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Collective Action and Property Rights for Poverty Reduction:

Lessons from a Global Research Project

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The Role of Collective Action and Property Rights in Poverty Reduction

Esther Mwangi, Helen Markelova, and Ruth Meinzen-Dick

Poverty reduction is at the forefront of global discussions, with various parties urgently pushing for policies and programs to enhance the well-being of the world's one billion poor. But a better understanding of the manifestations of poverty and the factors affecting it is required in order to inform these global policy efforts.

The United Nations Office of the High Commission for Human Rights defines poverty as "a human condition characterized by the sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights." Property rights are part and parcel of economic rights and entitlements, and collective action enhances people's choices, capabilities, and power. But many rural poor do not have secure property rights and cannot participate in collective action due to resource and time constraints. Therefore, strengthening the institutions of property rights and collective action is an essential part of improving the livelihoods of vulnerable and marginalized rural groups, including women.

Secure property rights are a key poverty-reducing mechanism because they provide the rural poor not only with present-day income streams, but also with incentives to invest in productive technologies and sustainable management of resources in the future. However, many government programs have been implemented without an understanding of the complexity of property rights and have actually reduced tenure security for poor and marginalized groups by allowing elite capture of property, for example. A better understanding of how the poor can protect and expand their access to and control over resources can significantly improve poverty-reduction efforts.

There is also a growing recognition of the important role of collective action in poverty reduction. Through formal and informal groups, smallholders can work together to overcome limitations of wealth, farm size, and bargaining power. Collective action is also needed to adopt many technologies and natural resource management practices that operate at the landscape level. In addition, collective action can contribute to poverty reduction through mutual insurance, sustainable management of natural resources, increased opportunities for income generation, and improved provision and access to public services. As with property rights, vulnerable and marginalized groups are often at a disadvantage when it comes to collective action, either because of social exclusion, lack of time to participate in meetings and activities, lack of education and confidence to speak in meetings, and domination by local elites.

To examine the role of the institutions of collective action and property rights on poverty reduction, the Systemwide Program on Collective Action and Property Rights (CAPRi) of the Consultative Group on International Agricultural Research (CGIAR) undertook a global research project with study sites in Ethiopia, Kenya, Uganda, Indonesia, India, Cambodia, and the Philippines. The main goal of the project was to contribute to poverty-reduction efforts by identifying effective policies and practices that enhance the ways that collective action and property rights are used to build secure assets and income streams for and by the poor. The project intended to provide policymakers, NGOs, and community groups with knowledge of the factors that strengthen the rights of the poor to land and water resources and lead to more effective collective action by the poor.

Four CGIAR centers and two German universities conducted empirical research on the role of collective action and property rights for disadvantaged groups. The briefs in this set represent the case studies that were part of the project. The case studies rely on a variety of research methods, including qualitative and quantitative approaches, participatory action research, and experimental games. They also cover a variety of contexts within Africa and Asia, which will allow policymakers, researchers, and practitioners to further examine what constitutes poverty and affects the welfare of the poor between and within countries, and to draw comparisons.

The project addressed a range of themes relevant to poverty-related policies and programs as well as collective action and property rights, such as

- risk and vulnerability to shocks,
- natural resource governance and access to resources,
- conflict and post-conflict development, and
- market access for smallholders.

Strengthening the institutions of property rights and collective action is an essential part of improving the livelihoods of vulnerable and marginalized rural groups

Each case demonstrated the central role that various institutional arrangements play in all these poverty-related areas. The findings showed that institutions—especially collective action and property rights—are important for the livelihoods of the poor, but require an enabling environment to be effective in reducing poverty. Specific findings include:

- Successful collective action can ensure equitable natural resource management, but in many cases requires vertical cooperation among stakeholders at different levels (communities, the government, and the private sector).
- Collective action around natural resource management can serve as a catalyst for income-generating activities and a gateway for participation in policy processes.
- Shocks play a significant role in the livelihoods of the poor. Local networks and associations can help mitigate idiosyncratic shocks that affect individual households, such as illness, but they are less effective with respect to covariate shocks such as drought, which affect all households in a community.
- A lack of clarity regarding property rights results in extensive conflict among groups, resulting in the break down of trust and cooperation.
- Regardless of the resource under consideration, formalizing property rights can lead to a concentration of rights and benefits among certain users over others, as well as to exclusion and changes in land use toward less compatible uses—all of which threaten the welfare of those who are excluded.
- Collective action can be a useful mechanism with which to clarify and secure property rights.

The findings show that while collective action and property rights have the potential to reduce poverty, they are often biased against the poor. However, the case studies also suggest interventions that can redress these problems so that collective action and property rights institutions can more effectively contribute to poverty reduction. Overall, the case studies highlighted the multiple dimensions of poverty and the need to take a multidisciplinary approach to studying it in order to better inform policies and programs aimed at improving the well-being of the poor.

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Collective Action and Vulnerability:
Burial Societies in Rural Ethiopia

Stefan Dercon, John Hoddinott, Pramila Krishnan, and Tassew Woldehanna

INTRODUCTION

Collective action has intrinsic value. Being part of a group and participating in meeting common objectives provide direct benefits to individuals. In addition, collective action has instrumental value; it can help individuals, groups, and communities achieve common goals. This latter aspect of collective action is the focus of this study. Drawing on longitudinal household and qualitative community data, the authors examine the impact of shocks on household living standards, study the correlates of participation in groups and formal and informal networks, and discuss the relationship of networks with access to other forms of capital. In this context, they assess how one form of collective action, *iddir*, or burial societies, help households attenuate the impact of illness, and make some policy recommendations.

DATA

The data are from the Ethiopia Rural Household Survey (ERHS), a unique longitudinal household data set covering households in 15 areas of rural Ethiopia. Data collection began in 1989 and was expanded and re-randomized in 1994 to yield a sample of 1,477 households that are broadly representative of the population shares in Ethiopia's three main sedentary farming systems. Survey rounds continued through 2004 and were supplemented with qualitative data gathered separately. The surveys revealed that these households are very poor, with mean incomes about 36 percent below the poverty line, and that agriculture provides the dominant source (about two-thirds) of income.

SHOCKS IN RURAL ETHIOPIA

Shocks are adverse events that lead to a loss of household income or productive assets or a reduction in consumption. They may be climatic, economic, political/social/legal, criminal, or health related. Virtually all households in the sample experienced a shock they ranked as "most important"; the most common were drought, death, and illness. The authors note, however, that at least one econometric analysis suggests that experiencing a drought at least once in the previous five years and experiencing an illness were the only shock variables that have a statistically significant effect on consumption. However, disaggregating the data reveal that drought shocks have more severe effect on female-headed and poorer households, and illness shocks matter much more in survey areas where malaria is much more common.

NETWORKS, GROUPS, AND COLLECTIVE ACTION

In the 2004 survey round, households were asked about the five most important people they can rely on for support in time of need, within the village and elsewhere, as well as other people they can rely on in time of need. Over 90 percent of households report that there is at least one person they can rely on for assistance, and the median number of people in households' networks is five. There is evidence that households do indeed call on these networks; there is also evidence of reciprocity. Most network relationships are neighbors, fellow villagers, relatives, and people holding adjacent property. Only 12 percent of network members are neither relatives nor members of the same *iddir* (burial society). Network members are often individuals whom previously the household had borrowed from or lent to.

The authors looked at measures of wealth and age and find that poorer households have relatively better-off households in their networks while richer households tend to have relatively poorer households in their networks. However, when the number of oxen is the wealth measure, households typically have as network partners other households with the same numbers of oxen. Networks tend to be quite variable when looked at by age; the distribution of the difference in age between the household head and other individuals in the network who are either relatives or members of the same *iddir* is considerable.

Few household characteristics are associated with the likelihood that a household has at least one person in its network. However, being wealthier in terms of landholdings is associated with having a larger network. Larger households and households where the head has any formal schooling also have larger networks. Family background also plays a role: having a parent or relative with important social or political positions in the village, or a father who belonged to an *iddir*, increase the mean number of persons in a household's network.

IDDIR AND THEIR ROLE IN MITIGATING SHOCKS

Members of *iddir* typically meet once or twice a month, making a small payment into a group fund. When a member dies, the *iddir* makes a payment to surviving family members. Outside of Tigray, *iddir* membership is widespread: nearly 90 percent of households report that they belong to at least one *iddir*. Two-thirds of *iddir* appear to have no restrictions on membership beyond paying dues

Realism is needed in assessing the pro-poor benefits of support to collective action and in terms of the ability of collective action to respond to shocks.

and fees. In addition to the death benefit, a third of *iddir* provide cash payouts to members when they have experienced other types of adverse shocks, such as drought and illness, and a quarter offer loans. Two questions arise: Does provision of assistance when illness shocks occur reduce their impact on consumption? And if yes, how do *iddir* overcome problems of moral hazard and adverse selection that typically bedevil insurance schemes?

To answer these questions, the authors used a restricted sample of villages where *iddir* that provide health insurance are present and other villages where they are not present. Illness shocks reported by poor households in villages where no *iddir* provide health insurance are associated with a large reduction in per capita consumption. By contrast, the impact of illness shocks on poor households in villages where *iddir* do provide health insurance is not statistically significant.

Enumerators then identified 33 insurance-providing *iddir* and asked members to discuss how the scheme worked. They found that most impose some sort of restriction, the most common of which is geographic—members must live in the same peasant association (PA). Other common restrictions include belonging to the same church or mosque or being a woman. The feature uniting these shared characteristics is how they address the problem of asymmetric information. Restricting membership geographically makes it easier to learn about members and monitor their behavior. The same is true about the requirement for common church or mosque membership. Direct medical costs are observable. For example, one *iddir* reported that "If a member takes the money for medication and does not go to clinic/hospital, he will be asked to return the money." About a third of the *iddir* surveyed stated that they had formal checks in place to make sure funds were spent on medical costs. Second, a considerable number of *iddir* conducted background checks prior to approving a grant or loan—visiting the member at home or asking neighbors to confirm that assistance was needed.

These methods do not, however, address adverse selection—the possibility that individuals who anticipate having to incur medical expenses in the future would join with the express purpose of accessing funds held by the *iddir*. While *iddir* do not prevent this directly, the imposition of a membership fee for new members discourages such behavior.

In addition to these mechanisms for dealing with informational asymmetries, *iddir* take a number of steps to reduce the likelihood that the provision of health insurance will lead to financial difficulties for the *iddir*. One is the considerable variation in ages of *iddir* members, which in effect spreads risk across generations—young members contribute while older members are more likely to have age-related illnesses. Another observation consistent with this argument is that youth-only *iddir* are less likely to provide health insurance. A second mechanism is size: the likelihood of providing assistance with *iddir* decreased with the size of the membership. Third is that the amount of money provided to members is tied fairly tightly to the amount collected. The median cash grant provides an amount equal to one month's income, and the maximum cash grant is slightly more than two month's income. Loans as a ratio of monthly income tend to be higher than cash grants, but about 75 percent require repayment within three months. In addition, most impose sanctions if members do not repay.

POLICY IMPLICATIONS

This study suggests that realism is needed in assessing the pro-poor benefits of support to collective action. Because wealthier and better-educated households tend to participate more in groups and have larger networks, we need to pay more attention to identifying barriers that prevent other segments of the population from participating in collective action. Realism is also needed in terms of the ability of collective action to respond to shocks. Specifically, where households have limited ability to develop spatial networks, collective action has limited ability to respond to covariate shocks. Direct public action is more appropriate in this area.

Collective action may be more suitable for providing an insurance function in response to idiosyncratic shocks. Public action and policy that supports forms of collective action in this area must recognize, as exemplified by the *iddirs*, that successful collective action is based on norms of trust and reciprocity. As trust is easier to destroy than create, the principal of "do no harm" is important here, particularly when government actions are aimed toward existing collective action institutions.

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Collective Action and Vulnerability:
Local and Migrant Networks in Bukidnon, Philippines

Agnes R. Quisumbing, Scott McNiven, and Marie Godquin

INTRODUCTION

This study examines the role of groups and networks in helping poor Filipinos manage their exposure to risks and cope with shocks. It brings together two strands of literature that examine how social capital affects economic variables and investigate the processes by which social capital formation, participation in networks and groups, and trusting behavior comes about. Specifically, the study seeks to understand the shocks rural households face and how the impacts of shocks differ according to household characteristics; characterize the formal and informal groups and networks households join and determine whether exposure to risk encourages membership in such groups; and quantify the returns to membership in formal and informal groups and networks.

DATA AND CONTEXT

The data come from a longitudinal study of households in southern Bukidnon, a province of Northern Mindanao. The original 1984/85 four-round survey investigated the effects of agricultural commercialization on nutrition and household welfare in about 500 households. In 2003, two rounds of quantitative data were collected from 61 percent of the original respondents using a survey questionnaire that closely reflected the one used in 1984/85. In 2004, 257 households formed by children who no longer live in their origin barangays (small communities of 50 to 100 families) were interviewed in major urban areas in Northern Mindanao as well as households in municipality seats and other rural areas of Bukidnon.

SHOCKS IN BUKIDNON, PHILIPPINES

Drought shocks have the greatest impact on households whose landholdings are below the median land size, households with below median net worth of assets, and (surprisingly) households with greater than median levels of schooling. Death of the head or spouse significantly reduces per capita consumption for households that had land in 1984 and for households above the median landholding size in 1984.

Short- and longer-term impacts also differ across household types. The impact of the 1987/88 drought was felt most strongly by households with no land in 1984, households with less than median landholdings and less than median net worth, and households with greater than median schooling. However, more recent drought shocks no longer had significant impacts on consumption, indicating that mechanisms to cope with covariate shocks have improved over time. Sudden increases in input prices, however, significantly reduced per capita consumption in both the later and earlier periods. Not surprisingly, the burden of input price shocks in both periods was felt by households with more land and assets whose exposure to input shock risk is greater.

GROUPS AND NETWORKS IN BUKIDNON, PHILIPPINES

Households provided information on 689 groups, which were classified into production, credit, burial, religious, and civic groups. Membership in groups is widespread, with religious groups the most frequently mentioned and civic groups the least mentioned.
Households also belong to diverse trust-based networks. Seventy-five percent report having a network to turn to in case of economic loss, with the highest asset quartile being the best insured. Only 48 percent of households report having a network for technology adoption and copying (perhaps because farmers rely on the formal extension system). Households belonging to the lower asset quartiles belong to fewer groups, as do households further from the town center. Households that experienced more negative shocks in the past belong to more groups.

Wealthier households are more likely to take part in productive groups. Not surprisingly, households engaged in agricultural or nonagricultural production are more likely to be members of productive groups, with being an agricultural producer having a greater marginal impact. The household's position in the asset distribution has a significant impact on the probability of joining a credit group, with the second and third asset quartiles significantly less likely to join relative to the wealthiest quartile. Both ethnic and educational heterogeneity have a negative impact on participation in credit groups.

Burial groups are found in almost all Philippine communities. In comparison to production and credit groups, being less wealthy does not pose a significant barrier to participation. Participation in burial groups also crosses occupational categories, although ethnic and economic village heterogeneity dampens the desire to join burial groups. Compared to production, credit, or burial groups, religious and civic groups do not focus on economic motives. Nevertheless, households with more human capital are more likely to participate in such groups.

Identifying barriers that prevent the poor from participating in collective action is an important task because accumulating social capital does not come easily to the poor.

The total number of groups to which a household belongs does not affect the density of its networks, but households with more human and physical capital have larger social networks. There is weak evidence that networks perform a risk-smoothing function, since the number of shocks experienced increases the number of persons that one can turn to for help. Interestingly, the number of daughters living outside the villages exerts a strong negative influence on the size of one's local trust-based networks. This result stems from differences in expectations of parental support from sons and daughters. Daughters, who are more educated than sons, typically migrate and send remittances to support their parents.

ECONOMIC RETURNS TO GROUPS AND NETWORKS

The total number of groups to which a household belongs has a positive and significant impact on per capita expenditures—and this is true for membership in burial, religious, and civic groups as well.

Insights from qualitative work among respondent households that experienced covariate and idiosyncratic shocks suggest that local networks have only a limited ability to help households cope, especially in case of a covariate shock. For example, several respondents said they feel embarrassed to ask for help from friends and neighbors. When faced with negative shocks, households use a variety of coping mechanisms, including working harder, relying on help from children who have left home, and borrowing money from informal sources.

Remittances perform an important consumption-smoothing function for parents, with households experiencing more shocks being more likely to receive remittances and in larger amounts. Schooling attainment of daughters, but not sons, increases both the probability of receipt and amounts received. While positive shocks to migrant incomes increase both the probability of receipt and amounts received, positive shocks experienced by daughters result in much bigger remittances to parents than shocks experienced by sons.

Investment in migrant networks has both positive and negative consequences for parents. The number of migrants has significant negative impacts on expenditures on clothing and footwear, family events, alcohol and tobacco, and a weak negative impact on health expenditures. Remittances, on the other hand, have significant positive impacts on housing and consumer durables, total value of nonland assets, total expenditure per adult equivalent, and other expenditures.

CONCLUSIONS

The finding that accumulation of social capital comes easier to the wealthy is sobering news for development agencies that encourage the poor to invest in "social capital" because they assume that it is easier to acquire than physical assets. However, participation in less economically oriented groups such as religious, civic, and insurance groups is less closely associated with initial wealth than participation in production and credit groups.

Different aspects of heterogeneity matter in the formation and conduct of collective action institutions. Disparities in ethnicity, assets, and education at the village level are likely to discourage the formation of groups, although they do not affect the formation of trust-based networks. Thus, external heterogeneity is not necessarily "good" for social capital formation. However, heterogeneity with respect to location may be important in insurance against covariate shocks. For example, networks of spatially-diversified children—especially daughters—perform an important insurance function against covariate shocks that may not be achievable by local networks.

POLICY IMPLICATIONS

First, identifying barriers that prevent the poor from participating in collective action is an important task because accumulating social capital does not come easily to the poor. Poorer folk often express discomfort at approaching wealthier individuals for help. Feelings of discomfort may interfere with efforts to have a more heterogeneous mix of households in groups, but the shame may be tempered if the richer individual is a relative. Familial networks therefore play an important role in helping poor people cope with shocks.

Second, covariate shocks are the appropriate arena for public policy because local networks and other forms of collective action have limited effectiveness in dealing with such shocks. Even if migrant remittances respond to covariate shocks, substantial time lags may be involved, and not all households in a locality may have access to remittances.

Third, certain types of groups and networks may be more effective in providing insurance against some types of idiosyncratic shocks. These tend to be the sort of shocks where, because of information asymmetries, public action may be less effective. Public action should therefore take on an enabling role, for example, by facilitating interventions that reduce the costs of remittances or of developing and maintaining family networks.

Finally, policies to help poor households cope with shocks must take into account Filipino social and organizational culture and discourage displacement of already existing indigenous networks.

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Rural Market Imperfections and the Role of Institutions for Collective Action to Improve Markets for the Poor

Bekele Shiferaw, Gideon Obare, and Geoffrey Muricho

BACKGROUND AND PURPOSE

Market institutions transmit information, mediate transactions, facilitate enforcement of property rights and contracts, and manage competition. They also address market failures that arise due to asymmetric information, high transaction costs, and imperfectly specified property rights. Without supporting market institutions, rural markets tend to be thin and imperfect, leading to high marketing and transaction costs. Important market players fail to undertake profitable investments, leading to coordination failures that further hinder market functions. Associated shocks and market risks also worsen imperfections and transaction failures. Institutional innovations that reduce transaction costs and enhance coordination of marketing functions in rural markets—such as producer marketing groups (PMGs) that make use of collective action—can help overcome these problems.

PMGs can enhance market opportunities for small producers by coordinating production, facilitating access to better markets, reducing marketing costs, and synchronizing buying and selling with seasonal price conditions. However, collective action is critical to realizing this potential and is only likely to occur when expected gains outweigh the associated costs of complying with collective rules and norms.

This case study of PMGs in eastern Kenya identifies the potentials and constraints for rural institutions to provide market services for small-scale farmers. It analyzes the role of institutional and organizational innovations in improving the performance of rural agricultural markets in less favored areas with relatively poor market infrastructure, and highlights marketing outcomes and the potential causes of differential success of marketing groups in relation to marketing and other functions

DATA

Data were obtained from a baseline and follow-up survey conducted in Mbeere and Makueni districts of semi-arid Eastern Province of Kenya. These districts were selected because of the importance of dryland legumes in the livelihoods of the poor smallholder farmers and the potential to target these crops to reduce poverty and vulnerability. A baseline survey of 400 households was undertaken in 2003 before PMGs were formed. Households were randomly sampled from a list of all households in the sample villages, and the distribution of members and non-members was decided after the PMGs had been established on the basis of committed and paid up members. Baseline information involved poverty indicators, agricultural production, market participation, and adoption of agricultural technologies.

A follow-up survey in 2005 in the same districts collected multi-level qualitative and quantitative data on broader trends in demographic and resource use patterns, socioeconomic conditions, and overall economic profiles of targeted rural villages. Data obtained from PMGs included objectives and aspirations of the groups, group characteristics, asset ownership, credit access, grading and quality control, bulking and marketing, governance, and major constraints to collective marketing. At the household level, data were collected from randomly selected households comprising 250 members and 150 non-members. Information obtained included data on socioeconomic characteristics, assets, credit and savings, production, buying and selling, and participation in collective marketing.

RESULTS

Collective marketing and its outcomes

Consumers, PMGs, and schools respectively paid about Ksh 7, Ksh 6, and Ksh 4 over the prices paid by brokers/assemblers. This shows that PMGs can be attractive market outlets for small producers. Furthermore, farmers selling their produce at harvest earned about Ksh 1.5/kg less than those who delayed selling for four to five months. This shows that PMGs could exploit seasonal price differentials through bulking and storage.

The higher prices paid by the PMGs to member farmers came at a cost of delayed payments. In contrast, competing buyers paid on delivery or shortly thereafter. This may explain why cash-constrained farmers opted to sell through other channels. The average income lost by selling through the broker channel amounted to about Ksh 4,488/yr, or 7.4 percent of the poverty line income. However, in many cases, the imperfect rural

Producer marketing groups (PMGs) were able to improve market opportunities and enhance links to secondary and tertiary markets through better coordination of production and marketing activities.

grain markets often represent the only option for resource poor farmers to acquire cash in situations where local credit markets are either missing or highly imperfect.

PMG membership

A key question is whether resource-poor and smallholder farmers benefit from PMGs. The results show that they do: membership increases with per capita livestock wealth but decreases with per capita farmland. It also appears that ownership of communication technologies reduces the probability of participating in collective marketing, perhaps indicating that farmers who lack alternative sources of market information may view PMGs as repositories of such information. However, households with less contact with extension services were also less likely to join PMGs, as were those with less contact with NGOs (common providers of agricultural extension).

Governance of marketing groups

An important aspect of governance of PMGs are the rules defining the norms of operations, roles, and responsibilities of various organs and members. All the PMGs have written by-laws governing the running of their groups. The by-laws put more emphasis more on the obligations of the members to the group but are relatively silent on the obligations of the group to members. For example, the by-laws require that members sell their grain through the PMG, make requisite payments and/or contributions, prioritize farming of marketable crops, and contribute actively to the development of the group. Fair and transparent elections are not also consistently practiced, reducing the confidence of members in the group leadership.

Performance of collective marketing groups

Are groups with higher degree of collective action also more effective in providing marketing functions? Six indicators were identified for the levels of cooperation within PMGs: the number of elections since formation, share of members respecting bylaws, attendance of meetings, annual member contributions, cash capital, and annual subscription fees. An analysis of these indicators reveals that the level of collective action varies. Total assets built over time and total volume of grains traded provided indicators of marketing outcomes. The aggregate performance rankings were correlated with higher levels of collective action.

Constraints to collective marketing

The three most important constraints to collective marketing were cited as lack of credit, price variability, and low volumes. Given the low level of market development and lack of service providers in many rural areas, PMGs are unlikely to prosper in a "business as usual" policy environment. Policies that spur PMG growth would include an enabling legal framework, improved access to market information, support to strengthen business skills, and access to essential finance and credit facilities. In Kenya, PMGs are registered as self-help groups (SHGs) but lack legal status as business enterprises, which restricts access to essential credit. Lack of legal standing also means that PMGs can neither be sued nor sue in case of any liability. This drastically diminishes the incentive for financial institutions to do business with PMGs. PMGs would benefit from a legal framework that facilitates their transition to cooperative societies and a policy framework that seeks to promote, guide, and discipline the operation of markets under the liberalized environment. This may include laws dealing with adoption of quality grades and standards, good agricultural practices, and environmental and consumer protection issues.

CONCLUSIONS AND POLICY IMPLICATIONS

With imperfect markets and limited institutions to support market functions, liberalization strategies have failed to integrate smallholder farmers in less favored areas into the market system. This analysis has shown that PMGs were able to pay higher prices to members and improve opportunities for resource-poor farmers to benefit from markets. PMGs improved market opportunities by bulking, storage, grading, sorting, and selling the produce. The links to secondary and tertiary markets were enhanced through better coordination of production and marketing activities. The PMGs do not benefit only wealthier farmers. On the contrary, the incentive for joining seems to be higher for those with less farmland.

Nevertheless, only relatively successful PMGs were able to exploit this potential. The challenge is to mobilize farmers in participatory governance, provide start-up capital to PMGs, and provide training in business skills. In addition, PMGs need to be supported to transition into legal business entities to facilitate increased access to financial and other services from the formal sector.

The effectiveness of the PMGs was hampered by their lack of cash capital to pay in time for produce deliveries. Cash-constrained farmers found it difficult to delay cash payments, even when future prices would be higher. The ability of the PMGs to access working capital through access to credit is therefore critical. One strategy would be to explore the use of crop inventory as collateral for financial credit. Another option would be to pay farmers a portion of the grain value at the time of delivery so that they can meet immediate needs while benefiting from better prices by delaying full payments.

In addition, the establishment of a "union of PMGs" for expanding horizontal and vertical coordination of production and marketing activities may help address the problem of low volumes and price variability and make the groups economically attractive to financial institutions. The seasonal price differentials may also be exploited further through bulking and storage during periods of excess supply and selling when prices improve. These strategies should be pursued together with alternative options for smoothing supply through investments in drought mitigating and water harvesting techniques that would enable farmers in drought-prone areas manage production risk more effectively.

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Community Watershed Management in Semi-Arid India:

The State of Collective Action and its Effects on Natural Resources and Rural Livelihoods

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INTRODUCTION

The Indian government accords high priority to integrated watershed management programs, especially in rain-fed and drought-prone areas. Investment in integrated watershed management requires cooperation among stakeholders at different levels. The ability of communities to initiate and sustain collective action often depends on internal socioeconomic characteristics and the biophysical and socioeconomic setting. There is a lack of knowledge of the factors that influence the level and effectiveness of collective action within the context of community watershed programs. This study uses socioeconomic data from 87 watershed villages in six districts of Andhra Pradesh, India, to develop indicators for the degree of collective action and examine its potential determinants. The study provides useful insights on how community institutions determine the level of collective action in watershed management and how such collective action is related to the overall performance and effectiveness of watershed interventions.

COLLECTIVE ACTION IN WATERSHED MANAGEMENT

Some of the investment activities of watershed management include construction of check-dams for infiltrating surface water, terraces for soil and water conservation, and tree planting. Watershed management potentially provides livelihood support for socially complex and diverse groups with differing entitlements and rights of access and use of resources. Sustainable management of such resources requires institutional mechanisms for fostering cooperation and coordination of the resource use and investment decisions among diverse stakeholders.

This study identifies two main components of collective action needed for the effectiveness of watershed management interventions. First are *enabling institutions* that enforce rules for operation and management of the various common assets and structures. These rules include mechanisms for conflict resolution, regulation of behavior, and agreed norms for sharing costs and benefits. Second is *organizational performance* - local mechanisms for coordination and implementation of watershed activities, including user groups, committees, and associations that determine the objectives and basic structure of authority and decision-making. The level of collective action therefore defines the ability of the community to create operational frameworks to achieve the goals pursued by the community.

METHODOLOGY AND DATA

Standard data collection instruments were used at the community level to collect information from leaders, user groups, and key informants in each of the 87 watershed villages. Data included a range of issues that characterized the village and the watershed groups. This included multiple indicators for the level and success of collective action. The indicators span the types of group actions described above and are aggregated to develop indices of the level and effectiveness of collective action. Using these indices, the analysis investigates the determinants of the level of collective action and how this in turn influences its effectiveness in terms of changes in natural resource conditions and livelihoods of resource users. Along with other factors hypothesized to influence the success of collective action, the study analyzes how various facets of collective action determine outcomes such as improvement in soil and water conditions, and other natural resources on private and common lands.

This first-stage effect of collective action is captured by constructing an aggregate performance index for diverse outcomes defining changes in resource conditions and benefits derived from watershed management activities. In the second stage, collective action in watershed management is expected to improve the wellbeing of the community and participants. This is the key incentive for stimulating greater participation and private and community investments in watershed activities. To measure this effect, information solicited from communities on various indicators of poverty and welfare changes within the watershed is used. These changes are those that respondents consider to be primarily attributable or driven by the integrated watershed management interventions. The study then tests whether the level of collective action in fact is associated with these positive welfare changes within the community.

Without effective and adaptable local institutions, the long-term sustainability of watershed investments will remain questionable.

Level of collective action

Two sets of variables that capture the level of collective action in watershed management activities are considered. The index for enabling institutions includes rules adopted by the watershed community, percentage of watershed association members making cash and labor contributions, and attendance of meetings and fund-raising events. The organizational performance index includes proportion of smoothly running user groups, self-help groups, number of watershed association meetings per year, and percentage of members attending meetings.

Success of collective action

A mix of quantitative and qualitative indicators measures the effectiveness of collective action in watershed management in terms of achieving various community objectives, including number of improved or well-managed communal tube (drill) and open wells, check-dams, ponds, tanks, area of community forests, and share of communal and private land treated with collective conservation practices. In the second level of the analysis, seven indicators capture the changes in the level of asset endowments or poverty profiles in the surveyed communities, including increases in the number of households owning livestock and land, self-sufficiency in food staples, income growth, and reduction in seasonal and permanent outmigration.

RESULTS

This study shows that collective action in watershed management can be captured through a set of variables that indicate the capacity of communities to design and enforce certain common institutional arrangements, and their ability to mobilize local financial and labor resources for watershed investments. The index for enabling institutions is positively associated with rainfall, number of castes, number of phones, and female employment in watershed works in the community, and decreases with larger groups and degraded land in the community, market access, and urbanization.

The organizational performance index decreased with rainfall, size of the group, number of seasonal migrants, and distance from the seat of the local administration, but increased with area of the village, flow of information within the village, share of land under village commons, equitable distribution of benefits and preference given for employment of the rural poor and female workers.

In most watershed communities the level of collective action is very limited: only 10%–15% of watershed communities were able to significantly harness the potential of collective action to achieve desired economic and environmental objectives. There is a strong correlation between higher levels of collective action and higher performance of communities in facilitating resource-improving investments, especially water-harvesting structures and good management of these resources. The effectiveness of watershed groups in terms of their performance on this index depended on other variables such as rainfall, access to education and other social services, governance structures, resource degradation or scarcity problems, and the quality of the road linking the village. On the other hand, the correlation between higher collective action and changes in the index of poverty parameters was not statistically significant.

Changes in watershed natural resource stocks did not have a significant effect on changes in household welfare, indicating that the indirect effects of collective action on the poorest segments of the community are still limited. This offers evidence that the links between collective action and poverty are not always straightforward as distribution of rights and other factors will condition how effectively the poor may benefit from improved natural resource conditions within the watershed.

Overall, the results indicate that collective action has made a significant contribution in terms of improving the investment and management of critical jointly held natural resource assets, but evidence is still lacking on its effects on improving the asset endowments of the resource poor and reducing poverty levels within the semi-arid watershed villages included in this study. To improve active participation of the resource users and the poverty impacts of watershed programs, there is a need to promote pro-poor interventions and institutional arrangements that enhance equitable sharing of both costs and benefits. Future research needs to investigate how effective local institutions for watershed collective action emerge and how such institutions adapt during the post-project phase and influence the propensity for sustainable community management of local investments. Without effective and adaptable local institutions, the long-term sustainability of watershed investments will remain questionable.

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Enabling Equitable Collective Action and Policy Change for Poverty Reduction and Improved Natural Resource Management in the Eastern African Highlands

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INTRODUCTION

Despite increased awareness of the institutional foundations of development and natural resource management, development and conservation interventions continue to be carried out with an uncritical view of equity issues. The shortcomings lie not only with practitioners, but within research as well. Research on the institutional dimensions of development and NRM continues to emphasize problems rather than solutions. This research tries to address these shortcomings by integrating institutional analysis (for problem identification and targeting of interventions) with institutional interventions (for development of "good practice").

BACKGROUND AND METHODOLOGY

The research was conducted under the rubric of the African Highlands Initiative (AHI), an eco-regional program of the CGIAR, which aims to improve livelihoods and arrest natural resource degradation in the intensively cultivated highlands of eastern and central Africa. AHI works with interdisciplinary teams of scientists and development partners to field test new approaches and synthesize results regionally. Unlike watershed management programs that focus primarily on soil and water conservation, AHI fosters an approach to integrate all components of the production system and landscape. This requires that tradeoffs and synergies between diverse goals be made explicit and managed. It also acknowledges that NRM is inherently political: decisions about which management goals to foster lead to unequal benefits and often favor some groups at the expense of others.

This study reports on findings from the institutional research associated with integrated social, biophysical, and institutional interventions. The primary objective was to develop and document successful approaches for facilitating equitable collective action processes and negotiated NRM solutions.

The research was conducted in four sites, two in Ethiopia and two in Uganda. All are highland micro-watersheds characterized by smallholder farming systems, high population density, clear evidence of natural resource degradation, and their representativeness of larger highland areas within each country. These sites have each served for 5–10 years as benchmark sites for the AHI. Each site is home to one or more ethnic groups with a long history of occupation of the area and limited in-migration from other groups or areas.

In each site, the research began with a situation analysis, using focus group discussions to identify local and external institutions and the participants, beneficiaries, and nature of benefits derived from each. Household interviews were then used to quantify levels and variation in household assets and participation or involvement with local and external institutions. Second, site and national stakeholder workshops were conducted to share findings and determine action research priorities. The workshops shared feedback from the situation analysis, identified and prioritized NRM issues requiring collective action and changes in institutional practice, and developed preliminary action plans for prioritized topics. Third, site teams conducted action research —both local and higher-level—to test strategies to support solutions to identified problems. The final step was to evaluate outcomes and impacts from the action research intervention through a participatory methodology.

FINDINGS

Local communities were found to have a rich array of collective action institutions, which in turn provide a variety of economic and social support functions. While some of these were seen to support some groups more than others, most forms of collective action were found to play largely positive roles. However, practices of formal support agencies were found to be biased by wealth, gender, levels of political influence, and other factors, exacerbating inequities over time.

Local forms of collective action seldom emphasize common solutions to felt NRM problems, other than provision of inputs (labor, capital, land). Action research findings have illustrated the potential for improving livelihoods and fostering more sustainable use of natural resources by catalyzing collective action on NRM where it is absent. Effective collective action seems to require use of both informal negotiation support processes and formal bylaw reforms and enforcement. Negotiated solutions and bylaw reforms create stakeholder buy-in, which reduces ambiguity and makes people feel more accountable to other parties when brought to account for their actions. A combination of formal and informal mechanisms seems to be needed to revitalize natural resource governance and related livelihood and environmental service outcomes. External agents (such as NGOs or local government) also have an important role to play, including information provision, community mobilization, facilitation, advocacy, monitoring, and negotiation support.

Strategies to improve NRM at farm and landscape levels proved to be more effective when more equitable decision-making processes were used that explicitly acknowledge diverse "stakes." However, given the divergence of these stakes, bylaws also played a fundamental role in holding each party accountable to resolutions reached through negotiations.

External development institutions often unintentionally increase existing inequities by working only with active community members and failing to establish mechanisms for equitable access to project benefits. Innovations to identify and overcome these biases are sorely needed.

Adapting bylaws to local conditions and stakeholder priorities also induced marked livelihood improvements by enabling collective action and technology adoption. However, participatory bylaw negotiations did not reduce the need for bylaw enforcement. Rather, participation made offenders feel more responsible to agreements once accused, increasing the effectiveness of informal efforts to increase compliance.

IMPLICATIONS FOR PRACTITIONERS

- Collective action serves critical development and social support functions in local communities. External institutions should seek to build upon local institutions that contribute most to livelihood goals, in particular for women and poorer households. Part of this effort should be oriented toward linking technology dissemination with low-risk forms of credit and diversification of assets of the poor.
- External development institutions often unintentionally increase existing inequities by working only with active community members and failing to establish mechanisms for equitable access to project benefits. Innovations to identify and overcome these biases and socially-disaggregated monitoring of interventions are sorely needed.
- Local forms of collective action emphasize enhancing buying power and "safety net" functions, leaving many common NRM problems unaddressed. External support for "horizontal" negotiations among local resource users is needed to support collective solutions to NRM problems that remain unaddressed despite their negative livelihood consequences.
- Extension and development organizations must consider the political dimensions of NRM. There are winners and losers from any given development intervention, and there are diverse interests and stakes on any given issue. Organizations must therefore learn to foster more equitable solutions to development and NRM challenges through stakeholder identification, negotiation support, and socially-disaggregated monitoring of interventions.
- NGOs, local government, and other development actors need to get involved in natural resource policy formulation and implementation processes. Their facilitation skills are important for fostering more equitable and participatory natural resource governance processes since there are close links between negotiation support, technological innovation, and rules and regulations on NRM.
- Fostering collective action to address felt community needs requires informal negotiation support, formal bylaw reforms, and forms of enforcement adapted to local social realities. Participatory bylaw reforms create stakeholder buy-in, which reduces the cost of enforcement and reduces ambiguity. Neither formal nor informal mechanisms would be fully effective without the other.
- The external agent, whether an NGO, community-based organization, or local government, can help bear the transaction costs of organizing collective action by providing information and mobilizing communities. Since rules restrict certain land use behaviors seen to harm other stakeholders, technological alternatives can also help landowners to bear the livelihood costs of good governance.

POLICY IMPLICATIONS

- Policymakers must seek ways to build upon the strengths of local institutions and the crucial social support functions they provide, in particular for women, the poor, and other marginalized groups. They must also seek ways to facilitate the participation of poorer households by assisting them in bridging the assets gap that hinders their ability to invest.
- Many national natural resource policies exist, although many are not followed. Participatory bylaw reforms suggest an interest in improved natural resource governance among local residents. More attention should be paid to building the "soft skills" and processes required to create community buy-in to good governance, and to enforcement mechanisms that are effective, while providing alternatives (technologies, cost sharing among stakeholders) where policies restrict livelihoods options.
- The partitioning of mandates between research, extension, and law enforcement agencies causes these issues to be treated separately and important synergies to be lost. Mechanisms and incentives for institutional cooperation toward more equitable and negotiated solutions to NRM are needed to harvest the potential of technology-governance synergies.
- Local residents can formulate NRM bylaws that address their own felt needs, but bylaw enforcement by communities themselves is more of a challenge. Communities want local government to play a role in the enforcement of bylaws. This should be taken into account in the process of local government reforms in the region so that participatory governance processes can be institutionalized in the region.
- Empirical research on the institutional aspects of development has advanced understanding of the pitfalls of development practice and the characteristics of local institutions. Two fundamental gaps remain. The first is ensuring widespread access to lessons learned among development practitioners to improve their practice. The second is the need to move beyond the identification of problems to the identification of viable solutions ("good practice") through the coupling of empirical and action-oriented research.

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The Transformation of the Commons:
Coercive and Non-Coercive Ways

Bekele Hundie and Martina Padmanabhan

BACKGROUND

Traditional communal landholding has long been prevalent in the Afar region of Ethiopia, accommodating the interests of different user groups for many generations. This form of landownership, which entails use of pastoral resources scattered over a wide area to produce livestock, is attributable to ecological conditions characterized by frequent drought. The harsh environment in which herders raise their livestock requires constant mobility to regulate resource utilization via a common property regime. In contrast to the mobile way of life characterizing pastoralism, agriculture as a sedentary activity is only marginally present in the lowlands of the Afar region. However, the traditional land use system is changing because of pressures from both governmental policy and natural events such as drought.

This study gathered data from 180 selected pastoral households in six sites in the Afar region of Ethiopia in 2004–06. In addition to household surveys, secondary and detailed qualitative data were collected though group and key-informant interviews; evidence was further strengthened by reviewing secondary sources and conducting expert interviews. Analysis shows that the question of whether the recent option of small-scale farming is taken up by pastoralists depends on factors such as suitability of the area for agriculture, per capita livestock holding of a household, access to wage employment, and external support. Overall, the study indicates that communal land ownership, which forms the basis for pastoralism, is under pressure as a result of state intervention and natural challenges, confirming results of other studies of pastoral areas.

COERCIVE AND NON-COERCIVE PROPERTY RIGHTS CHANGES IN THE AFAR REGION

State intervention in the Afar region, mainly since the early 1960s, has produced detrimental effects on pastoralist livelihoods. First, the state expropriated large areas of dry-season rangeland, exacerbating feed scarcity in the area. Second, the state enforced the transformation of pastoralism into sedentary farming without taking into account pastoral households' capacities to produce crops. Development schemes initiated and financed by the state couldn't enhance the capabilities of pastoral households to derive the full benefits of their land. Devoid of public participation in their formulation, these schemes paradoxically fostered dependency among pastoralists, which remained even after the schemes ended. Third, state intervention created a window of opportunity for some pastoralists, while others, such as women and the poor, were deprived of the benefits of the new arrangements.

But Afar pastoralists are threatened not only by the coercive actions of the state, but also by natural challenges such as recurrent drought. Two major droughts have hit the area since the mid-1990s, and short dry spells are common. This has had two major consequences. First, the prevalence of drought has reduced total livestock assets and productive capacities of the area. And second, it has recalibrated the terms of trade against the pastoralists. (Assessment reports of aid agencies indicate a sharp decline of livestock prices during the droughts.) Faced with such natural challenges, pastoral households employ coping strategies which may involve different ways of using the available resources, even looking beyond pastoralism. On the one hand, this natural challenge triggered the intervention of external actors to facilitate cooperation among pastoralists, providing a catalyst for them to take up farming. On the other hand, it increased the pastoralists' expectations that they would benefit more by taking advantage of the external assistance and participating in collective efforts. These expectations, realized or not, have produced cooperative decisions toward engaging in organized activities such as farming.

DISCUSSION AND RECOMMENDATIONS

With regard to the present study, two points are worthy of policy attention.

1. Averting state coercion: The coercive expropriation of pastoral land has slowed since 1991, and Afar pastoralists have regained some of their lost rights over their traditional land. However, the current national policies are not immune from the anti-pastoral sentiment. The 2005 national land use proclamation declares that communal rural land holdings may be converted to private holdings if the government finds it necessary. There is also a plan to expand irrigated land in the Awash basin. Implementation of such a plan would require evicting pastoralists. Current experiences in non-pastoral areas show that undervaluation of land, large variance between what investors pay and what evictees receive, and failure of evictees to start new livelihoods are critical problems associated with the expansion of investments in rural areas of Ethiopia. These problems are attributable to a lack of effective institutions and appropriate governance structures, including lack of clear guidelines on land valuation, marginalization of landholders in the process of land transfers, and a weak organizational setup to administer the transformation process.

The relatively low participation level of better-off pastoralists in collective action to start farming implies that crop production is not a substitute for, but is rather subsidiary to, livestock production in dry areas.

2. Harmonizing policy emphasis with the potentials of pastoral areas: The transformation of property rights due to natural challenges has had important implications for the livelihoods of pastoralists. Poor households (in terms of livestock assets) are more interested in farming compared to better-off ones. Decisions of pastoralists toward farming could reflect their reactions toward recurring natural hazards: farming is thought to be a post-shock livelihood by households that cannot call upon their pastoral assets post-drought.

Despite this fact, two points can be made about the potential of farming in the study areas in general. First, livestock appear to be somewhat more tolerant of drought conditions than crops, since they are mobile. The existence of mobile pastoralism in dry regions of the world also implies the relative viability of livestock production as compared to rain-fed agriculture in these regions. Efforts to produce food crops under rain-fed conditions may not provide any substantial remedy to the decline of food security when drought occurs; during a prolonged spell it presumably will not. Second, although crops can be produced using irrigation in some ecological niches, an irrigation-based production system is less appealing in many parts of Afar given the scarcity of water. Consequently, livestock production appears to be the best, and in some areas the only, option under the existing technologies.

CONCLUSION

The relatively low participation level of better-off pastoralists in collective action to start farming implies that crop production is not a substitute for, but is rather subsidiary to, livestock production in such dry areas. Therefore, instead of overrating the sustainability and impact of farming on poverty reduction, it would be worthwhile to focus on livestock production. In this regard, improving key services, such as the livestock-market information system, veterinary and financial services; investing in infrastructure; and enhancing feed management are key to turning the silent transformation of the commons into a viable development path for the Afar. Moreover, other alternative income sources should be promoted in addition to farming as a means of improving the capacity of (poor) pastoralists to overcome potential livelihood challenges.

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Unmaking the Commons:
Collective Action, Property Rights and Resource Appropriation in Somali Region, Ethiopia

Fekadu Beyene and Benedikt Korf

BACKGROUND

In Ethiopia, much debate and policy advice on agro-pastoralism and pastoralism is based on stereotypical representations of pastoralist areas, the notion among the ruling elite that pastoralism is outdated, and technical interventions that promote sedentarization. A farming highland and pastoralist lowland dichotomy tends to prevail in public discourse. The resulting bias in land tenure policies largely ignores the specificities of the pastoralist lowlands and considers sedentarization as the precondition of progress. Typically, the state aids the expansion of agriculture into the lowlands, but fails to regulate the tenure transformations that accompany the diversification of rural resource use. Consequently, property rights are undergoing significant transformation along with economic changes, and land tenure relations are shifting from communal and collective use to enclosed and individual use, to the detriment of the poor.

PASTORALISM, PROPERTY RIGHTS, AND COLLECTIVE ACTION

This case study investigates practices of collective action in water resource management of the (agro-) pastoralist commons in eastern Ethiopia with an emphasis on the following questions:

- What types of collective action prevail?
- How do changes in property rights affect incentives for collective action?
- What are the distributional consequences in the welfare of pastoralist households?

The literature on collective action identifies a number of factors that induce cooperative behavior in natural resource management: asset ownership, homogeneity of group members, mutual vulnerability of group members, and dependence on the resources. In addition, institutional arrangements (penalty systems and rule enforcement) can induce cooperative behavior.

STUDY SITES AND METHODOLOGY

This study focused on three districts in eastern Ethiopia that represent different (agro-) pastoralist household economies and political settings. Data collection employed focus group discussions using rapid rural appraisal techniques, a detailed household survey, and key informant interviews with experts on institutions related to resource governance. A qualitative in-depth analysis of the data looked into the specific factors that affect the rules governing collective action and property rights and the distributional effects of the institutional arrangements.

FINDINGS ON COLLECTIVE ACTION IN WATER MANAGEMENT

Wells

Access rights are usually based on a household's contribution of labor to the digging and maintenance of wells. Non-contribution leads, in theory, to restrictions on access. Rights are also usually granted in expectation of future reciprocity; this is important because differentiated rainfall patterns can bring water scarcity to one location but not necessarily to another in the region. Where water tables are deep and well construction requires high labor inputs, access to water is usually restricted for non-members. Reciprocal sharing is more common where initial investment costs are low.

In times of drought crises, pastoralist households seek grazing resources and well water based on kinship relations. However, when an influx of non-members with kin relations becomes common, it reduces incentives for members to contribute to maintenance. Collective herding increases the pressure on water wells as noncontributing households water their own livestock with the larger pool of animals.

Because it is almost impossible to exclude non-members from using well water, especially during crises, incentives for members to contribute to well management decline the more often crisis situations prevail.

Cisterns

There are marked differences in the case of private and communal cisterns. Owners of private cisterns use them to generate revenue: users have to pay. In communal cisterns, those who contribute labor gain access, and revenue generated from water sales to non-members is shared among members. The proliferation of private cisterns in the 1980s and 1990s brought water prices down and reduced incentives to maintain communal cisterns and wells. However, with the gradual decline of communal water points and restrictions on construction of new cisterns, private owners were able to increase prices, and water became unaffordable or unavailable during droughts.

Because de facto privatization provides some individuals with secure access to resources and additional income but excludes others, collective action on a local scale is insufficient to counter the unmaking of the commons. It needs to be complemented by a land tenure policy that ensures the rights of communal users.

The move to construct private cisterns was a turning point in collective action for joint management of communal water resources. Wealthier clan members did not have incentives to contribute to the maintenance of communal water points. In effect, maintenance was relegated to politically or economically less powerful clan members. This transformation of intra-clan responsibilities and duties effectively changed the genealogical and social networks as well as the tight connections between rights and duties that were inherent in customary rules.

Ponds

The construction of water ponds in the study area has been initiated by state-led development interventions. User groups provide labor during construction and for maintenance. Non-contribution results in oral warnings and fines. However, enforcement is often lax due to social obligations and a reluctance to punish. In principle, all members who have contributed have the right to use water from communal ponds. Asset-poor households often rent oxen to ensure their contribution to pond construction. However, not all such households can afford the rental, may thus be unable to derive benefits from their water rights, and are thus effectively excluded from these entitlements.

MULTIPLE ARTIFACTS, MULTIPLE USES, MULTIPLE RULES

The evidence shows that incentives for collective action in managing water systems depend on economic cost-benefit considerations and social norms. Exclusion of non-members is difficult to enforce, which reduces the incentives to contribute to collective action in maintaining those systems. Elite capture comes at the expense of the poor segments of the clan, which increases economic inequalities within clans.

The relationship of water and pasture resource use

In the agro-pastoral economy, access to water and pasture resources is intertwined. In principle, each clan possesses primary user rights over its own territory and is expected to confine herd movement within this territory under normal conditions. Asking permission to use another clan's communal grazing and water resources is only considered appropriate when own-clan resources are inadequate due to drought, violent conflict, or subject to prior inter-clan negotiation rituals.

The right to pasture is not necessarily linked with the right to water points, but generally they are granted in combination (excluding access to water while granting access to pasture would make enforcement costs prohibitive and likely create disputes at water points). This differentiates secondary users: those wealthy enough to buy water from private cistern owners can make use of the access rights whereas less wealthy households experience an entitlement failure.

Reciprocity and social obligation

Entrance to another clan's territory generally requires prior negotiation, even though the hosting clan is socially inclined to grant access (the reciprocity principle). Inter-clan kinship relations are important in negotiating and differentiating access to grazing resources, for example if clan members have relatives within other clans with distinct territories. These lineages and networks across clans and sub-clans played an essential role in establishing reciprocity.

The spread of private enclosures in some areas has complicated the system of granting access to grazing resources. Some clans have subdivided their territory and distributed the land to individual private rights holders, or influential clan members have constructed enclosure fences for cisterns or pasture. As a result, overall communal resources are continuously shrinking, complicating mobility patterns across seasons and years and restricting the options for coping with drought.

CONCLUSIONS

In eastern Ethiopia, property rights regimes to pastoral resources have undergone dynamic changes, and these changes affect incentives for and benefits from collective action to manage common property resources and the different technologies and artifacts that make benefit streams available from water and pasture use. These changes have further differentiated socioeconomic livelihoods and capabilities within agro-pastoralist society. The trend is toward privatizing and individualizing benefit streams to resources. Rights to those benefits are individualized, but duties to maintain commons resources are externalized. The impact of this on regulating access to the pastoral commons has disturbed reciprocal resource-sharing arrangements between clans, induced inter-clan disputes, and restricted mobility.

De facto privatization and individualization provide some clan members with secure access to resources and additional income, but *potentially* exclude others. While inter-clan negotiation may entail access to pasture commons, asset-poor households may fail to capture the associated benefit streams when water access is privatized and prohibitively priced. In that case, clan members may have endowments to some commons resources (like pasture), but will not enjoy the entitlement to actual benefit streams because of exclusion from others (like water).

Customary mobility patterns as a strategy of risk coping are increasingly disturbed, and this increases the risk marginal pastoralist households experience in the face of climatic variability. While the effects of enclosure and privatization on socioeconomic differentiation are complex, overall they exclude poor households from access to resources essential for keeping livestock.

POLICY IMPLICATIONS

Past and present land tenure policies have tended to discriminate against the communal interests of pastoralist communities, and the federal government's policy does not yet accommodate both customary modes of communal land use and emerging trends toward privatization. Collective action on a local scale is insufficient to counter the unmaking of the commons. It needs to be complemented by a land tenure policy that ensures the rights of communal users. Property rights to land and its multiple resources are central in defining incentives for collective action. Neither clans nor customary rule systems are adequate to fully adapt to changed environmental and social conditions. Nor has the state yet found a constructive role in the encounter with pastoralism and clan societies. A redefinition of this relationship is urgently needed.

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Escaping Poverty Traps? Collective Action and Property Rights in Postwar Rural Cambodia

Anne Weingart and Michael Kirk

INTRODUCTION

Property rights and collective action were severely undermined in Cambodia by the Khmer Rouge regime. After democratic consolidation, attempts to recreate a legal framework that secures access to land and natural resources were made by the Cambodian government and strongly supported by donors and civil society. Nevertheless, the new laws were only partly implemented, created new uncertainties among the rural poor, and benefited the more powerful.

This case-study identifies practices and policies that enhance the way collective action and property rights are used to build assets and income streams for the rural poor. To provide policymakers and others with a better understanding of property rights systems in place, the study assesses existing property rights systems in rural Cambodia to identify what benefit streams poor people can rely on. It also identifies forms and mechanisms of economic and social cooperation, how they influence property rights systems, and to what extent the rural poor are part of village networks. Based on this assessment, linkages between property rights, collective action, and poverty are analyzed.

THEORETICAL FRAMEWORK

The conceptual framework guiding this case study builds on the Institutional Analysis and Development (IAD) framework. This framework separates context and action arenas. Context represents initial socioeconomic and political conditions shaping the opportunities of people for possible actions: the asset base, shocks and risks, and political structures. These factors affect property rights and collective action, which themselves form part of the initial context. The action arena is where individuals, the state, and other actors make use of institutions of property rights and collective action. Poor education, exclusion from social groups, and landlessness are among the many obstacles preventing people from engaging.

While context focuses on initial conditions that affect people's actions, their agency interactions with others shape their future. In their interaction processes, actors reinforce existing institutions or even create new ones. They can have direct effects on wellbeing or change institutions themselves. A number of feedback loops might occur before institutional changes affect the situation of the poor. However, improved social inclusion, income and health, and reduced vulnerability may serve as evaluative criteria to assess outcomes.

METHODOLOGY

A mix of empirical research methods was employed. Interviews and group discussions with NGOs, donor agencies, and ministry staff identified research sites. Sites were selected with regard to different experience with formalized institutions for cooperation, natural resources endowment, and accessibility. Data collection included semi-structured interviews with key informants to gather information on village structure, a survey of 146 households, group discussions, maps to identify changes in resources and to examine property rights of different user groups, and experimental games to assess trust levels. Secondary data analysis helped fill gaps the field research could not address.

RESULTS

The findings indicate that the rural poor have access to natural resources that contribute a large share of their livelihoods, but accelerating resource degradation and conversion of natural resources into arable land leaves them with ever fewer options to derive income from these resources. Furthermore, slow land titling and demarcation in rural areas leave people vulnerable to land grabbing and exclusion from the benefits of common property. Findings also indicate that collective action still suffers from the Khmer Rouge legacy, which destroyed large parts of traditional social networks, including mutual help and religious institutions. Forced resettlement and collectivization also reduced people's willingness to cooperate at a larger extent in agriculture.

The study shows that mutual help groups, religious activities, and small-scale associations are gaining ground. However, the poor lack confidence to take part in those associations and are sometimes unable to use the services offered. In addition, collective action to secure natural resources does not yet address ongoing resource degradation adequately. Formal, legally backed institutions lack local recognition and are unable to enforce rules set to protect the resources. Villages that manage their resources following traditional principles tend to cooperate better across village boundaries and are thus more successful in natural resource management. Nevertheless, they too are unable to protect them against outside interventions. Low degrees of trust also contribute to low degrees of cooperation in natural resource management.

For a country disrupted for decades by war, genocide, and forced collectivization, it is not surprising that neither property rights systems nor collective action yet fulfill the expectations of research institutions, civil society organizations, or donors.

CONCLUSIONS AND POLICY IMPLICATIONS

In rural Cambodia, natural resources such as local forests, fish ponds, lakes, water streams, or harvested fields are usually commonly owned and managed. This makes effective collective action a precondition for sustainable resource management as well as income generation for the rural poor. For a country disrupted for decades by war, genocide, and forced collectivization, and which is still characterized by fragile government institutions, it is not surprising that neither property rights systems nor collective action yet fulfill the expectations of research institutions, civil society organizations, or donors.

Under Cambodia's devolution policies, important monitoring and enforcement mechanisms executed by weak local government authority are removed abruptly after responsibility is handed over to local forest or fishery community organizations. Yet these communities are neither officially acknowledged by the government nor able to execute all the responsibilities assigned to them. The institutional vacuum that emerges does not favor of the poor.

For formal institutions to efficiently manage the local commons, the content, procedures, and sequencing to formulate and enforce laws and statutes integrating both guiding principles of a devolving state and traditional local rules, and enforcement mechanisms should be given more consideration. An important first step will be to reduce uncertainties about village or commune boundaries, and procedures to be taken in case of violation of rules. Enforcement will only work at the interface of established informal and newly developed formal institutions if administrative procedures are transparent and there is final recourse to the judiciary.

For the rural poor, participation in organizations that foster collective action and govern the commons is costly: activities are time consuming, direct compensation cannot be expected, and unbalanced reciprocity often does not work. Although the poor profit most from protecting their local commons, they are not necessarily able to defend their interests effectively within village organizations. They remain dependent on the more affluent to initiate and continue cooperation. As the poor often have no formal education, a weak human capital base, and very little land, they are less likely to get involved in formalized groups, especially those that have been externally established to support agricultural activities.

The poor do participate in informal village groups and gatherings, though, and this is an entry point for further cooperation. However, empirical results show that they are more likely to comply with rules and mechanisms than to take deliberate action to shape and defend them. Complementary to this, the role of religious festivities and Buddhist values and norms needs further consideration. Jointly exercised religious activities provide an instrument to enhance cooperation in and between villages, and are explicitly used by political entrepreneurs and local leaders as a means to protect natural capital and to contribute to social cohesion and trust.

Building on religious initiatives and the overall imperative of harmony, people start to communicate experiences where collective action had once been successful to protect their interests. They do not actively protest and demonstrate but formulate petitions and memorandums to raise awareness of their problems, address conflicts, and ask for external support. These activities should be regarded as a starting point for collective action to protect property rights and to make use of a reformed property rights system that allows for new forms of collective action to combat poverty.

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The Role of Collective Action in Securing Property Rights for the Poor:
A Case Study in Jambi Province, Indonesia

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(with Neldysavrino, Yentirizal, Syamsuddin, and Deddy Irawan)

INTRODUCTION

This case-study presents a participatory action research (PAR) approach to analyzing decentralized forestry and natural resource management and land property rights issues, and catalyzing collective action among villages and district governments. The study focuses on understanding the current policies governing local people's access to property rights and decision making processes, and learning how collective action among community groups and interaction among stakeholders can enhance local people's rights over lands, resources, and policy processes for development.

The authors applied PAR in two villages, one each in the Bungo and Tanjabbar districts of Jambi province (Sumatra) to facilitate identification of priorities through phases of planning, action, monitoring, and reflection. PAR also helped participants decide what needed to be assessed, design further steps, and collect necessary information.

CONTEXT

Villages were selected based on their relatively strong kinship ties, medium levels of conflict between villagers and outside actors, high poverty levels, and proximity to national parks and forestlands. Villagers derived their incomes from small-scale rubber gardens, off-farm labor, timber and logging, and non-timber forest products. Production forest, protection forest, and national park are considered by the local community to be part of their traditional territory.

Before 1998, management of natural resources, including forestry, was characterized by strong control by the central government. In 2001, a new law gave districts greater autonomy to formulate their own policies and exert control over resources. The policy was intended to improve local people's management of and access to resources, but it was withdrawn in 2002 due to environmental degradation, failure to provide benefits to local people, and an uncertain business climate. In 2004, the government issued a law that clarified shared authority and re-instituted the hierarchy between central and district governments for dealing with various governance issues. However, struggles over power in the forestry sector continue.

DECENTRALIZED FOREST POLICIES, PROPERTY RIGHTS AND COLLECTIVE ACTION

There were no marked differences between the two districts in how they responded to the government policies and how they dealt with property rights and collective action. Both shared concerns over growing needs for more lands for development and clarifying property rights for local people, encouraging them to propose forestlands conversions to the ministry. However, NGOs and others have contributed to shaping local policies. For example, in one village, such interaction has contributed to internalizing principles of transparency, openness, and participation.

Local forest people expressed a strong need to secure their traditional farmlands and rubber gardens, whether outside or inside forestlands. Lands outside can be readily secured, but people may need to pay and wait for some time before obtaining such rights, and only a few go through this process. The central government has delegated to district offices affairs related to management and administration of lands outside forestlands and to educating people about the importance of legal security over lands. Efforts to secure lands for local people, whether within or outside state-claimed forestlands, face a complicated procedure.

Local land tenure insecurity is due to governmental frameworks that ignore the needs of forest-dependent people. Some regulations and ministerial decrees, for example, favor large-scale investment. Some national-level regulations gave local groups or cooperatives the right to manage or use limited amounts of forest, but their implementation has been problematic.

The government is currently embarking on new policies to promote property rights for local communities and the poor. While the programs offer opportunities for communities to engage in collective action and improve their wellbeing, questions remain as to whether their implementation will truly secure property rights and promote genuine collective action or benefit poor communities.

Action research may be an effective strategy for fostering collective action and maintaining the learning process that leads groups to be more organized and cohesive, and district government officials to be more receptive to stakeholders.

FACTORS STRENGTHENING COLLECTIVE ACTION

Trust and clearly delineated authority lead to effective collaboration among groups managing natural resources. In this study, trust developed through the creation of a mechanism wherein people could share their concerns openly and regularly. This led to improved understanding of local problems and willingness to work toward resolving land-use planning issues. Government officials also became more likely to abide by laws when a clear division of authority was laid out in the legislation. However, centrally designed legislation was only effective when developed and agreed upon by the various levels together.

FACTORS AFFECTING COLLECTIVE ACTION WITHIN GROUPS

Most participants agreed that individual group members have strong motivation to work collectively. Women's groups emphasized trust as an important factor in deciding to join a group. They considered trust and honesty crucial for a group to be strong and to reach common goals, build effective leadership, and sustain group cohesion. A sense of trust within groups made members more optimistic about reaching common goals.

COLLECTIVE ACTION TO AVOID ELITE CAPTURE

At higher levels of governance, some agencies applied pressure to assure prioritization of their programs and district development plans, resulting in fewer chances for funds to be allocated to needier parties. For example, one village head whose role should have been to mediate between the parties asked a group of farmers to pay a fee to him for the sale of their lands to a palm oil company. The group members united, stuck to their commitment not to sell land individually, and refused to pay the fee to the village head. They also used various means to overcome the village head's inappropriate behaviors, for example, by sending complaints to the subdistrict. By building relations with outsiders, making the misconduct obvious, and thereby forcing concerned elites to stop their actions, the group avoided elite capture.

COLLECTIVE ACTION TO PRESERVE PROPERTY RIGHTS

At the district level, the authors worked with officials to clarify areas of expertise and resource management options, and to improve both transparency and accountability. However, actual policy changes were modest—primarily increased willingness to work with district partners to resolve outstanding issues of forestland reallocation. Efforts to strengthen civil society as a means to contribute to policy formulation and more seriously monitor government have also been important for identifying and strengthening mechanisms for accountability. Facilitated community groups have shown the capacity to participate in decisionmaking for development, build alliances and networks, and reduce elite capture. However, it is also necessary to network with more powerful stakeholders to accomplish goals like more equitable access to land, preventing elite capture, increasing incomes, and improving women's status.

CONCLUSIONS, POLICY IMPLICATIONS, AND RECOMMENDATIONS

This study concludes that action research may be an effective strategy for fostering collective action and maintaining the learning process that leads groups to be more organized and cohesive, and district government officials to be more receptive to stakeholders.

POLICY IMPLICATIONS

- It is possible to catalyze collective action and strengthen local self-confidence and capabilities to interact with more powerful outsiders, negotiate effectively, and bring pressure to reduce elite capture of local benefits.
- The differences within and between communities are vast, and participatory action research within comparatively homogenous groups is one way to accommodate this diversity in local planning. By focusing on what communities can and want to do, a climate of confidence is built that can contribute to successful development and conservation outcomes.
- Participatory action research with government officials can build their willingness to listen to a wider variety of stakeholders and increase their respect for local community input and willingness and ability to manage adaptively and equitably.

POLICY RECOMMENDATIONS

- When implementing development programs, work with strongly motivated and already existing community groups, wherever possible. Provide local groups with access to networks of information and institutions.
- Invest more to support monitoring and supervision activities, and promote transparent and participatory forums for deliberations.
- Build capacity of local groups to grasp opportunities for improving livelihoods and informing development planning; enable them to increase their knowledge and skills in group organization and financial and resource management.
- Enhance coordination and shared learning among government units; apply transparent and participatory processes; and use a case-by-case approach to address land-use planning and forest reallocation issues.

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The System-Wide Program on Collective Action and Property Rights (CAPRi) is an initiative of the 15 centers that belong to the Consultative Group on International Agricultural Research. CAPRi fosters research and promotes collaboration on instititutional aspects of natural resource management between CGIAR centers and National Agricultural Research Institutes. CAPRi contributes to policies and practices that reduce rural poverty by analyzing and disseminating knowledge on ways that collective action and property rights institutions influence the efficiency, equity, and sustainability of natural resource use. Its Secretariat is hosted by the International Food Policy Research Institute's Environment and Production Technology Division

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