Collective Action and Property Rights for Poverty Reduction

A Policy Conference

February 28—March 2, 2007
Entebbe, Uganda

Organized by the CGIAR Systemwide Program on Collective Action and Property Rights (CAPRI)
In 2004, the CGIAR Systemwide Program on Collective Action and Property Rights (CAPRi) with the funding from the German Ministry for Economic Cooperation and Development (BMZ) began a project that aims to contribute to poverty reduction 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 is intended to provide policymakers, NGOs, and community groups with knowledge of the factors that strengthen rights of the poor to land and water resources and lead to more effective collective action by the poor.

Six grants were awarded to 4 CGIAR centers (AHI, CIFOR, ICRISAT, and IFPRI) and 2 German universities (Humboldt University of Berlin and Philipps-Marburg University). The project sites include Indonesia, Cambodia, the Philippines, India, Kenya, Uganda, and Ethiopia.

The conference is the final event of this three-year global research project. It will bring together six research teams and relevant policymakers from project countries with the aim of identifying and synthesizing policy lessons from this CAPRi-sponsored project. It will also discuss the key issues to be considered in implementing policy lessons, including effective ways for disseminating the research findings. Another goal of the conference is to forge stronger linkages between researchers and policymakers and to stimulate new discussions on the role of the institutions of collective action and property rights in poverty reduction.
Acknowledgments

The organizers of this conference, the CGIAR Systemwide Program on Collective Action and Property Rights (CAPRi), would like to express gratitude to the German Ministry for Economic Cooperation and Development (BMZ) for funding this project. We would also like to thank the governments of Norway and Italy and the World Bank for their continued support of CAPRi’s work, and the CAPRi Executive and Steering Committees for their continued guidance. We are thankful to Chelo Abrenilla of IFPRI-Washington, DC office and Eriasaph Owere of IFPRI-Kampala office for arranging logistics for the conference.

We are most grateful to the research team leaders: Laura German, Carol Colfer, Bekele Shiferaw, Agnes Quisumbing, John Hoddinott, Konrad Hagedorn, Martina Padmanabhan, and Michael Kirk, as well as their research teams, for their contributions to this project.
Program Overview

Wednesday, February 28, 2007

Field trip

Thursday, March 1, 2007

Registration

Opening remarks and introductions
Ruth Meinzen-Dick, CGIAR Systemwide Program on Collective Action and Property Rights (CAPRi)

Keynote speech: “Donor Perspectives on Trends in Poverty Reduction”
Christoph Kohlmeyer, German Ministry for Economic Cooperation and Development (BMZ)

Laura German, African Highlands Initiative (AHI)

Coffee Break

Carol Colfer, Center for International Forestry Research (CIFOR)

Lunch

Ratna Reddy, Center for Economic and Social Studies, India (in collaboration with the International Crops Research Institute for Semi-Arid Tropics-ICRISAT)

Presentation 4: “Collective Action and Property Rights for Poverty Reduction: The Case of Ethiopia (Afar and Somali Regions)”
Martina Padmanabhan, Humboldt-University Berlin

Coffee Break

Working Groups

Plenary Discussions

***Welcome Reception***
Friday, March 2, 2007

Summary of the previous day

Presentation 5: “Leveraging Rural Institutions for Collective Action to Improve Markets for the Poor in Kenya”
Bekele Shiferaw, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

Coffee Break

Presentation 6: “Collective Action and Vulnerability: an Evaluation of Local Groups and Networks in Determining Pathways out of Poverty [Ethiopia and the Philippines]”
John Hoddinott, International Food Policy Research Institute (IFPRI)

Presentation 7: “Collective Action and Property Rights for Poverty Reduction: The Case of Cambodia”
Michael Kirk, Philipps-University Marburg

Lunch

Working Groups

Coffee Break

Plenary Discussions

Closing Remarks
Collective Action and Property Rights for Poverty Reduction
(A Collaborative Project of the Systemwide Program on Collective Action and Property Rights (CAPRi) supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) for the period of March 2004–July 2007)

A BRIEF OVERVIEW

The **main goal** of the project is to **contribute to poverty reduction 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 intends to provide policymakers, NGOs, and community groups with knowledge of the factors that strengthen rights of the poor to land and water resources and lead to more effective collective action by the poor. As a result, CGIAR centers and National Agricultural Research systems (NARs) partners will increase their capacity to integrate research on collective action and property rights into their work on agricultural technologies and natural resource management, and to work with community organizations.

Four grants to conduct empirical research on interventions to strengthen collective action and/or property rights for disadvantaged groups were awarded to CGIAR centers in partnership with NARs and community groups. Two additional empirical studies, led by Philipps-Marburg and Humboldt Universities, are studying collective action (CA) and property rights (PR) for accommodating multiple resource users in Cambodia and Ethiopia and conducting a comparative analysis of links between PR and CA, poverty, and resource degradation. The latter two studies include 2 PhD and 2 developing country nationals Masters’ trainings.

African Highlands Initiative (AHI)

**Project Title:** Whose Voices? Whose Choices? Sustaining Collective Action for Empowering Rural Communities and Local Stakeholders for Policy Change in Natural Resources Management [Ethiopia and Uganda]

**Lead Scientist:** Laura German (l.german@cgiar.org)

**Collaborators:** National Hosts: Ethiopian Agricultural Research Organization; Southern Region Agricultural Research Institute (Ethiopia); National Agricultural Research Organization (Uganda). 
**Areka Site:** Areka Agricultural Research Centre; Areka Office of Agriculture; Gununo, Denbezamine, Chew K’are and Doge Hanchicho Peasant Associations; Magistrate Court and leaders of Gununo and Denbezamine Peasant Associations; 
**Ginchi Site:** Holetta Agricultural Research Centre; Dendi Woreda Department of Agriculture and Rural Development; Dendi Woreda and Ambo Zone Water Resource Department; Dendi Woreda Health Department; Dendi Woreda Magistrate Court; Farm Africa. 
**Kapchorwa Site:** Kapchorwa District Landcare Chapter; Uganda Wildlife Authority; Action Aid – Uganda; Local Government (LC5); the Benet Lobby Group; Local government departments of production; Parish Environment Committees; Tuban Organic Farmers Association (Tuban parish) and Tuikat Watershed Association; 
**Kabale Site:** Community-based NRM facilitators; local government (LC1 to LC5); NAADS structures; NRM Protection Committees; local government departments of production.
Project goal: To enhance livelihoods and the equitable distribution of benefits for the poor, women, and other local stakeholders in eastern African highlands through collective action, equitable NRM, grass-roots policy support, and widespread sharing of findings and approaches.

Methods: A series of 4 main methodologies was used: (i) Situation analysis (wealth ranking and wealth-disaggregated household interviews to identify levels of the 5 capital assets; focus group discussions to understand the role of local and external institutions in fostering changes in household assets); (ii) stakeholder workshops at site and national level to share findings and agree on priority areas for action research intervention; (iii) participatory action research on prioritized themes; and (iv) impact assessments by action research theme.

Findings: Local institutions serve livelihood security functions, are relatively equitable, but fail to address NRM; many external institutions are not seen as equitable; action research identified institutional and policy gaps for improved NRM, identified local and external stakeholders and supported negotiations between them to foster more collaborative solutions; and implemented integrated solutions involving technologies, social mobilization and by-law reforms.

Outputs:
“Negotiation Support in Watershed Management: A Case for Decision-Making beyond the Farm Level” (German, L., S. Charamila and T. Tolera); AHI Brief E2.
“Mobilizing Collective Action for Vertebrate Pest Control: The Case of Porcupine in Areka” (Leulseged Begashaw, Waga Mazengia and Laura German); AHI Brief E3.
“Enhancing Equitable Technology Access for Socially and Economically Constrained Farmers: Experience from Gununo Watershed, Ethiopia” (Waga Mazengia, Anbes Tenaye, Leulseged Begashaw, Laura German and Yeyes Rezene); AHI Brief E4.
“Enhancing Collective Action in Spring ‘Development’ and Management through Negotiation Support and By-Law Reforms” (Shenkut Ayele, Amare Ghizaw, Zenebe Admassu, Mesfin Tsegaye, Getachew Alemu, Tesema Tolera and Laura German); AHI Brief E5.
“Soil and Water Conservation through Attitude Change and Negotiation” (Zenebe Admassu, Shenkut Ayele, Amare Ghizaw, Mesfin Tsegaye and Laura German); AHI Brief E6.
“Co-Management of Protected Areas is About Cultivating Relationships” (Joseph Tanui, Simon Nyangas, Awadh Chemangei, Francis Alinyo and Laura German), AHI Brief B7.
“Enhancing Improved Seed Dissemination through Local Bylaws in Gununo Watershed, Southern Ethiopia” (Waga Mazengia, Laura German, Ashenafi Mekonen and Kassaun Abere); presented at the Africa-wide Research Workshop on Bylaws held in Kenya, November 2006.
“Collective Action Incentive Structures: Lessons on Securing Multiple Benefits from Agricultural Landscapes” (Laura German); presentation given at the Society for Applied Anthropology meetings, Vancouver, Canada, March-April, 2006.
“Moving Beyond Component Research in Mountain Regions: Operationalizing Systems Integration at Farm and Landscape Scale” (Laura German); Journal of Mountain Science 3(4):287-304, 2006.
Center for International Forestry Research (CIFOR)

**Project title:** "Collective Action to Secure Property Rights for the Poor: Avoiding Elite Capture of Natural Resource Benefits and Governance Systems" [In two districts, Jambi province, Indonesia]

**Lead Scientist:** Carol J. Pierce Colfer (c.colfer@cgiar.org)

**Collaborators:** ICRAF, Regional Development Planning Agencies (Bappeda) in Bungo and Tajung Jabung Barat Districts, Jambi Province, Indonesia

**Project goal:** The project seeks to identify the conditions under which collective action over property rights can help significantly redirect benefits from natural resource management, land use, and environmental services directly to local communities. The project aims to build local institutional capacity for inclusive local planning processes, focusing on building local communities' capacity to influence policy decision-making processes and rationalizing local tenure systems to give stronger legitimacy to local communities' rights to benefits, including the ecological and social benefits of effectively managed resources. The central goal is to determine how to reduce the ability of elite groups to hi-jack decision-making processes that enable them to maximize the economic exploitation of forest resources in their own interests.

**Methods:** Participatory Action Research, which includes community and inter-government agency facilitation, data collection and analysis, focus group discussions, key informant interviews, and workshops.

**Findings:** Using participatory action research, it is possible to catalyze effective collective action among groups of men and groups of women in order to strengthen local self confidence and capabilities to interact and negotiate with powerful outsiders and bring pressure to reduce elite capture. Despite the difficulties, the approach seems to build some capacities and willingness among government officials to listen to a wider variety of stakeholders, increase respect for local community input, and to work across governmental sectors. Good and comparatively neutral facilitation is important in this process at both levels in order to foster collective action and clarify property rights over resources.

**Outputs:**

**Papers:**

- “Participatory Action Research and Its Application in District Government Settings” (Komarudin, H., Hasantoha, A., Oka, N.P., Syamsuddin and Irawan, D.); presented at the IASCP Biannual Conference in Bali, June 2006
- “Linking Collective Action to Non-Timber Forest Product Markets for Improved Local Livelihoods: An Indonesian Case” (Komarudin, H, Siagian Y.L. and Oka, N.P.), presented at the Research Workshop on Collective Action and Market Access for Smallholders held in Cali, Colombia, October 2006; (currently under review)

**Policy Briefs:**

- “Gender Equity: Revealing the Reality of Jambi’s Women” (de Vries D.W. and Sutarti, N.).
- “Are Community Aspirations Being Accommodated in Development Plans? A Lesson from Collective Action in Jambi” (Syamsuddin, Neldysavrino, Komarudin, H. and Siagian, Y).
- “Blessing or Misfortune? Local Community’s Collective Action and Institutional Adaptation to Transmigration Programs” (Adnan, H. and Yentirizal).
- “Opportunities for Policies and Programs to Encourage Collective Action and Strengthen Community Property Rights” (Hadi, M., Komarudin, H., and Schangen, M.); (under review)
- “Collective Action to Secure Land Management Rights for Poor Communities” (Siagian, Y.L. and Neldysavrino).
POLICY CONFERENCE ON COLLECTIVE ACTION AND PROPERTY RIGHTS FOR POVERTY REDUCTION

- “Spatial Planning to Strengthen Community Property Rights: Opportunities and Challenges” (Irawan, D., Komarudin, H. and Hasan, U); (under review)
- “Spatial Planning, State Forestlands and Community Property Rights” (Komarudin, H. and Siagian, Y); (under review)

Training Manuals:
- “Gender Bukan Tabu: Catatan Perjalanan Fasilitasi Kelompok Perempuan di Jambi (Gender is not a Taboo: a note from facilitating women’s groups and collective action)” (de Vries, D.W. and Siagian, Y. L).

Case Study:
“The Role of Collective Action to Secure Property Rights for the Poor: an Indonesian Case” (Siagian, Y.L., Komarudin, H. and Colfer, C.J.P.); (currently under preparation).

International Center for Research in the Semi-Arid Tropics (ICRISAT)

Project Title: Institutional and Organizational Innovations for Accessing Markets and Empowering Communities: Collective Action and Property Rights for Poverty Reduction in Rainfed Systems [India and Kenya]

Lead Scientist: Bekele Shiferaw (b.shiferaw@cgiar.org)

Collaborators: The Institute of Policy Analysis and Research (IPAR), Kenya; Catholic Relief Services (CRS), Kenya; TechnoServe (TNS), Kenya; Centre for Economic and Social Studies (CESS), India; BAIF Development Research Foundation, India.

Project goal: Using two case studies of collective action (watershed management in India and group marketing in Kenya), the study aims to identify how local institutions and organizations evolve and function, what determines user participation in collective action, and the extent to which this can contribute to poverty reduction. While direct performance comparison is not intended, several policy-relevant issues are identified to draw useful comparative lessons from the two case studies.

Methods: Data was collected through structured and unstructured interviews at two levels: the micro-watershed/marketing group level and the household level. The group-level data was analyzed to identify a few micro-watersheds for an in-depth study of the determinants of success or failure of collective action and its contribution to poverty reduction while the household-level data was used to identify the determinants of participation in collective action.

Findings: Effective collective action in watershed management reduces vulnerability to drought and improves cash incomes for the poor via diversification into marketable products; marketing groups pay farmers higher prices than do brokers and middle men. Performance improved where decision making is participatory, members make regular contributions and provided starting capital; levels of collective action in watershed management increase where groups have prior history of cooperation, where they have conflict resolution mechanisms, and are closer to markets.

Outputs:

-“Rural Market Imperfections and the Role of Institutions of Collective Action to Improve Markets for the Poor” (Bekele Shiferaw, Gideon Obare, and Geoffrey Muricho); presentation made at the *Innovation Africa Symposium*, held in Kampala, Uganda, November 2006.

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**International Food Policy Research Institute (IFPRI)**

**Project title:** “Collective Action and Vulnerability: An Evaluation of Local Groups and Networks in Determining Pathways out of Poverty” [Ethiopia and the Philippines]

**Lead Scientist:** John Hoddinott (j.hoddinott@cgiar.org) and Agnes Quisumbing (a.quisumbing@cgiar.org)

**Collaborators:** Addis Ababa University, Xavier University, Research Institute for Mindanao Culture; Center for the Study of African Economies

**Project goal:** To evaluate how collective action can be used by groups to buffer rural people’s exposure to shocks in the short-term and to break the vicious cycle of poverty in the long-term. Results of the analysis will help policymakers identify what types of networks work best for the poor, enabling them to design interventions that enhance and/or compliment these network services.

**Methods:** Drawing from existing panel datasets in Ethiopia and Philippines, the study maps out networks that the poor rely on for risk management and/or risk coping and describes how different people rely on different networks to cope with different shocks. Econometric analyses are used to investigate the factors affecting consumption based indicators of poverty, with the specific aim of estimating the impact of shocks and testing the role of access to different networks.

**Findings:** Shocks play a significant role in the livelihoods of the poor; numerous networks exist in rural areas; the impact of networks on risk coping and livelihood varies: local networks are of limited assistance for covariate shocks, while some types of networks increase consumption and help deal with idiosyncratic shocks; better-off households have “better” networks.

**Outputs:**
- “Networks and Informal Mutual Support in 15 Ethiopian Villages: A Description” (Hoddinott, John, Stefan Dercon and Pramila Krishnan); Book Chapter
- “Groups, networks, and social capital in rural Philippine communities” (Marie Godquin and Agnes Quisumbing); presented at the *International Workshop on Gender in an International Workshop on Gender and Collective Action* held in Chiang Mei, Thailand, October 2005 and at *IASCP Biannual conference* in Bali, June 2006; CAPRI Working Paper 55.
- “Separate but Equal? The Gendered Nature of Social Capital in Rural Philippine Communities” by Marie Godquin and Agnes Quisumbing; submitted as part of special issue to *Journal of International Development*

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**Humboldt-University Berlin**

**Project Title:** Collective Action and Property Rights for Poverty Reduction

**Sub-Project:** Case Study of Ethiopia (Afar and Somali regions)

**Lead Scientists:** Konrad Hagedorn (k.hagedorn@agrar.hu-berlin.de) and Martina Padmanabhan (martina.padmanabhan@agrar.hu-berlin.de)

**Collaborators:** Alemaya University, Ethiopia; ILRI; GTZ; Ethiopian Ministry of Agriculture

**Project goal:** To identify effective policies and practices for rural communities in Ethiopia that face multiple threats (natural disasters, ethnic conflict, and economic transition) in order to reduce poverty and secure sustainable rural livelihoods based on effective collective action and secure
property rights. The main purpose of the project is to sensitize policy-makers, NGOs, and communities about the links between collective action, property rights, and the local-level institutions in mediating effective collective action by households and communities, particularly in crisis situations, and to improve policies for poverty reduction and local institution building in Ethiopia.

**Methods:** This study combines quantitative and qualitative approaches with analytic narratives to allow a thorough analytical assessment of the factors that influence collective action, determine effective property rights, and provide an understanding of ‘real life games’ around local-level institutions, the actors involved, and their strategies.

**Findings:** Better-off households make more contributions (than intermediate and poorer ones) to collective insurance schemes, but they tend to participate with households of similar wealth levels; household participation in intra-clan insurance is higher than in schemes that cut across clans; lack of clarity in property rights results in extensive conflicts among groups, which results in humanitarian crises, livestock theft, and underutilization of pastures and market opportunities.

**Outputs:**
- “To share or not to share? (Non-)Violence, Scarcity and Resource Access in Somali Region, Ethiopia” (Ayalneh Bogale and Benedikt Korf), 2005; Discussion Paper # 10, Institutional Change in Agriculture and Natural Resources Series, Humboldt University. Forthcoming in the *Journal of Development Studies*.
- “Property Rights among Afar pastoralists: Changes and implications,” (Bekele Hundie and Konrad Hagedorn), manuscript.
Findings: Despite prolonged, intentional efforts to eradicate voluntary collective organization and property rights institutions, informal collective initiatives are emerging (pagoda associations, savings clubs); however, the landless, land-poor, women, and those with lower levels of education are underrepresented in groups; local level collective action is also constrained by intimidation from external actors, e.g. military, foreign investors, high-ranking government officials.

Outputs:
- “Collective action and natural resource management in rural Cambodia” (Anne Weingart); presented at IASCP Biannual Conference in Bali, June 2006.
Enabling Equitable Collective Action & Policy Change for Poverty Reduction and Improved Natural Resource Management in Ethiopia and Uganda

African Highlands Initiative

Policy Problem

Institutions have a strong influence on household livelihoods through their role in facilitating access to productive resources, minimizing risk and – presumably – in providing mechanisms for enhanced collective action in natural resource management. This research looked at the way that assets are distributed within communities and the role of local and external institutions in the loss or acquisition of assets at household level and natural resource management beyond the farm level. This information was used to design intervention strategies and research on these interventions and to understand how problems can be overcome in practice.

This research is relevant for policy for several reasons. First, development actors tend to ignore local institutions and their role in livelihoods, preferring instead to set up new structures – representing both a lost opportunity as well as marginalizing local institutions that work. Secondly, research and development organizations focus on individual over collective decision-making, often leading to solutions that bring benefits to some groups at the expense of others (either because others do not access benefits, or because actions taken by some individuals have a negative impact on others). Finally, for the full potential of collective action to be realized in development and natural resource management, reforms in institutional practice and local policies are needed. This requires political commitment to equity in the ways in which development organizations interface with local communities and national policies translate to local-level practices, and to bottom-up policy reforms that can give extra weight to local agreements.

Findings

The Current Situation

Household Assets and Investment Potential

Household surveys measured current levels of assets using the “5 capitals”: human capital (age and education level of household members), social capital (access to social networks, participation in local forms of collective action), natural capital (water, forest, land, etc.), financial capital (off-farm income, savings) and physical capital (roads, structures, transport, communications). The idea behind this was to determine: (i) whether current assets determine ability to acquire new assets; and (ii) to understand the role of both local forms of collective action and outside institutions in assets accumulation.

1 The African Highlands Initiative is an ecoregional program of the CGIAR operating in the highlands of eastern Africa.
We found a two- to six-fold increase in land and livestock holdings from lower to higher income households. To determine the extent to which “wealth begets wealth,” we analyzed annual levels of investment in productive activities by wealth category. Data suggest a strong correlation between current wealth status and ability to invest in productive activities.

**Influence of Local and External Institutions on Assets and Livelihoods**

Local institutions were abundant in all research sites. They include local savings and loan groups, merry-go-rounds (rotational savings), religious associations, funeral associations and stretcher groups, labor sharing arrangements for private and communal works, traditional conflict resolution mechanisms, saving or pooling resources for celebrations, commercial labor groups (Kabale), and land and livestock sharing arrangements (Ethiopian sites).

Benefits of these institutions are both social and economic. Social benefits include strengthened social ties and networks and support during periods of hardship, while economic benefits include access to resources for agricultural and domestic functions (labor, utensils, food, seed, and cash) and “safety net” functions. Local institutions were seen almost unanimously to benefit all participants. One exception was found in Ethiopia, where contracting out land to others is seen as enriching some households (landowners) at the expense of others. Yet households continue to practice this activity when they have no alternative, generally due to the shortage of inputs (primarily labor).

While all participants are seen to benefit from most forms of collective action, certain participants benefit more than others for some forms of collective action. For example, land and livestock sharing arrangements in Ethiopia confer unequal benefits to participants. Landowners benefit most in sharecropping because they receive the benefits of their land with limited investment, but benefit least in contracting because they are paid poorly for the use of their land. Livestock sharing arrangements are similarly imbalanced. In Areka, *Hara* is seen to benefit the cattle owner most because they acquire offspring with limited investment, while the individuals rearing cattle receive only livestock products. In Ginchi, on the other hand, *Ribi* is seen to benefit the poor most, who acquire offspring as well as livestock products from cattle owned by others.

While local forms of collective action are seen to benefit all participants, some social groups cannot gain access to certain forms of collective action. Resource-poor households, for example, generally cannot participate in savings and loan groups, while commercial labor groups are male-dominated. The sick, elderly and disabled seldom participate in local forms of collective action, but often receive some form of assistance from others. In Kabale, women are more active in local forms of collective action, particularly those involving agricultural production.

Despite the caveats, communities generally agree that local forms of collective action play a strong positive role in livelihoods. This function is achieved by enabling households to access resources and acquire assets that would have otherwise been unachievable, buffering households during shocks and crises, and expanding social networks for intra-household sharing and support. However, with the exception of labor sharing arrangements, there was a notorious absence of collective action for addressing shared natural resource management concerns. Many NRM problems requiring collective action therefore remain unsolved.
Collective action can be fostered through both negotiation support of local stakeholders (to reach local agreements) and by-law reforms (to enforce local agreements). Two general scenarios were found in which the absence of collective action has had a negative effect on livelihoods of at least some land users:

(i) Natural resource management problems affecting agricultural productivity are treated as individual problems by the community and by external organizations. Examples include soil and water management and the control of pests, diseases and wild animals. Each of these problems cuts across farm boundaries, requires collective solutions, and – when left unresolved – exacerbates poverty.

(ii) Land management practices that illustrate an emphasis on individual economic returns over collective goods (i.e. water) or collective impacts (i.e. the livelihood of others). Examples include the cultivation of fast-growing tree species on farm boundaries which affect the productivity of adjacent farmland, and land management practices that compromise the long-term water supply (through either siltation/pollution or water consumption). Under this scenario, the livelihood gains of some land users are achieved at the expense of others.

Given the relative effectiveness of existing forms of collective action on livelihoods, the absence of collective action for managing natural resource management problems facing local communities was selected as a priority for local intervention. The approach used included: (i) identification of natural resource management problems of concern to local residents that require collective approaches; (ii) identification of local stakeholders specific to each problem; (iii) facilitation of “horizontal” multi-stakeholder negotiations to target solutions agreeable to all (technologies, policies, etc.); and (iv) implementation of agreed solutions. Three examples will be reported here: the control of porcupines in Areka, niche-compatible agroforestry in Ginchi and watershed management in Kapchorwa.

Institutional Practice
Contrary to local institutions, which were generally seen as equitable and supportive to most households, the activities of a number of external institutions were seen as highly biased in the groups benefiting. Institutional practice unknowingly favors some groups at the expense of others, while local institutions have not stepped in to fill the gap and to govern development interventions and resources more equitably. This has led to increased social differentiation, and loss of cohesion as local leaders and participating households are blamed for excluding others. Some government agencies are also seen to be corrupt, undermining policies that they themselves are supposed to enforce – and commitment by stakeholders at all levels to these policies.

National stakeholder workshops in Ethiopia and Uganda targeted several interventions to improve institutional practice. Given the direct relationship between institutional practice, livelihoods and equity, we identified this as a priority area for intervention. The approach taken was to facilitate “vertical” multi-stakeholder negotiations with outside organizations and policy-makers, and to test agreed upon solutions.
Policy Implications

The following implications for policy may be derived from this research:

- Contrary to our assumptions, institutional practice is often biased by wealth and gender, exacerbating inequities over time. Further research and methodological innovations are needed to understand how these biases, in particular within agricultural research and extension and law enforcement, can be minimized.

- Local forms of collective action serve critical development and social support functions in local communities. External institutions should seek ways to build upon local institutions that are highly valued or contribute most to livelihood goals, in particular for women and poorer households. Part of this effort should be oriented toward finding ways to minimize the effect of wealth on the potential for wealth accumulation by linking technology dissemination with low-risk forms of credit, and diversification of assets of the poor.

- Local forms of collective action emphasize enhancing buying power and “safety net” functions, leaving many common natural resource management problems unaddressed. External support for “horizontal” negotiations among local resource users is needed.

While many national natural resource policies exist, many are not followed – leaving a “governance gap” in many highland communities. Yet participatory by-law reforms suggest an interest in improved natural resource governance among local residents. Increased attention is needed to the policy needs of local communities and to enforcement mechanisms that are effective but not overly detrimental to livelihoods (i.e. ensuring alternatives are in place before enforcing policies that restrict options).
Collective Action to Secure Property Rights for the Poor: Avoiding Elite Capture of Natural Resource Benefits and Governance Systems.

Carol J. Pierce Colfer, Yulia Siagian and Heru Komarudin
Center for International Forestry Research (CIFOR)

Policy Problem
Confusion about property rights has been longstanding in Indonesia. Throughout much of the country, communities have existed, sometimes for centuries, in areas that are claimed as part of the country’s ‘forest estate’. Even within the formal, governmental sectors, there is confusion, with the same area considered by one group, for example, to be production forest, by another to be conservation forest, and by a third to be open for mining or plantation development. With the 2001 decentralization law, a possibility opened up for resolution of this state of affairs, which had left local communities in a comparatively powerless position, vis-à-vis the state and the people’s traditional resources.

Additionally, under Soeharto, the government tried hard to institute standardized procedures (often based on Javanese customs and practices) throughout the country. One result of this effort to standardize was the marginalization of the many non-Javanese ethnic groups and their ways of life. Social organization and cultural values that differed from the government-endorsed norm were relegated to inferior status, with adverse effects on the lives and self-confidence of such people. The Minangkabau of Sumatra represent one example of this marginalization, exacerbated by their matrilineal traditions, in which certain important kinds of property (including land) are inherited within matrilineal clans.

We anticipated that the process of strengthening collective action, both within communities and within districts, could contribute to clarifying the land tenure issue, empower local people to protect their own resources, and provide oversight to government and to their own, sometimes corrupt, leaders. We hoped that the matrilineal traditions of some of the local groups might provide a strong basis from which to work toward greater equity between men and women, as well---particularly given the link between land ownership and matrilineal clans. Such empowerment, we anticipated, by strengthening people’s claims on their traditional resources, would also contribute to poverty reduction. Finally, we hoped that we could identify grouping mechanisms that would be useful in the efforts of others to develop payments for environmental services.

Our work has been focused on two planes: one at the village level, and one at the district level. We worked in two villages (Sungai Telang and Lubuk Kambing) and in two districts (Muara Bungo and Tanjung Jabung Barat) ---both in Jambi, Sumatra. At both levels, we and our facilitators have conducted participatory action research, working with local people to clarify their goals, make and implement plans together, monitor their own progress, and change direction as needed, in a cyclical process. Where there was overlap in interests between the two levels, we tried to tie these efforts together. For instance, in Tanjung Jabung Barat, both local people and district officials were concerned about the lack of clarity in land ownership. The community concerns about tenure were linked to the land use planning concerns of the government. Gender was also addressed at both levels:
workshops were conducted in the villages and at district level, and materials were produced that combined local views and concerns with broader scale information. Some of these focused on basic understanding of types of gender inequity, women’s access to decision-making and development, Indonesian laws against spouse abuse and interpretations of gender roles in relation to traditional norms and Islamic doctrine. Other workshops and training were designed to link village men’s and women’s collective action on natural resource management to the District governments’ Development Resources Network. This aimed to provide capacity building and financial support for local development efforts.

Findings

Though it was not designed to quantitatively analyze various collective actions in terms of motivation, effectiveness and impact, the research project found that social capital such as family ties, friendship, motivation and trust plays an important role in featuring successful collective action. Unsuccessful groups were inclined to have (1) elite as the members -- they are often selected as the leader, (2) been built in hastily, without sufficient planning, for example, in responding to the government’s instant request for the distribution of aids, and (3) weak monitoring and group rules as to knowing how they progress and apply sanctions for non-compliance. The lack of external support (e.g. government’s systematic control over the distribution of aids) has also further exacerbated the situation.

In some cases, where collective action was successfully stimulated, actions were taken that effectively prevented elite capture by the local headman. Elite capture occurred when the village head constantly refused to sign a letter prepared by the group to be submitted to district government asking for grants under the farming plantation program (P2WK). The refusal was related to the head’s reluctance to formally recognize the presence of communities living in a newly established hamlet from which the group comes from. The group’s failure to persuade him has made the group take actions to bypass him and approach a higher level of government. The group’s effort resulted in the district head calling the headman over the issue and disbursing the grants directly to the group. Capture was also found to happen when government’s revolving funds allocated to a jernang group were misused by the group’s head and some members who turned out to be linked to the village structure.

The decentralization policy and increased freedom to speak up were also important contextual features that contributed to villagers’ ability and willingness to meet with the sub-district (kecamatan) government and then the bupati (head of the district), who in turn called the local headman to account. A fair amount of progress was seen in strengthening self confidence and collective action, initiating income generating activities, building networks and links from the village to larger scale entities (like plantation companies and government), and capacity to negotiate and manage conflicts. One example of this process occurred when the facilitated group was able to spontaneously take a negotiating position and bargain for their (the community’s) participation in the Government-led program on forest and land rehabilitation (GNRHL) in nearby production forest. The facilitator served only to link these stakeholders while the planning process and negotiation were conducted independently by the villagers with the district forestry office (DISHUT). There was also increased eagerness on the part of local women to receive capacity building – they became eager to learn about village government, jernang propagation, rubber cultivation, and gender issues through the
shared learning efforts organized by the project. The number of groups has grown, and the people have gained in confidence. We were also able to compare [still in analysis] various grouping mechanisms within the villages.

At the district level, where this approach had been less tested, the analysis was perhaps more ‘experimental’, and our results were more mixed. One difficulty was recurring loss of crucial personnel, through unpredictable and uncontrollable political changes. Another problem was the simple inertia of a huge government bureaucracy, reaching from the district all the way to the center of the world’s 4th largest country. Although there has been an explicit national effort to decentralize, with considerable success, the attitudes that evolved under the very centralized Soeharto regime do not change overnight. And there is pervasive suspicion (sometimes related to rent-seeking) among governmental sectors, with very little tradition of cooperation or asset sharing among them.

Still, we made progress on several fronts. While catalyzing the interaction between local communities and district officials, we worked with a group of district people from the regional planning office (Bappeda), the District Land Agency (BPN) and the Bureau of Forestry and Plantations (Dishutbun) to deal with specific issues such as spatial structure and development planning and forest area allocation. This aimed to see how institutional collective action takes place at this level in which different offices with their own but relevant programs made efforts towards achieving their shared goals. We have now been successful in bringing property rights - a rather sensitive issue to some parties - to the fore; and bringing together the district governments (who proposed a conversion of forestlands into areas for non-forestry purpose) and the Ministry of Forestry (holding an exclusive power over forestlands) to share arguments and concerns and negotiate dispute issues. Our stance here has been to promote the inclusive process of decision making and the importance of clear property rights for the local communities (i.e. Are there any policies that would secure people’s right to continue to access land resources and that would enhance collective action? What would be the district government’s decisions on land allocation and property rights, once their proposal to the Ministry of Forestry has been approved?)

We have also strengthened communication between the communities and the regional planning office (Bappeda), the District Land Agency (BPN) and the Bureau of Forestry and Plantations (Dishutbun) to collaboratively provide feedback, plan and act on the community’s efforts for land certification and alternative income generation. The regular meetings among governmental bodies and other stakeholders were valuable information sharing events, and contributed to more open and more coordinated attitudes from officials. Similarly, the interaction with local communities and exposure to CIFOR personnel’s respect for local knowledge and potential opened bureaucratic doors a bit to a wider range of inputs. The process of researching, drafting, getting critiques, and finally collaboratively producing analyses and policy briefs, a collaborative book on gender, and an edited book on research on Jambi was a new experience for most bureaucrats, and should be a valuable skill for the future. The necessity to deal with CIFOR’s non-corrupt accounting system was also a capacity building experience. Finally, these districts brought their land use planning efforts to the attention of the central government, which initiated a dialogue that may yet bear fruit on land use planning.
Repeated interaction through various means enables local stakeholders to be aware of their position in the network, stakes they would gain from collective action, and risk they would bear. A monthly multi-stakeholder forum in one of the district sites, set up jointly by the research project and other parties, has become the important vehicle through which district officials, local communities, research institutions and NGOs stakeholders sustain the patterns of interaction. Fund limitations preventing local communities from going to the city to interact with officials, for example, and repeated changes in government personnel continue to challenge us. However, the project’s investment in getting actively involved policy champions at district offices in the research and in building the facilitatory role of selected villagers has the potential to sustain the learning processes. Our government collaborators’ strong desire to develop a district long-term development plan (RPJP) through a more inclusive process – at the time when our facilitation has lessened– seemed to be a good indication of these positive changes.

Policy Implications
There are several implications of our findings:

• It is possible to catalyze effective collective action among groups of men and groups of women---in this context, separately---and strengthen local self confidence and capabilities to interact with more powerful outsiders, negotiate effectively with them, and bring pressure to bear to reduce elite capture of local benefits.

• The differences within and between communities are vast, and participatory action research within comparatively homogenous groups provides one mechanism for incorporating this diversity into planning at village and district levels. By focusing on what local women and men can and want to do (rather than their poverty or ignorance), a climate of confidence is built that should, over time, contribute to successful development/conservation.

• Doing participatory action research with government officials surfaces some difficulties that do not normally appear in villages; but the approach seems to build some capacities---willingness to listen to a wider variety of stakeholders, increased respect for local community input, greater desire to work across governmental sectors, hopefully a greater willingness and ability to manage adaptively and equitably---that will be important in making decentralization work.

• The approach we have taken, although not specified in Indonesian law, is consistent with recent laws mandating participatory approaches and greater local self-determination. It, therefore, can serve as one reasonably effective model that fits with Indonesian laws and contributes to the goals of decentralization.

• Some groundwork has been laid for strengthening land tenure security and improving incomes. These are longer term goals---not realistically anticipated during a two year project. But the capacities to analyze situations, develop plans and monitor them together, assess progress and correct course as needed, communicate effectively and negotiate with outsiders, and bring group pressure to bear on individuals and/or groups working against community interests are all skills that should contribute to making the community’s (and its members’) assets more secure and gaining access to the benefits from such assets for themselves.

• Good, comparatively neutral---recognizing that no one is truly neutral---facilitation is important in this process at both levels.
Collective Action for Integrated Watershed Management in Semi-Arid India: Strategic Policy and Institutional Options

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Introduction

Degradation of agro-ecosystems and declining sustainability are major concerns for agricultural development in many poor regions of the world where livelihoods depend on exploitation of natural resources. This is especially so in the semi-arid areas where water scarcity, frequent droughts, soil degradation and other constraints lower agricultural productivity and system resilience. Community-based integrated watershed management (IWM) is therefore being recognized as a suitable strategy for improving productivity and sustainable intensification of agriculture in drought-prone regions. This concept ties together the biophysical notion of a watershed as a hydrological unit with that of the community and its institutions for sustainable management of land, water and other resources.

India is one of the countries which has accorded high priority to IWM as a key strategy for poverty reduction and improved natural resource use in drought-prone regions. Watershed development is seen as the only alternative to provide employment, income growth and sustained livelihood security in these regions. India has invested more than Rs170 billion (about US$4 billion) in the watershed development programs covering more than 45 million hectares. In recent years annual expenditures exceed Rs10 billion, showing an increasing commitment of the government to the IWM program.

Watersheds are ecologically and socially complex geographical units characterized by interdependence between overlapping resources as well as resource users. Watershed resources (soil, water, trees, biodiversity, etc) are utilized by diverse groups of people holding unequal use rights and entitlements. Given this complex social and biophysical interdependence, a wide range of issues, such as social organization and property rights, need careful scrutiny in order to sustain and improve the effectiveness of watershed programs.

Based on a review of experiences and empirical evidence, this study highlights the challenges in implementing IWM programs in India and offers insights on future strategies for strengthening institutions of collective action to enhance the poverty and environmental impacts of watershed programs. We note that the overall impact of India’s integrated watershed management program on poverty and environmental degradation has been modest. The policy and institutional factors that have contributed to this outcome are highlighted in the following sections.

Current Policies and their Shortcomings

The 1994 guidelines are viewed as landmark in watershed development in India in many respects. The Ministry of Rural Development (MoRD) at the central level and the Department of Rural Development at the state levels are the nodal agencies.
(ZP) or DRDA/DPAP is responsible for administration and implementation of watershed development projects at the district level. At the watershed level the Gram Panchayat (GP) is the project implementing agency (PIA). The micro watershed is usually of the size of 500 hectares. The duration of the program is five years with an allocation of Rs.6000 / hectare.

Most watershed development programs have concentrated on physical interventions such as contour bunding and check-dams that are intended to improve groundwater recharging and reduce soil degradation. These physical interventions often overshadow policy and institutional measures to improve the production process or open up new livelihood opportunities or improve equity. Consequently, past watershed programs often failed to reach the poorest households and disproportionately benefit the better-off sections of the community.

A range of other policies that influence agriculture, water and land management are also relevant to watershed development. Power tariff pricing (which influences groundwater use), subsidies for marketing and distribution of rice and wheat, and other protection measures greatly influence the incentives for watershed development and how the benefits are distributed. Such policies also structure community responses to watershed programs. While some policies (like water pricing) strive to improve water use efficiency, other policies that encourage water-intensive agriculture indirectly promote inefficient water use practices. For example, subsidized power tariffs for agriculture have contributed to accelerated depletion and inequitable use of groundwater resources.

Factors Influencing Collective Action in Watershed Management

The case studies have shown that community participation in watershed collective action has been generally poor. Various factors spanning the biophysical conditions and institutional and policy environments have contributed to this outcome. The incentives for watershed collective action seem to be lower when biophysical conditions are either too good or too bad. The potential for collective action seems to be higher under moderate biophysical conditions. Similarly, the effect of group size seems to follow an inverted U-shape where effectiveness is highest with medium sized groups with shared objectives to facilitate co-ordination and communication.

The role of heterogeneity in influencing collective action is highly contested. Collective action is more likely in a community with shared interests. Homogeneity in economic and social structure (e.g. ethnicity) of the community generally facilitates collective action. Local governance and leadership are also important; political plurality at the community or village level often promotes transparency and accountability from community leaders. In the absence of good governance practices, watershed collective action has often failed.

Distribution of program benefits is one of the most vital factors in determining watershed collective action. Equitable distribution of benefits, especially to the poor and marginal farmers, increases the incentive to cooperate. Participation in linked income-generating options like collective marketing could also further improve incentives for watershed collective action. The Kenyan experience would come handy in this regard.
Property rights are clearly biased against the landless and the landed poor as far as the distribution of benefits is concerned. The absence of clearly defined property rights is at the root of the failure of participatory watershed development in majority of the cases. While collective action can lead to establishment or changes in the existing system of property rights, few communities have actually adopted property rights systems that promote equitable and sustainable management of watershed resources.

Conclusions and Way Forward

Evidence shows that IWM has a potential to address poverty, livelihood vulnerability and environmental challenges prevalent in rainfed and drought-prone regions. While technological options for watershed development are well understood, there is limited knowledge and experience on institutional and organizational issues required for its management. This is proving to be the main bottleneck for effectiveness of many of the watershed programs. Watershed management, therefore, calls for policy and institutional interventions that enhance collective action among the diverse resource users.

Collective action in watershed development programs is also biased towards reducing natural resource degradation and improving production. There is a need for complimentary interventions to improve distribution of benefits and sustainable management of watershed resources. There is also a need to strengthen institutions for input and produce marketing, now largely neglected, even in areas where market access is limited. Extension of collective strategies to output marketing could lead to substantial benefits to small and marginal farmers in isolated areas. There is also a need to promote inclusion and protect the interests of the disadvantaged sections of the community.

One of the most pressing issues remains to be the equitable access to common pool resources within watersheds. Collective action thrives where property rights are equitable. Equitable and sustainable management of water can be ensured only through de-linking water rights from land rights. This calls for clearly defined property rights on groundwater. Legislation and enforcement of clearly defined rights for groundwater, however, requires appropriate legal frameworks and effective institutional arrangements.

Future watershed policies need to be consistent, especially those related to agricultural input and output marketing, poverty reduction, safety-nets, infrastructure and power. There is a need to maximize synergies between agricultural and non-agricultural policies.

Along with suitable policies and institutional arrangements, there is a need to develop pro-poor and innovative watershed interventions. These include:

- Improvement of small on-farm water storage structures
- Micro-credit systems
- Improved livestock production
- Promotion of horticultural crops
- Bio-fuels on degraded lands
- Marketing of environmental services

Such interventions have the potential to improve economic incentives for the poor and marginal groups to participate in collective action.
Leveraging Rural Institutions for Collective Action to Improve Markets for the Poor

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The Policy Problem

Market transactions in rural areas of sub-Saharan Africa (SSA) are usually small, because the markets are thin and point-to-point transportation of commodities is difficult. The prices offered are not competitive, and volumes traded are usually season dependent. Where market infrastructure is weak and under-developed, liberalization and structural adjustment policies have not been able to improve market access; and the private sector has failed to make the investments needed for proper and effective market coordination.

Nevertheless, the new economic environment has opened a window of opportunity for farmers to harness market opportunities, diversify into tradable products and reduce dependence on subsistence farming. The removal of market barriers increased competition and allowed farmers to choose the buyers of their outputs and the suppliers of key inputs. Despite these positive developments, markets have not been able to spur commercialization of smallholder agriculture that could provide incentives for increased production and investments for managing production risks. Hence, smallholder market participation and marketed surplus remain very limited. High transaction costs and the inability of smallholder farmers to consistently supply quality products remain key impediments to the realization of the benefits of liberalization, while geographical isolation and dispersion has limited market development. These factors have deprived farmers of the incentives to produce high value differentiated products with desirable traits.

Farmer collective action can be an important strategy to strengthen market-supporting institutions in rural areas. Farmer organizations and cooperatives that facilitate business opportunities and market functions are evolving in many African countries (e.g., Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mali and Zambia).

Under enabling conditions, producer marketing groups (PMGs) and similar farmer organizations can facilitate market access to the poor through horizontal and vertical coordination of production and marketing activities. They can help shorten the long and complex marketing channels that prevail in many rural input and output markets by directly linking smallholders with the upper end of the supply chain. This can help reduce transaction costs and increase the share of the consumer price reaching small producers.

While farmer cooperative societies are common across SSA, there is lack of empirical evidence about PMGs that deal with food crops and operate in drought-prone areas. In order to evaluate their potentials in improving market access for the rural poor, ICRISAT and partners facilitated the formation of ten PMGs between 2002 and 2003 in two semi-arid districts of Kenya (Mbeere and Makueni) based on voluntary membership and clear commitments from members. No financial incentives were provided other than access to
improved technologies and institutional support for group activities. The PMGs were formally registered as welfare societies as is permitted under Kenyan law. They had well-defined objectives, by-laws, and an elected body that leads the group on behalf of the members. This brief presents results from this pilot study.

Rural markets and collective marketing

About 45% of the grain traded volume and 36% of the transactions occur at the farm-gate. About 90% of the grain sold by farmers is transacted at the farm-gate or village markets (less than 5 km off farm-gate). The study indicates that grain prices are unlikely to improve significantly within the range of 5 km from the farm-gate. Farmer prices tend to increase slightly as distance increases beyond 5 km, but the marginal increment (estimated at Ksh 3/km per 90 kg bag) is unlikely to create incentives for farmers to transport grain over large distances. Rural wholesalers and brokers/assemblers jointly control over 80% of the grain sold by farmers. About 75% of the grain was sold immediately after harvest when local supply is high and prices are low. The rural buyers do not pay any premium for superior quality, which undermines the incentive for farmers to supply diverse and quality products.

However, the PMGs have offered attractive marketing outlets for small producers – on average, they pay about Ksh 6/kg above the price paid by brokers and middlemen. The prices paid by the PMGs to the member farmers after covering their costs are about 22% to 24% higher than the prices paid by brokers and middlemen.

Policy and institutional constraints

The PMGs were able to bulk the grain and sell it to buyers beyond the village at better prices. However, this opportunity is hindered by several impediments to collective marketing that limit their competitiveness and market share:

Legal framework
The existing legal framework in Kenya is inadequate for the development of PMGs and their transition to cooperative societies. Their status as ‘welfare groups’ prevents the PMGs from accessing essential business services. There is a lack of mandated agencies and supporting institutions for the advancement of PMGs. The nascent PMGs are weak and cannot successfully operate within the provisions of the existing legal and regulatory framework of the cooperatives.

Capital and credit
The PMGs are operating on small funds raised from the membership. They face capital constraints to access essential services and engage into marketing functions. They also lack the necessary capital to pay farmers at the time of delivery. The PMGs take about 35 days to sell the grain and pay the farmer while other buyers often pay immediately or take a maximum of 2 days. This makes the PMGs less attractive to cash-constrained farmers.
Drought
The volume of grain that is handled by the PMGs is low even in good years and gets severely diminished in bad years. Recurrent droughts in semi-arid areas regularly push smallholders into poverty and undermine the ability to produce for markets. Low trade volumes increase transaction costs, making it difficult for the PMGs to take advantage of economies of scale.

Price variability
Owing to unpredictable prices, the farmers and the PMGs are facing difficulties in storing grain and in planning production activities.

Market intelligence
Lack of adequate information on alternative marketing channels and value chains prevents the PMGs from taking advantage of available markets.

Governance
Efficient coordination (vertical and horizontal) of production and marketing functions relies on good PMG governance and organization. Ensuring consistent supply of quality products requires ability to monitor and enforce standards, and create transparent incentive systems. The policy and legal environment should support enforcement of such internal rules that enhance governance and efficiency. Internal group laws need to be flexible, and they should facilitate good participatory governance and also allow for effective interaction with the private sector.

Policy options and strategies

In the short-term, governments should institute legal and policy frameworks that recognize PMGs as legal entities and facilitate their transition into commercially viable enterprises. In addition, Grameen-type group lending schemes could be devised for enhancing access to credit services to PMGs and their members. Credit linked to grain reserves (inventory credit) could allow the PMGs to pay farmers a proportion of the value of grain at the time of delivery. The field evidence from semi-arid Kenya has shown that farmers are often willing and able to defer sales by several weeks if they can be paid a third of the grain value upfront.

In the medium-term, because of the absence of financial institutions, governments and other agencies should launch credit guarantee schemes that could encourage private sector lenders to enter rural markets. Such schemes may be complemented by micro-saving and financing options that facilitate farmer investment in profitable technologies.

In the medium to long-term, strategies that improve productivity and reduce vulnerability to drought are needed to foster sustainable growth in marketable surplus from less favorable areas. Integrated interventions that combine improved crop and livestock technologies, soil and water management, and strengthening of institutions at the farm, community and landscape level have proven to be useful in drought-prone areas of South Asia (e.g. India).

Governments also have important roles in enhancing the capacity of farmer groups to overcome market failures in rural areas. This would include provision of public goods to
improve market performance and facilitating investments in communication to support information flow and adoption of improved agricultural technologies. In addition, strengthening rural institutions and farmer marketing groups would require public sector resources and action plans to address the specific needs and constraints faced by the PMGs and similar organizations. Such support is justified given the livelihood benefits to the rural poor and the growth linkages derived from improved commercialization of agriculture.

Conclusions

- Market liberalization has opened opportunities for smallholder farmers to diversify production and better target existing and emerging markets. But pervasive rural market imperfections impede farmer responses to economic reforms and limit their ability to exploit market opportunities.
- The PMGs can provide effective institutional arrangements to improve markets for the poor. Collective action is the key to reduce transaction costs and for small-scale producers to access essential agricultural services. Many such groups however face multiple challenges such as lack of credit, low volumes, price volatility and inadequate legal frameworks.
- In addition to provision of essential infrastructure and public goods, governments also have roles in supporting the emergence and development of rural institutions. This would include good legal and policy frameworks that facilitate and support farmer-marketing groups to develop into effective agri-business enterprises.
- The social benefits and positive role that farmer marketing groups can play in remedying market failures and improving rural livelihoods may also justify targeted subsidies and incentive systems that stimulate and support their development.
Policy problem

The goal of this project is to better understand the role of collective action through groups and networks in determining how the poor manage their exposure to risks and cope with shocks to their livelihoods. Understanding these networks is as crucial to understanding the determinants of poverty and the policies to move people out of poverty as understanding land tenure or access to financial capital. A misunderstanding of the roles of these networks can lead to policy changes that have unintended consequences on the functioning of these networks, with potentially damaging effects on the capacity of the poor to mitigate, and cope with, the effects of shocks. At the same time, a better understanding of such networks can lead to the identification of policies that compliment existing networks that already serve the poor well, and to policies that can substitute for networks that simply are not reaching the poor. Thus, the research directly addresses the heightened emphasis of the CGIAR on poverty reduction, in an area where information gaps are particularly glaring.

This study uses long-term longitudinal household data sets from Ethiopia and the Philippines to investigate this issue. The Ethiopia study is based on a panel study of about 1400 households in 15 villages in various agroclimatic zones, while the Philippine study is based on a survey of about 311 original respondents who were interviewed in 1984/85, 261 of their adult children living in the same villages, and 257 children who have migrated elsewhere. Both data sets contain specially designed modules that examine the types and consequences of shocks faced by poor households and the networks that households have available to them.

Findings

Our findings can be summarized as follows: a) Shocks “matter”; b) Networks exist; and c) The impact of networks on risk coping and livelihoods is nuanced. Generally, local networks are of limited assistance when households face covariate shocks; further, better off households tend to have “better” networks. There is evidence that some types of networks (but not others) increase consumption and some networks appear to help households cope with idiosyncratic shocks. We elaborate on these findings below.

Although both countries are very different both culturally and economically—Ethiopia is a low income country with a per capita GDP of $110 in 2004, while the Philippines is a lower middle-income country with per capita GDP of $1,170, also in 2004—the same types of shocks are important threats to household well-being in both countries. These are drought, death of a family member, and illness of a family member. In Ethiopia, the worst shock experienced by households between 1996 and 2004 was drought, affecting 47% of
households, followed by death (43%) and illness (28%). In the Philippine sample, drought was the worst shock that affected households between 1985 and 2003, affecting 35% of sample households, followed by illness (19%) and death (6%). Although the shocks are similar, their relative importance differs. Reflecting differences in overall health and nutrition between the two countries, both mortality shocks and illness shocks are higher in Ethiopia than in the Philippines. In Ethiopia, drought shocks and illness shocks are the most important shocks in the sense that households report these as being especially important and controlling for other household and village characteristics, they are associated with lower levels of per capita consumption. The magnitudes of these effects are nontrivial and long lasting. Experiencing a drought at least once in the previous five years lowers per capita consumption by about 20 percent and experiencing an illness reduces per capita consumption by approximately 9 percent. Some shocks appear to have long lasting effects.

In the Philippines, the impact of shocks is more nuanced. While it may appear that, on aggregate, Filipino households are able to smooth consumption in the face of covariate and idiosyncratic shocks, households are not equally able to cope with shocks. In the case of drought, for example, the consumption of landless households was severely affected. Death of the head or spouse significantly reduced log consumption per capita for households with more land and for households whose heads had less than six years of schooling. Households who have more land and assets were probably engaged in agricultural production, so their consumption is more vulnerable to the loss of an adult working member, particularly either the head or spouse. Households whose heads are less educated are also vulnerable to the loss of an adult working member.

Networks are pervasive in both countries, though their form and structure differs considerably. In Ethiopia, the types of networks that households belong to range from informal, unstructured networks, to work groups (debbo), and formal, structured burial groups (iddir). In terms of informal networks, more than 90% of households report that they know at least one person that they can rely on in time of need for support, both within the village or elsewhere. There is little differentiation in the likelihood of knowing at least one person, but the richer and better connected households tend to have larger networks. Outside of Tigray, membership in iddir is widespread, with nearly 90 percent of households reporting that they belong to at least one iddir. Again, there is little differentiation in the likelihood of belonging to at least one iddir, but richer and better connected household tend to have larger networks.

Similar to Ethiopia, Philippine households belong to both formal and informal groups and networks. A household belongs to 1.6 groups on average, and 76% of households belong to at least one formal group. In terms of informal networks, households list at least two people they could run to for help with family-related issues, three persons they could ask for help if they experienced economic losses, and two persons who could give price information or information on new technologies. None of the households say that they are unable to run to anyone for help. Similar to Ethiopia, better-educated and wealthier households belong to more groups and have larger trust-based networks. Also, households who have experienced more cumulative shocks between 1985 and 2003 are also more likely to be members in groups and have larger trust-based networks—indicating that such networks may form partly in response to shocks. Interestingly, however, households seem to invest less in assistance networks when they have daughters living outside the village who can act as insurers. In
contrast to Ethiopia, where networks are not geographically dispersed, very few households in the Philippine sample have no migrant network. Only 16% of parent households do not have children living in another locality; only 14% of younger households do not have siblings living in another locality. Sixty-two percent of parents reported receiving remittances from outside the village in the previous year, while 40% of younger households received transfers from siblings outside the village.

Local collective action increases per capita consumption in the Philippines. Taking into account the endogeneity of group membership, the total number of groups to which a household belongs has a positive impact on log per capita consumption. Interestingly enough, however, it is participation in non-economic groups—burial, religious, and credit groups—that is associated with increased per capita consumption. While it is difficult to assess the impact of networks on per capita consumption, because the factors that determine networks also directly affect per capita consumption, qualitative work suggests that local networks have a limited ability to help households cope with shocks. Respondents expressed embarrassment at having to run to friends and neighbors for help, because they are also likely to be poor and suffering similar problems.

Migrant networks may function better as a risk-smoothing mechanism. Migrant children are more likely to make remittances to parents if parents have experienced more (cumulative) shocks. The probability of remittances increases with the number of better-educated migrant daughters and positive income shocks experienced by sons. Remittances enable receiving households to invest in assets (land and livestock). They also enable households to invest in children’s education and potential migration. Migrants are more likely to make transfers to their siblings if the latter experienced shocks, but shocks do not affect the amount received. The impact of remittances on sibling households is generally limited to consumption.

In Ethiopia, networks do not appear to be particularly effective in addressing covariate shocks. First, households report low levels of interhousehold transfers. Second, networks are not geographically dispersed. Third, a significant proportion (60%) of households who report insufficient rain in last 12 months would have liked to have borrowed money but did not, largely because they feared they could not repay—indicating that credit constraints may be binding. Fourth, poorer households have smaller networks. Lastly, the negative impact of drought shocks on household consumption indicates that households have not been able to cope adequately with aggregate shocks.

That said, there is some evidence that certain types of networks are helpful in coping with idiosyncratic shocks. Already noted is the fact that, in Ethiopia, illness shocks reduce consumption. This is especially marked in southern parts of the country where malaria is endemic. Within this region, iddir in some (but not all) villages offer payouts in the event of health shocks. Where they do so, we find a much smaller effect of illness shocks on per capita consumption when compared to those villages where iddir do not provide this service.

Policy implications

Because shocks can have adverse consequences in both the short and long term,
understanding the appropriate role for public policy is of considerable importance from the perspective of sustainable poverty reduction. These results point to the following policy implications:

a) Addressing covariate shocks belongs in the public sphere. Networks and other forms of collective action have limited effectiveness in the face of adverse events that affect large numbers of households within a given geographic locality.

b) Certain types of networks do provide insurance against certain types of idiosyncratic shocks (such as illness) and these tend to be the sort of shocks where, because of information asymmetries, public action may tend to be less effective. Consideration should be given to thinking of public action as taking on an enabling role; for example in the Philippines, by facilitating interventions that reduce the costs associated with developing and maintaining family networks. At the same time, governments need to move cautiously, following the maxim of “do no harm,” and being aware of the possibility that government action may displace already functioning local networks.
The conflicting transformation of the commons: Collective action, property rights and poverty reduction among Pastoralists in Ethiopia

Martina Padmanabhan, Bekele Hundie, Fekadu Beyene, Benedikt Korf, Konrad Hagedorn

Policy problem

Change in natural environmental conditions has constantly influenced pastoral livelihoods, though uncertainty in ecological conditions and insecurity of property rights have increased. As a result, a reliable flow of life-sustaining goods and services from erratic rangeland ecosystems is diminishing, putting pastoral livelihoods at greater risks. Pastoralists’ adaptation is not confined to man-land relationship in an isolated setting but influenced by demographic change, agricultural expansion, attempts to incorporate them into the national economy, and insecurity arising from conflicts and borderer instability. Due to the widespread nature of the drought and ethnic conflict in several areas within the region, livestock movements to alternative water and grazing areas have also been severely constrained, weakening livestock and causing a significant increase in livestock mortality. The cumulative effect of these factors has led to breakdown of traditional authority, degradation of natural resources and growing vulnerability of different pastoral groups to ecological and economic stress resulting in poverty.

At present, the state’s national poverty reduction program recognizes a rising threat to pastoral livelihoods as a result of biased policies and environmental change. The effect of environmental scarcity is being given emphasis now than ever before due to recurring drought. The change in economic policy subsequent to political change in 1991 gave development priorities to neglected regions and groups, like pastoral and agro-pastoral group. Consequently, the prevailing constitution recognizes pastoral land as specified in article 40 and shows the step-wise constitutional and legal recognition of common property regime for the rangeland resources. Nevertheless, the aim of the government is to facilitate the gradual conversion of pastoralists into crop cultivators.

Findings

Ecological complexity and variability adhere to the development of flexible access options to resources for Afar and Somali pastoralists. Collective action and informal mechanisms for risk-aversion and improved access to livelihood resource are internal ex-ante strategies to minimize the impact of shocks or fluctuations on the pastoral economy. The role of informal institutional arrangements in creating security of rights to resources such as pasture and water is essential. We briefly present our results on collective action (resource sharing, collective farming and water points management) and property rights (exogenous and endogenous changes).

Collective action is the base for resource sharing arrangements in pastoralism. In this context the role of social ties in facilitating cooperation among clans and with other ethnic groups is noteworthy as well as to identify factors and determinants for induced collective action in
cultivation as a supplement. The Afar and the Somali pastoralists engage in various networks cutting across multiple social spaces and geographical boundaries. These inter-clan social ties are associated with interactions among various clans of one ethnic group whereas inter-ethnic social ties stand for those interactions which exist with neighboring ethnic groups. The two categories imply different levels of social relationships, which may lead to different levels of cooperation. Findings indicate that inter-clan social ties are stronger than inter-ethnic ones and allow for better coordination and exchange of resources. Inter-ethnic ties, which evolve through conjugal relations, shared procedures and institutions, and enable them exchange fugitives, pay compensations and reduce tensions, are getting weaker. As a result, cross-boundary movements of Afar clans are mainly limited within the Afar region.

Resource sharing arrangements in Somali among pastoral and agro pastoral groups focus on access to water and reciprocal grazing arrangements. Water points are increasingly becoming club goods since many common wells disappeared. Enclosures of pastures and water sources decrease the benefits from holding resources as common property – a prerequisite for inter-clan reciprocity, which serves as an internal means to respond to risk. This condition systematically works in favor of those who are able to buy water from privately owned cisterns as the prime beneficiaries from secondary access rights, since they have the capability to utilize resources. By contributing to maintenance of communal ponds, poor people secure their access to oxen from better-off households. Limited asset ownership will not necessarily lead to non-participation. The poor cooperate to gain social approval which is not limited to the resource being managed but encompasses wider social relations and interdependence.

Induced collective farming among pastoralists shows that poor households with few assets are more likely to cooperate while better-off pastoralists prefer to invest their labor in livestock rearing. An effective *ex ante* risk management technique is livestock accumulation and diversification of livestock. Poor households do not have the capability to exercise such mitigation strategies due to smaller number of livestock; they especially lack drought resistant camels and are more vulnerable to risks. The difference in cooperative behavior observed between poor and better-off pastoralists in regards to farming is attributable to their differences with respect to *ex-post* coping strategies. Since no special institutional treatment for rebuilding animal stocks for the poor exists, an available option to exercise rights is to start crop production.

Participation in collective action through different groups has a positive significant effect on herd survival from drought shock. For common wells, long term membership is associated with increased household food security. Participation in club good water sources with a large group size also increases food security, since the technologies are labor intensive. The overall effect of collective action on herd survival is consistent with its positive contribution to food security. There is a relative contribution of collective action to cope with shocks.
Common-pool property rights generate livelihoods particularly in pastoral areas of arid and semi-arid tropics. Almost all grazing lands in pastoral areas are common-pool resources over which a multitude of pastoral groups have de facto rights. Despite this, a wide range of changes in property rights and resource use patterns can be observed. Pastoral property rights are changing due to endogenous and exogenous actors, such as the state.

The following points are drawn from the experience of state intervention in Afar. The actions taken by the state are based on the principle that land belongs to the state and pastoralists have no right to block the former from using land in a specified way. This intention arises partly from the fact that pastoralists are insufficiently organized and not represented in the political structure of the country. The development projects implemented based on national development goals were continually resisted by the local people, which precipitated significant welfare losses. The major cause of the conflicts is not the intention of the state to promote development projects; rather, a contentious issue was the fact that such measures were “colonial” and ignored the role of consensus-building with the local people who had historical and emotional links to their communal heritage. The state enforced transformation of pastoralism into sedentary farming without building the capacity of pastoral households to produce crops. More specifically, the development schemes initiated and financed by the state couldn’t enhance the capability of pastoral households so that the latter could generate full benefits from their land. Being devoid of public participation, these schemes paradoxically fostered the dependency syndrome among pastoralists, which has sustained even after their termination.

State development schemes have been limited to those areas suitable for commercial farming while areas with low resource endowments for agriculture have been deprived of state support. This highlights the interest of the state in extracting economic benefits from pastoral resources rather than developing pastoral livelihoods. Furthermore, state development interventions have exacerbated conflicts among various pastoral groups, thereby worsening the scarcity of pastoral resources and excluding pastoral groups who had secondary and tertiary rights. The state intervention created a window of opportunity for some pastoralists while others were marginalized. While the customary law entitles every clan member to benefit streams from the communal land, only the pastoral elites and their allies could get access to private plots.

State intervention does not explain all the changes in customary communal land rights. Endogenous factors among the pastoralists are driving changes in property rights. The impetus for subdivision of the communal land is provided by livelihood changes and challenges. The deterioration of livestock productivity due to recurrent drought, more settled way of life, and demand for state legitimacy for land ownership are among the major factors that contribute to the desire for crop cultivation.

The trend of changes in land use in Somali Region from communal to private property rights is a response to endogenous forces, namely competition for potential land and the fodder market development, the expansion of charcoal market, programs favoring commercial livestock production, and involvement of many herders in opportunistic farming. Though the rights and duties of the private land use for pastoralists and agro pastoralist is clearly put in the federal land use proclamation, the empirical evidence shows
that customary institutional practices favoring private enclosures focus more on the rights than duties. Enclosures improve livelihood by providing income to poor households through diversification. Contractual grazing allows poor households to generate income in the absence of livestock, but the difference in food consumption as an indicator for welfare between enclosers and non-enclosers is not significant. Overall, the findings indicate that communal land ownership, which forms the basis for pastoralism, is under pressure as a result of state intervention, natural circumstances and socio-economic challenges. This weakens pastoralists in their capability to generate adequate inputs for the survival of the people who depend on it.

Policy implications

(1) Flexibility of access to wide range of grazing resources without ‘well-defined boundaries’ needs to be considered as one of the key strengths of the traditional pastoral systems. Exclusive boundaries are more a problem rather than a solution for the sustainability of the resource base. Nevertheless, a clear definition and understanding of hierarchical rights and duties regarding a certain terrain is key, followed by investment in building adequate institutions and governance structure.

(2) Maintaining and managing the commons and securing mobility of (agro) pastoralists remains conditional as pastoralists generate their basic livelihoods from animal husbandry. Restricted access to water points discourages reciprocity arrangements. Therefore, interventions that improve water availability in different grazing places can facilitate reciprocation of pasture use between different groups and contribute to peace keeping. Supporting clans to take advantage of reciprocal property rights arrangements contributes to food security.

(3) The emergence of market opportunities like enclosures develops new incentives on how to use the communal resource and pushes private holding. The harmonization of contradictory aspects is the emerging challenge for policies addressing the development of pastoralists.

(4) Pastoralism is considered a sustainable way of life under the fragile ecological conditions of most dry lands and, hence, should be endowed with secure, though flexible, property rights and the necessary and continuous establishment of mediation institutions, especially on inter-ethnic level and between ethnic federal states in a participatory and inclusive way.

(5) The long term goal of pastoral production as sustainable, environmentally friendly and welfare enhancing requires recognition of the attributes of the resources, its people and competing claims. In addition to enhancing collective action and clarifying property rights, the state can contribute by investing in pastoral governance structures and capabilities. It is timely to revise the policy goal of sedentarization to acknowledge a more diverse land use system of the lowlands, taking into account the growing importance of the lowlands for trade as well as for the legitimate mobility needs.
Escaping Poverty Traps? Collective Action and Property Rights in post-war Cambodia  
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Policy Problem

The goal of the project is to explore and better understand the role of collective action and property rights for poverty reduction in rural Cambodia. People living in rural Cambodia are highly dependent on arable land and on complementary natural resources to generate their livelihood. High population pressure on limited resources, exclusion from productive assets, vulnerability to natural disasters and violence result in a high incidence of poverty. In Cambodia around 36 percent of the population actually live below the poverty line. With only scattered empirical information on intensity and impact of local rural cooperation and how it influences the livelihoods of the Cambodian population, this research addresses a gap for policymakers that aim to reduce poverty by building on existing local networks and strengthening bottom-up governance patterns and thus incorporating collective decision making processes in rural areas. In this context, policy changes from external agents may have unintended, damaging consequences on local peoples livelihoods but can also further strengthen their ability to move out of the poverty trap. Thus, the study addresses CGIAR emphasis on poverty reduction in the particularly sensitive setting of a post war country.

This study uses data from 145 households from two provinces in Cambodia to address the subject as well as 126 data sets collected during field experiments. It works as well as with qualitative data collected through interviews with key informants, village resource maps and geographical maps on village areas. Within different modules, the data sets address the households’ situation regarding wealth, participation and income generation, individual levels of trust within the communities studied, underlying property rights, and information regarding the structure of institutions existent in the communities.

Findings

In rural Cambodia access to and use of natural resources significantly contribute to rural incomes. Access to natural resources is, however, defined by multiple and overlapping rights, both private and common ones which are in turn governed by formal and informal patterns of cooperation. People do engage in collective action to improve their livelihoods, but there are differences in the degrees of cooperation depending on the levels of human capital as well as economic well-being. The institutional setup in a village also matters; people in communities where traditional institutions are in still in place or could have been revitalized after the Khmer Rouge genocide tend to be more trustful than in communities where new institutions have been established.

In Cambodia nearly 80 percent of population lives in rural areas and around 70 percent are employed in the agrarian sector. Poverty incidence is highest in rural areas. With high exposure of rural incomes to natural disasters such as flooding and droughts, access to and use of natural resources to reduce income losses is an important measure to address poverty
in the rural areas. In rural Cambodia property rights on natural resources such as local forests, fish ponds, lakes, water streams or harvested fields are normally commonly owned, used and managed. This makes collective action a precondition for sustainable resource use. Even though Cambodia has been effected severely by the Pol Pot terror regime and civil war with forced labor, relocations and forced collectivization, there is a wide range of activities that are collectively exercised (99.1 percent report to take actions to help their fellow villagers in case of need, 75.7 percent do participate in common activities that improve the communities well-being, 62.6 percent are members of one or more associations).

Nevertheless, there are differences in the degree of participation in collective action. Only 11.1 percent of the illiterate households engage in associations whereas 51.5 percent of the better educated households are members of at least one association. Illiterate people are the only group that is expected to leave the associations in which they currently hold a membership (1.4 percent of the illiterate people plan to quit their membership). Interestingly, no major differences are observed in the extent to which people with different educational backgrounds engage in common activities that serve the communities’ well being. Poorer people are much more vulnerable to shocks that affect their income and thus tend to engage less in associations than economically better off people. It points to poorer people’s aversion for regular membership fees or other regular payments. People who recently migrated to the communities also show less engagement in associations.

In the research areas either traditional forms of natural resource management exist, where a group of community’s most respected elderly decide on use changes, extraction rates and so forth, or formalized user groups that register with the administrative bodies of the Cambodian government and are set up by local authorities can make these decisions. Both institutions face difficulties in order to achieve the goal of sustainable resource use. Whereas traditional natural resource management is prone to interventions by officials from higher administrative levels, newly established and registered institutions often lack full recognition and face problems when monitoring rules applying to the resource. Furthermore, institutions that govern lakes, ponds and rivers tend to be more successful than institutions that manage forests. Natural resource management is less successful, when several user groups and administrative bodies have to cooperate. Inter-user group cooperation is more successful, where traditional ties still exist (e.g. through joint festivities).

The analysis clearly showed that institutions matter: villages that are still managed traditionally show higher levels of trust than those communities that opted for newly established external institutional settings. Experimental evidence showed on average a fraction of 48 per cent sent to the unknown counterpart where traditional institutions were in place and only 19 per cent of fractions sent where new institutions have been established.

Policy Implications

Cambodian natural resources are commonly owned, used and managed, which requires collective management to be successful. The results discussed above indicate some policy implications:
The ongoing devolution process for natural resources might be considered as premature for its impact on collective action. It is in danger of inhibiting or even undermining expected sustainable use patterns. As long as important monitoring and enforcement mechanisms executed by a weak, though existing, local forest administration are removed abruptly after responsibility for resource management is handed over to local Forest or Fishery Communities (with these communities neither officially acknowledged by the government nor being able to execute the whole spectrum of responsibilities assigned to them), an institutional vacuum emerges which might not act in favour of the poor.

An important first step would then be to reduce existing uncertainties about village or commune boundaries, with responsibilities and procedures to be put in place in case of violation of rules. This may first involve supporting villagers in identifying their boundaries, demarcating them and documenting the results in a joint effort. In order to achieve sustainable resource uses, it is necessary to address the interests of all user groups and include, where necessary, expanding target areas over administrative boundaries.
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