

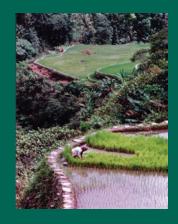


Governance of Natural Resources in the Philippines:

Lessons from the Past, Directions for the Future

Rural Development and Natural Resources Sector Unit East Asia and Pacific Region

November 2003







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Asian Development Bank	JBIC	Japan Bank for International Cooperation
Community Based Forest Management	LGU	Local Government Unit
Agreement	NCIP	National Commission for Indigenous People
Community Environment & Natural Resources Officer	NEDA	National Economic and Development Authority
Community Stewardship Contract	NGO	Nongovernmental organization
Department of Agriculture Bureau of Fisheries	NIPAS	National Integrated Protected Areas System
Departmental Administrative Order	PACBRMA	Protected Areas Community Based Resource Management Agreement
Department of Environment and Natural	PAWB	Protected Area Wildlife Bureau
Resources Department of Interior and Local Government	PENRO	Provincial Environment & Natural Resources Officer
•	PO	People's Organization
Government Finance	SIFMA	Socialized Industrial Forest Management
Executive order		Agreement
Foreign Assisted Projects Office	UNEP	United Nations Environment Programme
Gross National Income	UNDP	United Nations Development Programme
Industrial Forest Management Agreement	USAID	United States Agency for International Development
Indigenous People's Rights Act	WB	World Bank
	Community Based Forest Management Agreement Community Environment & Natural Resources Officer Community Stewardship Contract Department of Agriculture Bureau of Fisheries and Aquatic Resources Departmental Administrative Order Department of Environment and Natural Resources Department of Interior and Local Government Department of Fisheries-Bureau of Local Government Finance Executive order Foreign Assisted Projects Office Gross National Income Industrial Forest Management Agreement	Community Based Forest Management Agreement NCIP Community Environment & Natural Resources Officer Community Stewardship Contract NGO Department of Agriculture Bureau of Fisheries and Aquatic Resources PACBRMA Departmental Administrative Order Department of Environment and Natural Resources PENRO Department of Interior and Local Government Department of Fisheries-Bureau of Local Government Finance Executive order Foreign Assisted Projects Office UNEP Gross National Income Industrial Forest Management Agreement



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his report analyzes natural resource management and governance in the Philippines, identifying recent trends, current challenges, and future goals. The first half of the report summarizes the status of the country's natural resources, describes sector policies, institutions, and budget mechanisms, and identifies impediments to improvements. The second half focuses on three crucial issues for natural resource governance: property rights, institutions, and financing. As part of its analysis of these three overarching issues, the report considers cross-cutting governance concepts such as participation, accountability, transparency, corruption, and service delivery. The report's final section offers conclusions and recommendations.

The primary audience for this report is the government of the Philippines—particularly national and local agencies and officials with mandates for natural resource management. For academics and researchers the report provides an overview of problems in natural resource management and governance. For civil society the report might create opportunities to engage in dialogue with other stakeholders. And for donors it sheds light on the challenges involved in developing and implementing natural resource management projects in the Philippines.

The report's analysis draws on many studies conducted over the past decade—including studies commissioned for this report,

unpublished academic reports, and reports by government agencies, nongovernmental organizations (NGOs), universities, the Asian Development Bank (ADB), the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the World Bank, and bilateral donors.

The analysis for the report was carried out between September 2002 to June 2003. During this period, a new Secretary of Department of Environment and Natural Resources was appointed, and many of the recommendations proposed in the report are currently in the process of being implemented.

The Study was carried out by a team of Filipino researchers and World Bank Staff and consultants. Members of the team included: Giovanna Dore and Gilbert Braganza, Brenda Phillips and Patricia Morente from the World Bank, Arne Jensen, Charles Barber, Environmental Sciences for Social Change, Floredema Eleazar, and Paul Holtz. The overall Task was managed by Asmeen Khan. The Study benefited from comments provided by Kathy Mackinnon, William Magrath, Stephen Mink, and Ernie Guiang. The team would like to acknowledge the substantial help and assistance provided the Department of Environment and Natural Resources, particularly the Director for Foreign Assisted Projects and his staff. The Study was financed by the World Bank with additional support from the Global Environmental Facility and the Danish Government through a Trust Fund.

lthough the Philippines was once one of the richest biological regions on Earth, 50 years of severe natural resource degradation have taken a catastrophic toll. As a result the country now has among the lowest forest cover per capita in the tropics, and many mangrove and coral reef ecosystems have collapsed. The main direct causes of this degradation include pollution, urbanization, sedimentation, conversion to other land uses, and-most important-overexploitation, often involving destructive approaches to resource extraction. These problems have been exacerbated by weak natural resource management, limited financial resources, and ineffective environmental institutions. (In this report natural resources refers to forests, coastal waters, mangroves, coral reefs, watersheds, and protected areas. Mineral resources are covered by a separate initiative between the Department of Environment and Natural Resources and the World Bank).

Over the past decade the government has tried to reverse these trends, introducing innovative institutional and legal reforms for sustainable natural resource management—including, in the early 1990s, a comprehensive decentralization program that promotes resource management by local governments, indigenous groups, and resource-dependent communities. For example, new tenurial instruments have granted a variety of property rights to local and indigenous communities—particularly for public forests—and a national system of protected areas has been created.

In addition, in recent years many donors have supported efforts to improve natural resource management by building the capacity of the Department of Environment and Natural Resources (DENR), local governments, nongovernmental organizations (NGOs), and local communities, and by supporting innovative partnerships among them.

Despite these efforts, natural resource management in the Philippines has a mixed record of performance. The main reasons for failure are:

- Unclear institutional mandates between central agencies and local governments.
- Lack of sustained financing at the national level and revenue generation at the local level to finance natural resource management.
- Delays and other problems in issuing and enforcing the new tenurial instruments for public forests.
- Lack of equivalent tenurial instruments for coastal waters and resources.
- Administrative impediments.
- Insufficient capacity, accountability, and transparency in public and private institutions responsible for managing natural resources.

This report focuses on three crucial aspects of natural resource governance and the extent to which they explain failures in improving it:

- Property rights—tenurial and use rights for natural resources have not been fully implemented, hindered by rigid bureaucratic procedures.
- Institutions—a profusion of underfunded, centralized institutions have unclear and overlapping mandates, ineffective processes for stakeholder participation, and inadequate mechanisms to ensure accountable performance and service delivery.
- Financing—an inefficient, erratic system sets budgets for natural resource management, leading to a multitude of underfunded policies and programs for protected areas, community-based forest management, rights of indigenous peoples, and so on.

This report draws on the extensive literature on natural resources and governance in the Philippines, and complements it with data from the DENR and National Economic Development Authority (NEDA). In addition, case studies from resource-rich provinces are used to provide local perspectives that illuminate overall problems—and offer examples of how to improve institutional performance in resource management. The report's main messages are summarized below.



Effective natural resource management requires further institutional devolution

The Local Government Code of 1991 devolved substantial power, responsibility, and resources to local governments, including aspects of natural resource management. Yet the DENR still takes the lead in managing natural resources. Only 4 percent of the DENR's more than 23,000 staff have been devolved to local governments, and 18,000 DENR staff are in regional offices.

Meanwhile, provincial and municipal governments have limited capacity in resource management. For example, many municipalities do not have environment and natural resource officers—and given ceilings on hiring and the limited devolution of natural resource management functions, local governments have little incentive to fill these positions. As a result most local governments remain dependent on the DENR and are often disengaged from local resource management. Although some local governments have assumed active roles in natural resource management, this is generally due to the specific commitment of local political leaders and so is neither institutionalized nor sustainable.

Multiple laws devolving natural resource responsibilities have led to an administrative impasse that needs to be resolved

Responsibilities for natural resource management have also been decentralized by the Strategic Environmental Plan for Palawan, the Indigenous Peoples Rights Act, and the National Integrated Protected Areas System Act—in Palawan province, in recognized ancestral domains of indigenous peoples, and in protected areas, respectively. But these measures' procedures and requirements often overlap or conflict with the Local Government Code, adding an additional layer of bureaucracy and often causing delays in issuing environmental clearances, indigenous titles, community-based forest management instruments, resource use permits, and the like. Urgent attention should be given to harmonizing these mechanisms and streamlining their regulatory procedures. Efforts are currently under-

way to harmonize the Indigenous Peoples Rights Act with the National Integrated Protected Areas Systems Act.

Instruments for community-based forest management have strengthened local rights—but inefficiency and weak enforcement create conflicts and inhibit sustainable use and investment

Secure tenure can give communities an incentive to invest labor and capital in sustainable management of their lands, waters, and other resources. Recognizing that, in the 1990s the Philippines reversed a long-standing policy of state ownership of forestlands and developed regulations and tenurial instruments that allow individuals and communities to control and use forestlands and their resources. By 2000 nearly a third of public forestlands were formally covered by some type of community-based tenurial instrument.

But this new tenurial system is fraught with problems. To receive resource use rights, communities must complete a series of cumbersome procedures, which includes social preparation prior to receiving these rights. And once rights have been granted, communities can use forest resources only after the DENR has approved the resource management frameworks and annual workplans that applicants are required to produce. Because this documentation is often too complex for communities to produce, many must turn to NGOs or consultants for assistance.

Moreover, problems and conflicts arise when different tenurial instruments—such as ancestral domain claims of indigenous groups and various forest management tenures—are issued for the same area. In other cases local right-holders have no way of enforcing their rights against powerful outsiders—such as illegal loggers with political or military connections. As a result many forestlands formally under community-based tenurial instruments remain as they were before: de facto open access areas.

Devolution of control over coastal waters and resources needs to be complemented by community-based property rights to



reverse the current open access situation and provide incentives for sustainable community-based coastal resource management.

Although the 1991 Local Government Code and 1998 Fisheries Code devolved control over coastal waters up to 15 kilometers from the shore to municipal and city governments, there is no system of tenurial instruments for coastal waters equivalent to those for forestlands. As a result most of the country's coasts remain de facto open access areas—with attendant over-exploitation and use of destructive fishing methods.

The forest-related tenurial instruments show that while tenure is insufficient to ensure sustainable natural resource management, it is an important foundation for sustainable management in situations where poor and growing populations depend on local resources for their livelihoods. The same dynamic applies to fisheries, coral reefs, and other coastal resources—as has been well documented by sites where local governments and communities have instituted de facto tenurial regimes over coastal waters.

Devolution of natural resource governance and tenurial rights to local governments and communities must be complemented by a strong governing hand from the DENR—to facilitate and enforce observance of the responsibilities that accompany devolution

Neither devolution of governance under the Local Government Code nor creation of local tenurial rights over forest-lands was driven by evidence that such measures would improve natural resource management. Rather, both largely resulted from the democratization of Philippine society since the fall of Ferdinand Marcos' in the 1980s—and, in the case of community-based forestry, from the failure of top-down, state-led forest management to provide ecological sustainability or social equity.

But local management and control do not necessarily lead to sustainable natural resource management. Devolution of rights to natural resources must be accompanied by devolution of responsibilities to manage them sustainably, in accordance with national and local standards and priorities. The DENR should enforce these responsibilities and standards—and provide local governments and communities with the services and tools they need to observe them.

Thus the DENR needs to evolve in three directions. First, it needs to complete the devolution of natural resource management functions mandated by the Local Government Code and other legislation. Second, the DENR needs to recast its role—becoming the guardian of national minimum standards for natural resource management and building its capacity to ensure that local governments and communities observe them. Finally, the DENR needs to strengthen its capacity to help local governments and communities meet those standards. To fulfill these new roles, the DENR needs to restructure, redefine its programs, and reorient its staff.

The DENR's budget management process needs to be overhauled

Between 1998 and 2002 just 5 percent of the DENR's budget went to development expenditures—that is, actual investments in natural resource management. During the same period the DENR's overall budget dropped 43 percent. The department's limited budget is spread across too many programs and projects, and is fragmented among the DENR's four bureaus—significantly limiting any bureau's ability to effectively implement natural resource policies.

"Banner programs"—created by DENR secretaries to put their personal and political mark on the DENR's overall program—are one reason that resources are allocated inefficiently across too many program. (The fast turnover of DENR Secretaries is also a problem: there were four during 1998–2002.) Banner programs are supposed to provide focused budget resources to environmental and natural resource management challenges requiring special attention and immediate intervention. New banner programs are adopted each year without DENR evaluations of existing ones—which tend to take on bureaucratic



lives of their own—and assessments of their ongoing budget requirements. In addition to limiting the effectiveness of banner programs, this approach creates significant inefficiencies in spending on natural resources.

The DENR must slash "routine" costs

In 1998–2002 a staggering 95 percent of the DENR's budget went to "routine" costs of administrative management and operational support (with salaries accounting for a large share of these costs). Thus 95 percent of the budget was used to maintain a bureaucratic system for spending the remaining 5 percent of the budget on actual environmental and natural resource management services.

The DENR employs far more people than can be justified by its level of service delivery. The current ratio between routine and development spending (95:5) needs to be drastically altered—aiming, within five years, for a ratio of at least 75:25. Without such a transition, it will be impossible for the DENR to effectively deliver natural resource management services. Though this change will be politically difficult, it is technically and operationally feasible.

The DENR needs to boost its revenue

DENR revenue from taxes, penalties, and other fees and charges totaled 472 million pesos in 2001, about 13 percent less than in 2000. This revenue accounted for only about 6 percent of the department's budget—and should be significantly increased by improving enforcement and implementation.

Donors need to better integrate projects with DENR programs to improve fund use and effectiveness

In the 1970s the Philippines had 4 donor projects (those involving official development assistance) involving natural resource management, with a combined cost of \$24 million. Cumulatively there have been 173 foreign-assisted projects totaling \$1.2 billion—accounting for a quarter of the DENR's overall budget and

two-thirds of its development budget. Donor investments have consistently focused on forestry and upland activities.

Large investments from donor projects have cushioned low government funding for the DENR, but projects' potential to fulfill the department's mandate is constrained by their weak performance. A recent review by the National Economic and Development Authority indicated that among the country's rural development agencies, only the DENR has exhibited a decline in physical accomplishments—and cost and time overruns were largely to blame. Moreover, the DENR's performance rating for donor projects was less than satisfactory. Much of this weak performance was due to the DENR's lack of staff capacity, its failure to provide adequate counterpart funding, and its frequent shifting of priorities under the banner programs discussed above.

New institutional arrangements—including participation by communities and local governments—appear to be one solution

New institutional arrangements such as protected area management boards and provincial environmental councils have helped bring together key stakeholders in forums where resource management decisions are made in a more open, transparent manner. For example, many protected area management boards are actively involved in issuing local conservation regulations and implementing management plans for protected areas. In addition, enhanced stakeholder partnerships have increased the number of volunteers and NGOs assisting protected area superintendents in park management and protection activities.

But financing for the activities of protected area management boards remains limited and based on externally financed projects. And the Integrated Protected Area Fund, established under the Act on the National Integrated Protected Areas System, does not yet function effectively. Without sustainable financing, much of the recent progress on institutional arrangements could be lost. These new arrangements must also pursue an agenda that matches responsibilities with institutional capacity and accountability.



Setting institutional standards for environmental services would improve transparency and accountability

No standards or time limits exist for processing the various types of resource use permits. Getting a permit or tenurial instrument is an expensive, time-consuming, complicated process that few individuals or community groups can afford. Neither local governments nor the DENR have developed service standards or

examined ways to improve service delivery and reduce bottle-necks—for example, by easing requirements, posting and publicizing information, making costs transparent, and publicizing the number, location, and recipients of permits issued in municipalities and provinces. The DENR and Department of Interior and Local Government should work together to improve such mechanisms, particularly in resource-rich provinces with numerous land use conflicts.



Problem/issue	Envisaged solution	Agency responsible	Specific action	Timing
Property rights				
Tenurial instruments for community-based forest management have strengthened local rights, but bureaucratic complexity and lack of enforcement are causing conflicts on the ground	The DENR needs to review and simplify its procedures	DENR Office of the Secretary	DENR undersecretary for policy and planning to develop draft administrative order simplifying procedures	6 months
Unclear territorial jurisdiction of local governments for natural resource management	Develop tenurial instruments for local governments to set aside areas that will be entirely managed by them, set stan- dards for their use or develop- ment, and establish mechanisms to review performance	DENR Office of the Secretary; Depart- ment of Interior and Local Govern- ment; local govern- ments	Create a working group to study different models (such as forest co-management) and make recommendations to the DENR, Department of Interior and Local Government, and mayors of local governments	6 months
Devolution of control over coastal waters to local govern- ments needs to be comple- mented with effective c ommunity-based property rights	Department of Interior and Local Government, Bureau of Fisheries and Aquatic Resources, and the DENR need to develop policy and legal instruments	Secretary of Department of Interior and Local Government	Department of Interior and Local Government, with Bureau of Fisheries and Aquatic Resources, DENR, and civil society to assist LGUs with policy guidelines	18 months
The DENR and local governments need to jointly review and decide on resource use permits in a transparent, accountable, participatory manner	The DENR needs to work with local governments on technical oversight and rule enforcement. The DENR should build local governments' capacity to carry out devolved responsibilities for natural resource management and ensure that department staff are oriented toward this new role	DENR Office of the Secretary	DENR undersecretary for technical services to review organizational arrangements and make changes to increase technical oversight and support to local governments	12 months
Institutions				
Incomplete decentralization of DENR staff and functions; overstaffing in DENR cen- tralized offices	Further devolve DENR staff to provincial and municipal governments (especially in resource-rich provinces). Review personnel distribution in all bureaus and at all administrative levels	DENR Office of the Secretary	DENR Secretary—to review options and prepare a policy paper on reducing and devolving staff	12 months

RECOMMENDATIONS FOR IMPROVING NATURAL RESOURCE GOVERNANCE

Problem/issue	Envisaged solution	Agency responsible	Specific action	Timing
Natural resource manage- ment institutions—both provincial DENR and local offices—are stretched to deliver their institutional mandates	Delegate resource use permits (such as community-based forest management agree- ments) to local governments once more staff have been devolved	DENR Office of the Secretary; DENR bureaus	DENR Undersecretary of field operations—to review options and issue a new administrative order	6 months
Overlapping institutional mandates at the local level between the DENR, local governments, and other central government line agencies contribute to land use conflicts	Make land use decisions and issuance of resource permits more public through better information, stakeholder consultation, and public hearings prior to decisionmaking	DENR Office of the Secretary; Regional Executive Directors	Post provincial information on resource and land use permits on the DENR's Website	6 months
Insufficient transparency in resource allocation decisions	Same as above	DENR Office of the Secretary; Regional Executive Directors	Develop and implement guidelines on information disclosure through an administrative order	6 months
Weak standards and accountability for natural resource service delivery	Develop service standards for the DENR and local governments, reduce the number of institutional requirements, and make the cost of permits transparent. Encourage third-party monitoring of service delivery by local groups	Department of Budget and Man- agement; DENR; Department of Interior and Local Government	Establish a working group with the three departments, local governments, and civil society representatives to develop and pilot standards for one or two services (such as community-based forest management or environmental compliance certificates)	6 months
The DENR and local governments have minimal access to updated data on natural resource management	Link local government and DENR decisionmaking to accurate data to ensure scarce government resources are properly allocated	DENR; Depart- ment of Interior and Local Gov- rnment; PAWB	The DENR contracts out updates of data maps on natural resource management and use to third parties (such as universities); information published annually and posted on DENR Website	18 months
Successful partnerships between the DENR, local governments, NGOs, and civil society should be expanded	Develop more partnerships with qualified civil society and private sector groups to increase local capacity for natural resource management. Mechanisms for partnerships should be defined and funding ensured to sustain such partnerships	DENR Office of the Secretary	Undersecretary for Technical Services to review of tech nical services that could be contracted out, draft admin- istrative order	6 months



Problem/issue	Envisaged solution	Agency responsible	Specific action	Timing
Policy conflicts and under- evaluation of natural resources is resulting in their overextraction and strongly discouraging private investment	Simplify policy framework to ensure adequate evaluation of resource use to attract private investment in natural resources	National Economic and Development Authority; DENR Office of the Secretary; local governments	Working group to review policies and prepare guidelines to resolve conflicts	12 months
Financing				
DENR budget allocations are fragmented across too many programs and projects (nationally and locally)	Rationalize the budget process at the national and local levels	DENR Office of the Secretary; Department of Budget and Management	Set annual targets for increasing development expenditures and link to service delivery	12 months
DENR spending has been erratic, reflecting the priority given to natural resource management by different administrations	Prioritize budget allocations across programs, activities, and projects, and consolidate resource use to eliminate duplication of functions	DENR Office of the Secretary; Department of Budget and Management	Evaluate banner programs and reduce their number	6 months
Local government budget allocations for natural resource management are low and not necessarily dependent on local income levels—but more on priorities identified by local officials and, often, donors	Expand decentralization of budget control at the local level and increase local governments' financing proportionately so they can fulfill their devolved responsibilities	DENR Office of the Secretary; Department of Budget and Management; local governments; Department of Interior and Local Government	Increase DENR budget allocation to regional and provincial offices. Depart- ment of Interior and Local Government to issue guidelines to local governments for environ- mental service standards	12 months
Low revenue generation by the DENR and local governments	Explore opportunities to increase revenue from natural resources, including expanded base for revenue sharing with local governments and creation of instruments for local governments to collect fees, revenues, and other user charges for natural resources	DENR; DOF; Department of Budget and Management	DENR undersecretary for policy planning to establish a working group to review revenue and fee structures and recommend to DENR Secretary Working group drawn from the DENR, DOF-BLGF to identify opportunities for creation of instruments to collect fees, revenues, and user charges from natural resources, develop model ordinances and disseminate across all local governments	12 months



RECOMMENDATIONS FOR IMPROVING NATURAL RESOURCE GOVERNANCE

Problem/issue	Envisaged solution	Agency responsible	Specific action	Timing
Contributions from donor projects have become essential for the DENR to fulfill its mandates at the national and especially local levels	Strengthen the links between planning and budgeting within the DENR, DENR agencies, and DENR and local governments	DENR Office of the Secretary; Department of Budget and Management; local governments		6 months
Confusion exists on whether the DENR or local governments are to contribute to counterpart funding for donor projects	Same as above	DENR Office of the Secretary; Department of Budget and Management; local governments	Undersecretary for planning and policy to chair working group to improve planning and budgeting for donor projects	6 months

he Philippines was once one of the world's richest biological regions, with extensive and diverse tropical forests (including large coastal mangrove areas), high levels of species endemism, and 27,000 square kilometers of coral reefs containing enormous marine biodiversity. But while the country is still home to biodiversity of global importance, over the past 50 years its natural resource base has undergone catastrophic degradation—a process that has accelerated in the past 20 years (box 1). Causes of this damage include overexploitation, urbanization, pollution, sedimentation, and conversion to other land uses. And despite impressive strides toward establishing a comprehensive policy, legal, and institutional framework for sustainable management of natural resources, implementation has been uneven.

Bilateral and multilateral donors have supported numerous interventions aimed at improving natural resource management and strengthening the capacity of domestic entities—including the Department of Environment and Natural Resources (DENR), local government units, nongovernmental organizations (NGOs), and local communities—to address the top natural resource priorities. Though there have been some successes, the overall outcomes of these initiatives have not been satisfactory.

Better outcomes in natural resource management are impeded by several factors:

- Unclear institutional mandates between local governments and the DENR.
- Insufficient financing at the national level and revenue generation at the local level to finance natural resource management programs.
- Delays in issuing tenurial instruments.
- 1. For detailed information on the current state of and trends in Philippine biodiversity, see Ong, Afuang, and Rosell-Ambal (2002).

- Administrative obstacles at the local level.
- Lack of accountability and transparency among public institutions and NGOs involved in delivering services to upland communities.
- Inadequate institutional capacity.

Together these factors point to systemic problems in natural resource *governance* that must be addressed if current and future efforts to improve natural resource management are to succeed. Governance is generally defined as "the rules under which power is exercised in the management of a country's resources, and the relationships between the state and its citizens, civil society and the private sector" (Brown and others 2002). For the purposes of this report, natural resource governance is seen as having three main dimensions:

- Property rights—the allocation and enforcement of rights to ownership, access, and control over natural resources, as determined by policies and laws.
- Institutions—the mandates, functions, and capacities of government agencies in charge of managing natural resources, the relationships among these agencies and with civil society organizations, the processes for stakeholder participation in decisionmaking, and the mechanisms for stakeholders to hold government agencies accountable for their performance.
- Financing—the processes for financing, budgeting, allocating, spending, and accounting for the use of resources for natural resource management.

This report assesses the extent to which problems with these dimensions of governance explain failures in implementing natural resource management policies in the Philippines, particularly for forestry and marine resources. Emphasis is placed on local-level analysis, focusing on regions rich in natural resources but suffering from widespread poverty. The essential question that this report seeks to answer is, why are national policies and procedures for natural resource management not working at the provincial and municipal levels?

BOX I. TRENDS IN NATURAL RESOURCES IN THE PHILIPPINES

The Philippine archipelago comprises more than 7,000 islands with a land area of 298,170 square kilometers and a coastline of 18,000 kilometers. The two largest islands—Luzon in the north and Mindanao in the south—make up the majority of the country's land area, while the Visayas is an extensive group of islands and islets in the central part of the archipelago. Much of the country is hilly or mountainous, with nearly three-fifths defined as uplands. In 2000 the country's population was 75 million, up from 36 million in 1970. Much of the population—especially rural poor people—depends directly on natural resources. At least 40 million people reside in some 10,000 coastal *barangays* (the smallest political unit), and another 12–13 million live in ecologically fragile uplands.

Changes in status

In 1900, 70 percent of the country (21 million hectares) was covered by a rich mosaic of tropical forests, including extensive commercially valuable dipterocarp forests. But by 1999 forests accounted for just 18 percent (5 million hectares) of the country's land area, with less than 1 million hectares of old-growth natural forests. A 1997 survey of Earth's frontier forests—natural forest areas that are "relatively undisturbed and big enough to maintain all of their biodiversity"—concluded that there are no such forests left in the Philippines (Bryant, Neilsen, and Tangley 1997). Moreover, the country is among the 11 poorest of the 89 countries in the tropics (Borlagdan, Guiang, and Pulhin 2001; see also DENR and UNDP 2002).

Coral reefs have also suffered extensive degradation and face ongoing threats. Just 4 percent are in excellent condition (defined as having more than 75 percent hard and soft coral cover), while 28 percent are in good condition (50–75 percent), 42 percent are in fair condition (25–50 percent), and 27 percent are in poor condition (less than 25 percent). When only hard coral cover is considered, only 2 percent of the reefs are in excellent condition (Licunan and Gomez 2000). In addition, 70 percent of Philippine reefs are face high or very high levels of threat (Burke, Selig, and Spalding 2002).

Coastal mangroves have not fared much better, with their coverage falling from 450,000 hectares in 1918 to 288,000 hectares in 1970, 138,000 hectares in 1993 (White and Cruz-Trinidad 1998), and 112,400 hectares in 1997 (DENR and UNDP 2002). What remains is 95 percent secondary growth; most of the 5 percent that is primary or old growth is in Palawan (White and Cruz-Trinidad 1998).

Direct causes of degradation

Direct causes for the rapid degradation of natural resources and loss of biodiversity in the Philippines include:

- Overexploitation of natural resources such as timber, mangroves, wildlife, and fisheries, sometime using destructive and wasteful methods (such as blast and poison fishing on coral reefs).
- Conversion of natural ecosystems—such as forests and mangroves—to other land uses, including subsistence and commercial agriculture and aquaculture.
- Development of urban and industrial infrastructure, including roads, settlements, and mining and industrial facilities.
- Pollution and sedimentation from urban and industrial centers and agricultural expansion.

Indirect causes

Direct causes of resource degradation are driven by a complex structure of indirect causes, including:

- Limited availability of agricultural land for the fast-growing population.
- Displacement and migration due to natural disasters and insurgencies.
- Skewed distribution of rights to land and natural resources.
- De facto open-access tenure in many upland and coastal areas.
- Insufficient government capacity to manage lands, waters, and natural resources under state jurisdiction.
- An underfunded, incomplete system of protected areas, with many gaps in coverage of important ecosystems.
- Overlapping and conflicting laws and property rights for natural resources—particularly between conservation objectives and natural resource rights in protected areas.
- Overlapping institutional functions and mandates.
- Limited appreciation of and political support for natural resource conservation in government decision making.

he Philippines's policy and institutional framework for natural resource management has undergone sweeping changes since Ferdinand Marcos's regime was ousted in 1986. Government functions have been decentralized. Numerous mechanisms have been implemented to strengthen stakeholder participation in decisionmaking. The role of NGOs has expanded. The rights of indigenous peoples have been recognized. And a comprehensive national system of protected areas has been established. In addition, a wide variety of new and restructured institutions have been put in place to administer the new policy and legal framework.

THE POLICY FRAMEWORK— A SHIFT TOWARD DECENTRALIZATION

In 1991 the Philippines introduced the Local Government Code, among the most comprehensive decentralization policies undertaken by a developing country in the 1990s. This "revolution in governance" devolved substantial powers, responsibilities, and resources from the national to local governments (Rood 1998). The country's three tiers of local government units consist of 78 provinces in the first tier, 83 cities and 1,537 municipalities in the second, and 41,939 barangays in the third. In addition, for administrative purposes the country is divided into 16 regions that contain the deconcentrated regional offices of central departments and agencies.

The Local Government Code devolved numerous aspects of governance from the DENR to local government units—including some natural resource management functions such as community forest and communal watershed management, law enforcement through the issuance of local ordinances, and control over water within 15 kilometers of shore. The main provisions of the code affecting natural resource management are summarized in table 1. Despite the transfer of these functions, the DENR is ultimately responsible for managing forest resources, and implementation of these functions by local government units is subject to its supervision, control, and

review.2 Moreover, in some areas responsibilities are blurred, and there is a need to clarify and harmonize the roles of the DENR and local governments. The DENR has taken steps to this end by issuing several administrative orders and circulars which help define roles and responsibilities for local governments in areas such as communal forests, community watersheds and reforestation areas. However, only 4 percent (895 employees) of DENR personnel were devolved to local government units—compared with the Department of Agriculture, where nearly 60 percent were devolved. As a result most local governments have insufficient capacity to carry out the decentralization mandate, and significant human resource development is required to improve matters. Local governments face challenges in securing financing, have limited capacity to deliver environmental services, and possess incomplete information for monitoring environmental performance. At the same time, it is important to have a strong core agency, and the DENR should continue to be the main agency for managing natural resources and take the lead in guiding and assisting the decentralization of environmental and natural resource management.

In addition to the Local Government Code, the 1992 Strategic Environment Plan for Palawan and the 1998 Indigenous Peoples Rights Act are de facto measures further decentralizing natural resource management in Palawan Province and territories containing indigenous peoples.

The Strategic Environment Plan for Palawan created a unique arrangement for environmental and natural resource management. This was done largely because of Palawan's reputation as the Philippines's "last frontier" of untrammeled nature, and because of the perception that special measures were needed to prevent its ecosystems from experiencing the degradation common in other parts of the country. The plan promotes sustainable

^{2.} Elaboration of the DENR functions devolved under the Local Government Code can be found in DENR DAO 92-30, "Guidelines for the Transfer and Implementation of DENR Functions Devolved to Local Government Units."

Table 1. Decentralization of natural resource management functions under the Local Government Code of 1991

Level of government	Function
National	 Conservation, management, protection, development, and proper use of natural resources and promotion of sustainable development Management of: programs, projects, and activities funded by government agencies and foreign sources and of items under relevant executive orders and special laws, including the Agrarian Reform Program
Local	 Implementation and coordination of DENR policies, regulations, programs, projects, and activities Enforcement of Forestry Laws related to community and social forestry projects Management of communal forests with an area of less than 5,000 hectares, provided they are used for community forestry projects Management, protection, and rehabilitation of small watersheds that supply local water (as identified by the DENR), including extension and research services related to water and soil use and conservation projects Establishment, protection, and maintenance of tree parks, green belts, and other tourist attractions in areas delineated by the DENR (except those covered by the national protected areas system) and collection of fees for their services and the use of facilities established in them Regulation of flora outside protected areas and implementation of Rehabilitation in Conservation Hotspots (RICH) and Conservation of Rare and Endangered Species (CARE) activities in areas identified by the DENF Implementation of land management agreements, cadastral surveys, lot surveys, and isolated and special surveys Enforcement of small-scale mining laws Issuance of permits and adjudication of conflicts over fees for collection of guano and extraction of sand, gravel, and other quarry resources Management of small local hydroelectric projects Issuance of environmental compliance certificates for projects and businesses Implementation of solid waste disposal and other environmental management systems and services Adoption of adequate measures to protect the environment and conserve land, mineral, marine, forest, and other resources in their jurisdiction
	 Provision of necessary financial, technical, staffing, and other resources to ensure efficient, effective implementation of devolved functions

development in Palawan through conservation and careful use and development of natural resources. A main focus is forest conservation and protection, including a ban on commercial logging. Key features of the plan include:

- Developing a strategic environmental plan to guide local government units.
- Establishing an Environmental Critical Areas Network—
- similar to the National Integrated Protected Areas System (see below)—that controls development in ancestral and other lands and in coastal and marine areas. The network is widely used in land use planning.
- Creating the Palawan Council for Sustainable Development to review applications for environmental compliance certificates and land use plans and to conduct compliance monitoring for the DENR.

The Indigenous Peoples Rights Act established a regime to protect indigenous tenurial claims and other rights, providing some of the country's most comprehensive tenurial instruments. The recognition of indigenous peoples' private property rights supports the long-ignored legal doctrine that lands occupied since time immemorial—that is, since before colonialism—are not public lands. Key features of the act include its:

- Support for private rights to ancestral domains, including mechanisms for recognizing and delineating titles to such domains.
- Guarantees of rights to self-governance, empowerment, and cultural integrity, including rights to use traditional justice systems, conflict resolution mechanisms, and other practices—though the government retains regulatory powers over resource use and management.
- Recognition of rights to indigenous knowledge systems and practices.
- Creation of the National Commission on Indigenous People to help such groups obtain titles to and develop plans for the sustainable development and protection of ancestral domains.
- Establishment of an Ancestral Domain Fund.

The act's implementing rules and regulations were issued in 1998, but that same year its constitutionality was challenged by a lawsuit. Though the suit was ultimately rejected by the Supreme Court in 2000, it slowed implementation of the act.

THE LEGAL FRAMEWORK— AN EVOLVING ROLE FOR PROPERTY RIGHTS

Though there are multiple laws and regulations that govern natural resource management in the Philippines, the three most important for forests and coastal areas are the:

■ Community-Based Forest Management Strategy. In 1995 the Philippines adopted a community-based approach as its official strategy for forest management (through Executive

Order 263, with implementing rules and regulations promulgated in DENR DAO 96-29). This regulatory framework integrated a variety of previous initiatives for social and community managements of forests, uplands, and coastal areas and for recognizing ancestral domains. The strategy gives People's Organizations a central role in managing forests and has established new tenurial instruments for forest ownership, access, and control (Heltberg 2002).

- Fisheries Code. The 1998 Fisheries Code assigned coordination and consultation functions to the Department of Agriculture's Bureau of Fishery and Aquatic Resources and mandated the establishment of local councils for integrated resource management to foster cooperation between local government units. Several of the code's features are relevant to local governance and resource management in protected areas. First, it defined municipal waters and established local governments' jurisdiction over them. Second, it assigned enforcement responsibilities to local governments for wetland and marine resources, including patrolling the areas and issuing regulatory ordinances. Finally, it established fish sanctuaries and made local governments responsible for issuing permits and collecting fees for fishery activities and for registering municipal fishermen, fishponds, and fishery industries.
- National Integrated Protected Areas System Act. This 1992 act established the legal basis for developing a national system of "remarkable areas and biological important public lands with habitats of rare and endangered species of plants and animals, bio-geographic zones and related ecosystems, whether terrestrial, wetland or marine, all of which shall be designated as 'protected areas.'" The act's main features are summarized in box 2.

General types of property rights for natural resources

Clear, enforceable rules for natural resource ownership, access, and control—that is, tenure—are crucial for sustainable and effective natural resource management. Two broad types of tenurial rules are important: access rules defining who has access to resources, and conservation rules limiting resource use and

Box 2. KEY FEATURES OF THE NATIONAL INTEGRATED PROTECTED AREAS SYSTEM ACT OF 1992

The National Integrated Protected Areas System (NIPAS) Act governs the national system of protected areas, which includes 360 sites covering 3.8 million hectares. Key features of the act include:

- A 13-step process for assessing and formally establishing existing and new protected areas as official NIPAS sites.
- A process for removing protected areas from the system if they do not meet NIPAS criteria, such as areas that have lost most or all of their original vegetation.
- A management planning strategy to guide the formulation of site management plans, including innovative features such as zoning in protected areas, habitat rehabilitation, community organizing, socioeconomic and scientific research, and public hearings to assess draft plans.
- Creation of local boards to manage protected areas. The boards are composed of local and provincial government officials, regional and provincial DENR officials, local representatives of other government agencies, and representatives of NGOs, People's Organizations, and indigenous communities.
- Full recognition of ancestral lands and indigenous peoples' customary rights.
- Establishment of a tenurial instrument under which tenured migrants (people who lived in a protected area for more than five years before presidential proclamation of the area) can become stewards of land in a protected area's multiple use areas or buffer zones.
- Creation of an Integrated Protected Area Fund to support NIPAS areas. The fund draws its income from fines, entrance fees, donations, concessions and leases (in multiple use areas), and taxes on permitted sales and exports of fauna and flora.
- Recognition that government agencies other than the DENR—as well as local governments in marine areas and indigenous holders of certificates of ancestral domain claim—can hold jurisdiction over protected areas as long as they coordinate with the DENR in preparing management plans.

development in areas governed by access rules. Tenure over natural resources generally falls into one of four categories:

- Open access situations lacking effective ownership and control. Pure open access situations include resources from oceans and the atmosphere. Most terrestrial and coastal areas have formal property and use rights, but when such rights are unclear or not enforced, a de facto open access situation often emerges. Because they lack access and conservation rules, resources under open access are highly prone to overexploitation.
- Common property regimes where resources are communally owned and access rules are defined in terms of membership in the com-
- munity. In common property regimes ownership or control may be vested in a village, tribe, clan, user committee, cooperative, or local government. These regimes may or may not have conservation rules, and rights to use land or resources may be granted to individuals in the community. Traditional systems of natural resource tenure are typically common property regimes; the model is also common in community forestry, irrigation, and coastal resource management programs.
- State property regimes where the state owns the resource and ideally—enforces both access and conservation rules. This is the formal situation for forest and coastal resources in many tropical developing countries, including the Philippines. But state failure to enforce its property regime (and local resistance to

state ownership) often leads to the de facto open access situation described above.

Private property rights vested in individuals. Forests and other natural resources are widely held as private property in some countries, as in much of Europe. Although individual ownership rights are far less common in Southeast Asia, significant areas—such as logging concessions—may be considered de facto private property, at least for a certain period (Heltberg 2002).

Philippine property rights for natural resources

Under the Spanish colonial regime the Philippines's forests and other natural resources were declared state property. The 1987 Constitution reaffirmed this doctrine, stating that:

All lands of the public domain, water, minerals, coal, petroleum, and other mineral oils, all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the state. The exploration, development, and utilization of natural resources shall be under the full control and supervision of the state.

So, formally the country's tenurial regime for natural resources is a state property regime. But over the past decade a complex mix of regulations, policies, programs, and tenurial instruments has developed under which rights to control and use forests and coastal areas and their resources can be allocated to individuals, local and indigenous communities, and the private sector. These mechanisms were the result of the transformation in natural resource management policy from the top-down, state-centric, resource exploitation orientation toward the current emphasis on community-based management, decentralization of government functions, recognition of the rights of indigenous peoples, conservation of biodiversity, and restoration of degraded habitats. They also resulted from recognition that the former system gave rise to widespread de facto open access situations and resultant resource overexploitation.

Thus the Philippines's property rights regime for natural resources is one in which the paramount right of state property is delegated to communities and individuals through a variety of legal instruments for common property and private property, for the purpose of improving the open access situation that prevailed under more centralized state ownership. These instruments generally include both access rules and conservation rules.

Tenurial instruments for forests. Natural resource property rights are most developed for forests. The basic tenurial instruments are community-based forest management agreements (granted by the DENR to People's Organizations for 25 years and renewable for an additional 25 years) and certificate of stewardship contracts (awarded by the DENR to individuals and families for the same duration). Similar tenurial instruments are granted to indigenous holders of certificates of ancestral domain claims and ancestral land claims who enter into community-based forest management agreements for part of their territory. Vested rights granted under previous tenurial instruments remain valid. Tenurial instruments related to community-based forest management are summarized in table 2.

Conservation rules include requirements to develop community resource management frameworks and annual workplans—which must be approved by local DENR offices—and to obtain a DENR permit to use forest resources for commercial purposes.

These new instruments have appreciably strengthened formal legal rights to forestlands for local and indigenous communities, who can now obtain:

- Long-term production sharing agreements (lasting 25 years and renewable for another 25).
- Rights to use timber and nontimber resources.
- Rights to enter into joint ventures with public or private entities to develop and manage forestlands under community tenure.
- Rights to issue individual property rights in forestlands under community tenure.

Table 2.
MAIN LEGAL INSTRUMENTS FOR FOREST OWNERSHIP, ACCESS, AND CONTROL

Instrument	Legal Basis	Definition
Community-based forest management agreement	DENR DAO 22-93; EO 263 (1995); DENR DAO 96-29 (1996)	A production sharing agreement between a community and the government to develop, use, manage, and conserve a specific portion of forestland, consistent with principles of sustainable development and pursuant to a community resource management framework.
Certificate of stewardship contract	EO 263 (1995); DENR DAO 96-29 (1996)	A 25-year contract, renewable for another 25 years, awarded to individuals or families occupying or tilling portions of forests.
Industrial forest management agreement	DENR DAO 04-97	A 25-year production sharing agreement between the DENR and an individual or corporation to develop, use, and manage a tract of forestland, other public land, or private land to grow timber species (including rubber) and nontimber species (including bamboo and rattan).
Socialized industrial forest management agreement	DENR DAO 24-96	An agreement in which the DENR grants a natural or juridical person the right to develop, use, and manage a small tract of forestland $(1-10)$ hectares for individuals or single families, $10-5$,-000 hectares for associations or cooperatives), consistent with principle of sustainable development.
Certificate of ancestral domain claim ^a	DENR DAO 02-93	A certificate issued by the DENR to an indigenous community or people declaring, identifying, and recognizing their claim to a territory they have possessed and occupied and used—communally or individually—in accordance with their customs and traditions since time immemorial.
Certificate of ancestral land claim ^a	DENR DAO 02-93	A certificate issued by the DENR to an indigenous Filipino individual, family, or clan declaring, identifying, and recognizing their claim to an area they have possessed, occupied, and used—by themselves or their predecessors—since time immemorial.

a. Under the 1997 Indigenous Peoples Rights Act, certificates of ancestral domain claim are eventually to be converted into certificates of ancestral domain title, while certificates of ancestral land claim are to be converted to certificates of ancestral land title.

■ Rights to transfer claims to relatives, community members, or People's Organizations.

In 2000 more than 5.3 million hectares of forest area—17 percent of the Philippines's land area and 30 percent of its public forestlands—were covered by community-based tenurial instruments and management agreements. This was a reversal from the situation in the 1960s and 1970s, when

nearly 10 million hectares of forestlands were placed under logging concessions. Today the area under community-based management is nearly four times the area under private control, and also exceeds the areas set aside in protected areas and watershed reservations. The big difference is that several decades ago the country's forests were relatively intact and had a high economic value (Borlagdan, Guiang, and Pulhin 2001).

Tenurial instruments for coastal areas. Tenurial instruments for coastal areas are far less developed. As with forests, coastal and marine areas are formally owned and controlled by the state. But the Local Government Code extended the definition of municipal waters—identified by their bordering cities and municipalities—from those within 3 nautical miles of the shore to those within 15 kilometers. It also gave city and municipality governments considerable authority over resource access and use in those waters. Devolved functions include rights to grant fishery licenses and other privileges, enact management ordinances (including measures such as closed seasons, fish sanctuaries, and prohibitions on the use of destructive fishing equipment and methods), and impose penalties for illegal fishing and other environmentally destructive activities.

The 1998 Fisheries Code further strengthened the role of cities and municipalities in regulating resource access and use in municipal waters. With limited exceptions, all fishery activities in these waters are to be undertaken by municipal fishers and their cooperatives or organizations, as listed in the municipal registry. In addition, cities and municipalities can grant such organizations use of demarcated areas to catch fish and engage in mariculture or fish farming."

These provisions have led to a proliferation of communitybased coastal resource management projects over the past decade. But coastal management cannot take advantage of the kinds of specific tenurial instruments in place for forests. Rather, an ad hoc situation prevails in which cities and municipalities are charged with devising local plans—including access and conservation rules—through consultations with local management councils for fisheries and aquatic resources, with guidance from the Bureau of Fisheries and Aquatic Resources and the Fisheries Code. The only specific tenurial instrument established by the Fisheries Code is the fishpond license agreement, which is issued by the bureau. These agreements can be issued to individuals or fisher organizations for 25 years (renewable for an additional 25 years) on public lands declared available for fishpond development. Local governments have yet to develop tenurial instruments for municipal

waters, and guidelines from the Bureau of Fisheries and Aquatic Resources and DENR would be essential to ensure minimum standards across local governments for such instruments.

No data are available on the total area where local governments have granted individuals or organizations the right to use coastal resources. But a survey in the mid-1990s identified 43 community-based coastal resource management projects implemented in 1984–94 (Pomeroy and Carlos 1997), and numerous studies since have profiled additional projects.

THE INSTITUTIONAL FRAMEWORK— AVARIETY OF STAKEHOLDERS

Despite this elaborate tenurial regime and policy and legal framework—and its formal application to all public forests and coastal areas—an open access situation still prevails in many areas. This situation is due to problems with both the tenurial framework and its implementation. What institutions are involved in these arrangements, and how can they be made more effective?

National government agencies

The DENR is the primary government agency responsible for conservation, management, development, and proper use of the Philippines's environment and natural resources. But many other government agencies have mandates and programs that touch on natural resource issues. Of particular importance are the National Economic and Development Authority and the Department of Agriculture's Bureau of Fisheries and Aquatic Resources. In addition, the National Irrigation Administration, National Power Corporation, and Philippine National Oil Company play important roles in watershed management. All these national agencies share their natural resource management responsibilities with local government units under the provisions of the Local Government Code. The institutional structure and agency

mandates for natural resource management are outlined in figure 1.

Department of Environment and Natural Resources. The DENR is headed by a secretary who is assisted by four undersecretaries. The department also has 15 regional offices, each of which is headed by a regional executive director who is assisted by four assistant regional directors. In addition, the DENR has 74 provincial offices and 170 community offices (figure 2).

National Economic and Development Authority. NEDA is the lead agency for social and economic development planning and policy coordination. The president of the Philippines is the chair of NEDA's board, the director general of the NEDA Secretariat is vice chair, and the heads of all major government departments and agencies are members. The board is assisted by five cabinet-level interagency committees: Development Budget Coordination, Infrastructure, Investment Coordination, Tariff and Related Matters, and Social Development. NEDA is an oversight agency, and two of tits five committees are of particular importance for natural resource management:

- Development Budget Coordination Committee. Chaired by the secretary of budget and management, this committee advises the president on annual government spending, spending for development activities (both current spending and capital outlays), and capital outlays for specific investments and infrastructure projects. Thus the committee plays a major role in determining budgets for agencies, programs, and projects involving natural resource management.
- Investment Coordination Committee. This committee, chaired by the secretary of finance, advises the president on domestic and foreign borrowing and evaluates and reports on the fiscal, monetary, and balance of payments implications of major national projects. Thus the committee plays an important role in determining which foreign-assisted projects involving natural resource management go forward.

The NEDA Secretariat serves as the board's research and technical support arm, providing staff who conduct studies and offer

recommendations on development planning, policymaking, coordination, monitoring, and evaluation. Although NEDA has units that deal specifically with agriculture, trade and industry, infrastructure, and social development, there is no such unit for environmental and natural resource issues.

Bureau of Fisheries and Aquatic Resources. The 1998 Fisheries Code made the Bureau of Fisheries and Aquatic Resources a line agency in the Department of Agriculture, operating under the supervision of the undersecretary for fisheries and aquatic resources. The bureau's functions cover many aspects of fisheries policy, management, industry, marketing, and research and development. The bureau is headed by a director who is assisted by assistant directors for technical services and for administration, under whom sit 10 division directors. Regional fisheries offices report to the director; provincial offices report to regional directors.

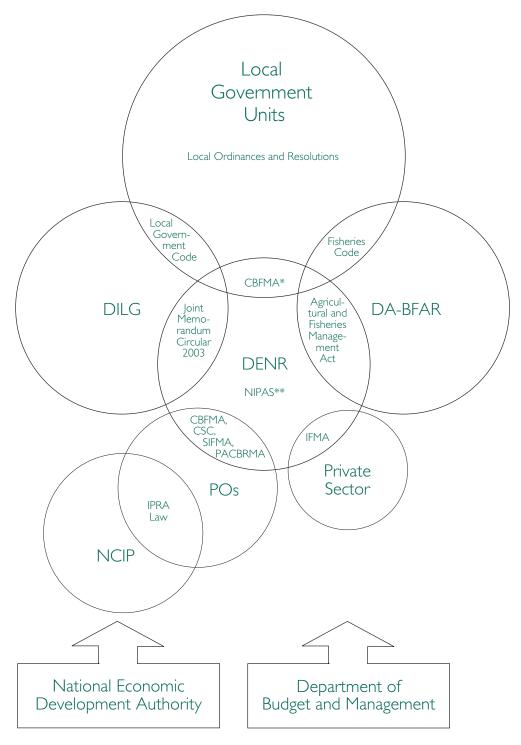
The bureau holds a mandate from the 1998 Fisheries Code to:

- Enforce all laws, formulate and enforce all rules and regulations governing the conservation and management of fishery resources (except in municipal waters), and settle conflicts over resource use and allocation in consultation with the local government units and the national and local councils for fisheries and aquatic resources management.
- Recommend measures for protecting and strengthening fishery industries.
- Help local government units develop their technical capacity for developing, managing, regulating, conserving, and protecting fishery resources.

Local governments

As noted, local governments have become more important since the Local Government Code was passed in 1991. Although the country has 17 administrative regions, the actual subnational units of government are the 79 provinces, 115 cities, and 1,495 municipalities into which they are divided. Cities and municipalities are further split into more than 42,000 barangays, the lowest level of government organization.



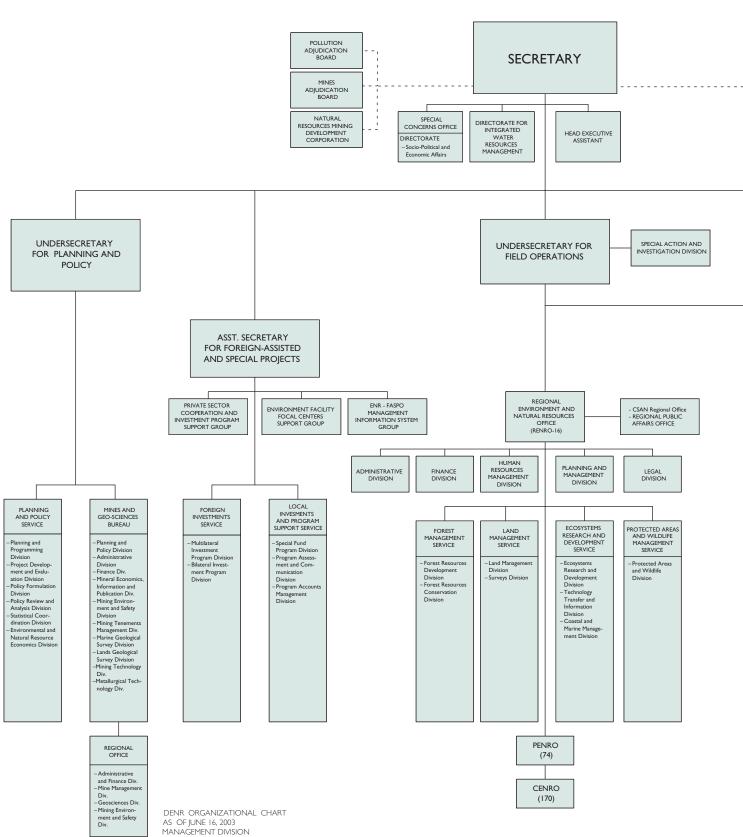


*All CBFMA applicants require endorsement by the LGUs.

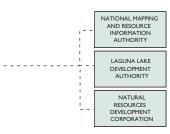
^{**}In NIPAS areas, LGUs and POs are members of the PAMB.

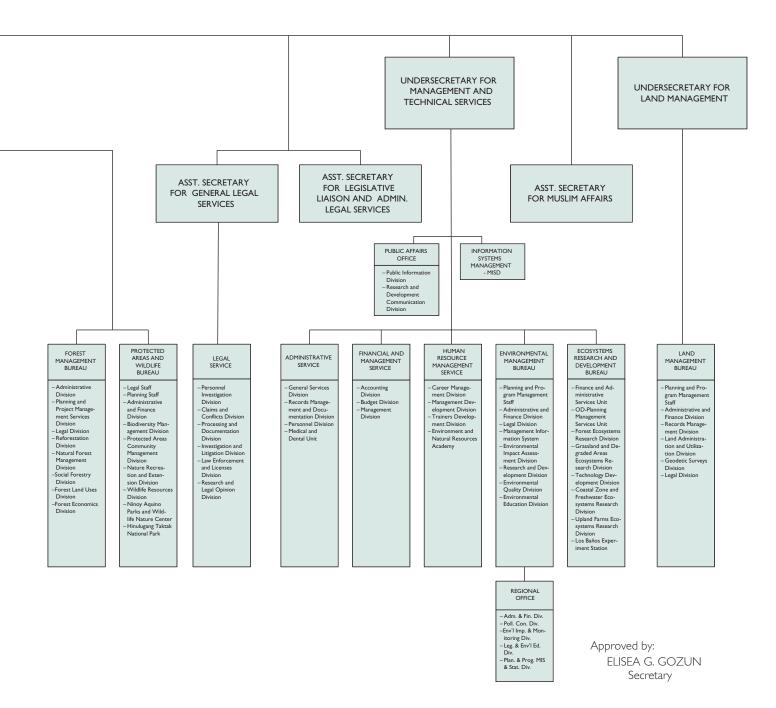
Figure 2.

Organizational Chart for the Department of Environment and Natural Resources









The Local Government Code made local governments responsible for a wide variety of government functions, including delivering basic services in health, social services, agriculture, the environment, public works, education, tourism, telecommunications, and housing. The code also assigned local governments various regulatory responsibilities, such as reclassification of agricultural lands, enforcement of environmental laws, inspection of food products and quarantine, and enforcement of national building codes.

As part of the devolution under the Local Government Code, many employees of national government agencies have been transferred to local governments, including (as of 2000) 42,000 from the Department of Health, 15,000 from the Department of Agriculture, 5,000 from the Department of Social Welfare and Development, and 700 from the DENR. The code also increased the financial resources available to local governments by broadening their taxation powers and ability to generate revenue from local fees and charges, providing them with a specific share from resource exploitation in their areas (such as mining, fishery, and forestry charges), and increasing their share of national tax revenue from 11 percent to 40 percent or more (Brillantes 2000).

NGOs and People's Organizations

Upon coming to power in 1986 after the ouster of Ferdinand Marcos, President Corazon Aquino called on the Philippines to "institutionalize People Power" and "establish institutions where they do not exist," setting the stage for a dramatic expansion of civil society organizations (NGOs and POs) in the country's political life and development policy. The 1987 Constitution institutionalized the role of NGOs, affirming that"the State shall encourage non-governmental organizations, community-based or sectoral organizations that promote the welfare of the nation." Another set of provisions set out the roles and rights of People's Organizations, indicating that"the State shall respect the role of independent people's organizations to enable the people to pursue and protect, within the democratic framework, their legitimate and collective interests and aspirations through peaceful and lawful means." Another section states that "the right of the people and their organizations to

effective and reasonable participation at all levels of social, political and economic decision making shall not be abridged. The State shall, by law, facilitate the establishment of adequate consultation mechanisms" (ADB 1999; see also Carino 2001).

Numerous laws and regulations for NGOs and People's Organizations were promulgated in the years that followed, and these organizations' participation in development processes and natural resource management is strongly institutionalized at a formal, legal level. The Local Government Code assigned seats to NGOs and People's Organizations on local development health and school boards, for example, which the law on the National Integrated Protected Areas System allocates seats to NGOs, People's Organizations, and indigenous communities on local protected area management boards. In addition, the Fisheries Code of 1998 mandates the development of fisheries and aquatic resources management councils at the city and municipality levels, "formed by fisherfolk organizations/cooperatives and NGOs in the locality."

As a result of these measures, the Philippines is home to a large and active community of NGOs and People's Organizations. By 1995 the Securities and Exchange Commission had registered some 60,000 nonstock, nongovernmental institutions—50,000 NGOs and 10,000 People's Organizations. But these figures cover a wide range of organizations, and the number of development-oriented NGOs is more like 3,000–5,000. In 1995 there were also 35,000 cooperatives registered with the Cooperative Development Authority (ADB 1999).

Many NGOs are engaged in field activities (in many cases as implementing agencies of donor-assisted projects) and advocacy related to natural resource management. A 1999 study by the Asian Development Bank found that the areas of public policy where NGOs have had the most significant impact include tenurial systems in the uplands, indigenous rights, community forestry, and coastal fisheries management. NGOs range from sophisticated national organizations with numerous field projects to small local organizations focused on one municipality. A number of international environmental NGOs are also active in the Philippines.

Despite the strong legal and policy basis for participation by NGOs and People's Organizations in natural resource management and development more generally, a recent study cautions that:

The government's legal framework for NGOs is but one aspect of the broader policy environment for NGOs. Especially for field-based NGOs, the actual democratic space is determined by local realities—the peace and order situation, local patronage policies, economic factors such as local marketing cartels, the impact of development policies on target communities, and the attitudes of beneficiaries in local community relations. (Asian Development Bank 1999)

Donors

The Philippines has attracted considerable international financing for investments in environmental and natural resource management. This support reflects the country's strategic location, rich and diverse ecosystems, and strong government commitment to sustainable development—through, among other measures, the establishment of the Philippine Council for Sustainable Development in the wake of the 1992 United

Nations Conference on Environment and Development (the Earth Summit).

Major donors include the Asian Development Bank, Canadian International Development Agency, Danish International Development Agency, European Union, German Agency for Technical Cooperation, Global Environment Facility, government of Japan (through the Japan International Cooperation Agency and Japan Bank for International Cooperation), U.S. Agency for International Development, government of the Netherlands, various UN agencies, and the World Bank. Bilateral assistance comes in the form of grants, while the ADB, JBIC, and World Bank extend loans. The DENR is the country's largest recipient of official development assistance for such activities.

In the 1970s the Philippines had 4 projects involving natural resource management that were funded by official development assistance, with a combined cost of \$24 million. In the 1980s the number of such projects grew to 48, with total funding of \$449 million. In the 1990s the number reached 112 and involved aggregate investment of \$760 million. And by 2001 there were 173 projects with a combined cost of \$1.2 billion (DENR 2001a). Investments in forestry, protected areas, and upland activities have consistently been the focus of donor support.

he national government's budget groups expenditures into six main categories. Economic services is the category that nominally pertains to spending for environmental and natural resource management. But not all expenditures in this category are environmental, and environmental expenditures also occur in categories with primary functions that are not environmental. Between 1990 and 2002 the budget allocation for economic services (as a share of total expenditures) fell from 24 percent to 21 percent.

Between 1998 and 2002 the DENR:

- Received a budget allocation equal to 0.18–0.23 percent of gross national income (GNI).
- Received 5–7 percent of its budget through revenue.
- Spent 5 percent of its budget on development. But spending on development dropped 43 percent during this period, from 416,364 million pesos in 1998 to 178,116 million pesos in 2002. This sharp decrease was partly caused by the impact that the East Asian financial crisis had on the Filipino economy.
- Spent 95 percent of its budget on routine expenditures, split between general administration support and support to operations.³
- Spent 51 percent of its budget on regional expenditures.
- Spent 4 percent of its budget across its four bureaus involved in natural resource management.
- Sometimes catalogued contributions (in addition to the required counterpart funding) for foreign-assisted projects as development expenditures, and sometimes as routine expenditures (box 3).

BUDGET MANAGEMENT

Between 1998 and 2002 the distinction between the DENR's development budget and routine budget was neither clear nor consistent, and there was considerable mingling of operating expenditures between the two. The main reason is that most agencies are underfunded for operations or investments, and they tap the other budget to make up for the shortfall. This blurring of the two budgets implies that changes in either can have both short- and long-term effects on natural resource management.

In addition, the DENR's tendency to catalogue contributions for foreign-assisted projects as routine or investment expenditures often distorted budget and expenditure planning and management. More important, it prevented the DENR from making adequate provisions to ensure the continuation and sustainability of specific investments and operation and maintenance activities after donor contributions end.

In 2002 the DENR received a budget of 6.53 billion pesos, some 1.42 billion pesos more than in 2001 (table 3). Until 1998 the DENR's annual budget allocation grew by an average of 17 percent a year. But between 1999 and 2001 it fell by an average of –6 percent a year—then rose 28 percent in 2002.

During Fidel Ramos's administration (1992–98) the DENR's budget grew in four of six years and maintained a stable 0.24 percent share of GNI. But during Joseph Estrada's administration (1998–2001) the budget shrank in two of three years (–11 percent in 1999 and –20 percent in 2001, with growth of 13 percent in 2000).

REVENUE

As noted, revenue accounted for 5–7 percent of the DENR's budget in 1998–2003. Between 2000 and 2001 revenue increased 15 percent, from 399 million pesos to 472 million.

At the national level revenue generation was extremely weak, with the DENR Office of the Secretary and the bureaus

^{3.} General administration support covers activities and expenditures dealing with administrative management and operational support to the entire department. Support to operations covers expenditures that provide staff or technical support to operations but that do not produce goods, deliver services, or directly engage in regulations.

Box 3. The DENR's Budget Preparation Process

At the beginning of each year's budget cycle, the DENR Planning Service and Budget Division issues budget preparation guidelines for all DENR units. These guidelines—based on the Department of Budget and Management's budget circular—identify priority programs and prescribe policies and procedures for budget preparation and allocation, and so influence the structure of the DENR's budget proposal. Because this first stage of the budget preparation process is considered a necessary act of compliance, senior DENR managers do not actively participate. The task is generally left to the planning and budget offices. Between 1998 and 2001 the programs financed by the budget were essentially the same.

In 2000 the Department of Budget and Management introduced the Major Final Outputs System. This system was meant to provide line agencies with an opportunity to revisit their programs, activities, and projects, drop irrelevant programs and define new ones based on emerging needs and priorities, allow flexibility in the use of funds, and reward agencies that met their own targets. Senior DENR managers did not fully understand the system's meaning, scope, and implications, and for 2001 failed to make any adjustments to DENR programs, activities, and projects—essentially resubmitting to the Department of Budget and Management a duplicate of the previous year's budget proposal.

Every year, after its proposed budget has been approved by Congress and the president, the DENR goes through a reprogramming exercise to:

- Prepare the work and financial plans required by the Department of Budget and Management.
- Make changes called for by the Department of Budget and Management and the Office of the President (as a result of the budget debate in Congress) that have a bearing on reallocations among programs, regions, and sectors.
- Address any inability of the budget preparation process to allocate sufficient funding to priority programs.

Once the reprogramming exercise is completed, the revised budget is submitted to the Department of Budget and Management for use as the basis for direct releases to regions, agencies, provincial offices, the Office of the Secretary, and other DENR offices. Although the reprogrammed budget differs from the one originally submitted to the Department of Budget and Management and approved by the Congress and the President, there is no mechanism for checking its consistency with the government's Mid-term Policy Development Program. Finally, DENR agencies, provincial offices, the Office of the Secretary, and other offices are required to submit budget accomplishment reports to the Planning Service at the end of each fiscal year. But the lack of reporting funds used against physical accomplishments makes the reporting exercise less useful that it could be.

experiencing a nearly 50 percent decline between 1999 and 2003, in the total amount of revenues generated. Specifically, the OSEC experienced a decline of 21.3 percent between 1999 and 2000; however, since 2000, the downward trend was reversed, and OSEC revenues generation increased some 20% in 2001 and a further 5.5% in 2002. In addition, between 1999 and 2002, the share of revenue collected by DENR regional offices increased 7 percent. The government plans to introduce comprehensive tax reform, which might provide the DENR with an adequate framework and incentives for increasing revenue (table 4).

DENR BUREAUS

Of the 4 percent of the DENR's budget spent on its four bureaus, nearly all was used to fund routine expenditures. Only 3 percent was earmarked for development expenditures.

Spending patterns across the bureaus vary significantly due to the rather fast turnover of DENR secretaries and the need to finance"banner"programs as well as other ongoing or new programs, projects, and activities in each bureau (figure 3). Banner

TABLE 3.	
DENR BUDGET AND REGIONAL ALLOCATIONS,	1998-2002

Indicator	1998	1999	2000	2001	2002
Total budget					
Billions of pesos	6,323,410	5,610,868	6,359,918	5,106,216	6,530,852
Percentage of GNI	0.23	0.18	0.21	0.16	0.25
Regional allocation					
Billions of pesos	3,491,000	3,063,000	2,351,000	3,122,000	3,127,000
Percentage of total budget	55	55	37	61	48

Source: Financial Management Services, DENR 1998-2002.

programs are meant to provide funding for natural resource management challenges requiring special attention or immediate intervention. But these programs change from year to year, and the DENR does not assess their effectiveness or needs for additional funding before choosing and funding new ones. This practice has severely limited the effectiveness of banner programs and created significant inefficiencies in expenditures for natural resource management. Between 1998 and 2002 the following banner programs were created, resulting in some reshuffling of the DENR's budget:

■ In 1998 seven banner programs were identified, including forest management and protection, water resources devel-

- opment and management, ancestral domain management and development, biodiversity conservation, and information, education, and communications. But budgets for these programs were reduced during the budget approval process.
- In 1999 the banner programs were essentially the same, but the budget emphasized sustaining financing during the transition to a new administration and strengthening reforms for sustainable resource management. The focus on these initiatives resulted in further reductions in budget allocations for the banner programs.
- After a new secretary of the DENR entered office in 2000, the banner programs were made part of a 14-point agenda for the department's activities. The resulting budget increased

TABLE 4.

DENR ACTUAL INCOME, 1999–2003

Office	1999	2000	2001	2002	2003 ^a
OSEC	380,092,356	298,991,242	359,229,681	379,144,826	202,899,952
EMB	1,589,469	15,926,631	19,787,873	41,167,392	15,955,602
MGB	37,030,988	45,821,842	59,819,941	45,835,831	21,283,476
NAMRIA	8,517,491	9,214,158	8,812,481	8,686,165	4,409,678
NRDC	57,916,943	28,692,994	24,540,792	(12,411,304)	(5,023,682)
Total	485,147,248	398,646,859	472,190,770	462,422,911	239,525,028

Source: DENR a. As of June 30, 2003

100,000,000 90,000,000 80,000,000 70.000.000 60,000,000 50,000,000 40,000,000 30,000,000 20,000,000 10.000.000 0 1998 1999 2000 2001 2002 Forest Management Bureau Lands Management Bureau Ecosystems Research and Developemnt Bureau

FIGURE 3.

SPENDING BY DENR NATURAL RESOURCE BUREAUS, 1998–2002

funding for timber plantation establishment, protection, and maintenance by 115 million pesos, for forest protection by 341 million pesos, and for community-based forest management by 30 million pesos.

■ In 2002 another new secretary took the helm of the DENR, and for the first time the Major Final Outputs System was used in determining the department's priorities. But the resulting budget hardly changed. For example, there were only slight increases in funding for plantation establishment (18 million pesos), forest protection (30 million pesos), community-based forest management (11 million pesos), protected area regional operations (9 million pesos), and soil conservation and watershed management (6 million pesos), and minor decreases for coastal environment programs (8 million pesos), forestland classification (4 million pesos), and ancestral lands management.

Budget allocations for the four DENR bureaus are fragmented across too many programs and projects, significantly limiting the bureaus' ability to implement natural resource management policies and address pressing challenges. Moreover, this fragmentation impedes the DENR from moving toward sustainable management of natural resources.

PROTECTED AREAS

In 2002 the combined budget for protected areas and wildlife and the DENR's Protected Areas and Wildlife Bureau accounted for about 5 percent of the DENR's total budget (with 3.7 percent for protected areas and 1.3 percent for the bureau). During 1998–2003 protected areas received \$32 million from the DENR budget and from government counterpart

Table 5.

DENR budget allocations and government counterpart funding for protected areas and the Protected Areas and Wildlife Bureau, 1998–2003

(thousands of U.S. dollars)

Type of funding	1998	1999	2000	2001	2002	2003	Change, 1998–2003 (percent)
Protected areas and wildlife	4,030	3,570	3,358	2,481	2,648	2,630	-34.7
Counterpart funding	686	1,587	1,703	748	589	451	-34.3
Integrated Protected Areas Fund	_	_	_	680	_	_	_
Subtotal	4,716	5,157	5,061	3,909	3,237	3,081	-34.7
Protected Areas and Wildlife Bureau	3,184	2,130	2,101	1,588	1,556	1,492	-46.9
Total	7,900	7,287	7,162	5,527	4,793	4,573	-57.8

Note: The exchange rate for \$1 was 40 pesos in 1998, 39 pesos in 1999, 44 pesos in 2000, 50 pesos in 2001, 51 pesos in 2002, and 54 pesos in 2002. Source: DENR appropriation budgets and IPAF Summary Report 2002.

funding for projects receiving official development assistance (table 5).

Allocations to protected areas peaked in 1998, but by 2003 they had fallen by 58 percent. Between 1998 and 2003 the budget for the Protected Areas and Wildlife Bureau was cut by half—from \$3.2 million to \$1.5 million—reflecting the reallocation of funds from the bureau to regional budgets for protected areas. Although the bureau has suffered perhaps the largest cutbacks among DENR bureaus, it has maintained 11 programs. Only the biodiversity program, responsible for most matters related to the international convention on biodiversity, saw a substantial increase in funding. Its budget rose 84 percent between 1998 and 2003, reaching \$210,000.

Counterpart funding for official development assistance rose between 1998 and 2000 but has since been falling. The three main projects for protected areas ended in 2002, and in 2003 only one project is focused on protected areas. The remaining projects—community development activities, regional biodiversity projects—have less direct impacts on protected areas.

Between 1998 and 2001 the Integrated Protected Areas Fund, active in 71 protected areas, generated nearly \$1 million (58 million pesos; see box 2 for a description of the fund). In 2001 the fund allocated \$680,000 to 10 protected areas, with N. Aquino Wildlife Park (in Quezon City) receiving more than 80 percent. This park is the fund's largest income generator.

OFFICIAL DEVELOPMENT ASSISTANCE AND FOREIGN-ASSISTED PROJECTS

As noted, the DENR is the Philippines's largest recipient of official development assistance for environmental and natural resource management. Between 1998 and 2002 there was considerable variation in the funding that the DENR received from foreign-assisted projects, reflecting the size of each year's foreign project portfolio. Over the period such projects contributed an average of 22 percent to the DENR's budget, with the share peaking in 2000 (25 percent) and bottoming out in 2001 (13 percent).

Foreign-assisted projects financed, on average, 60 percent of the DENR's development expenditures. Even in 2001, when

DENR Financing for Natural Resource Management

the budget for such projects was at its lowest level, 73 percent of DENR capital expenditures came from donors. Donor projects also subsidized the DENR's routine budget, covering 39 percent of operating expenditures between 1998 and 2002. Funding from these projects has helped counter the negative impacts of low government funding for investing in and operating priority programs. Indeed, donor contributions are essential for the DENR to meet its mandates at the national and, especially, local levels.

Foreign-assisted projects also helped the DENR pay its staff, accounting for 4 percent of personnel costs in 1998–02. This share declined over this period, however, reflecting concerns among donors and the Department of Budget and Management about the DENR's high personnel costs under its regular budget.

Between 1998 and 2002 most donor projects focused on forestry and uplands. But over the years the focus of the assistance has changed slightly, increasing resources for coastal and marine projects, biodiversity conservation, and general environmental protection. In 2001 the DENR had 25 projects in the pipeline, 14 of which have received funding commitments from multilateral funding institutions. The rest are expected to receiving financing from bilateral sources, for total projected investments of \$103 million. These new projects reflect the DENR's willingness to strike a balance in funding the green, blue, and brown sectors; projects related to management and improvement of environmental quality are expected to account for 59 percent of future funding commitments, with projects for forestry, uplands, and coastal resource management accounting for 27 percent. But Department of Budget and Management requirements for agencies to accommodate donor appropriations within their budget ceilings could jeopardize the implementation of the projects currently in the pipeline.

Effect of foreign-assisted projects on regional budgets

Most foreign-assisted projects focus on specific areas. Hence regions without such projects do not benefit from their contribution to the DENR's budget. This situation is aggravated by the fact that DENR regional budget allocations do not take into account foreign-assisted projects—so a region with many such projects can receive the same allocation from the regular budget as a region with none. As a result regions tend to overstretch their capacity to host as many foreign-assisted projects as possible, to the detriment of project performance.

Performance of foreign-assisted projects

The DENR's foreign-assisted projects have performed poorly in recent years, exhibiting a decline in physical accomplishments and an increase in cost and time overruns (NEDA 2001). Between 1998 and 2001 the projects' physical accomplishments averaged 84 percent for grant-financed projects but just 64 percent for investment projects. And in 2002 both grant- and loanfinanced projects underperformed, averaging 66 percent and 62 percent (DENR FASPO 2002). Key reasons for such poor performance included late releases of DENR counterpart funding, a prolonged transition period resulting from the change in government administration, delayed procurement of goods and services, slow turnover of project funds, prolonged startup or mobilization of new projects due to unfamiliarity with government and donor procedures, slow decisionmaking in multiagency and multisector projects, resource use conflicts in the implementation of the Indigenous Peoples Rights Act, National Integrated Protected Areas System, and community-based forest management, and long procedures for processing communitybased forest management applications and affirmation of annual work plans and resource use permits in community-based forest management areas.

Strong concerns have been raised about the sustainability of donor-supported projects. Such projects have been used to supplement the DENR's regular budget so that vital functions and services can be delivered. The projects are assumed to complete the implementation of efforts that have already been started, because the regular budget is insufficient to complete the work that needs to be done.

espite the Philippines's comprehensive policy and institutional framework and significant external financing, many natural resource management initiatives have failed to achieve their objectives. Institutional roles and responsibilities often overlap, and the country's natural resources continue to deteriorate—severely undermining efforts to alleviate rural poverty, stimulate sustainable rural development, and conserve unique biodiversity.

Consensus is growing that these implementation failures are largely the result of weaknesses in the legal, institutional, and political arrangements—including the role of donors—that guide the governance of natural resources in the Philippines. As noted, three dimensions of natural resource governance appear to underlie these failures.

The first is weak property rights—and the incomplete implementation of the framework for tenurial and use rights over natural resources. Although the Philippines has developed comprehensive tenurial and resource use instruments and permit procedures to give effect to decentralized, community-based natural resource management, this framework has not been implemented effectively. As a result tenurial rights are often insecure and so do not provide incentives for communities to adopt more sustainable methods for resource management.

The second dimension is ineffective institutions—with a profusion of institutions with unclear and overlapping mandates, ineffective stakeholder participation, and inadequate mechanisms to ensure accountability for performance: The natural resource governance problems associated with institutions fall into three categories:

Incomplete decentralization. As noted, over the past decade the Philippines has implemented far-reaching decentralization of government responsibilities and services. But devolution of natural resource management functions under the Local Government Code has been incomplete and unclear, leading to considerable confusion and conflict between local governments and the DENR. The DENR has retained a powerful voice in local decisions on natural resource management—though it lacks the local capacity to implement its decisions. This has led to a situation in which local governments view natural resource management as the DENR's concern, despite the clear mandate for local governments to play a stronger role in such activities.

- Ineffective stakeholder participation. The legal framework for civil society participation in natural resource planning and management is quite strong—much stronger than in many other Southeast Asian countries. But many participatory mechanisms are not really functional, and many natural resource decisions continue to be made by the DENR and local politicians, powerbrokers, and officials, with little meaningful input from NGOs.
- Inadequate accountability. In cases where communities and other stakeholders have disputes with the DENR or local governments, few mechanisms allow for complainants to air their grievances and seek redress.

The third weakness in natural resource governance is poor financial management—with an inefficient system for budgeting and financing that does not ensure funds are allocated to priority activities. Although national plans and priorities may look rational on paper, they are subject to complex reprogramming as funds move through the system. And though many natural resource management functions have been devolved to local governments, the DENR continues to absorb the lion's share of natural resource management budgets—and often micromanages the allocation and use of funds that do flow to regional and provincial offices.

The next three chapters examine these governance issues in detail, analyzing the challenges they pose for effective natural resource policies and programs.



KEY ISSUES AND EXAMPLES OF TENURIAL RIGHTS

A variety of instruments have made it possible for communities to gain formal, legal tenure to forestlands in exchange for agreeing to conservation rules included in DENR-approved community resource management frameworks and annual workplans. But implementation of this regime has been sporadic and problematic. A recent assessment of community-based forest management identified the following key problems:

- The current system is so dependent on state (DENR) action and approval that "communities cannot move without going through the grind of the DENR's bureaucracy." Where land rights are actually granted, they are "more often than not, rendered ineffective by the Environmental Compliance Certificate requirement."
- Even when land rights are granted, communities can only take advantage of them—that is, exploit the natural resources therein—after development and DENR approval of their resource management frameworks and annual workplans. Initially patterned after the old logging licensing system, "these documents are often too complex for the communities" and are often produced for the communities by NGOs or consultants.
- The DENR has an unrealistic expectation and assumption that communities possess capacities equivalent to those of the private sector in applying for resource use rights.

The result of this situation is that "to capitalize and generate revenues from the communities' major assets, namely their lands, labor, water and whatever available forest resources are available in their tenured area, the communities have to almost beg the DENR to grant them resource use rights." Faced with these bureaucratic barriers, communities have an incentive to convert brushlands and second-growth forests into upland farms, since the DENR does not regulate the production and marketing of cash crops. Thus a tenurial system designed to provide communities with incentives to keep land under forest cover—or reforest it—is instead encouraging the conversion of forestlands to agriculture (Borlagdan, Guiang, and Pulhin 2001).

Problems with community-based forest management in Quirino and Agusan del Sur

The formal granting of tenurial rights under the community-based forest management program is only the first step in implementing effective access and conservation rules, as Quirino province illustrates. Quirino is a mountainous province covering nearly 306,000 hectares in the southeastern portion of the Cagayan Valley. Three-fifths of Quirino is forestland (184,019 hectares), and the province has 39 agreements for community-based forest management covering 85,897 hectares and benefiting 19,485 individuals. Thus these tenurial agreements cover 28 percent of Quirino's land area and 47 percent of its forestlands. Implementation of community-based forest management has been supported by the government of Germany.

Despite the implementation of community-based forest management, open access remains a problem in Quirino. Communities complain that they receive little technical or other support from the government to manage the areas granted to them. Key government staff—such as employees of DENR community offices and others involved in implementing community-based forest management—are often reassigned, disrupting the continuity of project implementation. Budgets are depleted to pay for consultants and contractors, leaving little to finance field activities by community holders of forest rights. Illegal logging is reportedly widespread, and there have been allegations that military and DENR staff have been involved in such activities.

The local government has expressed frustration that it has an unclear role in community-based forest management relative to the DENR. The government views its involvement as limited to cursory consultations—and the results of such consultations are often disregarded in project implementation. The local government would also like to see a true devolution of community-based forest management from the DENR, including allowing the government to issues resource use permits, file cases, and award tenurial instruments. The local government does not think that the DENR should exercise state control

over community-based forest management areas or serve as a regulatory body. Rather, its role should be limited to monitoring and supervision.

Problems with forest tenure rights also affect Agusan del Sur, where 20 percent of the province's 613,700 hectares of forestland are covered by community-based forest management agreements and 30 percent by ancestral domain claims. The legal relationship between these two tenurial instruments—and which one takes priority—is a key obstacle to establishing tenurial security for local user groups. In addition, incorrect certificates of ancestral domain claims have reportedly been issued, with errors in the areas covered and the persons granted rights. As a result a large portion of the province's land area is under conflicting ownership claims brought about by overlapping and erroneous land classification.

Incorrect and conflicting rights in protected areas

Tenurial implementation problems also plague multiple use areas within and buffer zone areas around protected areas. For example, a review of governance issues at three protected areas found that the eight certificates of ancestral domain claim issued at the sites were generally technically flawed, with erroneous geographical and technical descriptions, wrong households included in the certificates, and households missing from the certificates (Jensen 2003). Large portions of the areas included were not areas claimed by indigenous peoples, while areas where indigenous people live and exercise their rights were not included. Two of the sites (Mt. Isarog and Northern Sierra Madre) contain many areas where absentee landlords, outside businesspeople, local politicians, and relatives of government officials are claiming land and being granted titles by the DENR. Meanwhile, tenurial instruments for communities actually living in these areas have been delayed by the DENR's failure to issue guidelines for their issuance.

Similar problems have arisen at Mt. Apo Natural Park in southern Mindanao, the site of the Philippines's tallest mountain. Mt. Apo was declared a natural park by presidential proclamation in 1996, under the law on the National Integrated Protected Areas System. Under DENR slope and altitude criteria,

80 percent of the park should be declared a strict protection zone. Yet about 70 percent of the park is deforested and occupied by indigenous peoples, migrant subsistence and commercial farmers, and vacation homes. Some 32,000 people live in 39 settlements in the park, engaged in both subsistence farming of corn and root crops and commercial production of potatoes and vegetables. The area is socioeconomically complex, with indigenous groups long mixed with migrants and a variety of resource management systems.

The law on protected areas and DENR regulations grant occupation rights to qualified migrants residing in multiple use and buffer zones of protected areas, and define a "tenured migrant" as "any person who has actually and continuously occupied an area for five years prior to its designation as a protected area [under the law on protect areas] and is solely dependent on that area for subsistence." Migrants who do not meet this description are supposed to be removed from protected areas. But criteria for determining who is a legitimate tenured migrant are unclear: there are no documented property rights, and lands in the park are frequently bought and sold—though doing so is illegal. As a result must of the park is a de facto open access area (De La Paz 2001).

KEY PROBLEMS WITH COASTAL RESOURCE MANAGEMENT AND PROPERTY RIGHTS—AND RESPONSES

As noted, coastal waters are not subject to the same range of tenurial instruments as forests or the same control and supervision by the central government. The Local Government Code provides a legal basis for local governments to establish property rights—or at least use rights—for coastal waters, using municipal ordinances to declare areas sanctuaries or limit resource use in certain areas to particular users. In limited cases indigenous peoples may be able to use the Indigenous Peoples Rights Act to do the same thing. But implementation of such measures has been sporadic, and most coastal waters and resources remain under an open access situation that facilitates continued overexploitation and resource degradation.

Implementing Rights to Natural Resources: Experience from the Field

Under the Local Government Code and the Fisheries Code, coastal local governments are responsible for planning, legislating, regulating, enforcing, and monitoring and evaluating sustainable coastal resource use in municipal waters and coastal areas. The DENR and the Bureau of Fisheries and Aquatic Resources are to help build local government capacity, provide policy direction, set minimum standards, and maintain the information and data needed for national-level planning.

The main problem is that local governments have not, by and large, fulfilled their responsibilities in this regard, and neither have the DENR and fisheries bureau provided the support that might make that possible. In the words of the DENR's proposed policy for national coastal resource management:

Despite the presence of a comprehensive legal and policy framework for coastal resource management, implementation has remained fragmented and weak. Local government units generally lack the technical and financial resources to implement coastal resource management. Coastal law enforcement is dismal. Furthermore, the absence of mechanisms to promote multisectoral collaboration between national government agencies, local government and other sectors continue to hinder effective planning and effective implementation. (DENR 2001)

Fishpond license agreements—the only real tenurial instrument for coastal waters established by national law and policy—have generally been monopolized by the wealthy. This is because "most small-time fishers have neither the considerable money nor the technical know-how needed to set up aquaculture projects. They also lack the political connections that facilitate the granting of licenses and permits." Thus most profitable aquaculture enterprises have ended up in the hands of wealth, politically connected entrepreneurs (Pabico 2002).

So, while management of municipal fisheries is legally a state property regime implemented through municipal governments, in reality it is more of an open access regime. Municipal fishers are largely unhampered in moving from one municipal fishing ground to another. Moreover, municipal governments are generally ineffective in protecting their marine waters from commercial fishers and in enforcing laws and regulations (Pido and others 1996).

What is needed is a set of tenurial instruments appropriate for coastal waters and resources, tailored to the capacities of local fishing communities and bound by criteria ensuring that sustainable management—use rules—and access rules are part of the system. Development of coastal tenurial instruments should benefit from the lessons from the implementation of forest-related tenurial instruments over the past decade. Lessons are also available from the few local governments and communities have taken steps to establish de facto tenurial arrangements—including both fishing and conservation areas—using the authority devolved by the Local Government Code or, in some cases, the Indigenous Peoples Rights Act.

Granting fishing privileges in Culasi

In Culasi municipality in Antique province the local government used its authority in granting fishing privileges as the basis for designating 1 square kilometer between the coast and a nearby island as an area for territorial use rights in fisheries. This move effectively turned a formerly open access fishing area into an area under community tenure (Agbayani 1996). Numerous similar cases are described in Foltz and others (1996) and in Local Government Center (1996).

Establishing indigenous rights to a marine territory around Coron Island

Coron Island, in northern Palawan province, is an interesting case in which an indigenous community used the Indigenous Peoples Rights Act to establish community property rights over a marine territory. In 1998 the DENR granted the island's indigenous Tagbanua people a certificate of ancestral domain claim that covered more than 22,000 hectares, including not only the island but also significant areas of the coastal waters surrounding it. This was converted into a certificate of ancestral domain title once the Supreme Court Challenge to the Indigenous Peoples Rights Act was defeated in 2000 (see above), and the

Tagbanua now hold the first such title encompassing not only their ancestral lands but also surrounding coastal waters.

The community patrols the area to chase away fishers using illegal or destructive methods, but it does not restrict access to those using environmentally friendly fishing methods. According to a Tagbanua leader, establishment and enforcement of the Tagbanua's tenure over the island's waters have more than doubled their fish catch since 1998 (Arquiza 2001). But while the Coron case is an important example of how establishing effective tenurial rights over coastal waters can improve natural resource management, the provisions of the Indigenous Peoples Rights Act are unlikely to be applicable to many coastal areas because—unlike in the uplands—there are few areas where indigenous groups can claim exclusive ancestral rights over marine territories.

Implementing environmental and harvesting standards for the aquarium fish industry

Another interesting model is being tested by the Marine Aquarium Council, an international NGO that has developed environmental certification standards for the aquarium fish industry and is helping several Philippine fishing communities implement the standards and receive its certification. This issue is significant because the Philippines is a major source of

the world's aquarium fish and coral, and cyanide fishing—an illegal and highly destructive method of stunning fish to make them easier to capture—has been widely used in the industry for decades.

The Marine Aquarium Council requires each certified collection (harvest) area to develop a management plan that limits access to members of the community collection group and sets aside a portion of the area (the goal is 20 percent) as "no take" reserve zones. Fishers help select and design the reserves, increasing the probability that the reserve zones will be respected by collectors and their communities and defended against poachers. Because the council also helps communities get their fish to markets, fishers have a strong incentive to protect their collection areas. These collection area management plans are currently being piloted in several areas of Bohol and northern Palawan.

The collection areas and reserves certified by the council have no formal legal status because, as noted, no appropriate tenurial instruments exist. But with support from resource users, communities, and local governments—combined with the authority over coastal waters devolved to municipal governments—these areas will likely receive some form of formal status from local governments, including the granting of at least the equivalent of tenure to the collectors associations managing the areas.



he previous chapter assessed the problems that have arisen in implementing the legal devolution of property rights over publicly held natural resources from the state to local actors. This chapter analyzes the governance problems that have arisen at the local level as a result of the institutional devolution of authority over natural resource management.

NATURAL RESOURCE GOVERNANCE IN AN ERA OF INCOMPLETE AND CONFUSED DECENTRALIZATION

As noted, relatively few DENR staff have been devolved in response to the Local Government Code: just 895 (4 percent), compared with nearly 46,000 (61 percent) from the Department of Health and nearly 18,000 (60 percent) from the Department of Agriculture. Though most DENR staff work in subnational offices, the department remains highly centralized, with a limited number of field staff spread over a large area. Field staff report through a system of municipal, provincial, and regional DENR offices, while links—and accountability—to local governments are sporadic and tenuous. In many areas the limited number of DENR field staff has resulted in a de facto devolution of responsibilities to local governments, NGOs, and community groups, but without commensurate devolution of formal powers or financial resources.

Many of the problems that arise in the field—land use conflicts due to overlapping claims, weak enforcement of regulations, overly bureaucratic procedures for processing resource use permits—stem from lack of physical and technical capacity, limited accountability to local clients, lack of service standards, limited local financing, and overlapping and poorly defined institutional responsibilities. Characteristics of the Philippine political economy—particularly the powerful informal patron-client networks of politicians, bureaucrats, and wealthy businessmen at the local level—also undermine accountability and effective performance by agencies responsible for natural resource management (see Rood 1998; Sidel 1997; and Chrispijn 1995).

Overlapping and poorly defined responsibilities are especially problematic, especially for the institutions responsible for allocating land and resource use permits—primarily local governments and the DENR but also the National Commission for Indigenous Peoples and regional and provincial development councils. Under current legislation each of these entities has a mandate to issue land and resource use permits to specific groups, including People's Organizations, indigenous groups, investors, and tree farmers. Each institution relies on different maps and data sets, and their decisionmaking often lacks transparency. Making matters worse, they do not coordinate with each other. As a result there have been many serious conflicts over land and resource use.

More broadly, local decisionmaking is often made chaotic by the wide variety of institutions and officials with overlapping or conflicting legal or de facto roles in natural resource governance, representing different interests and constituencies. For example:

- DENR regional offices implement policies, regulations, and programs, recommend project approvals, manage and allocate regional budgets, supervise processing and trade of natural resource products, supervise provincial DENR offices, and monitor foreign-assisted projects.
- DENR provincial offices enforce environmental laws and regulations, resolve claims and conflicts over natural resources, and supervise the activities of natural resource permit holders.
- DENR community offices implement laws, collect and account for fees, file court cases, conduct surveys of areas covered by leases and permits, and initiate settlements of conflicts between natural resource users. A community office may cover several municipalities.
- Environment and natural resource officers are local government officials who coordinate and supervise the planning and implementation of DENR functions devolved to local governments. Such officers are not mandatory, and are appointed at the discretion of local governments.
- Protected area management boards—established in every official protected area—approve funding proposals, decide on

- budget allocations, develop planning and protection activities, and monitor and mitigate natural resource and land use in protected areas.
- Protected area superintendents—appointed by the DENR for every protected area—coordinate the roles of the DENR and local governments in protected areas; form partnerships with local and indigenous communities in and adjacent to the areas, as well as with NGOs; plan, protect, and manage the areas; develop and implement information, education, and visitor programs; maintain peace and order and enforce rules; monitor natural resource and land use; and provide regular reports on these issues to protected area management boards. Each supervisor is the chief operating officer of the local board and is directly responsible to it, but also reports to the regional and provincial DENR offices.
- The Bureau of Fisheries and Aquatic Resources is responsible, at the provincial level, for issuing licenses to commercial fishing vessels operating outside municipal waters, monitoring and reviewing joint fishing agreements, providing services related to fisheries production, processing, and marketing, enforcing fishery laws, resolving conflicts in consultation with local governments, and formulating regulations for conservation of fishery stocks.
- Local governments, in coordination with the DENR and subject to its rules, are required to adopt adequate measures to protect the environment and conserve land, mineral, marine, forest, and other resources within their jurisdiction. As part of such efforts, they establish local development councils with private sector and NGO participation at the municipal, provincial, and regional levels, formulate, coordinate, and monitor development plans and projects, establish municipality environment and natural resource committees and offices, develop initiatives to fund environmental programs, and issue natural resource management ordinances on certain topics.
- Local government councils (sangguniang bayan) can pass ordinances and resolutions related to the environment—for example concerning pollution, illegal logging, or destructive fishing—and provide for the establishment, maintenance, and protection of communal forests, watersheds, mangroves, and similar forest resources.

- Regional and provincial development councils are advisory bodies that initiate the development of multisector development plans, including mandatory municipal comprehensive land use and development plans—the regional and provincial physical frameworks and development plans that set priorities for resource use and protection. As with protected area management boards, NGOs are guaranteed representation on these councils.
- The National Commission for Indigenous People, established under the 1998 Indigenous Peoples Rights Act, helps indigenous people develop ancestral domain sustainable development and protection plans and obtain legal title to their ancestral lands and waters. The commission is represented at the regional and provincial levels. Because of delays in issuing its guidelines and implementing rules and regulations, the NCIP is only now beginning to function. (Before the Indigenous Peoples Rights Act was passed, documentation of indigenous claims was handled by DENR ancestral domain programs).

With this enormous array of institutional actors, it is often unclear what has been decentralized to which institution, and there are no mechanisms for evaluating or holding accountable the institutions charged with providing natural resource services. The negative impacts of these disjointed institutional dynamics—and the ways that some areas are trying to ameliorate them—are illustrated by the cases described in the sections that follow.

AGUSAN DEL SUR PROVINCE— CHAOS IN THE ISSUANCE OF TENURIAL INSTRUMENTS

Agusan Del Sur is a mountainous province covering 896,000 hectares on the island of Mindanao. Just over three-quarters of the province is officially classified as forestland, though only 14,000 hectares of old growth forest remains and 38 percent of the province is cultivated. More than half of the island's population is poor, and 56 percent are indigenous peoples. Though the island was once a major source of timber, logging has mostly ended, and three-quarters of the population



make their living from agriculture and small-scale forestry activities.

As in many other provinces, the natural resource management roles of local governments and the DENR are unclear—though in theory a provincial environment and natural resource council provides a mechanism for coordination and communication between them. Neither the DENR nor the province's local governments have significant field capacity for natural resource management. The DENR has only about 200 employees in five community offices spread across the province and, as noted, only a small part of the DENR's budget is devoted to field-based natural resource activities. The provincial government has only 28 staff engaged in natural resource management, supplemented by 42 at the municipality level. The local government's budget for natural resource management is also extremely limited, accounting for less than 2 percent of the total. Although the DENR is supposed to provide technical support and capacity building to municipal staff engaged in natural resource management, this rarely occurs due to DENR staff and budget limitations. The only area where the DENR helps local governments is in monitoring foreign-assisted natural resource management projects.

Predictably, implementation of the Philippines's complex tenurial regime for forestlands has been something of a disaster this muddled institutional environment. Various agencies have allocated tenurial rights despite inadequate baseline information, minimal consultation with affected stakeholders, and no coordination with other agencies doing the same thing. As a result nearly all of the province's legally designated forestland is covered by one or another tenurial instrument issued by four separate agencies (table 6). These agencies work from different base maps, resulting in numerous errors, overlaps, and conflicts between groups receiving rights to forestland.

Conflicts and overlaps also occur at a larger scale, because the DENR has promoted two overlapping, inconsistent initiatives at the province level. The first is a timber plantation "corridor" (essentially an area prioritized for the development of industrial, monocultural timber plantations) under which 392,000 hectares have been allocated to private investors under industrial forest management agreements. The second is a biodiversity corridor under which 579,000 hectares of forestland classified as watersheds are being promoted for biodiversity conservation. Under this scheme, current holders of tenurial rights within the

Table 6.

Allocation of Forestland in Agusan Del Sur Province by
Type of Tenurial Instrument and Granting Agency

Instrument	Number issued	Area covered (hectares)	Granting agency
Timber license agreement	2	136,399	DENR regional office
Industrial forest management agreement	8	87,382	DENR provincial office
Industrial tree plantation lease agreement	3	65,930	DENR provincial office
Integrated social forestry		12,919	Municipality
Community-based forest management agreement	22	116,489	Municipality
Civil reservations	3	12,084	DENR
Certificate of ancestral domain	9	179,680	National Commission for
			Indigenous People (province)
Total	47	610,883	

Source: ESSC 2003.

proposed biodiversity corridor would allocate part of their holdings to conservation but would not relinquish their tenurial rights. Obviously, all these tenurial permutations cannot coexist peacefully. The DENR's promotion of the two new corridor schemes in an already complex and conflicted tenurial landscape, without open consultation with stakeholders, has already led to serious conflict with landowners and barangays that fall within the timber corridor area.

Agusan Del Sur's tenurial problems ultimately stem from the lack of a mechanism for institutional coordination. One mechanism that could strengthen institutional coordination is a provincial environment code that provides a comprehensive strategy for natural resource management. Such a code would help bridge gaps and conflicts in environmental management policies. It could also empower local communities through increased environmental awareness—and thus build a stronger local constituency for the environment. In addition, an environment code

provides a venue for stakeholders to enter into meaningful relationships with local governments and the DENR. Political administrators could support such a code through local legislation, and should ensure that it provides flexibility for amendments to accommodate changes in local conditions. Such a code would need a supporting institutional mechanism, and so would require creating councils at the provincial and municipal levels. One novel example of such a mechanism is the Palawan Council for Sustainable Development (box 4).

QUIRINO PROVINCE—DENR AND LOCAL GOVERNMENT COOPERATION TO COMBAT ILLEGAL LOGGING

Quirino is a mountainous province covering some 306,000 hectares in northeastern Luzon. Three-fifths of the province is legally classified as forestland, but much of this area has been degraded by logging operations and slash-and-burn agricul-

Box 4. The Palawan Council for Sustainable Development: An Institutional Model for Better Natural Resources Governance

The Palawan Council for Sustainable Development, created in 1992 by national legislation and funded by the national government budget, has jurisdiction over the entire province of Palawan. It is chaired by the executive secretary of the Office of the President and has members of cabinet rank from the DENR and other agencies. Council members also include representatives from the League of Municipalities and the League of Barangays in Palawan.

The council's main mandate is to ensure that all local governments in Palawan use the provincial Environmentally Critical Areas Network zoning map when planning and implementing development activities. The council helps local governments finalize their comprehensive land use plans in conformity with the network map. It also formulates policies for implementation by local governments in Palawan, and all administrative orders issued by the council are adopted by local governments. The council also reviews applications for environmental compliance certificates before the DENR reviews, and conducts its own inspections as well. In addition, the council conducts natural resource monitoring and research, including monitoring changes in the province's forest cover.

Although the council has many positive features that may provide a model for other provinces, it also has problems. Some natural resource stakeholders consider the council just another layer of bureaucracy. For example, the fact that applications for environmental compliance certificates have to be reviewed by the council and the DENR—a requirement unique to Palawan—is often viewed as an additional bureaucratic burden. Such applications will not be approved unless they are presented to and discussed at regular council meetings. Yet the council meets irregularly, leading to delays in the processing and issuance of the necessary clearances—and to mounting complaints from the private sector. Some applicants claim that because of this convoluted process, it can take up to two years to be issued an environmental compliance certificate.



tural activities. About three-quarters of the province's 150,000 people live in rural areas, with 70 percent engaged in agriculture, hunting, and forestry activities, particularly for the furniture industry. There are 39 agreements for community-based forest management covering nearly 86,000 hectares—equal to 28 percent of the province's land area and 47 percent of its forestlands. Because of the active furniture industry and some rich stands of commercially valuable timber, illegal logging is a perennial problem despite widespread tenurial rights for community forestry.

The provincial government in Quirino has taken an active approach to natural resource management, establishing an office for the environment and natural resources in 1993. The office has 36 employees, and there is a proposal to add 31 more. No corresponding local government offices have been established at the municipal level, however, so the provincial office is responsible for the entire province, helping municipalities deal with illegal logging and community-based forest management issues. To the extent that municipal governments directly assume natural resource management functions, they are implemented by municipal agriculturalists. Because of extremely limited municipal budgets, funds for municipal natural resource management are provided by the provincial government.

Unlike in some other provinces, Quirino's office for the environment and natural resources works closely with the DENR provincial office in executing natural resource management functions. The only natural resource management functions formally devolved to the provincial government are management of sites under the Integrated Social Forestry program and supervision and monitoring of former project sites under an environment adjustment loan. But the provincial government is much more involved in natural resource management than its formal mandate suggests, actively participating in implementation of all community-based forest management sites and in enforcement of forest protection.

The relatively high cooperation between the DENR and the provincial government is illustrated by the approach used in joint efforts to combat illegal logging. The provincial government,

DENR, and Philippine police have entered into a formal agreement to collaborate on such activities. To support this partnership, the Quirino provincial council developed a forest protection plan that was endorsed by the DENR provincial office. In addition, a joint task force has been created to monitor the community-based forest management areas where most illegal logging occurs. The provincial council has also organized a Forest Protection Council that discusses illegal logging policies and issues, and at least three checkpoints have been established to monitor the outflow of timber and catch those transporting illegally cut timber. Collaboration between the DENR and the provincial government has broadened to consider creating legislation that would generate additional revenue for natural resource management activities, such as by charging downstream water users in other provinces for water coming from upstream watersheds in Quirino.

Despite its strong cooperation with the DENR, the provincial government has expressed interest in taking on more devolved natural resource management functions. This is because government officials believe that the DENR does not provide adequate technical assistance, doing so only when specific funded projects are at stake. From the government's perspective, the DENR is mainly a channel for getting funds from donors, a bureaucracy that issues tenurial instruments, and a partner in combating illegal cutting. Indeed, this is a common perspective in many provinces.

If local governments are to play a stronger role in natural resource management, they will require increased technical capacity and financial support to plan, manage, and implement natural resource projects. One way to achieve those goals would be to devolve a larger share of DENR staff from regional and provincial offices to local governments. Doing so would make particular sense in resource- and mineral-rich provinces, where increases in staff at the local government level could be offset by increased revenue from natural resource management services.

Forestland co-management agreements are another potential way to boost the capacity of local governments and promote

better coordination with the DENR. These agreements provide a formal means for a partnership between local governments and the DENR in the protection or development of specific sections of the forestland within a municipality. Despite the progressive devolution of central powers and responsibilities, there is reluctance on the part of DENR officials to concede part of their resource management authority to local governments. Forestland co-management agreements provide a way to overcome this reluctance by providing a mutually agreed framework in which the DENR and local governments can co-manage specified areas.

For their part, local governments must be ready to fund investments in developing the agreements. One model that has supported such initiatives is the World Bank–financed Community-Based Resource Management Project, which provides local governments with loans and grants to support investments in natural resource management. Targeting poorer municipalities, since 1999 the project has provided financing for small-scale reforestation and other environmental initiatives. Results from the field appear promising. In Agusan del Sur, for example, local governments in three municipalities have developed agroforestry, micro-watersheds, and tree-plantations on degraded watersheds with local People's Organizations.

Another promising initiative to strengthen the natural resource management capacity of local governments is the Eco-Governance Project funded by the U.S. Agency for International Development. The project helps local governments use existing mechanisms to work with other agencies in planning and managing their environment and natural resource base. The project also helps local governments network with each other and with national technical agencies to implement common strategies to increase the authority and public accountability of national and local governments for effective, environmentally sensitive management of local resources. Project activities support successful examples of local government initiatives by taking advantage of vehicles such as national programs for community and local government management of forest and coastal resources. Examples include helping municipalities adopt the National Fishery Code and comply with the Solid

Waste Management Act and their implementing rules and regulations, and co-management of forest resources where Eco-Governance Project teams work with DENR field offices and members of the League of Municipalities to take advantage of management and investment opportunities arising from the national community-based forest management program and the Local Government Code.

ISABELA PROVINCE—INSTITUTIONS STRETCHED THIN ON LUZON'S LAST FOREST FRONTIER

Isabela is the largest province in northern Luzon, with a land area of 13,643 square kilometers. Its population of nearly 1.3 million is mainly settled in the Cagayan river valley in the eastern part of the province. The western part, mountainous and densely forested, is the location of the 395,500 hectares Northern Sierra Madre Natural Park—considered the Philippines's most intact and important protected area. Illegal logging and encroachment by small farmers are the main threats to the park, which has 24,000 inhabitants. With valuable timber resources at stake, corruption among local government officials is also a big problem (box 5).

Nowhere in the country is effective natural resource management more important, but the capacities of the DENR and local governments are not up to the job. The DENR provincial office and six DENR municipality offices supervise and monitor 3 timber license agreements, 38 lumber dealers and rattan permittees, 612 industrial forest management agreements covering 3,806 hectares, 62 forest grazing land agreements covering 20,096 hectares, 15 industrial forest management agreements covering 33,147 hectares, and 8 tree farm leases covering 1,366 hectares. The DENR also provides support to 6 community forest project sites covering 43,305 hectares and 3 certificates of ancestral domain claim areas covering 45,276 hectares. In addition, the DENR directly manages 3 watershed projects and, together with stakeholders, is responsible for managing three large protected areas—the most important of which is the Northern Sierra Madre Natural Park, which received support from donors and international NGOs. To conduct all these



Box 5. CORRUPTION AND ILLEGAL LOGGING IN ISABELA PROVINCE

At the local level, corruption related to natural resource management takes two broad forms. Most common are the many situations where government officials extract unofficial fees for performing services they are supposed to perform as part of their jobs, such as issuing resource use permits and other clearances. As in many other countries, this kind of petty corruption also occurs in many sectors other than natural resources. A second, more serious form of corruption occurs when officials take payments in exchange for permitting illegal activities—such as illegal logging—or are engaged in illegal activities. According to a detailed field study carried out in 1997, this latter form of corruption is widespread in Isabela province.

The local furniture industry—which, with some 13 cooperatives and numerous shops, is sizable—is the driving force behind illegal logging in Isabela and the corruption that it engenders. Narra (Pterocarpus indicus) is the timber of choice for the furniture industry, but the species is increasingly rare and subject to a variety of DENR harvest restrictions. Thus industry buyers mainly rely on illegally cut sources provided by small teams of loggers. Because such transactions are illegal, the principals involved—middlemen, sawmills, furniture makers and cooperatives, the Cagayan Valley Chamber of Furniture—must make regular payments to a variety of civilian and military officials (including DENR community and provincial offices) as well as, in some cases, the New People's Army, an insurgent group active in the area.

This kind of corruption is by definition difficult to document. But it is likely that the Isabela case is unique only in that it has been so carefully documented. An investigation of fraud in the awarding of integrated forest management agreements, for example, concluded that "a widespread pattern of fraud in the awarding of [the agreements] has resulted in rampant tree-cutting in areas intended for forest protection.... DENR investigators suspect that dozens of Department personnel may have connived with loggers to use the agreements as a cover for illegal logging" (Severino 2000).

Source: Huigen 1997.

tasks, spread out over a vast and remote territory, the provincial and municipality DENR offices have 355 technical and administrative staff.

The provincial government of Isabela designated an office for the environment and natural resources in 1992 and created a unit for such activities in 1998. The provincial office started with 14 staff, all of whom were devolved from the DENR and formerly employed as community development officers in the Integrated Social Forestry program. The province established the office to revive the DENR's Integrated Social Forestry projects, which were turned over to local governments at some 22 sites. The office also reviews environmental compliance certificates in areas devolved to local governments and processes permits for sand and gravel. But the office has no role in protected area management, even though a substantial portion of the province's land is protected area, because the province views protected areas as the responsibility of the DENR. Among the 35 municipalities in Isabela, only one has an office for the environment and natural resources.

PROTECTED AREA MANAGEMENT BOARDS— A MODEL FOR NATURAL RESOURCE GOVERNANCE?

As noted, primary responsibility for management of nationally designated protected areas has been devolved to multistakeholder protected area management boards. While many protected areas in the system do not yet have functioning management boards, the number is increasing. Where such boards are adequately funded and the full range of stakeholders are actively involved, they offer the best hope for instituting effective governance for the country's protected areas. The boards may also offer a model for local natural resource governance that could be applied to a broad range of natural resource management concerns.

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The DENR does not have the capacity to effectively manage the nation's 360 protected areas, which cover 3.8 million hectares and often suffer from serious land use conflicts and encroachment threats. About 1,100 DENR staff are allocated to protected area management (table 7). Although 90 percent of these staff work in the field, that means that each staff member is responsible for managing 3,800 hectares. There are 159 protected area superintendents managing 169 protected areas—meaning that 191 protected areas do not have a superintendent. DENR staffing for protected areas is supplemented by volunteers and NGO employees. Indeed, at some sites these supplemental workers account for more than 80 percent of staff.

Protected area management boards offer a model—beyond the useful but ad hoc support provided by volunteers and NGOs—through which the DENR can enlist a wide range of stakeholders to support protected areas and provide concrete assistance for their protection and management. The boards have been relatively successful in bringing together stakeholders in a forum where decisions are made in a transparent and accountable manner. For example, data from sites financed by the World Bank-Global Environment Facility Conservation of Priority Protected Areas Project indicate that the boards have helped protected areas substantially increase the number of natural resource management issues discussed, with a corresponding increase in actions and initiatives on the ground. Increased participation by local stakeholders has also significantly increased the number of conservation, resource use, and management resolutions issued by the boards.

For example, the number of resolutions passed in nine sites financed by the World Bank–Global Environment Facility project increased from 50 in 1996 to 124 in 1999, and 56 just in the first quarter of 2001.

Most protected area management boards have not, however, achieved a truly multistakeholder identity. The DENR is the chair of the boards and executing body for the National Integrated Protected Areas System Act, as well as the regulatory body issuing land and resource use permits. Thus at the local level, protected area management boards are perceived as extensions of the DENR rather than as joint enterprises of local stakeholders, each with an equal say in its deliberations and decisions. One result is that local governments generally perceive protected areas as the responsibility of the DENR rather than as a responsibility of theirs. But this view may be changing: local governments and NGOs are taking an increasingly active role in board proceedings and outcomes, though in the three protected areas reviewed in depth for this study-Mt. Isarog National Park, Northern Sierra Madre Natural Park, and Puerto Princessa Subterranean River—most input to board agendas still comes from the DENR (table 8).

And although participation by People's Organizations, indigenous peoples' representatives, and barangay officials is still limited, it is better than in the past—and in many cases is contributing to better working relationships between these groups and the DENR and local governments. Increased discussions of protected areas and their problems among these stakeholders

Table 7.

DENR Staffing for the Philippines's 360 Protected Areas

Central office	Regional offices	Provincial offices (est.)	Protected area superintendents	Protected area staff (est.)	Total (est.)
100	121	400	159	330	1,100

Note: Superintendents and staff cover 169 protected areas. Source: DENR-PAWB 2003.



Table 8.

Stakeholder Participation in Protected Area Management Boards in Mt. Isarog National Park, Northern Sierra Madre Natural Park, and Puerto Princessa Subterranean River, 2000–01 (number of board members)

Stakeholder	Mt. Isarog	Northern Sierra Madre	Puerto Princessa
DENR(including park superintendents)	31	30	5
Provincial and municipal governments	12	16	58
Barangay governments	15	5	6
NGOs	17	19	17
People's organizations	2	1	1
Indigenous peoples' representatives	1	2	1

Source: Office of Park Superintendents, board minutes.

have also reduced conflicts over natural resource management. Still, based on the three sites reviewed for this study, it cannot be said that protected area management boards are appreciably fostering more integrated natural resource management implementation between government agencies such as the DENR, Department of Agriculture, local governments, and law enforcement agencies. Indeed, some key government stakeholders—including the Bureau of Fisheries and Aquatic Resources, Department of Agriculture, and National Commission for Indigenous People—are seldom represented on the boards, despite their role being prescribed in the act on protected areas. Representatives of members of congress, who could contribute to protected areas' financial sustainability, are also seldom involved.

In recent years the boards in the Mt. Isarog and Northern Sierra Madre parks have become more engaged in park management, largely due to training financed through foreign-assisted projects in these sites. (At the Puerto Princessa site, by contrast, discussions have focused on ecotourism and income generation rather than natural resource management.) Until 2000 conservation and park protection were generally never discussed at the Northern Sierra Madre site. But there has been a perceptible move toward more open, regular discussion of resource management problems and an increase in joint mea-

sures to resolve conflicts. This development is reflected in the relatively high number of natural resource management interventions since 1999—largely reflecting the institutionalization of the DENR's Biodiversity Monitoring System. The system has provided the management board with data on more than 60 plant and animal species and on 16 resource and land use management practices.

Although protected area management boards provide a potential model for local institutional coordination and stakeholder involvement in natural resource management—as well as the best hope for more effective governance and protection of the country's beleaguered protected areas—severe governance challenges remain:

- No mechanism defines and facilitates functional coordination among the DENR and other government entities and NGOs for protected area management.
- Overlaps persist between the Local Government Code and the act on protected areas with respect to the granting of resource use permits, collection of fees, and land use development and enforcement.
- Local governments show limited willingness to give protected area management the same priority as other activities.

Box 6. Paying for Participation: The Cost of Running a Protected Area Management Board

Effective governance of a protected area requires a functional management board through which all stakeholders meet regularly, review management activities, and pass ordinances related to the protected area. Without dedicated financial resources to support board meetings and functions, there is essentially no protected area governance.

Data from the Mt. Isarog, Northern Sierra Madre, and Puerto Princessa Subterranean River protected areas indicate that the annual cost for a typical management board—with 35 members holding 10 technical and 8 executive meetings a year—is about \$7,500. Costs include travel, honorariums, and capacity development of stakeholders to ensure their active participation. Most of the costs at these three sites are financed by foreign-assisted projects. Few boards generate sufficient resources or receive funds from the DENR to ensure adequate participation by all stakeholders in decisionmaking. In short, the policy framework and local mechanism to enhance stakeholder participation and institutional coordination in protected areas management are in place, but are vulnerable to collapse when foreign funding ends—unless the DENR and local governments allocate sufficient funding for a board's continued operation.

- The central government provides limited financing for protected area management, leading to heavy dependence on donor-assisted projects to finance most aspects of management—including the costs of making management boards functional (box 6).
- Mechanisms are general lacking (Puerto Princessa National Park is an exception) to ensure coordination and harmonization between the decisions of protected area management boards and municipal councils.

CREATING DEMAND FOR GOOD NATURAL RESOURCE GOVERNANCE—ESTABLISHING SERVICE DELIVERY STANDARDS AND ACCOUNTABILITY MECHANISMS

The DENR and local governments will deliver more effective natural resource management services only when their constituents demand them. With the high turnover in local elected officials, however, public accountability of local government performance is limited, and there are no performance-based measures for environmental services delivered by local DENR units or local government staff. This lack of accountability significantly increases the likelihood of corruption among local officials who process permits, issue tenurial instruments, and provide other natural resource services. Illegal activity is also

encouraged by myriad bureaucratic requirements and procedures. For example, obtaining a wood recovery permit in Puerto Princessa National Park requires nine processes and clearances from seven agencies—and takes five months.

Local governments and the DENR provide a range of services to citizens, from technical support and training for community natural resource management and social forestry projects to land surveys, permits, tenurial instruments, and environmental compliance certificates. But there are few opportunities for users to rate these services and few incentives for local governments and the DENR to improve service quality and outreach and to reduce transaction costs. Moreover, accountability and transparency are lacking in natural resource expenditures and revenues.

Although there are national systems for rating local governments—such as the Local Productivity and Performance Measurement System (managed by the Department of Interior and Local Government to determine assess local capacity for service delivery) and the Citizen Satisfaction Index System (implemented by civil society organizations to provide feedback on the quality of services)—few are linked to program management. Improving agency performance requires management support at the highest levels.

Institutions: The Impacts of Incomplete Decentralization on Natural Resource Management

To make local DENR staff more responsive, the DENR secretary should consider conducting user surveys to rate services. For local governments, independently conducted public surveys and the Local Productivity and Performance Measurement System are a start, but will be difficult to implement until more environmen-

tal services are devolved to local governments. Some donors, such as the U.S. Agency for International Development (USAID), are working directly with progressive local governments and the DENR to promote increased transparency and accountability in local natural resource management.

espite significant differences in land area, population, income, and natural resource endowments, DENR spending on natural resource management shows limited variation across regions. Regional allocations are generally low and spread across too many programs and projects, undermining their impact and impeding the DENR from fulfilling its regional mandate. And as noted, across regions some 95 percent of the DENR's budget is allocated to routine expenditures, and just 5 percent to development expenditures.

In the three provinces reviewed in this chapter—Isabela, Palawan, and Quirino—DENR provincial and community offices generally play a limited role in the annual budgeting and programming process. Budget targets and ceilings, based on DENR priority programs, are handed down to regional offices after the final DENR budget has been approved. Budget allocations are then divided among provincial and community offices (six in Isabela, two in Quirino, and seven in Palawan). To receive funds from the Department of Budget and Management, the DENR must prepare budget breakdowns through the provincial level; allocations between provincial and community offices are agreed internally.

Although local governments and the DENR follow the same principles and guidelines in preparing their budgets, the processes are separate. Across regions, allocations for natural resource management account for just 1–2 percent of local government budgets. Local governments rely on funds from donors to develop and implement natural resource programs and projects—and make no provisions to ensure their sustainability after donor support ends. The Investment Coordination Committee has issued guidelines on cost-sharing arrangements which are based on a financial viability assessment of the local government, which determines the amount of assistance to be provided to the local government unit.

The separate preparation of local government and DENR budgets results in limited prioritization of budget allocations across programs, lack of consolidation of resource use, and duplication

of functions across local environmental offices. Although regions have developed mechanisms to improve coordination with the DENR, the situation remains problematic.

ISABELA PROVINCE

Isabela is a first-class local⁴ government and received large internal revenue allotments (derived from national taxes) from the central government. During 1996–2002 these allotments accounted for nearly 93 percent of the province's income. Less than 5 percent of the province's income came from local taxes, and just over 1 percent came from operating and miscellaneous income. Because these income levels were sufficient to finance Isabela's operating and development budget requirements, the province had little incentive to generate additional revenue from local sources. Moreover, it has been claimed that the magnitude of the province's forestland limits its real property tax base. As a result real property taxes generate very little revenue.

Between 1998 and 2002 the composition of Isabela's expenditures improved, with personnel costs dropping from 54 percent of the budget to 38 percent. This change was largely the result of drastic measures to improve the province's fiscal situation. Savings on personnel costs were channeled to operations and maintenance, which grew from 15 percent of the budget in 1996 to 29 percent in 2002. Allocations for non-office support—essentially the development budget—fluctuated during this period, peaking at 30 percent of the budget in 1997 and dropping to 21 percent in 2002.

Budget for natural resource management

Isabela engages in two types of spending related to natural resource management: the operating budget of its environment

^{4.} Based on Department Order 32-01 of the BLGF, Department of Finance. Municipalities are classified in 6 income brackets ranging from 35 to 7 million pesos.

and natural resources office, and programs financed by the 20% Development Fund.⁵ During 1998–2002 about 1 percent of Isabela's budget went to these activities.

Programs and projects received only 28 percent of Isabela's budget for natural resource management; nearly all of the remaining funds were spent on the salaries and operations of the province's environment and natural resources office. The office provided continuous funding for just four major programs: the Fishery Development Program, ISF projects, the ENR Watershed Development Project, and the Community-Based Forest Management Project on Environment and Forestry Natural Resource Management. Such limited funding reflects the low priority given to natural resource management—which is ironic given that the province has such extensive forests and its economy largely depends on forest-related activities. The limited budget may also reflect the Isabela government's limited mandate for natural resource management. This situation is very different from that in other resourcerich regions, where local governments allocate larger budgets to natural resource management—particularly for programs outside devolved functions. For example, Isabela has no program to strengthen enforcement against illegal logging, which is a serious concern in the province.

Revenue

In 1996–2002, 56–75 percent of Isabela's income from natural resources came from its share of the proceeds from the use of national wealth. The rest came from mining taxes, sand and gravel taxes, and charges on forest products, which accounted for 6–28 percent of local taxes. Revenue from natural resources accounted for 0.6–1.2 percent of provincial income in 1996–2002, and covered 48–153 percent of the province's budget for natural resource management. For its part, in 2002 the DENR collected

32 million pesos from forest charges and other fees due to the government.

Budget of DENR provincial and community offices

Between 1998 and 2002 Isabela's spending on natural resource management was not covered by DENR budget allocations to its provincial and community offices. In 2002, for example, DENR's provincial office in Isabela was given a budget of just 64 million pesos. About 91 percent of this went to routine expenditures, and 1.5 percent to development expenditures. Meanwhile, DENR's community offices in Isabela received an average of 640,000 pesos.

PALAWAN PROVINCE

Palawan is also a first-class local government. During 1998–2001 the province's internal revenue allotment accounted for 97 percent of its income (net of borrowings)—indicating limited capacity to generate income to finance its operations. Very little of the province's income—about 0.03 percent—comes from its share of the use of national wealth. This fact could be explained by the strict limits on logging in the province. Logging activities are limited to harvests from community-based forest management areas, which are conducted on a very small scale and have been irregular because of the changing policy on community-based forest harvesting. The small share of income from national wealth may also be due to the fact that income from tourism based on natural resources (and related sources) is not captured in the reporting formats of local governments.

In 2001 Palawan province had an operating budget of 622 million pesos—62 percent more than in 1997. But while the budget increased, the composition of expenditures hardly changed. Personnel costs averaged 53 percent of the budget during this period, ranging from 52 percent in 2001 to 62 percent in 1998. This share exceeds the limit prescribed in the Local Government Code, which specifies that first-, second-, and third-class local governments should allocate no more than 45 percent of their budgets to

^{5.} The 20 percent Development Fund is the portion of the LGU's internal revenue allotment earmarked for development projects determined by the LGU.

personnel services. As in many local governments, Palawan's spending on capital outlays was low, averaging only 8 percent of the province's budget during 1997–2001—though it ranged from 4 percent in 2001 to 20 percent in 2000. This composition also reflects the allocation of the 20% Development Fund. Although the development fund is supposed to finance development expenditures, the data suggest that it has been used to finance routine expenditures.

Budget for natural resource management

During 1997–2001 the Palawan government allocated an average of 1.5 percent of its budget to natural resource-related activities. This share peaked in 1999 at 2.8 percent and was at its lowest level in 1998, with a mere 0.8 percent. But while these shares may seem small, the absolute amounts were quite high reaching 13 million pesos in 2000 and 12 millions pesos in 2001. The Palawan government's budget for natural resource management is spent on two main items: the operating budget of the province's environment and natural resources office and the programs financed under the 20% Development Fund. In 1997 the environment and natural resources office received 83 percent of the budget—and in 1998, 93 percent. But the situation changed considerably starting in 1999, when the budget for programs exceeded that for the office. In 1999 the office's share of the budget was 34 percent, in 2000 it was 33 percent, and in 2001 it was 45 percent. Moreover, proceeds from the 20% Development Fund were used to finance the office's programs, projects, and activities. About three-quarters of Palawan's budget for natural resource management was allocated to routine expenditures; just one-quarter went to development expenditures.

The programs supported by Palawan's environment and natural resources office varied considerably. Only the Bantay Palawan Program and Fisheries Development Program ran for three years; the rest were one- or two-year programs with no clear long-term orientation. The small allocations for the various programs also undermined their long-term impacts. No allocations were made for ISF, communal forestry, or micro-watershed rehabilitation activities—which are functions clearly devolved to local governments.

Revenue

Palawan generates limited local revenues from natural resource activities. The province has declared a total ban on logging, and mining is not encouraged. Palawan has huge deposits of offshore natural gas, but recent exploration of these resources led to a dispute with the central government over royalty sharing. As for the DENR, in 2001 it collected just 137,043 pesos in forest charges, from rattan cutting.

Budget of DENR provincial and community offices

Funding for the DENR's provincial and community offices in Palawan reflect the situation in other DENR field offices. In 1999–2002 the provincial office's operational budget did not increase, and averaged just 4,019,750 pesos. Allocations for the main provincial office accounted for 17 percent of the DENR's operations budget for Palawan in 2002, and the combined total for all of the DENR's provincial offices accounted for 40 percent. The remaining 60 percent of the operations budget was shared among the seven DENR community offices—meaning that each office received less than 10 percent of the budget, or just 374,300 pesos on average.

Palawan Council for Sustainable Development

The Palawan Council for Sustainable Development receives regular funding from the national government through the Annual General Appropriations Act. During 1998–2002 its funding increased 48 percent. The council has been the implementing agency for Palawan-based natural resource management projects such as the Palawan Tropical Forest Protection Project, the Second Palawan Integrated Area Development Project, and the Sustainable Environmental Management Project in Northern Palawan. Overall, the council appears to have maintained its operational efficiency and serviced the needs for it was established

QUIRINO PROVINCE

Quirino is a third-class local government. During 1998–2002 its budget increased by less than 1 percent a year. Because of this

low budget level, the provincial government has been unable to provide the mandatory benefits due to its personnel—though, as in other provinces, personnel costs have accounted for the largest share of its budget, averaging 54 percent. In 2002 this share was 47 percent of the province's budget. This allocation violates the provision of the Local Government Code, which states that third-class local governments cannot spend more than 45 percent of their budgets on personnel services. Allocations for capital outlay have been minimal, accounting for just 1.4 percent of the budget in 2002. The policy of setting aside 20 percent of the internal revenue allotment for development expenditures has ensured that some budget is left for the province's development activities. This may also explain the minimal allocation for capital outlays in the province's operating budget.

Like most third-class local governments, Quirino is highly dependent on internal revenue allotments to finance its operating and development budgets. In 1998–2002 these allotments accounted for 88 percent of the province's income. And if the province's large borrowings in 1995–97 and 2000–01 are not considered as source of revenues, the internal revenue allotments accounted for 91 percent of the province's income.

Budget for natural resource management

Between 1998 and 2002 about 2 percent of Quirino's budget went to its office for the environment and natural resources and to related natural resource management programs and activities. While the amount in pesos was small (4.5–6.5 million), the fact that a low-income local government allocated a considerable share of its limited budget to natural resource management indicates the priority and importance given to natural resources. Overall, allocations for routine expenditures fell between 1998 and 2002, while the share of the 20% Development Fund devoted to natural resource management increased.

Revenue

Given its vast timberland, one of Quirino's most important sources of revenue is its share from the proceeds of the use of national wealth. Indeed, in 1995 it received nearly 41 million pesos from the national government. But the province chose to lobby for the cancellation of timber licenses to enable communities to have access to its forest resources. The DENR cancelled all such licenses, paving the way for the establishment of many community-based forest management sites throughout the province. This program is now the centerpiece of the provincial government's efforts to alleviate poverty in some 80 percent of its barangays.

Other sources of income are fees from sand and gravel extraction and operating and miscellaneous revenue from real property taxes and other taxes. But because Quirino's small agricultural area limits its real property tax base, receipts from these sources are very low. Thus natural resources account for a minimal share of the province's income—just 0.9 percent in 2002.

PROPERTY RIGHTS AND TENURE

Tenurial instruments issued by the DENR under its community-based forest management policy have formally strength-ened local rights. But bureaucratic complexity, inefficiency, and weak enforcement have resulted in conflicts on the ground and limited the potential of these instruments to provide incentives for sustainable management and investment. To remedy these shortcomings, tenurial instruments for forestland should be reviewed, consolidated, and streamlined. In addition, mechanisms for enforcing access rights and responsibilities for sustainable resource use attached to those rights should be strengthened.

Moreover, the devolution to local governments of control over coastal waters and resources needs to be complemented by an effective system of community-based property rights to reverse the current open access situation and provide incentives for sustainable community-based coastal resource management. Thus a national system of standardized, legally enforceable community-based tenurial instruments should be established for municipal coastal waters and resources.

INSTITUTIONS AND MANAGEMENT

Overlapping institutional mandates at the local level between the DENR, other central government agencies, and local governments are a major factor contributing to land use conflicts and limited accountability for service delivery. Local agencies issue multiple permits for similar resource use rights, and resource allocation decisions have limited transparency. To address these problems, land use decisions and the issuance of resource permits should be made more public—through better information, increased stakeholder consultation, and more public hearings prior to decisionmaking.

There appear to be few formal forums for the DENR and local governments to collaborate on activities. In most cases local governments have handed over natural resource management responsibilities to the DENR, and have limited staff or budgets

to deal with resource management within their administrative areas. To ease this situation, more partnerships should be fostered with civil society groups and private sector actors to increase local capacity to manage natural resources.

Institutions in charge of natural resource management—both local governments and provincial offices of the DENR—have limited capacity to fulfill their institutional mandates. Provincial agencies lack adequate staff and budgets to deliver technical support and training to community groups, private actors, indigenous groups, and farmers and fishers involved in natural resource management activities. NGOs and other civil society groups currently fill this gap. Foreign-assisted projects are the main source of financing for the development expenditures of NGOs and government agencies. Few activities are sustained through local government or DENR development budgets. To improve this situation, more DENR staff should be devolved to provincial and municipal governments, especially in resource-rich provinces. And once that happens, local governments should be given more power in granting resource use permits—such as community-based forest management agreements.

There appear to be few service standards for natural resource management. Processing for resource use permits (fishing permits, community-based forest management agreements, industrial forest management agreements), environmental clearances, and other permits is a time-consuming, opaque, laborious process, requiring multiple payments to myriad agencies at the local level. This situation provides an environment conducive to corruption and rent seeking. These problems could be eased by developing service standards for natural resource management services from the DENR and local governments, reducing the number of institutional requirements, and making the costs of permits more transparent. In addition, local groups should be encouraged to monitor service delivery.

Some new institutional partnerships show how partnerships between local governments and the DENR could work. Protected area management boards and the Palawan provincial environmental council are institutional mechanisms that could be

replicated. But constraints remain—including financing, capacity issues, and incomplete or overlapping legislation. One way to address these constraints would be by publishing annual reports at the provincial level on budgets, administration, personnel, and services delivered.

Both the DENR and local governments work from limited information and data at the local level. Many parks in protected areas are no longer viable, and a reassessment is required. In watershed management, local governments and the DENR need to develop better working relationships to deal with upstreamdownstream externalities and to provide appropriate tenure and irrigation user charges to encourage farmers to maintain forest cover. In coastal areas, limited information on the resource base makes it difficult to regulate fishing in municipal waters or within marine protected areas. To address these issues, local government and DENR decisionmaking should be linked to better, more accurate data. One way to integrate resource management is through the Comprehensive Land Use Planning mandated under the Local Government Code. At the national level, a review of the protected areas system and a focus on critical lowland areas of high biodiversity are critical to ensure that scarce government resources are properly allocated.

FINANCING AND BUDGETING

Although DENR budget allocations are not low, DENR spending is fragmented across too many programs. This approach significantly limits the effectiveness of all DENR programs and makes it difficult for DENR agencies at the national and local levels to implement natural resource management policies and address pressing natural resource management challenges. It also prevents the DENR from making significant progress toward sustainable management of natural resources. Moreover, between 1998 and 2002 DENR spending was erratic, reflecting the varying priority given to natural resource management by past and present administrations. This situation should be resolved by rationalizing the budget preparation process at the national and local levels for both the DENR and local governments.

Contributions from foreign-assisted projects are generally catalogued as both development and routine expenditures in the DENR budget. This practice has become essential for the DENR to be able to meet its mandates at the national and especially local levels. But it has often biased the planning and management of budget expenditures and prevented the DENR from making adequate provisions to ensure the continuation of development expenditures after donor contributions cease.

DENR regional allocations are generally low and spread across too many programs and projects, jeopardizing the possibility for DENR to fulfill its regional mandates. To address this problem, budget allocations should be prioritized across programs, activities, and projects, and resource use should be consolidated to eliminate duplication of functions. In addition, the resource use and budget process should be strengthened by moving toward functional allocation of resources. Moreover, efforts should be made to strengthen the links between planning and budgeting within the DENR, DENR agencies, and between the DENR and local governments.

Decentralization has given local governments increasing responsibilities for natural resource management—including planning, law enforcement, program implementation, and monitoring and evaluation. But local governments appear not to be receiving adequate financial and technical support from the DENR to manage their new duties and responsibilities. Thus decentralization of budget control should be increased—as should financing for local governments to fulfill their devolved responsibilities.

Policy conflicts among laws and regulations and weak enforcement of policies on resource use (especially at the local level) are resulting in overextraction of natural resources and discouraging private investment in natural resources.

Local government budgets for natural resource management are very low—averaging 1–2 percent of total budgets. Local government spending on natural resource management is not necessarily dependent on the government's income level. Instead, it tends to reflect priorities identified by local government officials and donors.

There is no clear distinction between allocations for routine and development expenditures at the national and local levels. Most local governments are underfunded for routine expenditures, and they tap development funds to cover the shortfall. The blurring of the two budgets has both short- and long-term effects on the management of natural resources.

There is confusion between the DENR and local governments on who is supposed to provide the counterpart funding for foreign-assisted projects. Local governments interpret the Local Government Code as making the DENR entirely responsible for providing counterpart funding to foreign-assisted projects. But the DENR feels that local governments should provide some counterpart funding. Based on a assessment of local governments' financial viability, the Department of Budget and Management is expected to make a final decision on this issue by the end of 2003.



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The World Bank 1818 H Street, N.W. Washington, D.C. 20433, U.S.A.

Telephone: 202 477 1234 Facsimile: 202 477 6391 Internet: http://worldbank.org/easrd



