What do fishers in the Philippines have in common with farmers in irrigated areas of South India, forest user groups in Nepal, and pastoralists in Morocco? They are all part of efforts to improve the management of natural resources by supporting the participation of local resource users (see box).

The past decade has seen a growing recognition of the benefits that can be derived from transferring control over natural resources from central governments to local bodies. At the international level, this trend is seen in agreements like the Convention to Combat Desertification and the Convention on Biological Diversity that commit signatories to principles of decentralization, subsidiarity, and local participation. At the national level, many countries in Africa, the Americas, Asia, and Eastern Europe have devolved management responsibilities over rangelands, forests, fisheries, and irrigation to local government authorities, resource users, or both.

Devolution, defined as the transfer of rights and responsibilities to user groups at the local level, has made its way to national policy agendas for several reasons. The first reason is recognition of the limited effectiveness of the state in managing natural resources, especially at the local level. Local users often have intimate knowledge of the resource, which is especially important where resources vary greatly over space and time. Users who live and work in the area also may have an edge over government agents in monitoring use of the resource and compliance with rules. Because their livelihoods depend on the resource, local users often are assumed to have the greatest incentives to maintain the resource base, particularly if they make the decisions and devise the rules.

The second reason that devolution is appearing on national policy agendas is that few developing countries have the financial capacity to adequately monitor the use of large areas of forests, fisheries, rangelands, or irrigation schemes. As a result, these resources have not been properly managed, and deforestation, overfishing, overgrazing, and deterioration of irrigation facilities have become major problems. These problems grow more serious when governments confront financial crisis or undertake structural adjustments that require them to cut budgets and staff. Fiscal crisis and ensuing economic reform policies often provide the greatest impetus to devolution policies.

Finally, devolution of resource management opens the door for more democratic processes to emerge by shifting greater authority and decisionmaking to rural people. When such reforms place greater control over livelihood assets into the hands of the poor, such control can be a powerful tool for poverty alleviation and self-determination.

Despite user management’s obvious potential to reduce poverty and to improve efficiency, resource sustainability, and democracy, countries that have transferred management of resources to local users have experienced mixed outcomes. The performance of these reforms often is related to issues of collective action and property rights.

**COLLECTIVE ACTION**

Devolution programs generally are based on the assumption that resource users will take on an expanded role in managing resources. For this to work successfully, however, users must engage in some form of coordination or collective action. There is ample evidence of local institutions effectively governing resource management, but in many cases these institutions do not exist or are ineffective.

Research shows that collective action is more likely to emerge and to be sustained when the resource is important to local livelihoods, the cost is low and benefits are tangible, local leaders endorse social justice and resource management objectives, an atmosphere of cohesiveness and trust exists among users, and social structures and values support cooperation.
Even when these elements are in place, a number of factors can weaken the legitimacy of local resource-management institutions and, therefore, the potential for collective action. These factors include population pressures, mounting competition for natural resources, incentives created by expanding markets, and policies and laws that contradict local rules for resource use and protection or that undermine local authorities. Whereas it is difficult or perhaps even undesirable to arrest some of these trends, policies that support local rules and authority, sanction local organizing, and actively encourage the participation of civil society can enhance the likelihood and effectiveness of collective action.

Where local cooperation is weak, external organizers can be catalysts for collective action by strengthening awareness of the benefits of cooperative resource management. Staff of nongovernmental organizations (NGOs) or government extension staff trained in community development and organizing also can facilitate the building of organizational capacity and leadership. These capabilities not only are critical to developing rules for and carrying out resource management activities, but also are necessary to creating legitimate local institutions for resolving disputes. Social processes like this take time, however, and must adapt to their unique socioeconomic, political, and physical contexts while developing local legitimacy. Donors and policymakers looking for quick solutions by imposing organization on resource users risk disappointing results.

**PROPERTY RIGHTS**

Governments often assert that they should own and manage important natural resources such as land, water, forests, and fisheries. They particularly claim resources that are not registered to individual owners, even if those resources historically have been governed and managed by local communities. As a result, government bureaucracies are put in charge of regulating the use of resources.

In some cases, the state’s inability to administer its management authority has enabled local institutions for resource management to operate with relatively little interference. However, in countries characterized

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**Devolution in Action**

- In San Salvador village in Zambales, Philippines, collective action by village fishers, the Haribon Foundation, and local government units (LGUs) at the municipal and village levels led to the establishment of a 127-hectare marine sanctuary and marine reserve. Comanagement arrangements have redefined access to resources, encouraged fishers to shift to nondestructive practices, and formally instituted measures to guard the coastal waters from poachers and illegal fishers. Coral reef conditions have improved remarkably, and catch per fishing trip has increased. Fishers, moreover, have perceived positive socioeconomic changes over time.

- In Andhra Pradesh, India, more than 10,000 water-user associations have been organized to take a more active role in managing irrigation systems, which cover 4.8 million hectares. Farmers who repair facilities receive part of the irrigation fees. “We were able to finish maintenance work that has not been done for 30 years,” reported one farmer. In pilot projects, the irrigated area increased from 30 to 60 percent of the possible command area with simple repairs, such as removing accumulated silt, and by negotiating with farmers at the head end of the canals.

- In Niger, the 1993 legal reforms embodied in the *Principes d’Orientation du Code Rural* recognize traditional resource management systems, particularly of pastoralists, and involve customary rulemakers and decisionmakers in promoting better natural resource management and conservation practices on pastures as well as agricultural land. The *Code Pastorale* passed in Mauritania in 2000 has gone even further in defending the rights of transhumant pastoralists to rangeland resources.

- Research on community forests in Nepal has shown that many user groups can devise rules that are well matched to their ecological problems. Local institutions have enabled these groups to sustain and, in some cases, improve the condition of their forest.
by rising populations and increasing competition for resources, government management has fostered growing insecurity among local users who have seen their resources appropriated by the government or more powerful interests (for example, commercial loggers and fishers). Even where this has not happened, the fear that it may happen can encourage local users to deplete resources before they are taken away.

Devolution programs that transfer responsibilities for resource management to local users often fail to transfer commensurate rights. Yet, property rights that assure users the ability to derive benefits from resources over the long term are necessary to induce them to bear the management costs. When irrigators are asked to take over maintenance work formerly done by government agencies, but do not have rights to the water in the system, farmers may lack incentives to do the maintenance work.

The strength of management incentives also depends on how the bundle, or collection, of various rights is distributed. For example, if forest users are permitted to collect nontimber products or dead branches, but are prohibited by the state from cutting trees and live with the threat of being evicted if forest areas are converted to logging concessions, sustainable management is unlikely.

Equity issues also need to be considered. In the case of rangeland resources, transhumant pastoralists often share rights to grazing areas and water points with other herders. Strong traditions of crop-livestock interactions may enable farmers and pastoralists to use the same land in a complementary manner, with pastoralists grazing their herds on fallow fields. As competition for resources grows, however, mobile herders may lose access to resources to farmers and sedentary pastoralists. Protecting the interests of less powerful groups calls for representative and robust conflict resolution mechanisms that different stakeholders consider legitimate.

Even with the most complete transfer of rights and responsibilities to users, the state retains a critical role in enforcing regulations, punishing violators, and settling disputes between local groups and outsiders. Legal frameworks and government enforcement mechanisms need to support the rights of local users, respect their management institutions, and provide responsive backup. The actual nature and extent of comanagement arrangements are likely to depend on local capacity to undertake certain roles and functions. Devolution can be an evolving process of greater local control as investments are made in building the organizational, administrative, and technical capacity of communities, local and regional organizations, and local and regional governments.

In spite of its potential, devolution will not entirely resolve the problem of degradation of natural resources. There is a strong need to address poverty, particularly in remote areas, where resource users may have few subsistence and income-generating alternatives beyond exploiting their natural resource base. This calls for greater attention to policies and investments that will enhance opportunities for livelihood diversification. Such measures include investments in rural infrastructure and enhancing access to markets, credit, and insurance to reduce the high costs of setting up and operating industries, markets, and finance facilities in rural areas. By combining such measures with policies and legislation that enable the poor to have access to and control over natural resources, policymakers will make substantial gains in moving underprivileged citizens out of a life of poverty.

A number of the findings and recommendations presented in this brief are based on discussions during the Workshop on Collective Action, Property Rights, and Devolution of Natural Resource Management held in June 1999 in Puerto Azul, Philippines, and organized by CAPRI, the German Foundation for International Development (DSE), and the International Center for Living Aquatic Resources Management (ICLARM). For more information, see Ruth Meinzen-Dick and Anna Knox, “Collective Action, Property Rights, and Devolution of Natural Resource Management: A Conceptual Framework,” a chapter in the forthcoming proceedings volume for the workshop.

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