particular marginalized sector, such as subsistence fisherfolk. The same is true for any other attempt to create a universally applicable set of social boundaries. Given such difficulties, it becomes more important to focus on the management principles of CBNRM than to try and define a community management unit that will hold for all occasions.

Responding to this dilemma, we would argue that community-based natural resource management is not identical to community resource management (CRM). That is, community-based management cannot be equated solely with direct management by the community itself (though direct management is certainly one mode of CBNRM). In part this is for reasons of community formation, and in part it is for reasons of scale. Philippine examples of self-initiated resource management by local, often culturally distinct, communities (e.g., the rice terraces of the Cordillera) show the importance of considerable pre-existing forces of social solidarity to their ability to accomplish natural resource management. Any attempt to externally initiate community NRM cannot hope to duplicate this level of internal cohesion. Added to this, the large scale of some CBNRM efforts increases the difficulty of internal cohesion. The notion of a community existing at the watershed or bay level, a huge entity capable of collective action, is meaningless. At larger scales, therefore, other institutional arrangements must be employed, constructed on the principles of responsiveness and downward accountability, so that local community interests and local control remain primary in the governance structure (Agrawal and Ribot 1999). Participatory, decentralized NRM is perhaps the closest approximation to direct community management at larger scales.

We therefore suggest that CBNRM programs and projects stop seeking a group of people to be “the community.” *The point of community-based management is local control by stakeholders.*³³ There are likely to be a range of management structures that can accomplish this. Which form will depend on the specifics of each situation, particularly on the type of resource(s) being managed and the scale of the management area, as subsequent chapters will discuss.

As a practical matter, the process should begin with establishing the boundaries of the management area. This should be done in line with the relevant ecosystem boundaries. While we argued at the outset that a focus on governance structures and improving equity are the practical constraints of CBNRM, we would also argue that *the resource conservation goals must set the basic parameters for management*. This is the only way to ensure that they do not inevitably get superseded by the economic needs and interests of the local community.

Once the boundaries are set, the various sectors or stakeholders in that management unit can then be identified. Given the heterogeneity of interests and power in real communities at all scales, attention needs to be paid above all to enabling effective representation of all sectors of the management area. (While one can call the people within the designated management area a community, we have deliberately chosen not to do so. This is because of the likelihood that this group of people is not a community in the sense required for NRM – namely, a self-identified group with internal social cohesion capable of collective action. If, however, the residents did

³³ The principle of proportional representation (by size of population), which we discuss in subsequent chapters, will assure a structural bias for the marginalized.

meet that definition, there would be no problem in their direct management of the area. The IAs are an example of this type of NRM community.)

The exception to this is land which is claimed as ancestral domain by an indigenous people. In this context, clearly it is the cultural boundary that sets the parameters for the management area. But as the purpose of IPRA is to restore rights to people unfairly deprived of them, it is not entirely accurate to label all ancestral domains as CBNRM areas. Their primary purpose is not resource conservation but cultural survival. However, the various forms of traditional corporate management by IPs, combined with the cultural link to the resource base, arguably make this a particular variation of CBNRM.

One important note: Our point is not to de-legitimize POs as organizations for social action. POs may still be quite appropriate operationally for a number of purposes in CBNRM (e.g., tenure holder, negotiating group, on-site manager). Our plea is simply not to confuse it with “the community.” As a consequence, any PO should be understood to represent a certain segment of the community rather than the totality. And attention would need to be paid to ensuring all appropriate sectors were represented in the management unit’s decision-making structure.

Our purpose overall here is to suggest that the ultimate myth of community is that it exists in any practical, operational and fixed sense for NRM purposes. We all belong to multiple communities – residential, occupational, religious, recreational, etc. – and these are key components of our identities. But the type of community required to manage natural resources is rarely found. There are instances of self-initiated community management such as the rice terraces of the Cordillera, and there are externally-initiated cases such as the IAs. But these are the exceptions, not the rule. And yet CBNRM in the Philippines is largely based on the assumption that there is a community there to which one can turn over management and in response a more equitable, more sustainable world will result. We wish that were so. But the reality seems rather to be that the social boundaries of organized communities don’t equate with local people’s sense of who the community is; and the internal cohesion required to function through collective action is not there. Therefore, we have turned to a more fluid understanding of CBNRM, one that focuses on the core principles that need to be addressed in any management structure aimed at resource conservation, greater equity, and local control. Many of these principles are already a part of CBNRM, but it is the misplaced connection with community that has perhaps been part of the problem with poor achievement of desired outcomes. There are other means to ensure local control by stakeholders without labeling a particular group a “community”.

Participation: Shifting Power and Negotiating Conflict

Participation as negotiation of conflict: life vs. project

Resource struggles are inevitably also political struggles, and thus the impact of politics on resource decisions must always be anticipated. As [Peters \(1996: 22\)](#) notes, “Participation or the lack of it is fundamentally a political process and only a political analysis can reveal what does or does not take place and why.” Participation (in the project sense) must take place in the context of both the micro-politics of everyday life and the macro-politics linking local actors with state and other powerful external actors. Power is constantly being negotiated, particularly by those with the least power ([Li 1996](#), [Scott 1990](#), [Sivaramakrishnan 1996](#), [Ribot 1996](#)). Any

external intervention to enable participation must therefore take into account the lively and contested political world already existing in any locale.

Conflict is another word for such contested political interactions, and the sources are many. Tenure is a steady source of conflict, as so many areas have multiple claimants (Tyler 1999). The overlapping of coastal and marine resource areas provides a particular challenge, as discussed elsewhere, but even terrestrial resource areas are subject to overlapping claims. Recent forestry cases include intra- or inter-community conflicts between the holders of overlapping CADCs and CBFMAs (certificate of ancestral domain claim and community-based forest management agreement, respectively). Also common are community conflicts with a variety of powerful actors -- private companies holding timber license agreements, as well as government actors such as special economic zone authorities and local government units (La Viña 2002).

In an interesting critique of current participation models, Leeuwis (2000) argues that regardless of whether they are instrumentalist or transformative, their methods (and notions of social change) are very similar. He points to the commonality of the learning process as the starting point, the planning model (stages of action from data-gathering through implementation) as the path, and decision-making as the most common end goal of participation. His critique centers upon the way these models “deal with social conflict and the struggle over resources.” (Leeuwis 2000: 938) Most current models assume that if one just has more flexible planning processes, better communication, and greater knowledge, people will be able to come to the consensus needed for collective action. This, Leeuwis notes, ignores the basis for people’s different beliefs, needs, and actions (e.g., economic need), which greater knowledge and a well-facilitated process don’t change. He argues instead for looking at negotiation as a model for participation, one which assumes self-interest is a given and the negotiation of all these is the way people already function. *The challenge is to create effective and equitable processes of negotiation.*

La Viña provides support for this idea in describing how he dealt with the conflicts mentioned above while at DENR. He assumed that these conflicts would not be fully resolved: “What was accomplished in the way we managed these conflicts was a realignment of the power relationship between the actors, positioning the communities to negotiate from a better and strengthened position.” (2002: 13) Empowerment thus becomes a matter of enabling communities to better negotiate for their rights and interests. In these cases, the communities needed technical assistance from NGOs or lawyers to level the playing field. Making sure power remains with the community during such assistance is an acknowledged issue among many NGOs (Golub 2000).

One strength of a negotiation model is that it takes participation out of the realm of the project and into the realm of everyday life. One caveat is that multi-stakeholder negotiation can only take place when all wish to do so. If a mining company believes it can get what it wants through pressure on the government or other tactic, there will be no point in convening a group. Similarly, if power is too unbalanced a weaker group should not proceed. In both these cases, it is more appropriate to focus on empowerment efforts that alter the balance and can bring all sides to a productive negotiation process. In the end, even negotiation models of participation return to considerations of power.

Principles of Participatory, Decentralized Decision-making

The principles we outline here flow from a negotiation model of participation. We discuss issues of fair process, of accurate representation, and of benefit allocation. Most importantly, we tackle the issue of power imbalances among the stakeholders. If one assumes that local communities are sites of competing interests and varying degrees of power, then equity in negotiations is a crucial focus. This requires both careful attention to the make-up of local decision-making institutions and a deliberate effort to assist less powerful members of the community to assert their interests effectively.

Fair Process

One strategy that incorporates these concerns is the notion of consensus-based decision-making (CBDM). Based on ideas about interest-based negotiation borrowed from Western alternative dispute resolution (ADR), consensus-based decision-making is a growing form of public dispute resolution and policy making on environmental issues. American activists have been willing to engage because it provides new opportunities for participation and power sharing. Conflict in such participatory institutions is viewed as both a given and a positive indicator of sometimes hidden struggles over power.³⁴ CBDM focuses on a multi-stakeholder process where effective representation and negotiation are seen as a means of generating new options that meet the needs of all parties. This replaces a zero-sum view of negotiation as inevitable win and loss. An important aspect of CBDM is that it takes place in a way that gives any individual the power to stop the entire process, an attempt to equalize power among negotiators.

A recent assessment of the experience of American environmental activists with this form of participatory decision-making noted their generally positive experience with CBDM, but with some strong caveats (Pellow 1998). The process will only work if the parties are skilled in negotiation and have command of information to support their positions. Clearly, this is an even greater challenge in a Philippine context. Pellow also interestingly notes the potential a number of activists have discovered to continue their conflict agenda within a new collaborative framework (he notes the parallel with the subversive tactics of “infrapolitics” in Scott 1990). Tactics such as coordinating external attempts to influence powerful actors in the negotiation (rallies, advocacy with influential individuals, etc.) were important in addressing the power imbalances at the table regardless of the attention to fair process. We would not argue that simply bringing everyone to the table in a Philippine context, even with ground rules and processes that give each an equal voice, will produce a fair and responsive outcome. But we would argue that the attention to rules and process embodied in CBDM is an important step towards meaningful participation, and one that could be assayed in the Philippines.

For those concerned that this type of decision-making institution is an abdication by government of its mandated functions, we wish to make clear that we are not advocating an absolute transfer of power. Government has an essential role in oversight of this process. Ensuring the outcomes are in accordance with law and the general welfare of the Filipino people are primary responsibilities of the state. In addition, responsibility for the fairness of the process – ensuring

³⁴ Indeed, the absence of conflict in many supposedly ‘participatory’ programs is something that should raise suspicions (White 1996, cited in Utting 2000).

the capacities of all to negotiate effectively – rests ultimately with government. (Though needless to say, the service and advocacy capacities of the NGO sector will be crucial in ensuring this actually happens.) And finally, ensuring the enforcement of the agreed-upon rules (the police function) is a core government responsibility. The main contribution of this process is to the decision-making institution, in making certain that the decision reached reflects the equitably combined wisdom, interests, and sacrifices of all involved.

Accurate and Effective Representation

In this section we look at representation as a basic component of the decision-making process. As the earlier section on direct versus representative participation suggested, any decision that allocates benefits (or restricts them) requires direct participation by all. Day-to-day operational decisions – the implementation of the agreed-upon allocation regime – can fairly be decided by representatives. In principle, that is a clear distinction. But in practice, where the scale of the management area is large, the decision-making institution that ultimately establishes the regime will likely be a representative structure. A giant plenary session of several thousand individuals (or tens of thousands) to settle those questions won't work. How then do you make a representative structure into a direct participation structure? The IA process that sets water distribution and cropping schedules is a useful model here. It is an example of a bottom-up process that begins with small groups and aggregates up to the larger council where the various small groups are represented.

Thus, the question of representation is really two questions: Are all the interests involved in this issue *accurately* represented? Is each stakeholder *effectively* represented? The latter question, that of effective representation, is more an issue of capacity and power. The first question, on accurate representation, really has two levels: the negotiating table and the party level. The first level has to do with ensuring all interests/stakeholders are represented at the table. In this sense, it is an issue of inclusiveness. The second level has to do with the reality that even sectoral interest groups are made up of individuals who will not agree on everything. They have a representative who speaks in a single voice yet must represent this group's sometimes diverse views.

Achieving accuracy at the negotiating table level is a reasonably straightforward process. Within the defined management area, a thorough search for all stakeholders and issues can be conducted. Ideally, an institution could then be designed to manage conflicts among these multiple users, or multiple interest groups. However, in reality, it is unlikely that individualized institutions can be created for each area. Therefore, in Chapter 4 we make some practical suggestions that can build on existing institutional modes. The key point here is that the process must always begin with the identification of interests/stakeholders. Only in this way can one ensure that the management unit will be community-based in the fullest, most accurate sense.

Accuracy within the party level is a different matter. This relates to a group's need and ability to come to consensus on their primary interests, so that they (and their representative) may speak as one voice. Accuracy within the party also relates to the accountability of the representative to his or her group. Granted that some people will not want to be the spokesperson, while others may not have the skill. How is the spokesperson chosen? Will the representative really reflect the group's opinion when his or her opinion is different from that? Is a one-time election sufficient justification for substituting his or her sole judgement for that of the group he or she represents?

Particularly for disadvantaged groups, prior to entering a negotiation it will be important to go through a process of identifying key concerns as well as key information to support their views. This consensus-building exercise is also important as an empowering process, as the force of many come behind a unified stance and people realize that they may have information of their own that is valuable. It is also a means of strengthening group control over their representative, as the group's agenda and interests are made explicit in these types of discussion and not simply left to the judgement of the representative.

Political leadership raises questions that interweave both levels. *Barangay* captains are the most frequent representatives of a community, for the understandable reason that they are the duly elected leaders. However, it is not clear what interest(s) the *barangay* captain is supposed to represent. Does the *barangay* captain relay all the various sentiment of his constituents or vote based on his own appreciation only? If the latter, is this a problem at the party level or does it mean that important stakeholders are not represented at the negotiating table?

Finally, the question of effective representation is inseparable from the issue of accuracy. This is because no matter how accurately an interest may be represented (through the presence of a spokesperson at the table, through the spokesperson's accurate expression of the group's views), if the person is an ineffective speaker or if the position of the group is powerless then the communication will have no effect. Capacity and power are thus necessary characteristics of the representative. The ultimate question for effective representation is whether a party can negotiate independently and ensure a just outcome. If the power balance around the table is highly uneven, then effective representation is impossible. The next section examines this problem.

Equal Power Around the Table

Interest-based negotiation provides an opportunity for disadvantaged groups to directly participate in the resolution of the problems affecting them and determine for themselves an acceptable outcome. However, adapting Western conflict resolution models requires attention to a number of Philippine-specific realities. Most importantly, a clear mechanism is needed to deal with the extreme differences in power among individuals or groups in conflict in the Philippines. In Chapter 4 we discuss a number of possible empowerment strategies related to enabling disadvantaged groups become more effective negotiators. Here we limit ourselves to what we consider the core empowerment issue – namely, tenure.

The basic dilemma is this: Marginalized residents are usually lacking almost all the major requirements for a fair negotiation to occur. They do not have rights, or do not realize they have rights. In negotiation terms, this means they do not have a seat at the table. They do not know the means by which to exercise their rights, meaning they do not know the rules of the game. They do not have the information or skills to play the game effectively, which means they do not have a fair chance of getting a just return. And lastly, they have insufficient capital to absorb likely periodic setbacks without being forced to accept very low returns simply to settle quickly. This means they cannot truly negotiate independently. Addressing these issues is crucial to achieving a fair process.

The starting point for addressing this problem is securing a seat at the negotiating table, establishing the right to participate. The need is not just to establish the right (and the amount of power that right conveys) but also to ensure the security of the right, the certainty that it will not

be withdrawn. Remember that the state, in its various functionalities, is also a party (or parties) at the negotiating table. If one party has wide discretion in determining whether another party may or may not sit at the negotiating table, then there is a fundamental unfairness. To protect against manipulation and arbitrariness, the right to participate must be secure and inalienable, guaranteed by the compelling powers of the state. The right to sit at the table should also be free from strings. This means the party has to be free not only to sit at the table but also to decide on who sits there (a representative), even to decide not to play, without fear of forfeiting the right at another time.

So, how does one secure the right to participate in CBNRM? Since the most important decision points have to do with resource use, the most important rights are those that attach to the resource. A person's right to participate is directly correlated to his or her stake in the resource. One can have a stake through one's dependence for survival on the resource. But that stake is a powerless position. It is highly unlikely that anyone in that position can negotiate a fair outcome for them, as noted above. By contrast, property is a major source of power; in the case of CBNRM (by definition on publicly owned land) that means either control of natural resources or access to them. To ensure the right to participate, there must be security in the rights over the resources; they must be demandable, inalienable, not subject to revocation on a whim. Rights over resources not only convey the right to participate in the decisions affecting the resources; they also carry the (potential) economic power to ensure independent decisions. Tenure, then, is a pre-condition to meaningful participation.

Tenure has been a central focus of CBNRM for good reason. It is a key to possibilities for both sustainability and equity. Under the Regalian doctrine, the Philippine state owns all resources initially, and thus all rights are a grant from the state. The exceptions to this are rights to ancestral domains, as the indigenous peoples' claims to those resources predate the state. These rights are therefore a claim against the state, not a grant, and cannot be taken away. By contrast, the rights granted by the state are considered privileges that the state may take away "if general welfare demands." The distinction, however, between private land and a CBFMA area is that if the state asserts its right to take away private land, it must 1) prove compelling reasons and give the owners the chance to oppose the claim in court; and 2) if the courts agree with the state, it must fairly compensate the owners. Under the current tenurial instruments in CBFM, the state can simply withdraw the privileges at will, and there is practically no compensation for the tenure-holders. Thus, a former secretary of DENR was able to suspend arbitrarily the rights of CBFMA holders to use the resources in their areas. The impact of the insecurity on their livelihoods was immediate; and therefore there are concerns about the impact on the security of resource conservation of the areas (for which the resource use permit was compensation). The links among tenure, sustainability, and equity in this case are evident.

Control of valuable forests and forest-lands has been a priority for both the colonial and post-colonial state in the Philippines. In forestry, the state is able by virtue of its control of tenure to decide *who* will participate in CBFM and *how* -- it can select the beneficiaries of CBFM, it sets the criteria they must meet to get and retain tenure, and it evaluates whether they have met those goals. The state is able to control their actions with the threat of loss of tenure or funding support. In many cases, CBFM projects confer no tenure at all. Without tenure, local people are considered squatters. A recent critique of CBFM asserts that without tenure, "the forest community ended up as underpaid wage laborers in reforestation activities," and concepts of

empowerment, decentralization and participation were “hijacked” to mask the failure to transfer real power (Contreras 2000).

Even when tenure is granted, it is not granted in a form that truly transfers power. CBFM agreements are not a complete form of tenure. They convey land rights without real resource use rights; permits to use resources, to transport them, etc. must be applied for separately and regularly. And the technical requirements to acquire a CBFMA are expensive and cumbersome (Philippine CBNRM Review: Forestry Report 2002). In addition, security is an issue as they are not a permanent tenure (25 years, renewable for another 25 years). CBFM communities are being allowed to play the game but only with their hands tied behind their backs.

By contrast, the central government has never asserted blanket control of fisheries, preferring only to claim control over coastal lands. This is presumably in part because fish are a moving resource and therefore hard to control. But it is also a reflection of the fact that fish have not been a high-value export until recent times, whereas the coastal zone has long had value for ports, fishing concessions, reclamation, tourism, and other commercial uses. In coastal areas the state is unable to use tenure to control who participates in CBCRM, given the multiplicity of resources in any area, the bounding problem of mobile coastal and marine resources, and the weak enforcement of central government claims over coastal lands. Weak state tenure is one of the reasons that CBCRM was able to evolve from early experiments by university researchers and NGOs, as communities asserted decision-making authority in the absence of the state. However, weak tenure (public and private) is a major factor in difficulties addressing the degradation and decline of coastal and marine resources (Philippine CBNRM Review: Coastal Report 2002). Developing appropriate tenurial instruments that will enable security and equity is one of the major challenges in CBCRM.

Tenurial instruments for coastal areas are still in early stages of experimentation. What exists now is the result of the direct assertion by certain CBCRM and ICM communities of management rules for portions of their coastal areas. They have sought recognition of these rules through local ordinances issued by the municipal councils. As LGUs have virtually plenary powers over municipal fisheries, municipal ordinances can in fact convey access rights. The advantage of this instrument is that there is no term limit, unlike CBFM’s maximum of 50 years. However, neither land nor water tenure is conveyed in these ordinances. The LGU has no power to grant coastal land tenure, which is as important to fishermen as access to fisheries in the water. (All coastal lands within 50 meters of the high-tide mark are considered forest lands in the Philippines, and are therefore under the jurisdiction of DENR.) And regulation of coastal waters for non-fishing purposes is also not an LGU power. Establishment of water-based tenure rights or exclusive resource use rights (as well as the recognition of native title) is seen as a crucial strategy for countering overexploitation of the open access resource areas. Current models contemplated by the state include adapting terrestrial property rights models and adopting the system of individual tradable quotas (ITQs) currently popular in many Western countries (Willman, undated). A different model, espoused by certain NGOs active in CBCRM, is the development of a community property rights instrument (Lacson and Cruz 1998; Quicho 2001; Lynch 2001).

Insecure and inadequate rights are still the norm in both forest and coastal areas. Ultimately, a genuine shift in power occurs only when local populations and their downwardly accountable

representatives gain control over resources they need to govern themselves (Agrawal and Ribot 1999). The next section examines the issue of benefiting from that resource control.

Equitable Benefits and Just Compensation

An important distinction in CBNRM needs to be made between: (1) compensating the on-site managers; and (2) distributing benefits among the stakeholders. The basic tenet for allocating benefits from the resources is that it should be negotiated by the institution that meets the above principles. Ideally, this will ensure that the benefits to stakeholders are distributed in proportion to their stakes. And since proportional representation in the institution means the marginalized sectors are given larger stakes, this should result in a greater share of the benefits going to them. Equity is the goal in the allocation of benefits.

Benefit allocation is not the same thing as compensating managers. Currently, it is quite likely that a PO would be the manager of a CBNRM area, as the returns from the (generally) degraded resources are not high. There would be little competition from professional managers from the private sector. However, the stakeholder group is likely to be broader than the PO's membership. In such cases, the PO should receive fair compensation for the work and responsibilities undertaken, while leaving the overall benefit distribution to the multi-sectoral negotiations. Thinking in terms of fairly compensating the on-site manager would alter the current paradigm, which paternalistically views any benefit flows to the PO "community" as an incentive or a reward for good behavior. We would argue that PO managers deserve to be recognized and justly compensated for their labors, not "rewarded" by the powers that be. Also important, calculating adequate compensation both for their labor and for the opportunity costs of conserving natural resources places the PO managers in a more powerful negotiating position. Their labor is valued, and they can themselves bargain for better terms, rather than the current pattern of waiting powerlessly for government largesse to flow to them.

Conclusion: "CB or Not CB..."

Ultimately, CBNRM has been and continues to be a useful concept as a strategy for shifting approaches to development at the macro/global level. But as a strategy to be operationalized in specific contexts, it sometimes confuses more than it clarifies; and in so doing, it sets up enormous possibilities for mis-appropriation by the state and other powerful actors interested in maintaining their control. Like JFM in India, Philippine CBFM remains largely a state appropriation of participatory development without much that is genuine in terms of local control. The Philippine central government sets the terms for participation, the mode of interaction, and the distribution of benefits.

Some might argue for substituting "locally-based" or "decentralized" NRM, for community-based. The problem with those formulations is that it is then too easy simply to substitute LGUs as the locus of authority. Where LGUs are not truly representative or accountable to constituents this does not ensure that decisions will be responsive and equitable. "Community-based" at least keeps the focus at the level of people living in or around the resource area and on local participatory institutions, not simply local elected (or hereditary) leaders. As proposed here, community-based institutions also keep the focus on responding proportionately to the large numbers of poor people living in those areas. This type of interest-based representation is not accurately or effectively embodied in LGU structures.

Multi-stakeholder decision-making is not a new idea. There are variations of this already in existence, particularly the example of the protected area management boards (PAMBs). But CBNRM is more than simply this institutional form. The major insights arising from this portion of the review concern the need to address power dynamics head-on and the need to redefine the notion of community at the core of the CBNRM approach. The misplaced equation of community with a people's organization (PO) and the lack of explicit focus on changing the dynamics of power over resources have meant that CBNRM has not truly had the chance to be tested in the Philippines on a broad scale.

Chapter 4: In Search Of Sustainability

Sustainability, Sustainable Development, and CBNRM: Technocracy or Politics?

Sustainability seems to be this era's Holy Grail. We seek it. We believe that if we reach it, our problems will be solved. But it is extraordinarily difficult to find. Complicating matters is the problem that, unlike the grail, we do not know (or cannot agree) what sustainability looks like.

Is this really a problem? At one level, it is not.³⁵ Clearly, there is a common value or nerve touched that enables such a disparate group – major corporations, community activists, government officials, nature enthusiasts, and others – to get on the sustainability bandwagon (or its de facto synonym, sustainable development).³⁶ All can agree on statements such as: the planet's life support systems should remain healthy; future generations of humanity should have enough to eat and be able to provide for their needs. Who is against sustainability? It would be like being against freedom.

The Vision

The major declarations of the 1980s – the Brundtland Report (1987) and *Caring for the Earth* (1989) – came out with definitions that were at this level. The Brundtland Report's famous phrase carries strong concern for future generations (“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”). *Caring for the Earth* came out strongly for the continued health of planetary life support systems (“improving the quality of life while living within the carrying capacity of supporting ecosystems”). That is part of their persuasive power: the defining of goals at the visionary level, the level where one defines ultimate good.

The Philippine framework for sustainable development functions largely at this level. It has seven components: economic viability; ecological viability; technological viability; political viability; socio-cultural viability; and institutional viability (IEMSDP-DENR 1997). They are in effect seven tests: fail one, and the activity or policy is unsustainable. But what does this actually mean in practice?

³⁵ The analysis in this section is particularly indebted to Michael Jacobs' (1999) essay *Sustainable Development as a Contested Concept*.

³⁶ Like Jacobs, we agree that the two terms have largely become interchangeable in popular usage. Sustainability is used in some cases to refer specifically to ecological carrying capacity and in others to refer to the continuation of project accomplishments. However, we begin the discussion with the acknowledgement that in common usage (and that, after all, is what is likely to be in the minds of most government and non-government people engaged in CBNRM), *sustainability* and *sustainable development* both often carry the full weight of hopes and expectations that social, political, economic, environmental, and cultural continuity and justice is what is to be achieved. Small wonder we haven't gotten there yet.

Pursuing the Vision

In the Philippines and elsewhere, it is at the second more operational level that the disputes arise. How does one pursue sustainability? What are the signposts or benchmarks along the way? What are the priorities and bottom lines? Here is where differing values and interests appear at all scales, from the very local to the global. Attempts to get to this level of specificity have generated continuing controversy, seen most recently in the frustrations and limited accomplishments of the 2002 World Summit on Sustainable Development in Johannesburg.

This is likely to continue. Sustainability at the operational level is and will remain a contested definition balancing human needs and the health of multiple ecosystems. Some political scientists recognize sustainability as a contestable concept, an arena where other political battles are fought out. As Jacobs (1999: 26) notes, “such contestation constitutes the political struggle over the direction of social and economic development.” A similar perspective comes out of the negotiation field, where Susskind (1996) argues that it is a mistake to believe sustainability is a technical matter to be defined by scientists. Regardless of the definitions science works out (and hopefully those explorations will continue to improve our understanding and management capacity), the decisions on what happens are made by humans through whatever decision-making structures exist.

This perspective is helpful, because it allows us to recognize that defining sustainability at the operational level is a political process not a technical one (Enters and Anderson 2000, Jacobs 1999, Susskind 1996). *Sustainability is defined in practice through human political processes.* Clearly, technical answers will remain necessary to support the contending political visions. But there is no objective standard that all can agree on (save, perhaps, for the worst-case scenario of a strip-mined, clear-cut, over-farmed, fished-out planet, where all can see a lack of sustainability – but that takes us back to the first, more visionary, level of agreement).

Two consequences flow from this view. First, it highlights why, ultimately, democratic governance structures are crucial to sustainability. These structures provide the forum where action toward sustainability is decided upon – a particular set of policies, budgetary priorities, and programs. Effective representation of all interests is crucial, precisely because it is everyone’s future (immediate and long-term) that is at stake. Chapter 6 on decentralized governance will take up this issue as its core focus.

Second is the recognition that politics will ensure that economic questions stay in the foreground. Ecological sustainability may be the bottom line of conservation-oriented NRM, but in the real world you can’t get there except through confronting the prevailing economic growth paradigm. This is the essence of the sustainable development marriage of opposites. For CBNRM, located as it generally is in the impoverished hinterlands, the economic viability of human resident communities has become the primary focus of sustainability actions. Thus, economic viability is as much a bottom line as ecological viability in CBNRM.

The chapters on sustainability issues and approaches will therefore focus on these twin goals. We will argue, however, that it is important to keep them separate in devising strategies for sustainable livelihoods and biodiversity conservation. *The fusing together (as in sustainable development) of ecological and economic goals, we shall argue, is one of the reasons for CBNRM’s failure to deliver on the ecological bottom line.* Economic viability is and should

remain an important objective of CBNRM. But biodiversity conservation is not an outgrowth of this rural development. It should be pursued as a separate objective needing its own incentives and enabling factors, as we discuss in the last section of this chapter and the succeeding chapter.

CBNRM, Sustainability, and Sustainable Development

Sustainable development, in its fullest sense, has considerable overlap with the goals of CBNRM. We would suggest, however, that CBNRM differs considerably in priorities.

From the start, sustainability definitions stressed the basic idea of meshing economic development with environmental protection (Brundtland Report; UNEP/WWF; Goodland and Daly 1996, Lele 1995). Concern for the quality of life of both present and future generations is also a core interest (often termed intra-generational and inter-generational equity). More recently, participation has become a desired means *and* end packaged into sustainable development during the Earth Summit in Rio de Janeiro in 1992 (Jacobs 1999). All these concerns are present in CBNRM also.

But CBNRM is not primarily a rural development strategy; it is a conservation strategy³⁷. The rapid rise of CBNRM worldwide was powered particularly by the failure of states to conserve natural resources under direct management. The bottom line of this form of NRM is continuing ecological viability. The “CB”-ness of it is a supposedly more effective means to that end. Thus, CBNRM is generally a synonym for community-based conservation.³⁸ As such, the ultimate indicator of success is whether the natural resource base – the forest, the fishery – has been maintained, improved, or has continued to be depleted.

The natural resources and ecosystems being managed must continue to exist. However, there is a significant difference as to what different managers may see when they look at a given ecosystem. For some, sustainability means that the area must be able to produce products and income for present needs while not compromising the needs of future generations. This, essentially, is a definition focused on sustainable use values. For others, it is the area’s biodiversity and the entire range of environmental services – such as watershed functions, carbon sequestration, marine nutrient production, and soil or beach conservation – that must be preserved (together with the intangible but real value of aesthetic appreciation). This definition looks more at values which cannot be directly converted to use by local peoples.

Much discussion of sustainability in CBNRM combines the two goals, though as Uphoff (1998) points out biodiversity conservation is hardly the same thing as sustainable development. We would argue that it is important to separate the two when devising strategies that will enable and

³⁷ Note that it is a program run by the DENR, formerly the Bureau of Forestry, with personnel whose primary skill set is forestry. Rural development tends to be the focus of other government agencies -- particularly the Department of Agriculture.

³⁸ NGO-initiated CBNRM, however, tends to be more of an example of conservation-based community development. In addition, there are many supporters of CBNRM who are mainly interested in its potential both to empower the marginalized and to improve their livelihood opportunities. However, there is no getting away from the conservation goal at the heart of CBNRM.

encourage impoverished local residents to conserve both future productivity and biodiversity³⁹. Current strategies are primarily oriented towards conserving for future production (sustainable use) but very poorly designed for conserving biodiversity and environmental services.

Sustainability Issues in the Philippines

Increasing pressure on dwindling resources is the common story told of the uplands and coastal areas. Sustaining the Philippine natural resource base clearly depends on drastic changes in resource use patterns. The upland population has tripled since the 1960s, estimated in 2002 at 17.4 million out of a total Philippine population of around 76.5 million; and this number is expected to double by 2020 as a result of more in-migration and higher than average fertility rates (Cruz 2000). People are driven to the uplands because they have nowhere else to go, pushed out of the lowlands where they have neither land nor employment to sustain themselves. In the uplands, the attractiveness of areas where it is relatively easier to make a living (e.g. logged areas) means that already stressed ecosystems receive further pressure.

Coastal lands, by contrast, are often prime properties with strong claimants, not generally open access like the forests. However, the sea is open access, and the condition of coastal populations (less well-studied) is likely the same as in the uplands: poor, high density because of migration and fertility. Migration patterns appear to be more from one coastal area to another (generally not from inland), following where the fisheries are abundant and where access to coastal land can still be had (public land or unattended private land). The push factors are similar: lack of security over land, lack of other opportunities to make a living.⁴⁰

Sustainability requires these fragile communities, eking out a living in fragile ecosystems, to take on the added challenges of conserving productive resources and on top of that conserving biodiversity. While sustainable use logically is in their interest, the question of how they are able to think and act for the long-term is a real one.⁴¹ And beyond that lies the question of how and why they would choose to act for conserving non-use values such as biodiversity. Impoverished people understandably focus on their family livelihood, not on the broader need for sustainability (CIFOR; Uphoff 1998). It is therefore an eminently fair question to raise as to why community-based models should be the means of achieving conservation, particularly biodiversity conservation (Kramer 1999; Wells and Brandon 1992).

We would agree that ecological sustainability is not an inevitable outcome of CBNRM, far from it. However, we would also argue that *ecological sustainability is only reachable through CBNRM, not state management, in the current reality of a severely under-resourced state*

³⁹ For ease of reading, rather than listing each time the entire range of non-use values such as biodiversity, environmental services, scientific knowledge, etc., we will use the term biodiversity to represent the larger set of ecosystem functions not oriented to consumption and production.

⁴⁰ It should be noted, however, that fishing as a preferred life pattern has resilience even in the face of other opportunities (Pomeroy et al., 1996; Pollnac et al., 2001).

⁴¹ There is little information on policies that impact on resource use patterns and migration patterns. Data-gathering and empirical analysis is clearly needed for market and sector-level incentives that influence household-level decisions on land use (Coxhead et al. 2001).

managing a huge state-claimed area. Simply put, the Philippine state cannot enforce conservation laws in an effective manner with the small amount of human and financial resources it has on hand. CBNRM is the only practical solution to this dilemma, as the costs of local enforcement are lower and the effectiveness arguably higher (Brunner et al 1999, Uphoff 1998). The question therefore is how local people can be encouraged to conserve resources – both for productivity and biodiversity. We look at each of these goals separately in the next two sections.

Strategies for Sustainable Use: Conserving (and Increasing) Productivity

Sustainable use centers on enabling local communities to make a living through sustainable natural resource management. *Unfortunately, there are few grand success stories of sustainable use in Philippine CBNRM.* Current programs have been evaluated as more successful in empowerment than in achieving either greater wealth for local residents or greater viability for the resources of the local ecosystem.⁴² Reasons given range from insufficiency of tenure security, a degraded resource base as starting point, project time horizons that are too short, externalities the projects couldn't address (demographic, political economic), and a host of other problems (forestry report, 2001; coastal report, 2001).

The coastal report summarizes the major outcomes as PO formation, management body formation, and local ordinances. Some habitat protection and increased biodiversity have occurred (of fisheries through marine protected areas), as well as some livelihood diversification. But this has not led to increased income or reduced use of resources. The report concludes that resource-based strategies (marine sanctuaries and mangrove protected areas) will be more successful strategies than diversification or loans, as the focus needs to be directly on improving the status of the resources. In addition, improving the resource status is better for equity, as all coastal residents can benefit (not just PO members).

The forestry report concludes that protection has been far more emphasized than production in CBFM. Employment income is a major livelihood benefit but a highly temporary one. With little or no incentive, this type of collective activity unsurprisingly disappears after the projects end. The forestry report thus recommends a greater focus on production – particularly, assisted natural regeneration (ANR) and smallholder farms and plantations. Both reports therefore highlight the need to focus directly on improving the status of the threatened resources.

At a broad level, one can point to a trio of strategies apparent in the team reports that together make up a general strategy for enabling sustainable use by local people.

1. The first strategy is to *increase income from a given unit of resource.* This involves a range of technical, financial, and infrastructure solutions that increase efficiency and maximize returns for the primary users: soil and water conservation, agro-forestry, establishing local processing enterprises, providing small-scale financing, improving links between markets and farms/fishing boats, etc.

⁴² Though as discussed in previous chapters, empowerment has largely been equated with or assumed from the formation of people's organizations (POs).

2. The second strategy is to *reduce pressure on the resources*. This involves a range of activities from environmental education (building awareness of human patterns of resource depletion) to generating alternative (non-resource-based) livelihoods and even encouraging emigration (through lowland job-creation).
3. The third strategy is to *create incentives for management and conservation of the resources*. The primary approach in forestry is the provision of some form of tenure over forest lands (linking current activity to future benefits). The primary approach in coastal areas is the demonstration of rapid, concrete economic benefits from establishing a local reserve. There is also a short-term strategy of funding reforestation jobs in exchange for participation in project management regimes; however, this is not a true incentive for managing the area sustainably for the long haul.

All three strategies are necessary and complementary. Reducing human pressure on the resources is the ultimate conservation goal. Increasing income for local impoverished populations is both a (partial) means to that end and, more importantly, a goal in itself. To the extent that the income is resource-based, it must be focused both on maximizing returns from each unit of resource and on establishing a locally accepted management regime for the resource area that will keep the income flowing. For people to accept this management regime, there must be a link to definite positive and/or negative consequences. Tangible economic benefits, such as the right to harvest future crops or non-timber forest products, or the increase in quantity and diversity of fish catch, have been effective incentives in establishing local management regimes (forest and coastal reports, 2001). Threats of negative incentives, such as fines or jail terms, are present in current rules and regulations, but they have not been effective as the state is rarely able to enforce them. More often, they are an additional cost to producers as “rents” paid to low-salaried state officials; such payments are considered a normal cost of doing business in forestry.⁴³

Most CBNRM projects focus their energies on strategy 1, which is really about rural development and sustainable livelihoods. As is clear from the discussion above, this strategy alone will not bring about sustainable use. Greater attention to the other two strategies is needed, which are also crucial to local people’s interest and ability to conserve resources for future use. In addition, explicit attention is needed for the reality of the frequent need for rehabilitation prior to conservation. CBNRM areas map fairly consistently (though not exclusively) to degraded areas.

Strategy 1. Increasing Income from Each Unit of Resource

Poverty alleviation is at the core of this strategy. In this scenario, conservation comes about through the ability of people to obtain higher value from the local natural resources. If they can make the same income off of fewer resources, the reasoning goes, they will reduce their resource use. (We shall have more to say about the limits of this reasoning in the biodiversity

⁴³ Research on the extent to which bribes significantly alter the returns on forest products to primary producers would be a potentially valuable, if controversial, topic. However, we will argue in Chapter 5 for regulations that better reflect the state’s new role in NRM and that take the national government largely out of the fee collection business.

conservation section.) The emphasis therefore is on adding value and maximizing returns – through processing technology and enterprise development; through increased efficiency in soil and water conservation and/or or in agro-forestry; through improved infrastructure that facilitates links to nearby markets.

This area is a main focus of activity for most CBNRM projects (apart from organizing POs). Support for the growth of local agricultural or fisheries production and micro-enterprise (both resource and non-resource-based) are common components of forest and coastal projects. The emphasis is capturing the jumps in value along the commodity chain, as the product is extracted, processed, and traded. The more those jumps occur at the local level, the greater the local income generated from each unit of resource.(Ribot, in Zerner)

The forest report notes that CBFM's objectives originally were focused on rehabilitation and production; only a decade later were concerns for biodiversity and empowerment added. Contour farming, multi-cropping, and soil and water conservation have been continuing strategies to improve productivity in upland forestlands.

Sites which started in the 1980s show a very strong bias toward objectives related to upland agriculture and soil and water conservation measures because their forests are already badly degraded and largely unproductive to begin with. These objectives are intended to address the significant depreciation of the natural capital base in the uplands and the consequences of declining productivity, worsening food security, and deepening poverty which, by the 1980s, had become national issues (DENR-RRDP 1987; Seymour 1985; Borlagdan 1997; Guiang 1993b; DENR-UDP 1996; de los Angeles 1994).

These activities continue to be a part of both conservation and economic development programs in the uplands.⁴⁴ The most valuable product in the uplands, timber, is arguably the greatest hope for wealth creation in the uplands.⁴⁵ However, Guiang (2002) points out that timber harvesting enterprises have generally been successful in creating jobs but not wealth (managing at most to cover production costs):

Indeed, timber harvest operations are constrained by the resources that local communities can mobilize. Timber sales from all CBFM communities typically produce income sufficient to pay market-based daily wages to community labor, rent needed equipment, and cover the costs of transport and associated marketing costs. No community has yet generated what might be termed a substantial financial surplus from its timber operations. The principal beneficiaries of CBFM timber harvests are those employed in the operations.

⁴⁴ The Landcare program initiated by the International Center for Research in Agroforestry (ICRAF) in Lantapan, Bukidnon and its predecessor Sloping Agricultural Land Technology (SALT) are examples of the continuing effort to increase and sustain the productivity of upland farming.

⁴⁵ Interestingly, in a study on profitability of forest-based enterprises, Ames (1998) suggests that adding value through processing may not always be the way to greatest profitability. Her analysis points to the basic value of the raw material as the single most important factor influencing profitability.

The reasons for this are many, ranging from the usual suspects (poor infrastructure, inadequate access to credit) to management issues such as insecure tenure and inadequate involvement of local government and the private sector. Guiang also makes the point that there is enormous variability in CBFM areas – some communities have harvestable forests (“standing capital”) whereas some have marginal forestlands that need to be rehabilitated before farm or timber products could be harvested. In some places there are organized groups capable of management, in others not.

Strategy 2. Reducing Pressure on the Resources

Results of attempts to reduce pressure are mixed. Both positive and negative incentives are common approaches. Positive strategies that encourage limiting one’s resource use include raising awareness of environmental problems and providing support for alternative livelihoods (ones not based on a threatened resource). Negative incentive strategies focus primarily on enforcement of exclusion regimes – patrolling the forest or the seas for illegal activities.

The team reports point to the common CBNRM project approach of beginning with environmental education. It apparently has been effective in recruiting volunteers for enforcement and in convincing local community members to give up some resource use. However, it is important to note that both these outcomes have usually been compensated by jobs, which are not sustained after project funds are gone unless the community is itself able and willing to continually subsidize. The extent to which environmental awareness is a major factor in local decision-making is unknown. Research into this area could provide an important input into local government environmental programs.

There are indications that perceptions and values may in some cases be oriented toward sustainability over maximal profit. Anthropological studies of indigenous communities have shown that non-economic values attached to resources make them more likely to conserve (Mangahas 2000). And a resource valuation study in Samar shows that even if the value of community benefits from mineral resources far outweighed the value of forest and other agricultural products, the communities consulted would rather engage in sustainable forest and farm activities than allow mining.⁴⁶ In Orion, after participation in a coastal resource management project, fishers appear to have kept their commitment to diversified livelihood and fisheries co-management despite a lack of clear household-level economic benefit (Roy et al, 1999, cited in coastal report 2001).

At the other end of the spectrum, moving people out of an area is the most drastic approach to reducing pressure on resources. However, there are compulsory and non-compulsory forms. There is a significant body of literature on the desirability versus the negative impacts of resettlement.⁴⁷ Forced resettlement is not a major strategy employed in Philippine conservation

⁴⁶ Marian de los Angeles, 2001, pers. comm.; results of SAMBIO project funded by USAID, publication forthcoming.

⁴⁷ For an example of those in favor of moving people out of conservation areas, see Kramer 1998. For a discussion of problems with cultural survival of the resettled see West and Brechin 1996.

programs; we certainly would not argue for it, in the Philippines or anywhere else.⁴⁸ Nevertheless, out-migration (a non-compulsory form of resettlement) is a part of many conservation strategies, particularly for the uplands. The creation of jobs in the lowlands is a strategy meant not just to alleviate poverty in the lowland areas; it is part of a strategy of attracting people out of the uplands to better opportunities. The decline of the famed Banaue rice terraces in the Cordilleras is generally attributed to the growth of non-farm employment in nearby towns and even abroad. It is important to recognize that CBNRM on its own will not provide the long-term answer to growing population pressure. Lowland absorption of some of this population through job creation is crucial to enabling sustainable upland use and conservation. Given that these kinds of job-creation programs are rarely within the reach of CBNRM projects and programs, it points to a long-term need to integrate local development and conservation programs (ideally at the national level, but practically speaking at the local level). The need for significant local government involvement in CBNRM is particularly evident here.

Reducing pressure is also attempted through replenishing the resource and creating and enforcing prohibitions on non-approved (“illegal”) extraction. Creating marine protected areas and artificial reefs (though these can actually add pressure by drawing fish and fishermen to a new place) and patrolling against illegal fishing are very common activities in CBNRM. Reforesting forestlands converted to agricultural use and patrolling of core zones in protected areas are common activities in CBFM. The forestry report is critical of the degree to which protection and patrolling are emphasized over production in the CBFM Agreements (CBFMAs):

Forest protection activities against fires, illegal encroachments, and illegal cutting are some of the manifestations of the DENR-determined and prescribed activities in the communities. Apprehending illegal encroachers and patrolling the forest are two of the dominant practices for forest and forestland protection included in the CBFMA provisions. The practice of ANR, despite its potential and cost-effectiveness, has not received adequate attention in the communities (Friday, Drilling, and Garrity 1999). The same thing can be said for the development of smallholder tree farms and plantations, except in cases involving a huge amount of subsidy (e.g., Maasin watershed site).

Another very common strategy in CBNRM and CBFM for reducing pressure on resources is the creation of alternative livelihood projects. Pig and goat raising, basket and mat weaving, quilting, farming (for fisherfolk), are all examples of attempts to enable local people to shift their source of income away from threatened species. The coastal report (2001) summarizes the lessons thus:

⁴⁸ Even when there are farming settlements within a national park that have removed all forest cover in their area, such as the Kapatagan area in Mount Apo, the political costs of forcible removal have and will continue (understandably) to prevent their resettlement. Resettlement is, however, a contentious issue in the Philippines for large-scale development projects such as power plants and dams. Ironically, one of the few incidences of resettlement of a population in a national park came about as a result of the establishment of a geothermal power plant within Mount Apo National Park, not as a result of establishing the park itself (Gollin 2000).

After over two decades of experimenting with various livelihood projects, it has become apparent that the idea of providing an alternative livelihood to reduce fishing effort is extremely difficult to achieve. Among the constraints are socio-cultural factors (e.g., mismatch of introduced enterprise with interest and skills of fishers) and the economic scale of a livelihood intervention necessary to take people out of fishing. Subsequently, expectations have been tempered down to providing supplemental sources of income or diversification of income sources of coastal community members (i.e. income augmentation). Even so, successful livelihood development activities (i.e., micro-enterprises) are few and benefits are limited to a small group of participants.

The report concludes that efforts to improve income would be better focused explicitly on resource-management activities rather than non-resource based strategies. Particularly recommended are ones that either: (1) improve the share of value received by primary users (such as reform in fishery concession policies); or (2) increase the supply of coastal and marine resources (such as “community-based grow-out culture as reproductive reserves (e.g., Junio-Meñez, et al., 1998) which can be adapted for a variety of invertebrate species and reef fish (e.g., *siganids*).”) Such strategies not only strengthen sustainable use, but also are more equitable as more than just PO members are likely to benefit.

It appears that it would be more beneficial to focus on diversification in general as a livelihood strategy, rather than the creation of alternatives as an either-or choice for rural people. As Ellis (1999: 3) notes, “The effects of diversification on environmental resource management are mixed and context-specific. The growth of non-farm income sources might be expected to reduce the need for landless rural dwellers to carry out extractive practices in local environments for survival. On the other hand, for settled agriculturalists non-farm earning opportunities can result in neglect of labour-intensive conservation practices if labour availability is reduced.” We will discuss this further in the subsequent chapter on suggested approaches.

Strategy 3. Creating Incentives for the Management and Conservation of Resources

Government management of natural resources is now shared with local people. But “management” implies a degree of control over an area. Whether you manage for development or for conservation, the basic need is to be able to control who uses the area and how they use it. The primary means of gaining this control is through property rights (though social controls such as local norms and relationships play an important role too). Property rights convey the authority to access resources and often to control a resource area as well. They are also seen to provide incentives for the labor involved in managing a resource (Schlager and Ostrom, 1992). If you are guaranteed an exclusive benefit, the rationale goes, you are more likely to invest time and money in managing the resource for continued productivity, rather than simply maximizing your current harvest.

In the context of degraded public lands, where the government has insufficient funding and people to exercise management functions, the transfer of property rights to local people has become a key strategy to arrest the de facto “open access” regime. The greatest perceived need is to change what are de facto open access regimes into communally managed areas. Hardin’s (1968) Tragedy of the Commons thesis has influenced a range of views that see greater

completeness and security of property rights as the answer to degraded and depleted resources. As McCay (1998: 2) notes:

The literature to date emphasizes market failure: How the lack of secure, exclusive property rights creates incentive and reward structures that encourage people to emphasize their own short-term interests and to shift the costs of their actions onto other people, the environment, and the future. With exclusive, secure property rights in a resource, the ‘externalities’ can become internally recognized and reconciled costs and benefits.”

Here is where the need for improvement is most apparent. Philippine CBNRM generally treats tenure issues as a key component of terrestrial resource management, but has yet to deal effectively with them in a marine context. Both forestry and irrigation have some level of tenure transfer to organized groups as a part of the management arrangement. For coastal and marine areas, tenure activity appears limited to mapping and enforcing the existing municipal water boundaries of the Fisheries Code of 1998 and establishing CBFMAs in mangrove areas.

Both the coastal and forestry reports highlight the important issues of tenure and management institutions. The forestry report lists a number of needs – among them, more secure tenure over resource use rights (RURs), better support and involvement of local government (with increased authority and clearer responsibilities for the LGUs), and improved partnerships between the private sector and local community resource managers. The coastal report also points to tenure issues (though here the need is for the development of property rights for “multi-species/multi-gear small-scale fishery within a multiple use coastal system”) and an institutional arrangement for coastal resource management that can handle larger scale, more complex issues.

We shall examine the issue of tenure in greater detail in the next chapter on strategic approaches to sustainability. For the purposes of this chapter, it is important simply to note that to date, tenure grants to community organizations have not created the necessary incentive to conserve resources. Why is this? First, as the reports indicate, there has been inadequate security and completeness in the tenure instruments conveyed. Second, we would add that even with adequate tenure and security, tenure will be insufficient to bring about conservation, because of the limits of sustainable use approaches.

Beyond Sustainable Use: The Need for Compensation for Conserving Biodiversity

The Limits of Sustainable Use

Sustainable use, as we have noted, is the dominant approach to conservation in Philippine CBNRM. The language of sustainable use focuses on “increasing the efficiency of resource use” and “maximizing returns” to impoverished users. Both the issues of production and income (quantity and value) are intertwined in the search for the perfect balance – sufficient production to meet human income needs and sufficient conservation to meet ecosystem viability needs for future production. But what levels of production and income will be necessary to conserve ecosystem viability overall?

The limits to a sustainable use approach come out most clearly on issues of compensating the resources needed (human labor, financing) for conserving resources that are not to be extracted. The common experience of CBFM and CBCRM is that it is established in degraded areas (forest,

coastal reports 2001). As a consequence, establishing sustainable use in these ecosystems requires rehabilitating the ecosystem, not merely establishing sustainable agriculture, forestry, and fishing practices. And in some cases, such as in protected areas, it means zoning large portions of the area as no-touch areas. The starting natural capital is often worthless, yet current models expect local people not only to gain income for current needs but to conserve the resources for future needs.

Tenure and income have long been the strategies to encourage this kind of commitment. Communities are currently expected to shoulder the costs of rehabilitation, in exchange for legitimization of their right to stay on the land. This burden is thus added to the already considerable one of trying to meet their basic needs in a degraded resource area. A number of studies (CIFOR and Bais Bay) show that linking tenure to conservation is too simplistic. Tenure doesn't inevitably lead to improved biodiversity or even quantity of resources, because the market influences people's perceptions of value (and therefore the species they are interested in conserving).

As noted earlier, there is little evidence of increased income in CBNRM areas (forest report 2001, coastal report 2001). The poor condition of the resources, the limits on supply of the resources, and the paucity of current economic opportunities in the uplands and most coastal areas combine to make it nearly impossible for the income from sustainable use to be sufficient to enable poor residents to restore and conserve these areas. In addition, while projects often assume that all participants can and wish to become entrepreneurs, this has not been borne out in practice.

There is another difficulty with the above strategies – namely, their assumption of subsistence level living. In general, there are serious limitations to these strategies, even when they are successful in generating income. *Models that assume that poor people's needs and goals will remain at a subsistence level are highly unrealistic, to say nothing of the implied ethics.* Alternative employment may generate income that assists in meeting household needs, but it is unlikely ever to translate into a subsidy for biodiversity conservation. It is more likely that additional income will create additional opportunities that are valued, and thus it will become a supplement rather than a substitute for resource-dependent activities. The costs of biodiversity conservation will have to be found elsewhere.

Moving From Incentives to Compensation

It is important to recognize that sustainable use may not be enough to meet the economic needs of the resource-dependent communities, let alone the costs of rehabilitating and conserving the whole range of ecosystem services. Sustainable use of local resources is clearly one part of a larger package of income sources that a rural household may have as options. What are some others?

Looked at most broadly, we see several sources to make the total conservation package (use and non-use values) possible. First, there are income and products from extraction (with secure tenure to support sustainable extraction levels). Second is supplemental income from diversified livelihood opportunities (both on and off-site). But do any of these link specifically to conservation work, to covering the labor and opportunity costs of it? The legitimacy of passing on conservation costs to local communities is in any case questionable, given that the non-local

beneficiaries of forest or fisheries conservation are numerous. *In opting for sustainable activities, in investing in rehabilitation, and in monitoring the resources, the upland and fisherfolk communities are actually performing a service whose benefits the rest of us enjoy for free. We ought to pay.* Thus the third income source is a newly emerging area, compensation for conservation services.

This strategy, just beginning to be applied in the Philippines, is to compensate local communities for the conservation services they are performing. This compensation provides them with a supplementary income stream that is clearly tied to conserving the natural resource base.

There is already an element of compensation built into many projects. Often labeled incentives (or occasionally rewards), these are payments tied to specific work responsibilities. The coastal report describes a range of such arrangements:

In addition to providing livelihood opportunities, some projects also provide assistance to upgrade fishing gears (e.g., nets, boat engines) with the condition that recipients of “livelihood support assistance” participate in conservation activities. For example, in the Turtle Islands, KKP loaned boat engines for fishing. In return, recipients are required to participate in monitoring and patrolling activities (Palma, 2000). In Orion, Bataan, credit–extension for household-scale livelihood projects were provided with the intention of minimizing the impacts of marine sanctuaries and enjoining more fishers to participate in CRM activities (Orozco and Tria, 2000). In Danao Bay, fishers who operated fish corrals in the area proposed as a sanctuary agreed to move their corrals with the condition that they be paid for the work and hired as guards of the sanctuary (Heinen and Laranjo, 1996). In Bolinao, the federation of local people’s organizations was granted an interest-free loan by the U.P. Marine Science Institute to defray part of the payment of the concession fee for the milkfish fry concession. The loan was given in support of the plan of the federation to implement a closed season in fry collection and provide an opportunity for the federation of local people’s organizations to learn how to sustainably manage and acquire greater economic benefits from the concession.

Such forms of compensation are generally considered incentives. We would argue that it is time to move from carrot-and-stick control approaches to a bargaining approach, where individuals and households can make decisions for themselves and see themselves as engaged actors, not passive recipients of largesse or punishment.

Compensation mechanisms could entail a range of market-linked initiatives to capture and distribute at the local level the real value of the conserved resource.⁴⁹ Thus, for instance, a PO in

⁴⁹ We recognize that non-monetary benefits are another important form of compensation. The coastal report notes: “Leaders (e.g., officers of people’s organizations, members of the local management committee) are provided additional opportunities such as cross-site visits and attendance of conferences in various places. These provide opportunities to establish personal networks, which can also benefit their families (e.g., educational scholarship or

a CBFM area is given the responsibility of planting trees but is only allowed to cut a portion of them. The question then arises as to who should pay for the labor involved in planting non-cuttable trees. If the trees are in a watershed, the downstream water users are clearly directly benefiting. Should they not compensate the upland community for their work? There is interest in the Maasin watershed in exploring just such an arrangement of direct compensation from clearly identifiable beneficiaries in Iloilo City (namely, the Metro Iloilo Water District).

Direct community compensation by downstream users is one option, where the beneficiaries are clearly identifiable. Consumer compensation through eco-labeling (environmental certification) of sustainably harvested products is another means of channeling revenues back to those engaged in conservation work. Apart from this, there are also options to channel revenues arising from international agreements (La Viña and Yu 2001). International funds for carbon sequestration could be channeled to community forestry, rather than to state-managed plantations. Benefit-sharing from bio-prospecting may provide another revenue option; the policies for this were already largely put in place under the Ramos administration. All of these ideas are highly experimental, yet the potential exists for creative work on these issues in the Philippines. We will explore them further in the next chapter.

Conclusion

CBNRM is criticized for failing to deliver on sustainability – either ecological or economic. However, the reality is there is not enough money in the system to cover the costs. The few successes are in fact where local communities are subsidizing conservation work. *The issue therefore is not failure of the CBNRM model overall but the realization that sustainable use is simply not able to pay for biodiversity conservation.* The basic assumption that it could do so has been demonstrated to be incorrect.

Tenure is currently thought of as carrying conservation responsibilities (e.g., you get a farm in exchange for caring for the forest), but it doesn't work. People will always be more interested in conserving resources in the multiple use zones, not in the no-touch zones. For the latter, we need to compensate them. Ideas need to be developed and experimented with, but diversifying income streams and distinguishing between those likely to support sustainable use and those needed for non-use functions will be important in crafting better strategies. Therefore we now turn to a separate consideration of the diversity of income streams available to rural communities under CBNRM. We look particularly at the key issues of tenure and compensation.

jobs for children). ... The non-monetary rewards also include greater prestige and influence in the community, which in turn open new possibilities for personal advancement particularly for the leaders. In this respect, personal benefits are proportionate to the degree of involvement. Notably, in San Salvador, members of the core management group became elected officials in the community. This in turn helped sustain support for project activities and the management of the marine protected area.”

Chapter 5: Strategic Approaches to Sustainability

*Covering the Costs of Conservation*⁵⁰

As discussed in the previous chapter, current strategies for sustainability are focused primarily on sustainable use. The Philippines has moved into a number of second generation problems in the quest for resource values to be better used, distributed, and conserved. The needs now are: not just conveying tenure, but conveying it in a way that encourages sustainable use and management; not just supporting local wealth-generation strategies, but understanding how conservation strategies affect different social groups within a community and developing strategies that address these differential needs and interests.

Biodiversity conservation is assumed to be packaged in together with conservation for future productivity in some all-encompassing notion of conservation. However, this has resulted in the unrealistic piling on of responsibilities and expectations on people eking out a living at the margins of degraded lands – fragile communities in fragile ecosystems. Both they and the resources deserve better. We would argue that improvements in sustainable use strategies are needed. But we would also argue for separating out biodiversity conservation as a goal needing its own structure of support. We therefore suggested in the previous chapter that a range of market-linked initiatives may be necessary supplements: direct compensation for conservation services, eco-labeling, or other attempts to capture and distribute at the local level the real value of the conserved resource.

Financing ecological sustainability is a key need in achieving CBNRM's goal of conserving natural resources. Much of this chapter will look at factors such as tenure and compensation that enable impoverished local residents to increase their stake in sustainably managed resources. But we also want to recognize at the start that humans do not function solely on the basis of rational economic self-interest. Social relationships, cultural values, aesthetics, and other elements of human culture play a deep role in how we relate to natural resources. To a certain extent, our recommendations for continuing awareness-raising through environmental education and community-building through collective tenure arrangements speak to those non-economic aspects, often captured in the terms human capital and social capital. However, the needs for covering the costs of conservation are paramount, and we have chosen to focus our analysis on those aspects.

Strategic Needs for Sustainable Use: Improved Tenure and Diversified Livelihoods

⁵⁰ The late-nineteenth century distinctions in the U.S. environmental movement between conservation and preservation implied that preservation forbade any use while conservation was equivalent to what is now termed sustainable use. However, that distinction has largely been lost in current usage. As with sustainability, we use the term conservation as it is popularly understood. For conservation, this means a focus on preserving non-human life and planetary life-support systems. In some places this allows resource use; in some places it does not. Where we mean a specific type of conservation, we use the terms conservation for productivity (or sustainable use) and biodiversity conservation (shorthand for ecosystem services and other non-use values).

All three current strategies for sustainable use in CBNRM are necessary. To summarize the basic strategies: (1) incomes must be increased through improvements in value gained and retained at the primary user level – e.g., through more efficient technology of cultivation and extraction, the adding of value through processing, and a supportive infrastructure for marketing and enterprise development; (2) pressure on the resources must be reduced through awareness raising and the development of diversified livelihood options (either on-site or in other locations that draw people to better economic opportunities); and (3) management incentives must be put in place – in particular, tenure must be made more secure, so that one’s efforts to conserve the resource will be connected to its future availability.

Of these three strategies, the one most in need of attention is the issue of tenure – as in its current form, it is neither complete enough nor secure enough to provide an incentive for local people to actually manage resources (as opposed to simply extracting them). The sectoral reports point to the clear need to improve community access and control of natural resources (particularly resource use rights). Also needed is greater focus on strategies that will reduce pressure on resources, either by increasing the supply of resources or decreasing the extraction of them through heightened awareness and diversified income sources. We will focus primarily on tenure as a strategic approach with the highest importance.

Tenure: Improving Security and Completeness, Strengthening Collective Action

For the Philippines, there is much to be gained from a careful look at three basic questions: What rights are conferred? Will they be respected and enforced? Whose rights are they? The first two questions focus attention on the *completeness* of the bundle of rights conveyed and on the *security* of the rights conveyed. The last question relates to the issues of identifying the community that is to be vested with rights, and the distinctions between individual and collective rights.

Security of Tenure

In currently prevailing theory, there are four types of property rights regimes: state, common property, individual (private) property and open access (the absence of property rights). While common property used to be equated with open access, it is now understood that locally accepted systems of management have long existed for pastures, woodlands, and other commons (Bromley 1991). The degradation associated with the “tragedy of the commons” is actually the tragedy of open access. Natural resource degradation happens because of the failure (of the state or local people) to enforce a property rights regime.⁵¹ And a key strategy in establishing sustainable use in NRM has been to establish secure property rights to prevent open access situations.

While the Philippine government claims large areas of land for the state, it does not have the resources to enforce its property rights. Thus, *de facto* open access regimes are a fact of life and

⁵¹ However, resource values such as biodiversity and watershed function are benefit streams that everyone can enjoy; no one can exclude others from enjoying. In effect, by the nature of the resource (such as fish in the sea that can’t be fenced) or by public policy, these resources cannot be the subject of property rights.

a major reason for the appeal of CBNRM. In the current version of CBNRM, the state has retained its property regime and is getting the community or LGU to enforce its rights. It uses tenure, particularly use rights, as a form of compensation. Apart from the obvious equity problems in this situation, there are difficulties for sustainability as well. Such an arrangement will survive only as long as the benefit stream from the use rights is higher than the cost of enforcement. Once the costs of enforcing the property regime outweigh the returns, the regime will break down and return to *de facto* open access. It is a highly insecure regime. This makes sustainability extremely difficult to achieve.

In the context of this insecure regime, secure rights become even more important. However, not only is the state rarely present to enforce the use rights it has transferred, but in the case of forestry it also regularly threatens to take them away. The use rights granted under CBFMA are 25-year arrangements – not a particularly long time in terms of the returns on investment needed for forestry. But more importantly, the requirement of DENR approval for extraction, transport, and other actions involved in managing the CBFMA area means that the use rights are highly conditional on DENR approval. The suspension of harvesting rights under Secretary Cerilles was the ultimate demonstration of how insecure the use rights in the CBFMA are. Sustainable use requires investments in the resource area, including restraints on extraction. Such restraint is unlikely when future rights to extract are so lightly held.

Completeness of Rights: Use Rights and Control Rights

The transfer of rights may be critical, but it is also problematic. State ownership of resources is claimed on behalf of the nation. Why, some would ask, should one group be given ownership of what is important to the entire nation? How do less-local stakeholders get their interests represented, if rights are transferred to small local groups? The debate over control of resources that are important to humanity everywhere takes this same question to the international level. And even at the local level, there are concerns for how equity can be dealt with once rights are transferred. There are a number of cases in which collective community management has actually excluded the most marginalized users – women with customary water or kindling gathering rights, pastoralists with customary grazing rights (Meinzen-Dick and Knox, 1999).

Division of rights and clarity over them may be one way to help. In their seminal article on property rights and natural resources, Schlager and Ostrom (1992) dissect resource rights into five types along a continuum of greater and lesser control. Different actors may have different clusters of these rights, which range from basic access to an area to the right to sell or transfer the whole bundle of rights. Meinzen-Dick and Knox (1999) helpfully group the five rights into those concerning *use* and those concerning *control*:

Use rights are made up of the right of *access* and the right of *withdrawal*. Hikers in a protected area have rights of access to the area, but they may not take out any plants or animals. Farmers with lands along an irrigation canal are authorized users – meaning they have both access and withdrawal rights for the water within their area.

Control rights include the right of *management* (deciding how the resources are used), the right of *exclusion* (power to decide who gets to use resources and who gets to decide on how they are used), and the right of *alienation* (the ability to transfer all four rights, especially the other control rights, to another).

They are not separable, but instead are hierarchical. Each is placed atop the others, so that if you have a right with a higher degree of control you also have all other rights below it. Use rights are a key starting point, obviously, but users have no power to affect the actions of other users.

The rights of management and exclusion are crucial for sustainable development (Schlager and Ostrom 1992; Agrawal and Ostrom 1999; Meinzen-Dick and Knox 1999). Without the power to assure that outsiders will not benefit from your investments of time and money in an area, there is little incentive to plan for the long-term and manage resources so as to maximize continuing yield. There is also little incentive to participate in managing the resource. As Meinzen-Dick and Knox (1999: 9) note:

Unless these [management and exclusion] rights are held by user groups, the groups will not be able to carry out many of the responsibilities that the government or their members expect of them. For example, forest committees will not be able to maintain the biomass if it cannot regulate how much members as well as outsiders extract. Nor can they regenerate the forest if they do not have management rights, e.g. to plant trees and protect the seedlings. The committee cannot assure the members that they will benefit from participating if they cannot exclude outsiders from taking the forest products or regulate the conditions under which they can come in (e.g., by harvesting only certain trees and/or paying compensation).

It is important to note that “completeness” does not mean that all five rights must be transferred in all cases. The literature on common property notes that it is not necessary to have a full package of rights in order to get sustainability. (Meinzen-Dick et al, 2002) Much depends on the specific nature of the resource management activities undertaken, as well as the scale involved. Agro-forestry, for example, would primarily require use rights, whereas watershed management would require management and exclusion rights as well. *Completeness really means that the appropriate rights for the task at hand have been conveyed.*

These distinctions provide one way of answering the concerns of national interest raised above. Not simply use rights but management and exclusion can often be devolved to the local level while leaving the nation-state with the ultimate rights of alienation of all the other rights. This gives the national government the final right of intervention, without necessitating it be intimately involved in managing the resource. The division of rights also gives flexibility in configuring tenure arrangements to fit specific situations. For instance, it is important to consider whether there may be different arrangements of tenure needed for no-touch areas versus multiple-use zones. And equity considerations may generate yet a different set of concerns for what rights should be transferred.

There is a need to look systematically at property rights in Philippine CBNRM from the standpoint of distinguishing these five rights and determining which rights are necessary and for whom. We provide an initial attempt below, which indicates that in most instances not even full use rights are conveyed, let alone rights of management and exclusion.

Irrigation Tenure: Irrigation, for instance, depends on funding and labor for upkeep of the canals. The management of the system depends on coordinating planting and harvesting schedules, so that the withdrawal of water is done efficiently and within the limits of available

water supply. For communal systems, IAs have access, withdrawal, management, and exclusion rights. For national systems, IAs have those same rights for their sub-sections of the irrigation system, but for the entire system their rights appear to be primarily use rights rather than control rights.

Forest Tenure: In forestry, on the surface tenurial instruments such as CBFMAs, CSCs, and their predecessors appear to grant all tenurial rights except alienation, which remains with the state. But on deeper inspection, the property rights given through a CBFMA basically convey access rights and partial withdrawal rights. DENR remains continually involved in managing the areas, even after the CBFMA is signed. The agreements stipulate monitoring by DENR, but there is a real question as to whether monitoring in this case has turned into reassertion of control through incomplete rights transfer. The array of items requiring approval, even after the signing of the CBFMA, demonstrates that rights remain largely with the DENR even in a CBFM site.

Withdrawal rights are the first place to start, as these are currently transferred incompletely. The forestry report discusses the need to transfer RURs (resource use rights, aka withdrawal rights) fully to the community: “In order to move CBFM forward towards the road of sustainability, communities with access to standing capital should have predictable resource use rights to enable them to use internally-generated revenues to finance their own development and the protection and management of their forests and forest lands.” Currently, even though the CBFMA holders are the only authorized users, each withdrawal must still be approved by the DENR. Not only do RURs need to be conveyed fully with the CBFMA, but also the key control rights of management and exclusion need to be brought to the local level if sustainable management is to be achieved.

Coastal Tenure: As discussed in previous chapters, water tenure is still largely undeveloped (with the exception of ancestral waters such as those recognized for the Tagbanua people in Coron, Palawan). Withdrawal rights are transferred through permits issued by the LGU, which holds the right of management and exclusion for fisheries. However, the LGU does not exclusively control other uses of the municipal water, such as ports, tourism development, and commercial and industrial development.⁵² By law (the Fisheries Code), withdrawal rights are supposed to have an existing bias for the marginalized. However the actual withdrawal of fish and marine products has been a source of conflict for decades. And the criterion for municipal fishing permits is residence, which of course doesn't address the equity differences within fisherfolk communities.

In coastal areas, the primary tenurial instrument is for mangrove lands, for which a CBFMA can be granted. However, this is only applicable in certain areas. There remains a need to look at shoreland access for fishers as a crucial rights issue that affects their ability to access whatever water rights they may hold.

Management rights are a hodgepodge of overlapping responsibilities, with actual rights primarily vested in the LGU. The FARMC is the body tasked with the primary management

⁵² This has a clear impact on local welfare – for instance, fishing rights are deeply affected by pollution. However, fishing rights are withdrawal rights, not ownership, and thus there is no basis to claim damages in case of loss.

responsibilities – its mandate is to determine appropriate gear, open and closed seasons, the establishment of sanctuaries, etc. Enforcement is supposed to be handled by the LGU, but it lacks manpower and thus it is usually the bantay dagat that does the enforcing. Interestingly, the bantay dagat has management rights that are informal but perceived locally to be legitimate. They enforce primarily through citizen arrests, though they generally involve the police and/or the LGU in the process. For areas such as fish sanctuaries, it is often the bantay dagat that is deputized by the LGU to enforce the no-touch zones.

Of course, the dilemma with coastal management is that it is not just about managing fisheries but about integrated management of the coastal zone. The LGU has a natural integrating function, and thus good potential for hosting such management rights, but at the moment it depends on the cooperation of national agencies. Current projects, such as the Coastal Resource Management (CRM) project of USAID, see opportunities through the Local Government Code in strengthening the role of LGUs in integrated coastal management. In the Code, LGUs have a general statutory authority through the “general welfare” clause.⁵³ But specific authority is only granted (to municipalities and cities) for fisheries management.

- Some pollution and waste management control has been devolved to the LGUs, but standard setting and inspections remain with the DENR. The LGU remains dependent on the cooperation of DENR, and can’t compel the EMB to test. Monitoring and inspection skills are highly specialized and different for each industry, so it is clearly unrealistic to expect LGUs to have specialists in all fields. However, where there is a major industry with dominant impact on local resources, it would be appropriate and desirable for the LGU to have local specialization (petroleum monitoring in Batangas Bay, where the oil industry has a huge local impact, would be an example).

Short of actual transfer of full management rights of the coastal zone to LGUs, local institutional modalities that enable the various rights-holders to jointly determine use are a promising solution. We will examine this further in Chapter 6.

Exclusion rights are particularly problematic in coastal waters due to the complexity of identifying the community. The coastal report describes it thus:

While “rights” (i.e. responsibility) to manage a particular area (e.g., sanctuary) have been acquired by local community institutions in many sites, this communal responsibility has no corresponding exclusive rights to the managers. The territorial use rights granted to fishers in Malalison Island (Agbayani, et al., 2000) may be an exception. However, acceptance of such use rights is likely only in areas that are relatively isolated from “outsiders” (i.e., villages in small remote islands). Under these conditions, social sanctions/non-formal arrangements akin to practices in indigenous communities (Charles, 1994) can enhance compliance to regulations by village members. In mainland villages, interests of village members are diverse, and social and economic status is more stratified (e.g., McKay, 1995; Rivera and

⁵³ On the basis of this clause, for example, the Palawan provincial ban on exporting live lapu-lapu was upheld by the Supreme Court. However, if the province had attempted to allocate use as well as to ban, they would likely have lost their case, as only the municipality has the (management) right to allocate use rights.

Newkirk, 1997). Likewise external influences (e.g., intrusions from fishers from other adjacent coastal villages, market demands) result in complex social interactions among members of the community (Aliño and Juinio-Meñez, 1995). In contrast to the above scenario, reciprocity and kinship will be unlikely sufficient to sustain cooperation among various resource users.

And property rights, which would provide one means of encouraging cooperation, cannot be conveyed without accurately bounding the community to whom the rights will be transferred.

The next chapter on decentralized governance will take up the issue of subsidiarity, of control being devolved to the lowest level appropriate to the scale and nature of the task. Tenure is a key element of such control. *Careful attention to the different types of rights to be transferred – particularly the equity and sustainability repercussions of such transfers – is the essential next step in the development of Philippine CBNRM.* For example, one might argue that management and exclusion rights should be devolved to participatory local government institutions, with use rights for specific areas and/or types of resources being granted to sub-groups such as POs. We do not wish to propose a particular assignment of rights, however. This is an area that needs considerable further public debate.

Whose Tenure? The Debate over Individual vs. Collective Tenure

Intimately related to the tenure question is the issue of collective title. One of the second generation questions for Philippine CBNRM is resolving whether the rights should be held by a group or by individuals. The complexity and scale of interventions needed for conservation point to collective action as the only feasible means of accomplishing these goals. Current approaches in CBFM promote this through communal tenure instruments that tie collective *use* to collective *responsibility*. But it has become evident that this does not adequately convey the incentives necessary for individuals to manage for sustainable use. Open access dilemmas continue, as does reluctance to make the investments needed for conservation. Part of the problem is incomplete transfer of rights, but part of it is the form in which the rights are conveyed. The challenge is how to bridge the benefits of both forms – individual incentives for economic growth and investment, and collective action for conservation work.

The scale of most natural resource management requires collective action. Forests, irrigation systems, and fisheries are all generally too large to be managed by individual households. While it's important to treat small units as starting points for conservation work, one can't truly manage for sustainability on a farm-plot by farm-plot basis. Coordination of resource uses and coordination of protection and rehabilitation work are required over a broad area. Either the state or a group/collective is needed to take on the coordination work. Multiple uses of resources require careful and complex negotiations among users. Irrigation systems involve not just fields but fishing, livestock, and domestic water supplies. Forests have timber and resins, rattan, kindling, etc. Coastal waters have fisheries (large and small-scale, reef and migratory), shipping, tourism, and industry.

The issue of bounding the community is central to the form of tenure. Clearly, collective title that included all users of a coastal zone near an urban center (Batangas Bay, for instance) would not be an effective means of encouraging collective action. At that point, the community is simply too large and internal negotiations cannot be expected to resolve differences and compel

action. It may be the case that collective title for coastal zones is simply unworkable at any scale, save perhaps for where mangrove lands are the primary resource to be managed. However, collective title is one solution to problems of changing community structure – if the land was divided up into individual plots, there would be no future accommodation for those who had migrated to the area and become dependent on local resources. In addition, in many cases it would be difficult to divide up an area equitably, as resources are not evenly distributed across either the land or sea. Collective title allows for sharing of benefits more equitably across the population.

The coastal report notes that land rights have not necessarily led to better environmental stewardship.

“Pomeroy, et al. (1996) ... noted that where use rights are specified and secure, there is a change in behavior and attitude toward conservation and probably a much greater chance for the intervention to be maintained. However, there are other reports that suggest that this scheme for community-based reforestation has not been effective. For example in Bais Bay, of the 183 CSC holders in three barangays, none had mangrove plantations. Whether stewardship will be improved by providing contracts to organized groups remains to be evaluated.”

This provokes some interesting questions. Given that CSCs are family-based tenure instruments, this would appear to indicate that individual rights have not led to conservation work, not surprising in light of the above discussion on collective action. Expecting families to invest their energies in mangrove planting just because they have title to the land sidesteps the question of what use mangroves are to the livelihoods of these families. Even if responsibilities for planting are conveyed with the CSC, without effective enforcement these requirements are toothless. And enforcement is likely to continue to be most effective at the community level. Collective title is likely to remain necessary to enforce norms of collective responsibility for stewardship.

Collective title is, however, insufficient on its own. The forestry report notes that collective action (patrolling, etc.) gradually drops off in CBFM areas after a project ends, because of lack of financial support. Farmers prefer upland agriculture and agro-forestry, as they reap direct benefits from their labor. The report points with interest to cases where there are clear individual property rights within the communal tenure arrangements. In these sites, forest protection and other collective action appear to continue beyond the end of the project.

Financial sustainability for the management institution, another key issue for sustaining conservation efforts, is also linked to collective rights. Covering the costs of conservation work such as tree planting, and patrolling has been a problem outside of a project structure, where external funds are available. By holding certain control rights, it has been argued, the organization would be able to function self-sufficiently (Agrawal and Ribot, 1998). “If the organization is able to raise money by selling rights to certain trees, shares of water, or other usufructs, it is less dependent on membership fees and labor contributions ... or on subsidies from the government or external NGOs.”(Meinzen-Dick and Knox: 8) The irrigation experience provides strong support for this. In communal systems, where the IAs hold tenure of the system, irrigation infrastructure maintenance is less of a challenge than in national systems. In national systems, IAs are refusing turnover under IMT contracts, apparently because the level of control

and associated benefits are perceived to be insufficient to match the level of work responsibilities transferred (irrigation report 2001).

Communal property is a potentially useful catalyst for collective action, but it is also a weak form of property rights. Conventional categorization of property rights considers communal property as public property. To address some of the issues of insecurity noted above, some advocates are pushing for communal *private* property rights (Lynch 2001a). Private property rights are very secure, but the current concept is that they can only be held by individuals. It is argued, however, that Philippine ancestral domain titles (CADTs) are a form of private communal property rights and thus local precedent exists for this form of tenure.⁵⁴ Evidence from Philippine indigenous communities show clearly that private corporate tenure has been practiced for a long time. The muyong system of the Cordilleras is an example of private, corporately owned property – not common property, as it is held by a clan or sub-group (Prill-Brett). In these cases, there seems to be an adequate blend of private and collective incentives to manage sustainably.

Finding the right balance between collective and individual rights and incentives is a priority for Philippine CBNRM. Clearly, it is not a choice between one or the other form. Some level of individual tenure is what seems to provide the incentives to protect land from open access, as well as to provide the labor for protection work. But collective tenure is crucial for overall coordination, enforcement of work responsibilities, and equitable distribution of benefits. Research that explicitly compared CSCs and CBFMAs would be a useful contribution to understanding the particular dynamics underlying household decisions to conserve local resources.

Diversified livelihood approaches:

Poverty alleviation has been a strong focus of attention in Philippine CBNRM. We will just note briefly here that the next challenges for developing livelihood strategies that enable sustainable use are: (1) greater specific focus on reducing pressure on resources; and (2) greater attention to the often very different needs and resource uses of community sub-groups (divided by socio-economic strata, gender, culture, basis of livelihood, etc.).

In this context, it is important to focus not on substitution of “alternative” livelihood strategies but on diversification. It is increasingly recognized that rural families rarely rely on a single income strategy, and the percentage of rural households that depend on non-farm income is well over 50 percent in some countries (Ellis 2000, Wollenberg and Ingles 1998). As Ellis (1999: 8) notes: “Diversity is closely allied to flexibility, resilience and stability. In this sense, diverse livelihood systems are less vulnerable than undiversified ones; they are also likely to prove more sustainable over time precisely because they allow for positive adaptation to changing circumstances.”

⁵⁴ See Cruz vs. Secretary of DENR, GR No. 135385, Dec. 6, 2000 for a discussion of the nature of ancestral domain rights.

Diversification of livelihood opportunities is one means of reducing pressure on threatened resources. Another strategy, recommended in both the forest and coastal reports, is greater attention to increasing the resource base itself. Most strategies currently focus on reducing human use; the flip side of that coin is to increase the supply of the resources. The forest report recommends greater attention to assisted natural regeneration (ANR) and to the growth of small-holder tree farms. The coastal report recommends community culturing of invertebrate species and reef fish to increase the populations of coastal and marine life.

The other challenge in supporting sustainable use is to recognize and respond to the different needs (and resource uses) within a community. This requires better micro-level approaches, informed by knowledge of the diverse sources of income for different sub-groups. The growth of rural development approaches such as “sustainable livelihoods” or “asset building” provide an important entry point to designing more effective community-level livelihood assistance.

Replacing long-dominant paradigms of sectoral focus and investment, these approaches recognize the interconnectedness of economic life and focus on the assets and opportunities of rural individuals and families. The inter-sectoral approach is not new – the 1970s and ‘80s integrated area development (or integrated rural development) approach, and its successor, the landscape approach both became popular development strategies linking multiple sectors. But the focus on the micro-level brought by the sustainable livelihoods approach adds a new twist. It is a logical outgrowth of the people-centered development movement (Farrington 2001). The focus is on developing an integrated, nuanced response that is sensitive to the differential effects a particular intervention may have on rural people.

This approach would be a useful one to apply to CBNRM sites in the Philippines, particularly on the issue of how potential conservation strategies will mesh with existing patterns of rural livelihoods. Results from its application to a CBNRM site in Namibia show “how CBNRM activities affected the livelihoods of different stakeholders; how and why their interest and participation differed; [and] how CBNRM activities could be made more effective in supporting [sustainable livelihoods], particularly those of the poor.”

For the more secure households, the main issues were how CBNRM affected their livestock herds (via predation, exclusion from grazing, and/or enhanced common property resource management) and whether they had access to new tourism jobs. For poorer households, access to small amounts of income, elephant damage to crops, and continued access to wildlife/tourism areas for harvesting plant resources were the critical issues. A large minority faced a considerable seasonal cash shortage, so even small amounts of CBNRM income (e.g. from a bed-night levy) could help meet food needs or school bills if timed correctly. The analysis highlighted that minimising costs to livelihoods was as important as maximising benefits.” (Farrington et al., 1999: 9)

Interestingly, this study notes that earlier analyses of the Namibian project focused on institutions and rights. The more nuanced and precise analysis came as a second phase. This dovetails with a recent critique of CBNRM approaches in upland Southeast Asia and the dangers of their simplistic views of rural livelihoods (Li 2001).

One can see from the forest report that Philippine CBFM is currently in the first phase of analysis – a rights-oriented focus and an interest in local management institutions. This synthesis report also reflects such a focus. However, in looking beyond what is currently known, it appears time to move on to a deeper understanding of forest-based rural livelihoods in island Southeast Asia. A recent attempt to explore methodologies to define sustainable harvests, measure income of forest-dependent peoples, and specify other basic needs of sustainable use produced an interesting and suggestive mix of findings and approaches (Wollenberg and Ingles, 1998). The work of Richard Pollnac provides similar attempts to quantify livelihoods of coastal communities in Southeast Asia (e.g., Pollnac et al., 2001). This area is a huge research need.⁵⁵

The new emphasis on diversity of livelihood sources ties in well with our suggestion that financing sustainability be conceived of as providing a diverse set of options for rural families to choose from. Farm or water tenure, improved technology, enterprise development, off-farm (or off-boat) employment, are all options for higher incomes. The need is to keep expanding the options so that the great variety of needs and interests within a community can better be met.

Improvements – especially those in tenure – are sorely needed to encourage sustainable management. However, we have argued that returns from sustainable use will rarely be sufficient in and of themselves to meet local needs for poverty alleviation, let alone enable the conservation of non-use values such as biodiversity and environmental services. Reviews of ICDPs by conservationists have come to similar conclusions (e.g., Wells and Brandon 1993). The next section explores expanding the options for financing conservation of both use and non-use values.

Compensation: Towards Genuine Viability of Livelihoods and Ecosystems

Compensation actually serves two purposes – justice and conservation. First, it addresses concerns for justice, because it pays those who are actually doing the work. Currently, communities largely subsidize conservation work in exchange for rights to stay on their land. Notions of just compensation are immediately understandable to poor farmers and fishers in the Philippines, and it is an area with potential for more empowered forms of negotiation. It is not charity or subsidy or reward.

Second, it particularly addresses the challenges of biodiversity conservation. As we have discussed, community management is the only means of getting the investments of time, labor, finances, enforcement of use restrictions, and social fencing necessary for such conservation to occur in the rural Philippines. Enforcement will always fall back on local people, since formal policing would be too costly. Tying such enforcement to earnings from sustainable use or the

⁵⁵ The assessment of Indonesian forest-based income sources by Wollenberg and Ingles (1998) noted the complexity and time involved in such measurements. They recognized that this would rarely be possible outside of a dedicated research project. Dedicated research is one way to pursue this knowledge; letting people negotiate for their own interests is another.

right to stay in an area has yet to work; piling on responsibilities on impoverished peoples trying to survive in impoverished resource areas is not a formula for success. Biodiversity conservation is only possible if the people doing the work are specifically compensated for it.

There is of course a risk that compensation will draw more people to a conservation area, precisely the opposite effect desired. However, if the compensation is (a) fixed and (b) tied to specific outputs, then the on-site managers are likely to have sufficient incentive to be able to serve as a social fence keeping out additional users. Household incomes would be reduced if more people are sharing the fixed compensation. And compensation won't happen at all if the managers can't deliver on conservation outputs. Therefore they will be more likely to be interested in enforcing local limits on use and residence.

There are a number of important issues within the concept of compensation. We look briefly at three of the most important questions: How much? To whom? From whom?

Proper Resource Valuation:

How much should be paid? Environmental accounting is obviously an inexact science, particularly when it comes to environmental services and other functions without easily convertible use values. Accurate numbers have yet to be developed, though there is an interesting project attempting just such an evaluation.⁵⁶ We would point out that compensation will in any case reflect not just the value of the conserved resource but also the ability to pay. Thus, compensation will always need to be negotiated locally based on existing context-specific realities. Nevertheless, it is clear that such values are not reflected in current economic and pricing models. The point is that even without perfect numbers, one can begin to experiment with the concept as it is clear that an increment over current value is fully justified.

Who Should Receive Payment?

The local management unit, the decision-makers, will have a choice over who should execute the on-site management functions. There are a number of reasons to argue for a preferential option for the poor in selecting on-site managers. Part of the rationale ties to the desire to alleviate poverty and reduce pressure on the resources. By giving supplemental income to resource-dependent users, contributions to both these objectives are achieved. In addition, there is an argument to be made on efficiency grounds. In remote and/or degraded areas, the cost of management by government is likely to be more than the present value of the resource to be managed. Management by local residents is the only reasonable option, and these are the poor.

Options for Sources of Compensation

This is a fertile area for experimentation in CBNRM. Local situations will vary enormously, but there are likely to be pockets of funding to be found in unlikely places, particularly if the link between conservation work and public benefits can be clearly demonstrated. Consumers,

⁵⁶ The RUPES (Rewarding the Upland Poor for Environmental Services that they provide) project, undertaken by the International Center for Research in Agroforestry (ICRAF) and the International Fund for Agriculture and Development (IFAD). A predecessor of this in the Philippines was the ENRAP (Environmental and Natural Resource Accounting Project), supported by USAID.

downstream residents, and the world community at large benefit from sustainable use and biodiversity conservation. The following are a few ideas for ways in which they could be (or are being) tapped as sources of compensation.

Eco-labeling:

There are a number of other countries with experimental programs in environmental certification, or eco-labeling, as an effort to encourage sustainable use and enable resource-dependent groups to obtain higher incomes. Wealthier consumers in many countries are able and willing to pay a premium for sustainably harvested products. Potential exists in the Philippines for this kind of process. International Marinelife Alliance (IMA) is testing and certifying cyanide-free fish, in partnership with the Bureau of Fisheries and Aquatic Resources (BFAR), albeit on a small scale. An initial experiment in forest certification was conducted in Compostela Valley, Davao assisted by Smartwood with the support of USAID-NRMP, which highlighted concerns about the very high costs of the procedure.

Certainly the need for greater value to be retained by local communities is crucial to the success of community-based models. However, one risk is that in making certification the norm, local people who are unable to afford the certification process are discriminated against, regardless of whether or not they are harvesting sustainably. Questions therefore of how the certification process will be established, who will do the certifying, and who will pay for it are important issues to be worked out. In the U.S., controversies over cost and criteria have led some communities to develop their own certification standards and procedures, outside of those developed by the Forest Stewardship Council (FSC). Multiple certifications may be a bit confusing to consumers, but they appear important in enabling more avenues for communities who wish to benefit from sustainable practices. In the Philippines, one avenue may be for DENR to provide certification as part of its annual monitoring for compliance with the CBFMA. DENR personnel would need to be trained, and there would need to be periodic international monitoring for quality control (to assure international markets). The plus to this is that certification would incur no additional cost for the community.

Direct compensation:

The case of the Maasin Watershed, Iloilo is an instructive example of the potential for financial arrangements to be established among beneficiaries and service-providers of conservation. The watershed had only 10% forest cover in the 1980s, the rest being cultivated farms. The Metro Iloilo Water District (MIWD) is the specialized government body designated to manage the watershed. However, it had long neglected the area. After local advocacy and community organizing in the mid-'90s, a contract reforestation project was initiated in the watershed in 1997. Two-thirds of the watershed was reforested over the subsequent four years, as farmers voluntarily gave up their farms in return for both initial compensation for the reforestation and the expectation of obtaining tenurial rights to profit from some of the trees that had been planted.

In 1998, the LGU of Maasin negotiated with the Water District for compensation for the benefits of the reforestation of the watershed. The Water District agreed to pay annually 1 million pesos to the LGU and 1 million pesos to DENR. The payment has been made only once to date. The money has been used for general expenses of the LGU and did not flow directly to the 16 barangays active in the reforestation activities. DENR appears to have used its portion for administrative costs involved in managing Maasin. The reforestation contract has ended, DENR

under the previous Secretary refused to grant a CBFMA, and the savings (and initial earnings from their coop) of the PO federation coordinating the whole effort are insufficient to start up local enterprises to reduce dependence on farming (Salas 2001; local interviews 2002).

Resource rights, financial support from water districts, and income from community enterprises are the major sources of potential funding that would enable the residents to meet their own consumption needs and protect the watershed (Guiang 2000). Assistance in valuation of the environmental services and in negotiating with the LGUs, the Water Districts, and DENR might make a difference in redirecting the flows of Water District compensation to those directly providing the service. The money earned could then be used for PO member support and for investment in communal enterprises that could diversify available means of livelihood for the former farmers.

Certainly the Water District remains interested in paying those it sees as carrying out the work. It is however hesitant about continuing to pay the official “representatives” of the people, as it does not see the funds flowing back to conservation work. Potential exists for the newly created River Board (on which LGUs, DENR, the PO federation, and the Water District all sit) to be a venue in which negotiations on compensation could take place. The PO federation could receive payment for reforestation and conservation services as a designated service-provider of the River Board. This would provide an accountable and representative structure through which such compensation flows could be channeled.

This example is one where external support is needed. However, there is also a reported case of direct compensation of upland communities by lowland communities in Mount Matalom, Leyte for watershed protection services (Dargantes 2000).

International Compensation:

Globalisation is generally viewed as threatening to the powerless, particularly to rural communities in the South. However, there are some community advocates beginning to look for ways to reshape such forces to assist communities. Though not generally conceived of in this way, international agreements such as the Convention on Biodiversity (CBD) and the proposed Convention on Climate Change provide potentially significant opportunities to channel power and financial resources to communities (La Vina and Yu, 2001).

Under a community-based NRM regime, the work of protecting biodiversity (the raw material of biotechnology) and the trees that store carbon is done by communities. Thus, the flows of international compensation that are stipulated in these agreements could and should be channeled to communities. However, international conventions are agreements among states, with no requirements for how any state to distribute opportunities internally. The challenge is thus to develop mechanisms that enable communities to decide on the activities they will undertake and to negotiate with the state for their share of compensation for the benefits arising from their activities.

The Philippine experience in developing bio-prospecting regulations as part of its obligations under the CBD is an example of an attempt to establish this type of mechanism. The CBD gives each state sovereign rights over natural resources and the authority to determine access. In the use of genetic resources, prior informed consent (PIC) by the state and the entitlement to a fair

and equitable share of the benefits are required under the CBD. However, the state is not required to obtain prior informed consent or share benefits with the community source of the genetic material. To address this equity issue, President Ramos signed Executive Order 247 in 1995, which mandated PIC and fair and equitable benefit-sharing with the community by bio-prospectors. EO 247 is the first such instrument of its kind in the world and has been used as a model for other countries (Kho et al. 1997).

Challenges in implementation have ensued, as critics claim that the bureaucratic procedures for ensuring genuine PIC and benefit-sharing are overly cumbersome and have driven away investors. Changes to the policy are clearly needed, and a new model for benefit-sharing needs to be developed in particular. Most importantly, there is a need to support community capacity to understand technical issues and negotiate effectively. NGOs such as SEARICE have begun to provide services in this area: it serves as a watchdog against piracy, an educator on technical information, a negotiation coach, and a state partner on the inter-agency body that grants bio-prospecting permits. When an agreement on climate change is eventually reached, it will be important to develop similar mechanisms for benefit sharing of the large flows of funding for tree-planting that will arise from the agreement.

Conclusion

We began the discussion of sustainability by noting that economic viability is crucial to ecological viability. This is not a new insight. It is a core assumption of CBNRM. However, in its current version it contains a basic fallacy. It assumes that you can pursue both together, that one leads to the other – in particular, that sustainable use leads to biodiversity conservation. It does not and cannot, for all the reasons we have discussed in the past two chapters. Biodiversity conservation is not an outgrowth of sustainable rural development. They are crucial but separate goals and need to be treated that way.

As a result of this misunderstanding, communities are currently being burdened with an unrealistic and unfair set of responsibilities. On top of struggling to meet their daily needs in degraded lands and seas, they are asked to conserve for future productivity (practice sustainable use) and on top of that conserve biodiversity and other ecosystem functions. And their primary compensation for all this has been short-term employment (especially for reforestation) and the partial and insecure right to stay on the land they occupy. This is not to dismiss the importance of all the investments in livelihood diversification, access to credit, better technology, enterprise development, etc. Those have been a core focus of CBNRM projects for good reason. However, as in all rural development projects, even those not oriented toward conservation, the road to wealth generation is a long one. And yet CBNRM models assume that such strategies can not only deliver improved livelihoods but sustainability. The only portions of CBNRM projects that specifically are focused on sustainability are the two mentioned above – reducing pressure on the resource and creating incentives for long-term stewardship (management) through tenure.

We highlight this for several reasons. One, because we see a risk of poverty alleviation becoming a key strategy for the DENR. This is understandably appealing, but it would be a mistake. There are other agencies that already focus on rural development. DENR is not a development agency, and the nation needs an agency that has the skills and the focus to ensure conservation of natural resources.

Secondly, we highlight this because it makes clear that improvements in tenure transfer and a new approach to compensation are critical. These are approaches that specifically target sustainability (of both use and non-use values). It is vital that CBNRM approaches separate out the various sustainability goals and devise appropriate specific strategies. *Poverty alleviation, sustainable use, and biodiversity conservation are deeply linked goals, but they cannot be reached through the same paths.*

Tenure is perhaps the most important area for immediate improvement. Tenurial instruments need to move beyond conveying access rights and conditional use rights. If true incentives are to be in place to conserve resources for future generations, then resource use rights and greater rights of management and exclusion need to be conveyed. This has enormous implications for the role of DENR and LGUs, and we shall explore this further in the next chapter on decentralized governance.

Diversified and sustainable livelihood approaches will gradually increase the range of options available to rural households. Ellis (1999:8) describes optimal conditions for livelihood diversity that appear to fit the Philippines' current situation well: "It is well to recognise that the benefits of diversity are context-specific. They apply most forcefully in contexts of high seasonality, high risk, absent markets, poor infrastructure, declining farm size, and similar adverse factors. Historically, the progression from low to high standards of living has typically involved a transition from diversity to specialisation." Poverty alleviation strategies in CBNRM appear to be moving appropriately in the direction of diversification of livelihood opportunities. *What is needed for sustainable use, however, is to place greater emphasis on strategies that specifically reduce pressure on resources.* Increasing the resource base – in forestry, through assisted natural regeneration and smallholder tree-farming; in coastal areas, through aquaculture and mariculture – is one important set of approaches that need greater attention.

Biodiversity conservation is the area where new approaches are needed, particularly in covering the costs of conservation. We have argued that compensation for conservation services is an important addition to current approaches. Compensation, in recognizing the additional burdens that conservation for non-use values places on impoverished rural families living at the margins, addresses both justice and sustainability concerns. And if diversification of livelihood and income is the common situation, then why not think also in terms of diversification of compensation streams? Overall, the approaches seek to present not a single panacea for the lack of sustainability, but rather an ever increasing set of options from which rural families may choose. Increasing (and diversifying) the number of income streams available is the only way that the costs of conservation will be able to be met.

All these considerations are essential to ecological sustainability. Yet as McKay and Jentoft (1998) point out, property rights approaches assume the key dynamic is the market and that the problem is market failure, which more private and secure property rights will cure. They rightfully criticize this approach as lacking in its understanding of individual and group behavior, of all the important factors captured under the currently popular term social capital. Thus, they point also to problems of community failure which need to be addressed through attention to management institutions, the places where people are embedded in social relationships that will deeply affect their treatment of natural resources. While we don't see it as community "failure" (that would imply there was a realistic set of expectations concerning community management),

we do agree that it is essential to focus not just on property rights and market-oriented solutions. Thus, we turn next to governance questions and a focus on institutional modalities that can manage resources in ways that place the community in control of crucial decisions.

Chapter 6. Devolving Natural Resource Management: Towards Practical CBNRM

The Philippines, like many other countries, continues to be a site of debate over the degree and type of government involvement desirable in natural resource management. One recurring question concerns the search for appropriate governance structures at different scales of resource area. Another question concerns the control over high-value resources. Responsibility to care for resources has been devolved without much contest. But control over how the most valuable forest and fish products will be utilized and how profits will be allocated remains a highly contested issue. These and other issues highlight the interconnectedness of decision-making structures, wealth creation, and ecological sustainability.

In previous chapters, we looked at notions of community and sustainability, arguing that misconceptions embodied in both terms have impeded progress toward genuine CBNRM. For “CB”-ness, we argued for attention to equitable decision-making processes rather than to bounding community in a way that cannot include all stakeholders. For sustainability, we argued for a separation of sustainable use and biodiversity conservation goals, with additional compensation needed to enable impoverished families to conserve non-use values such as biodiversity. And for both, we argued for the transfer of tenure as a crucial factor in equity (where it conveys power) and sustainability (where it provides the security to invest and manage for the future). In this chapter, we look at existing modalities of decision-making and make recommendations that aim to give local communities the opportunity to make a decent living from the use and protection of natural resources and the power to negotiate for this package of benefits.

Decentralization⁵⁷ of Natural Resource Management:

The promotion of CBNRM, as noted earlier, has occurred in the context of a broad trend towards decentralizing natural resource management that began in the 1980s.⁵⁸ Historically, the benefits derived from the exploitation of forests have gone to a favored elite, facilitated by the centralized control of privileges to extract natural resources. The management strategy for much of the 20th century consisted primarily of establishing a system of allocating harvest rights and collecting a percentage of the revenues from high-value products such as timber. Faced with mounting

⁵⁷ Decentralization is understood here as a generic term that includes a range of arrangements that move power away from central government. More specific distinctions define: *decentralization* as any act in which central government formally cedes powers to actors and institutions at lower levels in a political administrative and territorial hierarchy (Agrawal and Ribot 1999, citing others); *delegation* as the transfer of authority to public corporations or special authorities outside the regular bureaucratic structure; *devolution* as increased empowerment of local organizations with no direct government affiliation; *privatization* as the transfer of responsibility to voluntary organizations or private enterprises (Agrawal and Ostrom 1999, citing others).

⁵⁸ The Central Visayas Regional Project (CVRP), approved in 1983, was the first major project of the government’s regionalization program; also the first project to reflect the World Bank’s shift in agricultural lending strategy, focusing on halting environmental degradation in forestry and fisheries (CVRP Project Completion Report, 1993).

evidence of resource loss, the response of the national government was to increase its presence through field offices of national agencies and tighten restrictions. It was only in the late '80s that government moves towards devolving power and improving social equity gained ground because of strong domestic and international pressure (Fairman 1998; Vitug 2000).

Modalities of decentralization of NRM in the Philippines

There are at least four modalities for decentralized natural resource management currently found in the Philippines: delegation to a specialized government agency, decentralization to an LGU, devolution to a multi-stakeholder body, and devolution to a community organization. A fifth, pure community management not requiring government grant, is legally in a gray area. A CADC or CALT (certificate of ancestral land title) is considered state-recognized, not state-granted. Advocates argue that the right to manage them may rest on an assertion of community *private* property rights (Lynch 2001a). However, the ability of DENR to place environmental liens on ancestral domains (e.g., in areas that overlap with a protected area) and the requirement of DENR approval of ancestral domain management plans indicate a continuing presence of the regulatory state. In any case, *de facto* community management has been a strong influence on the development of CBNRM and continues to be a possibility in more remote areas.

- Delegation to a specialized government agency. In the past, there was a tendency to create specialized (but still essentially central government) agencies to handle certain resource management tasks. National parks were originally administered by a separate council, later moved under the Bureau of Forestry. NIA was also set up along these lines. Another variation is the Laguna Lake Development Authority (LLDA), a semi-private, non-participatory corporation. The LLDA was primarily created as a revenue-generating entity (from resource use fees), and only in recent times has it taken seriously its role as resource manager. It is still largely a corporation exercising governmental regulatory functions.
- Decentralization to LGUs. In an attempt to improve the delivery of basic services, the Local Government Code transferred vast responsibilities formerly held by central government agencies to LGUs in 1992. Among the devolved responsibilities was the protection of the environment, for which LGUs took over responsibility for social forestry, pollution control, fisheries management, etc. Fighting the trend of granting full autonomy, the DENR lobbied and retained “supervision and control” over these environmental protection functions.⁵⁹ The allocation of resource use rights (RURs) also remained with central government. Difficulties in financing their environmental protection work have clearly hindered LGU initiatives. LGUs theoretically get a share in the exploitation of local natural resources, but the revenue that is generated is not necessarily plowed back into environmental programs. Despite the incomplete and unclear transfer of power, devolution has sparked many innovative means of sharing responsibility and functions.
- Devolution to multi-stakeholder bodies. Devolution to LGUs effectively brought decision-making to the local level, but without a guarantee that decision-making be participatory.

⁵⁹ Except for fisheries management, which was seen not as a resource management function but as a revenue generation activity. Sec. 149 of the LGC on fisheries management is under the fiscal management chapter; the resource protection paragraph is largely a misplaced (albeit very significant) rider in this chapter.

Another recent modality has been to combine local decision-making with participatory processes through the creation of multi-sectoral bodies. A wide variety of such bodies have been created, with considerable differences in the extent of their decision-making and enforcement powers. Special area bodies include the protected area management boards (PAMBs), created under the NIPAS law, which have plenary powers and relatively flexible operations. They are an institution with real potential to institute participatory decision-making, though current structural challenges exist. FARMCs, created under the Fisheries Code, have only advisory powers. One variation is special bodies governing a particular province -- the Palawan Council for Sustainable Development (PCSD), created by national law, is an example of a more powerful body; whereas the Batangas Provincial Council for Sustainable Development, created under local legislation, is highly dependent on the governor. The common feature of these bodies is that they are area-specific and attempt integrated management at a scale that matches the resource area.

- Devolution to a community organization. This is a state-sanctioned transfer of management functions direct to the local community level. Examples of this include irrigator association (IA) management of communal irrigation systems and CBFM. In the other three modalities, the right to manage is not an issue because they are government instrumentalities with civil society participants. In a community-managed modality, there is a need to establish the right of the community to manage, which is generally in the form of a government-drafted agreement.⁶⁰ These tenure instruments are different from conventional property rights in that they explicitly have management obligations attached. In the past, tenure instruments were given to individuals or corporations, though the PO is now the common tenure-holder.

Trends and Contradictions

The trend across these modalities is for local decision-making, responding to unique local situations and needs. And the most recent corollary to that has been an increase in civic participation by private actors, particularly NGOs. The right of the people and people's organizations to "effective and reasonable participation at all levels of social, political and economic decision-making" is guaranteed under the Constitution.⁶¹ This right is reflected in various laws such as the Local Government Code⁶², NIPAS Act, Fisheries Code, Mining Act, and the revised EIA regulations, among others. In these laws, stakeholders participate in decision-making in varying degrees, from public consultation and social acceptability in the EIA process to constituting part of a multi-sectoral decision-making body such as the PAMB. In addition, the right to intervene in what is traditionally a government function was recognized in

⁶⁰ In contrast, in community-led initiatives (e.g. most NGO-initiated CBCRM), communities assert their right to manage, with or without state recognition.

⁶¹ Sec. 16, Art. XIII, Constitution. The Constitution, for example, requires NGO representation in regional and local development councils and sectoral representation in local legislative councils (Sec. 9 and 14, Art. X).

⁶² There are concerns about the lack of a formal venue for participation in environment and natural resource decision-making at the LGU level. Some sectors advocate amending the Code to provide for a multi-sectoral ENR council. While this may be advantageous, it may potentially duplicate and conflict with other multi-sectoral bodies such as the development council, FARMC, etc.

the landmark decision of *Oposa vs. Factoran*, where the Supreme Court upheld the right of children and future generations to question management strategies of the present that will affect their enjoyment of natural wealth in the future.

Nevertheless, these trends are countered by other developments. For example, the Local Government Code and E.O. 263 imply that the central government is to step back from direct resource control. However, there have been recent debates within DENR concerning the Bureau of Forest Development becoming a line agency, thereby increasing the state regulatory presence at the local level. And as noted earlier, CBFM communities (and PAMBs as well) remain largely under the control of DENR. Even after the adoption of CBFM as the core of the nation's strategy for sustainable forestry, local actors have principally gained subsistence benefits with commercial values going elsewhere. This is a pattern found in decentralized NRM programs in other countries as well (Agrawal and Ribot 1999). A recent assessment of CBFM found that Philippine policy is still shaped by efforts to maintain centralized control and improve the efficiency and commercial viability of timber extraction (Gauld 2000). The latter is a *de facto* return to centralized control, with all the attendant limitations (inability to be responsive to large variations in local conditions, insufficiency of personnel and of financial resources).

In the fisheries sector the situation is similar, though the locus of power has been decentralized to the LGU. The local government has wide discretion to choose the grantee of fishing privileges, despite the preferential treatment given to subsistence fishermen under the Constitution and the Fisheries Code.⁶³ While the Code created a multi-sectoral fisheries and aquatic resource management council (FARMC) where fisherfolk are widely represented, the FARMC is largely an advisory body without real power. Decentralization in this case has not affected the inequitable access to resources in the fisheries sector.

Scale Dilemmas

The struggle to match governance structure to natural resource area is a huge dilemma in the Philippines, as elsewhere. The size and nature of the ecosystem tends to be the determining factor, but these have to be weighed against feasibility and efficiency considerations. Piling new administrative structures on top of existing ones creates coordination requirements and overlapping jurisdiction problems that may render them ineffective. The impact of externalities (e.g., the impact of distant deforestation or mining on a bay) raises the potential problem of a membership so large that the management structure becomes unwieldy.

To take one example, some special bodies such as the Lingayen Gulf Coastal Area Management Commission (LGCAMC) have little funding and rely principally on the willingness of local officials to implement commission decisions. The large membership of high-level officials on the LGCAMC makes it difficult to convene regular sessions. It also means that an official who was not in attendance, and therefore did not participate in the decision, may have little reason to implement a commission recommendation. This may have been a factor in its dissolution in

⁶³ This discretion is made possible because marginalized fishermen often cannot meet the license fee required to qualify for the grant of privileges.

2001. The nature of the ecosystem requires a gulf-wide management structure, but the LGCAMC was not an effective management institution.

Assessing whether governance problems are a result of scale mismatch or of other factors is an important task. Problems in the devolution of the integrated social forestry (ISF) program and the communal irrigation system (CIS) provide an instructive contrast.

- Devolution of 98% of ISF sites to LGUs is widely perceived to have weakened the ISF program and the effectiveness of the CSC as a tenure instrument. An overwhelming majority of LGUs do not have a clear understanding of the ISF program and how it supports collective action for NRM, nor do they have the capacity to provide financial or technical support (Contreras 2000). Rather than argue that the ISF program should be returned to DENR, however, most analysts point to the needs to devolve control over resource use rights, to redirect the flow of state revenue from these resources to the LGU level, and to reorient DENR technical staff to provide support rather than direction to the LGUs.
- When the responsibility of developing and managing irrigation systems was delegated to NIA, it allowed the government to focus on a specific concern by dedicating a special agency to it. NIA, while smaller than a national department, had national coverage and centralized funding which it could allocate proportionately depending on the need of each area. With the increasing transfer of management of the small systems to irrigators associations, the actual management of communal systems (though not national systems) was devolved to the community, with NIA providing technical support. However, in 1992 the responsibility of looking after communal irrigation was devolved from NIA to LGUs. Because management of communal systems had already been devolved, this was actually a step away from devolution; it inserted another layer of administration between the community and NIA. As providers of support, LGUs have neither the technical capacity nor the financial flexibility of NIA. The scale of investment needed for communal irrigation systems is huge for an LGU, and it can only be met at the expense of other needed infrastructure projects. Interviews from the field reveal that local governments have neglected irrigation or have been dependent on pork barrel to fund communal irrigation projects. And the CIS structures are increasingly showing signs of disrepair. (Philippine CBNRM Review: Irrigation Report, 2001).

The NIA case is an example of a mismatch in scale, as the CIS has already been devolved and the specialized technical support needed is more efficiently and flexibly provided by a national government agency. By contrast, the ISF case is an example of the problems of incomplete decentralization.

Approaches to Devolution: Enabling Local Interest-Based Decision-making

The various modes above attempt to address scale issues by bringing decision-making down to the locality where the resource is found. *Subsidiarity* is the principle that decisions should be made at the lowest possible level where competencies exist (Babin and Bertrand 1998, Anderson 2000). For NRM, as we discussed in Chapters 2 and 3, factors of scale and complexity of resource use play a significant role in determining where that lowest level lies. The second principle evident in the more recent modalities is *pluralism*, the value of sharing decision-making among a broad base of interested parties. Participatory NRM draws from pluralism's strong democratic appeal.

Some might argue for substituting “locally-based” or “decentralized” NRM, for community-based. The problem with those formulations is that it is then too easy simply to substitute LGUs as the locus of authority. Where LGUs are not truly representative or accountable to constituents this does not ensure that decisions will be responsive and equitable. “Community-based” at least keeps the focus at the level of people living in or around the resource area and on local participatory institutions, not simply local elected (or hereditary) leaders. As proposed here, community-based institutions also keep the focus on responding proportionately to the large numbers of poor people living in those areas. This type of interest-based representation is not accurately or effectively embodied in LGU structures.

While the modes described above resemble CBNRM, they are not quite the same. CBNRM carries with it empowerment, not just instrumental participation. It has a strong bias for the marginalized, as a response to inequities generated by the current order. Decision-making under CBNRM is a negotiation among all legitimate interests, where responsibilities, costs, and benefits are shared equitably. A number of the modalities above attempt to address these concerns but are not yet successful. The enormous variations in scale, resource type, and local political and socio-economic conditions make it likely that different modalities will be appropriate in different NRM contexts. Rather than argue about the theoretical advantages of one modality over another, we would propose a more practical focus on the mechanisms of decision-making in any modality, so that it most closely approximates the ideal of responsive and efficient, downwardly accountable governance.⁶⁴ The subsequent discussion therefore maps out some paths to effective, local, interest-based decision-making, which is the core institutional requirement of CBNRM.

We propose a focus on four approaches, which range from items needing immediate action to those with a longer time frame. They are:

1. Secure locally vested tenure, as a cornerstone of all other equity and sustainability approaches
2. Establish and strengthen local-level mechanisms for interest-based decision-making (redefining institutional roles, enabling participation, negotiation, and conflict management)
3. Build capacity for negotiation and for conservation management (empowerment, information generation)
4. Establish mechanisms for operational viability of the management unit

The first approach speaks to the fundamental need to make local authority real and legitimate. Subsidiarity cannot occur without the power being vested at the local level, and tenure rights are

⁶⁴ A recent World Bank study on decentralization noted, “Decentralization is neither good nor bad for efficiency, equity, or macroeconomic stability; but rather ... its efforts depend on institution-specific design. ... This broader agenda suggests enhanced focus on accountability, governance and capacity in the context of designing policies for decentralization.” (Litvack et al. 1998)

the primary means of conveying that power. It also responds to the strong need to arrest current de facto open access regimes, in which resources are declining rapidly. The other three approaches deal with the requirements for establishing truly participatory decision-making: appropriate institutional mechanisms must be put in place, all stakeholders must be able to negotiate effectively for their interests, and the management institutions must be able to sustain themselves financially and organizationally for the long haul.

1. Secure locally vested tenure as a cornerstone of all other equity and sustainability approaches

[*section under development]

In CBFM, once resource use rights are granted, they must be respected as long as the grantee faithfully complies with limits. It is that security, which the grantee can literally take to the bank, that will be the incentive for making investments in sustainable use. How secure people feel about their rights is directly correlated with the amount of investment they will put on the property to keep it safe and productive. The currently evolving process of defining and recognizing IP resource management rights under IPRA can serve as the model for stable, demandable property rights not subject to wild state 'discretion'. We propose that DENR should completely devolve exclusionary rights to the stakeholders. Completeness of rights devolved does not necessarily imply privatization.⁶⁵

In the coastal sector, fishing permits give you withdrawal rights, but it has limited value because it is dependent on the capacity of the state to exclude non-permittees. In the total absence of state enforcement [more the case than the exception], the value of the permit is next to nothing since there is in effect open access. Property rights are more definite for fish corrals and aquaculture, where the fishery resource can be fenced in and the rights holder can lay claim over the property to the exclusion of others. CBCRM efforts in essence, is community direct exercise of exclusion and management rights which are later recognized thru ordinance. Exclusion and management will give communities capacity to protect their withdrawal rights. That gives flexibility and potential for sustainable use in the same way as land tenure. But coastal communities will only invest if the return is substantially higher than the cost of enforcing their rights.

But who is the community you give the rights to? Use rights can be granted to anyone and under the Fisheries Code there is a preference for the local municipal fishermen. The exercise of those rights implies a cost on government to guarantee, a cost that the users pay for as taxes or license fee. To the extent that it is the community or PO that acts as government agent for enforcement, some exclusive use rights may be granted to the PO as part of compensation for conservation, in the same manner that resource use rights are granted to CBFM holders. Control rights, on the other hand, must be held by all stakeholders as a group [which we call the 'management unit'] since control includes the power of allocation of rights and exclusion. It is not fair to give power

⁶⁵ Which is not legally possible as long as the lands remain in the public domain. Whether forest lands should be privatized at all in a massive land reform similar to what happened Mexico, is a separate question. Complete privatization is not necessary as a sustainable use incentive, what is critical is security.

on resource use allocation to a single interest group where there may be other competing users for the same resource.

The ‘community’ is different for different reasons. In the context of the NIPAS law for example, local communities may enjoy harvest rights to NTFPs, may have exclusive areas for timber production, etc. but the decision on who should have what rights must be decided by the collective of stakeholders, in this case the PAMB. But is the PAMB’s process of decision-making truly reflective of the stakeholders’ collective decision?

In the coastal sector, there is no equivalent legal body [the FARMC is a policy recommending body], but in practice, the POs who enforce marine sanctuaries are exercising exclusionary powers. The problem here is that they are only or mostly small municipal fishermen, other interests [fishing and non-fishing] not included in the decision-making body. We discuss these problems in the next approach.

2. Establish and strengthen local-level mechanisms for interest-based decision-making

In the discussion of what it means to be community-based across all scales, we pointed to the need to include all stakeholders in decisions that allocate resource uses and benefits. (Day-to-day management of the agreed-upon regime is a different matter and can be handled by designated on-site managers.) The coastal zone provides the clearest example of this need. In a remote island barangay, you can have a community-based institution dominated by small fishermen focusing mainly on fisheries issues. But a group of the same composition cannot be the decision-maker in a coastal city. A bantay dagat composed of fishermen would be fine there for enforcement of fishing laws, but for coastal resource management you need to bring in other sectoral interests. And for ecological scale considerations, the management area may need to be larger than the coastal city – e.g., a bay or strait. Coastal areas have multiple uses that increase in complexity as the size of the resource area increases – thus management institutions of large-scale coastal areas must be able to balance the conflicting demands of small and large-scale fishers, ports developers, resort owners, industry, and other users of the land and waters of the area. Even were a bay to fall under the jurisdiction of a single province, it is unlikely that the provincial government on its own would be able to make allocation decisions acceptable to all or even most stakeholders. *Representation and effective negotiation of all interests is the most efficient means of creating a management regime that will reflect the equitable distribution of benefits, responsibilities, and sacrifices.*

Several areas of focus are needed in order to bring about and strengthen interest-based decision-making on natural resources. In particular: (1) institutional roles of the various actors need to be redefined, particularly the national government; (2) decision-making processes need to be established or revised to enable effective negotiation of interests; (3) and existing institutions that enable multi-stakeholder negotiation need to be strengthened.

Redefining Institutional Roles

The role of government actors in the decision-making process is a complex one. While they obviously have the mandate of the constituency that elected them, the diversity of interests of their constituents cannot be represented by their single vote. A barangay official, for example,

cannot represent the conflicting interests of both migrant and IP residents of his barangay. As an influential study of American public disputes noted, effective decision-making processes require “a redefinition of leadership and of responsible citizenship. Political leaders ... should take more responsibility for building consensus; citizens, public interest groups, and business leaders should participate more willingly in the search for solutions that maximize mutual gain and improve long-term relationships.” (Susskind and Cruikshank 1987) Interest-based negotiation and mediation is the outgrowth of this vision of collaborative problem-solving.

National government agency roles in a decentralized natural resource governance structure

This area focuses on the challenges in translating recent policy mandates into new operational patterns within DENR. Part of the problem is resistance within the DENR structure to the radical changes implied by CBNRM and the Local Government Code. The case of CBFM clearly demonstrates the non-monolithic nature of a state agency – the leadership and field agents hold rather different understandings of what is meant by the goals of the CBFM program. In one former DENR official’s analysis, the primacy of CBFM in Philippine forestry was decided upon by DENR leadership in dialogue with advocacy groups and donors who were promoting the concept (La Viña 2001). Intra-agency dialogue did not take place, and thus commitment to implementing the policy was not generated before it was passed into law through Executive Order 265.

DENR clearly has a continuing powerful role in natural resource management through its regulatory function. In this sense, DENR represents the interests of the larger community, the nation, in ensuring that significant negative environmental impacts of resource-related activities (whether by corporations, communities, or individuals) are minimized. In addition, DENR will continue to be needed in a supportive role -- particularly technical and financial support. DENR is not currently particularly well-positioned, however, to provide this support. Reorienting the technical skill set of DENR personnel from forestry to a broader range of disciplinary backgrounds including ecosystem management and conflict management is a long-term challenge.

Another issue that needs addressing is the inability of DENR to support initiatives outside of its traditional budget categories. CBNRM is one such initiative; approving new policies without providing funding for them is a traditional behavior in a Congress that wishes to satisfy multiple constituencies. Support of agency and NGO advocates in reforming the DENR budget to allow greater flexibility and to reflect a more supportive agency role is thus an important need.⁶⁶

Improving accountability mechanisms within DENR is another need, and it is one that would help ensure that policy direct. Better monitoring of field staff both within DENR and by citizens, together with better communication systems within DENR, would help ensure new policy directives are carried out. Support for monitoring and evaluation by non-government actors such as media, NGOs, and citizens, perhaps through multi-sectoral monitoring teams, would be one approach to improving accountability within DENR.

⁶⁶ These suggestions are made by La Viña in his draft policy paper for the Philippine CBNRM Review.

Improving coordination with other government actors is another major area of needed action. At one level, this means coordinating with the Department of Agriculture and related agencies in support of community development in CBNRM areas.⁶⁷ Most importantly, coordination is needed with local government units to provide for genuine ceding of decision-making power to the local level (whether by LGUs or multisectoral bodies). The supervisory relationship of DENR to LGUs has kept power with DENR. The transfer of responsibilities to LGUs for implementing community-based forestry without the funding or the authority to allocate resource use rights (RURs) places the CBFM program in limbo. Initial efforts to work through some of these issues, such as Joint Memorandum Circular 98-01 which mapped out a fully devolved (future) forest management role for LGUs, provide a base from which to continue.

The NCIP is another national institution with a critical, if supporting, role. Unlike DENR, it is not a source of power that is devolved, because power is with the communities from the start. IPRA, the laws creating the NCIP was enacted to recognize pre-existing rights held by indigenous peoples over their ancestral domains and lands. The NCIP is envisioned to assist IPs in documenting and exercising these rights. Its role is to protect that power which the state has recognized, represent the interests of the various IP groups in the national arena, as well as facilitate resolution of conflicts among IP and with non-IP groups over ancestral land claims. Its supporting role is both its strength and its weakness. It plays a key but non-determinative role in defining and protecting IP rights, but it is also easily over shadowed by DENR which still argues that it has responsibility over the conservation of the natural resources in IP lands. NCIP is only now finding its voice. The role of the national agency with respect to the local management institution should be something like NIA with respect to the IAs – supportive, a source of financial and technical assistance, but not a micromanager.

Decision-making Processes for Consensus Building and Conflict Management

The previous approach focuses on increasing institutional mechanisms for participation in natural resource management. These increased opportunities, however, are no guarantee of genuine democratic process. Increased participation can often simply generate disputes, without leading to outcomes that truly reflect the fair and equitable working though of society's multiple needs and interests. As noted earlier, the vibrant NGO sector is one of the hallmarks of Philippine political life in the post-EDSA period. However, one result of this explosion of civic involvement is an increase in political conflict, both within civil society and with other political actors.

Effective participation in the Philippines requires a focused effort to create and sustain conflict-management mechanisms that will help break the impasses, build consensus, and reach better decisions both within civil society itself and among civil society, the government, and the private sector. Interest-based negotiation and mediation are essential strategies in this effort. They provide a means of contributing to the empowerment of disadvantaged groups through negotiating on their own behalf. They also can enhance the effectiveness of civil society in participating in decision-making processes. This program approach is thus an important

⁶⁷ The potential for expansion of DENR into a community development agency through CBNRM is not a direction helpful to the agency or to the communities in question.

component of any strategy to support the growth of more equitable and participatory systems for policy-making and the delivery of justice.

Interest-based mediation and negotiation

The recognition of the need for more effective means of resolving public disputes in the United States and Canada is one of the major factors behind the growth of mediation and other forms of appropriate dispute resolution (ADR) there. Mediation has a long history in the Philippines through the *katarungang pambarangay* (barangay justice) system, in which elected barangay captains, often with the help of a local panel (the *lupong tagapamayapa*) resolve disputes in the community. The form of mediation used in this system tends to be advisory and evaluative in nature, more closely allied to an arbitration approach than to a facilitative approach founded on the principles of interest-based negotiation. Similarly, the Department of Labor and Employment uses mediation in employment-related cases; this, too, is primarily an evaluative/advisory mediation approach. Recent NGO partnerships with the Department of Agrarian Reform (DAR) and the DENR have introduced a shift towards *interest-based mediation*, a form of mediation in which an impartial third party facilitates negotiation and problem solving among the parties, so that the parties themselves develop agreements which are mutually acceptable because they address the needs of all parties, within the context of the law.

There is a need to look both at the supply and demand for interest-based mediation. Incipient networks of mediators exist, but they are still largely ad hoc groupings. The creation of a neutral professional organization is critical to the credibility and development of mediators in this country. Currently, mediators trained under previous projects work in a variety of NGOs and government agencies; there are as yet no independent mediation groups able to provide mediation services, as the field is still in its infancy. It is expected that the growing demand for mediation will eventually enable the rise of such groups. However, at the current stage it is necessary to have a neutral organization that can keep a roster of accredited mediators and provide referrals to individuals, giving them a recognized identity as a neutral third party, regardless of their other affiliations. The association is also necessary as a means of furthering the development of mediators – it can play an important role in marketing the services and thus building demand, and it can create opportunities for mediators to develop and refine their skills through networking with each other and sharing successfully applied models, techniques, and strategies.

On the demand side, there are possibilities within government agencies to experiment further with new dispute resolution approaches, with a view to institutionalizing them. Both DAR and DENR have had initial positive experiences with the use of interest-based mediation during the Ramos administration. The need now is to build on that experience. Within DAR the possibilities for institutionalization are clear; mediation training is already a recognized need, particularly within the legal bureau. Within DENR, further experimentation is needed to build within a section of DENR the capacity and commitment to this form of conflict management. The Environmental Management Bureau is one area of focus with strong potential, as its responsibility for the EIA process keeps EMB staff regularly involved in public participation activities. EMB's recent change from staff to line bureau is a plus, as it now means that building EMB staff capacity in interest-based mediation would place trained mediators in regional offices throughout DENR.

Strengthening Institutions for Multi-stakeholder Negotiation

Consensus-based decision-making in the current Philippine context could be pursued through several institutional arrangements that enable multi-stakeholder engagement. These options include enhancing the functionality of existing multi-sectoral bodies, as well as strengthening national and local government capacity to share authority with other state and non-state actors. Local government bodies provide a second institutional venue where mandated participation creates an opportunity to develop interest-based decision-making.

Multi-sectoral bodies

This area of focus would respond to opportunities created by the recent establishment of a number of multi-stakeholder bodies with varying degrees of authority over natural resource decisions. Protected area management boards (PAMBs) and fisheries and aquatic resource management councils (FARMCs) are multi-sectoral bodies created by legislation in the 1990s to enable participatory decision-making on protected areas and municipal coastal areas. Dozens of these bodies have been created throughout the nation (and hundreds potentially could be). Other multi-sectoral bodies have been established to govern specific administrative areas, such as the Palawan Council for Sustainable Development (PCSD). It would be difficult to point to any of these as an example of an effective, participatory decision-making institution.

As many of these bodies are relatively new, the opportunity exists to recommend policy changes in their functioning before these become set in stone. Questions of appropriate membership, representation, and size need to be explored and recommendations made to ensure these bodies are genuinely representative and downwardly accountable. Decision-making structures should also be a major focus: in bodies such as a PAMB, where local government representatives currently outnumber representatives of marginalized groups by a significant margin, support is needed to experiment with processes that would ensure decisions are by consensus rather than majority. Questions of empowerment are central considerations in ensuring that representatives of indigenous communities, poor fisherfolk, upland migrants, and other marginalized groups are able to express and negotiate for their interests effectively.

The overall issue of how much authority is devolved to these bodies is an important one. The implications of the advisory powers of the FARMC as compared with the decision-making powers of the PAMB could be examined. A related issue is whether these bodies should be strictly policy setting (analogous to a board of directors) or be involved in the day-to-day administering of the resource area. A third question of authority relates to the potential for proliferation of these bodies and how issues of coordination and jurisdiction are to be resolved. For example, in Palawan it is possible for the PCSD, a PAMB, and a FARMC to be tackling overlapping concerns (together of course with the municipal government). Lastly, as a contrast to the variety of *formal* institutions for multi-stakeholder management, it would be important to explore the advantages and limitations of *informal* resource management arrangements, such as the watershed coalitions that have begun to form around the country in recent years.

LGU-level participatory natural resource management

The role of LGUs as convener of multi-stakeholder bodies is problematic but inescapable. The powerful position of the LGU and the political relationships attached to the mayor or governor

make a neutral convenor role for LGUs impossible. However, the realities of financial resources needed to convene such a body, together with the expectations of many citizens as to where responsibility lies for responding to local problems, make the LGU the most likely “host.” Given this situation, capacity-building to enable meaningful participation in these fora is an important need.

There are a number of examples of participatory natural resource management processes initiated by LGUs (notably Nueva Vizcaya, Quirino, and Batangas provinces). The importance of support by enlightened local chief executives is one of the lessons from these cases. The flip side of this coin is that these programs are highly vulnerable to changing administrations. There is thus a continuing need to institutionalize participatory programs at the LGU level. Part of this might be addressed by enhancing the professional capacities of career LGU staff, so that continuity may be provided past the next election. Equally important is support for civil society pressure on their representatives to continue participatory programs. As an example, several municipalities in Banate Bay, Iloilo created an integrated coastal resource management council in the mid-‘90s, which included participation from civil society. After elections, representatives of civil society groups and the council staff were able to negotiate with the new mayors to continue the council (Baylon 2001, Larroza 2002).

Access and generation of management information is an enormously important need in natural resource management, and it is one where the LGU is a logical focus. A consistent finding of the CBNRM review was that genuine assessment of environmental sustainability impacts was impossible because initial baseline information was lacking in project after project. The municipal level is the most appropriate link to those who have the greatest stake in knowing the status of the local resource base and whether management efforts are working. An LGU could facilitate a multi-partite effort to gather and share locally relevant information on a regular basis.

Dilemmas

The central dilemma has to do with the trade-offs between existing government authority structures and newly created more participatory ones. LGU structures are more stable and cost efficient than unwieldy participatory structures that do not have clear jurisdiction over resources and revenues. There is a need to take advantage of the institutional strength conveyed by the Local Government Code and yet ensure that local governments do not substitute or impose their decisions on communities.

- The STMPC in San Rafael is a PO management structure that worked for a time, perhaps aided by the fact that the PO leaders were also the barangay leaders. And now that there are different barangay leaders, the jurisdiction over the forest is again unclear.
- The Banate Bay management body is the opposite, being LGU initiated and run. It functions fairly well and has been able to survive election changes in local leadership within the LGUs. But it does not have a decision-making structure in which local people negotiate for their interests and thus its decisions do not necessarily reflect their needs.

- Imugan, the site of the Kalahan people, is a unique confluence of community boundaries and local government structure. This has strengthened the powers of the management body. But this is possible only in an IP setting.

3. Build capacity (and power) for negotiation and for conservation management

Lack of capable managers is a frequent excuse for retaining centralized control. It is often argued that there is no management capability at local levels, either in the LGU or among community members, so transferring responsibility will only result in failure.⁶⁸ But this ignores the obvious truth that levels of competence change over time (Anderson 2000). Capacity can be built; its lack is not a permanent limitation. Increased capacity for disadvantaged groups is both a path to greater competence in natural resource management and a path to power.

This approach would support efforts to enable disadvantaged groups to access information on their resource base, generate their own information and analysis, increase awareness of their legal rights, and negotiate more effectively for their needs and interests.

Community access and generation of information

Scientific and technical information

Effective negotiation necessitates free and informed decision-making by all parties. Natural resource management relies on a constant stream of information, most commonly provided by technical experts such as scientists and lawyers. The translation of this information into knowledge accessible to disadvantaged groups (and other non-technically trained participants) is a basic requirement of any good consensus-based process.

Information is also crucial to increasing the perceived value of biodiversity and other environmental functions of the resource areas that local people are managing. If compensation flows for biodiversity conservation are to develop, then awareness of these values needs to be raised, both for those doing the conservation work and those simply benefiting from it.

Enabling access to information and the generation of alternative knowledge bases is one clear path to building strength and consensus within a disadvantaged group. Community mapping is increasingly recognized as both a participatory research methodology and a tool for empowerment. Confidence is built up through the direct experience of gathering and processing of information. The knowledge gained then feeds back into decision-making processes. It can provide an alternative way of looking at a problem; it may also provide valuable information unavailable to scientists.

Similarly, community monitoring activities are a source of both information and internal power. In Lantapan, Bukidnon, community members participate in water quality monitoring using

⁶⁸ This is a current explanation for the near collapse of the ISF program after its devolution to the LGUs. However, as we discussed earlier in the chapter, the authority and financial resources to support the program remained with DENR.

simple tools and techniques. The information they have gathered over time and across the watershed have given the people first-hand knowledge of the disturbing trend of degradation of their water and watershed (Deutsch et al. 2001a; Deutsch et al. 2001b). This type of environmental monitoring builds awareness of problems in a concrete way that is owned by the local people. These processes can then enable a marginalized group to negotiate from a position of greater confidence and unity.

Rights and Process Knowledge

As noted earlier, equalizing the negotiating strength of the various stakeholders involved in natural resource decision-making is crucial to achieving outcomes that are genuinely representative. One of the paths to power for disadvantaged groups is to increase awareness of their legal rights. Another is to understand how local administrative procedures work, so that they are able to advocate for their interests and press for redress of their grievances. Local administrative procedures are the initial avenues for deciding most issues of resource allocation, land tenure, enforcement of environmental protection laws, etc. Thus the majority of issues facing disadvantaged communities are raised and resolved at the local level.

The work of legal services NGOs and other groups that provide such training is an important contribution to the empowerment of disadvantaged groups. Their approach involves mutual learning and facilitating a process whereby groups determine their own strategies for enforcing rights and articulating their interests. The goal is to leave behind self-reliant groups able to function within a demystified legal system. Their work is thus an effort to democratize access to state-controlled resources and policy-making processes (Golub 2000).

Negotiation coaching for disadvantaged groups

It is important to recognize that interest-based negotiation and mediation provide an opportunity for disadvantaged communities to directly participate in the resolution of the problems affecting them and determine for themselves an acceptable outcome. However, adapting Western conflict resolution models requires more than simply changing the case study examples and making reference to local concepts such as go-betweens. It requires examination and incorporation of indigenous notions of justice and, most importantly, a clear mechanism to deal with the extreme differences in power among individuals or groups in conflict in the Philippines.

The novel portion of this strategy in terms of current approaches to ADR is the empowerment portion, which we term “negotiation coaching.” The assumption underlying this component is that true, effective joint problem-solving requires that all parties be able to express their views clearly and forcefully. Western ADR models generally assume that a fair process will be able to mitigate power differentials (which are not as extreme in North America and Europe).⁶⁹ Thus, it is crucial to develop a new process specifically geared towards coaching disadvantaged groups, so that they are able to effectively represent themselves in negotiations. There have been initial efforts to develop this type of service, but it is at a very early stage.

⁶⁹ Though, as Pellow (1998) points out, even American activists have had to resort to power-generating tactics outside of and as a corollary to the negotiation process.

The application of this methodology is needed not just in natural resource decision-making fora but also in community negotiations with the private sector. Community-based tenure systems make community-business negotiations more likely. This method is expected to provide important lessons for creating ADR systems in a developing country context.

4. Establish mechanisms for operational viability of the management unit

[*section under development]

Both local politics and renewable resource ecosystems are highly unpredictable (Agrawal 1997). Stability is only possible through effective, accountable, and local institutions for natural resource decision-making. And in order for these institutions to function, they must be clothed with appropriate control rights to manage for conservation and be able to draw off revenues to support the regulatory system. This area is the least well-studied and potentially the most crucial.

The previous chapters on sustainability looked at a variety of funding flows to support sustainable use and biodiversity conservation. Diversifying income streams, internalizing environmental costs through pricing that reflects proper values, ensuring that international funding for environmental services (carbon sequestration, bioprospecting) gets plowed back into conservation work, eco-labeling, direct compensation from downstream beneficiaries – all these are flows that can and should be directed towards those whose livelihoods depend on the resources and are doing the work of conservation. But what of the management body itself, how does it get funded?

In the long run, it must be part of regular revenue flows that circulate through the government. The situation of the PAMBs shows the problems of trying to fund these bodies through separate funding structures. Meant to be supported through parks fees, most PAMBs cannot even afford the small costs of holding meetings. Only those parks that have foreign-assisted projects paying the operating costs of the PAMBs are able to actually convene the management body.

One of the revenue streams that needs to be re-evaluated is fees – both in terms of their purpose and to whom they should be paid. While the PAMB example above shows the dangers of relying directly and solely on fees, there is no question that fees have a clear role in supporting the regulatory structure. Fees relating to natural resources are a controversial subject. Irrigation service fees, forest charges, fishing permits, concession fees for fish-pens and non-timber forest products (NTFPs) – all these are payments to the state in return for use rights (specifically, withdrawal rights). But the rationale behind each of these is different – some are meant as revenue-generating measures for the state, while others are simply meant to cover the costs of managing the resource. We would argue that the changed role of the state towards natural resources in the 21st century has major implications for the use of fees. Now that the state is focused on sustainable use and biodiversity conservation, rather than extraction, the sole purpose of fees ought to be to cover the management costs of conservation

The changing relationship of the state and natural resources: from revenue to conservation
Philippine government policies towards natural resources (particularly forests) in the first three-quarters of the 20th century clearly laid out a role for the state as promoter of extraction and

collector of needed revenues from a plentiful resource base. Forest charges were initially established as a revenue-generating measure for the colonial and post-colonial state, which viewed the nation's abundant forests as a major source of wealth. The last quarter-century, however, began a shift in state role to become guardian and conservator of a rapidly diminishing resource base. While this new role is re-stated in nearly all recent laws and administrative orders, the hodgepodge of still-active policies remaining from the previous era (e.g., the Forest Code, P.D. 705, which dates to 1975) make for the highly contradictory approaches co-existing in DENR. Resolving this issue is a clear priority for the nation.

The changing purpose of fees: from tax to regulatory vehicle

Fees are one of the areas in which contradictory policies are in effect. In forestry, the permit and charges system is still based on the now nearly defunct TLA system, where resource extraction and ensuring the nation got its fair share were the priority concerns. Forest charges are a form of tax, based on the value of the resource. Now that the government focus is on sustainable management, an extraction-oriented tax system has lost its reason for being. The need now is simply to support the regulatory structure and to cover the costs of management – particularly enforcement costs.

The use of fees in fishing and irrigation provide a sharp contrast with forestry. Fishing fees are set up primarily as a regulatory vehicle. Through licenses, municipalities control who has access to local fishing grounds. Through fines, they finance enforcement of local fisheries ordinances. The irrigation service fee (ISF), as the main source of funding for the National Irrigation Administration, is meant to cover the costs of managing the nation's irrigation systems.

Forest fees also serve a regulatory function – through DENR's control over use rights, the permits and forest charges are a means to control who cuts and how much. This in and of itself is not a problem; natural resource management requires a regulatory regime and a means of financially supporting that regime. The issues for forestry however are: (1) the level and structure of fees; and (2) to whom the fees should be paid.

Level and structure of fees:

- Cost efficiency – is it worth it? Costs more to run system than getting in fees. Increase fees or decrease enforcement structure and manage for outcomes, not activities (monitor forest cover, or annual inspections, rather than every transport).
- A licensing fee system may be a more appropriate structure for forestry. A system of once a year permit or license fee and a year-end monitoring of standing stocks is easier and cheaper to administer than a volume-based forest charge and the tedious process of accounting and monitoring – so prone to corruption. Decreasing enforcement costs.
- Significantly reducing or abolishing forest charges (and/or simplifying the system) will have the added benefit of reducing production costs. This should translate either into reducing pressure on the resource or (more likely) increasing income for forest-dependent families.

- Flipside of contributing to the undervaluation of forestry resources. But the capturing of the true value of forest product should be at the market stage, so that the value added is reaped by the community-harvester and (presumably) the money will be plowed back to operations, rather by DENR.

Who should be paid? Management unit.

If fees are payment for management of the resource, then in a CBNRM regime it is necessary to consider the fact that fees ought to be flowing to the management unit – the community. In thinking about fees differently – as compensation for labor provided – what are the cost centers in CBNRM? There are enforcement costs (especially the labor of patrolling), rehabilitation costs (reforestation of upland or mangrove areas, artificial reef construction, etc.), and there are management body costs (logistical support; we are not advocating that representatives on the body gain significant income from their work, only that they do not have to subsidize it).

Conclusion

The local, representative and informed decision-making body suggested in the previous sections must also have a viable claim on the financial resources needed to keep operating. Ultimately, there is a need to develop better institutions of multi-stakeholder decision-making. There will be no single formula appropriate to all resource and socio-political contexts. But the basic principles of consensus-based decision-making, downward accountability, efficiency, and effective representation should be present in any institutional arrangement. It should be noted that equity and empowerment in this context is a matter of ensuring the marginalized can negotiate equally, from a position of parity (no small task). There is no guarantee their view will prevail, but a representational structure that gives heavier weight to primary stakeholders will encourage outcomes in favor of local communities.

Chapter 7: Conclusion

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