Institutions of collective action and systems of property rights shape how people use natural resources, and these patterns of use in turn affect the outcomes of people’s agricultural production systems. Together, mechanisms of collective action and property rights define the incentives people face for undertaking sustainable and productive management strategies, and they affect the level and distribution of benefits from natural resources. The linkages between property rights, collective action, and natural resource management have important implications for technology adoption, economic growth, food security, poverty reduction, and environmental sustainability. Yet despite their importance in people’s lives, property rights and collective action are often undervalued, and when they are recognized, often misunderstood.

WHAT ARE PROPERTY RIGHTS AND COLLECTIVE ACTION?

Collective action is often considered narrowly in terms of formal organizations, and property rights only in terms of formal title issued by the government. In fact, they are much more than that.

Collective action can be defined as voluntary action taken by a group to achieve common interests. Members can act directly on their own or through an organization. In the context of natural resource management, even deciding on and observing rules for use or non-use of a resource can be considered collective action, and it can be instituted through common property regimes or through coordinated activities across individual farms.

Property rights can be defined as “the capacity to call upon the collective to stand behind one’s claim to a benefit stream” (Bromley 1991). Rights do not necessarily imply full ownership and the sole authority to use and dispose of a resource; different individuals, families, groups, or even the state often hold overlapping use and decisionmaking rights. To be secure, rights should be of sufficient duration to allow one to reap the rewards of investment and should be backed by an effective, socially sanctioned enforcement institution. This institution is not always the government; communities or other institutions may provide the backing.

LINKS TO SUSTAINABILITY OF NATURAL RESOURCE MANAGEMENT AND AGRICULTURAL SYSTEMS

The following figure illustrates how property rights and collective action affect the application of agricultural technologies and natural resource management practices. Conventional on-farm technologies like improved, high-yielding crop varieties (HYVs) have a short, usually seasonal, time horizon and a small spatial scale, often a single plot. They can be adopted by a single farmer—even by a tenant. Other technologies may require longer time horizons between their adoption and their payoff. In those situations, farmers need secure tenure (property rights) to have the incentive and authority to adopt. For example, tenants are often not allowed to plant trees or lack incentives to do terracing. Moving from on-farm technologies to those that operate at larger spatial scales implies a greater need for collective action to make the technology work. Integrated pest management (IPM), for example, must be coordinated across farms.

Most natural resource management practices have both long time and large spatial scales. Both property rights and collective action are therefore crucial for the management of forests, rangelands, fisheries, watersheds, or irrigation systems that serve more than a single farm. In some cases, the scale of the resource to be managed may go beyond what can be done by voluntary collective action by a community. Federations of user groups may sometimes be able to manage larger resources, but often the state or even international bodies become critically important partners. In these cases, co-management between the community and government, rather than government management alone, often leads to better outcomes.

Property rights and collective action also affect natural resource management and agricultural production systems in interaction with other factors such as information, wealth, risk, labor, and marketing. Collective action and networks among community members can facilitate access to information and even allow farmers to participate in technology development. Ownership of assets can serve as collateral for obtaining credit. Microfinance programs have shown that action through groups can also provide access to credit, with social bonds providing collateral. Rights over common property resources frequently
function as a buffer against risk, especially environmental events and loss of other livelihoods. Similarly, collective action enables risk sharing and inspires mechanisms for collective self-help. Collective action and reciprocity arrangements offer ways to overcome labor shortages, especially for practices that require intense labor effort in concentrated periods.

Property rights and collective action are also interdependent. This is particularly clear in the case of common property regimes, where holding rights in common reinforces collective action among members, and collective action is needed to manage the resource. Maintaining property rights can require collective action, especially in the case of landscape-level resources and where outsiders challenge local claims.

**LINKS TO POVERTY REDUCTION**

Property rights and collective action affect people’s livelihoods. The most vulnerable and marginalized rural groups often lack access to resources (that is, they have no or insecure property rights) and find participation in collective action too costly because of lack of time and resources. Enhancing rights to even relatively small homestead plots can increase food security by allowing women to grow gardens, and rights to common property often provide insurance for the poor. Tenure security provides key assets for poverty reduction, allowing the poor to help themselves by growing food, investing in more productive activities, or using property as collateral for credit. Collective action can increase food security through mutual insurance.

Both property rights and collective action are empowerment tools. Poor people often have difficulty making their voices heard. Interventions to strengthen their property rights or to help them participate in collective activities improve their bargaining positions. Security of rights and the capacity to manage local common resources allow people to make decisions while taking the future into consideration. This longer-term approach generally translates into more environmentally sustainable management practices and a healthier resource base for future generations.

**IMPLICATIONS FOR POLICY AND PRACTICE**

Many countries are now adopting policies to devolve the management of forests, fisheries, irrigation, watersheds, or rangelands to local communities or to develop some form of co-management between the state and communities. In addition, community-driven development initiatives are helping local organizations to set priorities for local public service spending and to provide services such as schools and health centers. For these programs to succeed, effective collective action within communities is essential.

As the briefs on forestry, irrigation, fisheries, and rangelands in this series show, successful collective action does not always emerge, especially where traditional management institutions (like tribes on rangelands) have been weakened by migration or excessive state intervention. Government agencies need to change how they work with communities, becoming more conscious in their efforts to strengthen local management institutions and allowing more local decisionmaking without imposing external rules.

Devolution programs that transfer management responsibility for natural resources from government agencies to farmers often fail to transfer corresponding rights. Yet rights over the resource are needed to provide groups with the incentives to conserve and even invest in the resources. Without recognized decisionmaking rights, the groups lack the authority to manage the resource or to stop members or outsiders from breaking the rules. Recognized property rights not only reinforce collective action that is needed for collective management, but also provide security for individuals and households. Several briefs in this collection suggest ways of strengthening property rights for the poor.

Many other government and nongovernmental organizations involved in community development are addressing collective action issues, whether through revolving credit or livestock schemes, agricultural extension groups, or domestic water supply. There is a wealth of practical experience on ways to organize or strengthen collective action. Researchers have documented factors that affect collective action, but their findings are often based on a few successful case studies. Much more needs to be learned about what approaches do and do not foster collective action that continues beyond the project intervention, as well as about how externally induced organizations interact with indigenous institutions for collective action. Promising approaches suggested by briefs in this collection include using facilitators, community organizers, or farmer-to-farmer learning, providing groups with credit to make investments and create property rights, and increasing access to technical information about resources. As collective action grows, local groups are forming federations up to the national level to address their problems at appropriate levels and to gain voice in policy decisions, including critical issues of rights to resources.


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