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COLLECTIVE ACTION AND PROPERTY RIGHTS FOR POVERTY REDUCTION

A Review of Methods and Approaches

Esther Mwangi, Harvard University

Helen Markelova, International Food Policy Research Institute (IFPRI)

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CGIAR Systemwide Program on Collective Action and Property Rights (CAPRI)

C/- International Food Policy Research Institute, 2033 K Street NW, Washington, DC 20006-1002 USA
T +1 202.862.5600 • F +1 202.467.4439 • www.capri.cgiar.org

ABSTRACT

While much attention has been given to examining various aspects of poverty, a number of studies have shown that institutional environment in which the poor exist conditions welfare outcomes, thus highlighting the inherently crucial importance of institutions for poverty reduction. The institutions of property rights and collective action are among those identified as playing a major role in the livelihood strategies of the poor. This paper highlights ways to operationalize the conceptual framework developed by Di Gregorio and colleagues (2008), which provides an analytical tool to study poverty through the institutional lens with a special focus on collective action and property rights. By emphasizing the multidimensionality of poverty, the authors advocate the importance of applying various approaches and tools to conceptualizing and measuring it. They also emphasize the crucial role that institutions of collective action and property rights play in poverty reduction and sketch out theoretical nuances and methods of examining such institutions. In addition, power relations and political context are seen to be of utmost importance in poverty-related studies; the authors provide suggestions on how to understand and operationalize various dimensions of power and institutional environment in research. Outcomes are approached from the evaluative standpoint, which moves beyond straightforward empirical measurement of certain indicators to a comprehensive analysis that would involve a range of methods and approaches to both the definition and measurement of criteria that affect the complex reality of the poor.

Keywords: collective action, property rights, poverty reduction, evaluation, vulnerability, power, institutions, wellbeing

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COLLECTIVE ACTION AND PROPERTY RIGHTS FOR POVERTY REDUCTION

A review of methods and approaches

Esther Mwangi and Helen Markelova¹

1. INTRODUCTION

Poverty reduction has come to reflect an urgent global consensus in development. The Millennium Development Goals adopted in the 1990 provide a normative framework and specific targets for poverty reduction and the enhancement of well being. The poverty reduction strategy papers, or PRSPs, on the other hand, provide an instrumental road map for achieving the MDG aspirations. Embedded in these global policy efforts is a crucial need to better understand the manifestations of poverty and the factors that affect it in order to inform policy and practice, and to assess policy performance.

It is now generally accepted that the poor are those that have few assets (both tangible and intangible), are more vulnerable to different forms of risk, and are often at a lower end of a power continuum, with limited ability to influence policy and practice. Less obvious is an understanding of the way in which institutions and institutional change influence poverty. Collective action and property rights institutions in developing countries have been demonstrated to have positive outcomes for natural resource management. A growing body of literature, for example, documents how such institutions enhance natural resources management across a broad range of sectors and at multiple levels of governance. But there has been considerably less effort to systematically explore how collective action and property rights institutions may influence or mediate poverty. Yet there seems to be great scope for collective organization (of the poor and their allies) and property rights to enhance access to assets that can be used to improve incomes, to reduce the risks that climate, disease, and other factors imposed on the poor, or to support the poor in processes of change that may serve to empower them.

This paper attempts to operationalize a conceptual framework developed by Di Gregorio et al (2008) that provides key variables and relationships essential to an inquiry into the links between poverty reduction and the institutions of collective action and property rights. Di Gregorio and colleagues argue that collective action in the form of social networks, micro-finance groups, etc. is important for improving incomes, accessing and building an assets base, and reducing and coping with different forms of risk. Indeed, collective action can be used to secure property rights and access to resources, but also to challenge and overturn existing power structures or even to create space for the poor to participate in policy dialogue. Property rights to different assets provide a sound basis not only for income

¹ Corresponding author: h.markelova@cgjar.org

creation and savings, but also in dealing with shocks and as a form of power that can be used to negotiate positions. Thus, poverty reduction implies several things: an improvement in people's well being over time, a reduction in their vulnerability, and the incremental/eventual removal of relations that keep people poor. It is a long-term process.

This paper provides an overview of how researchers and practitioners conceptualize and measure poverty, property rights, and collective action. It outlines ways in which these concepts can be identified and evaluated, and offers insights on some of the conceptual and measurement concerns researchers face when studying the interactions between collective action, property rights, and poverty. In addition to highlighting various definition and measurement approaches for these key concepts, it also emphasizes the overall importance of institutions for poverty reduction efforts.

The rest of the paper is organized into seven sections to correspond with the conceptual framework, which is briefly reviewed in the first section. The second section looks at different ways to define poverty and methodological issues that arise when measuring it. The third section highlights the role of assets, discusses the impact that risk and shocks have on the community, and raises the issues of power and the role of external institutions in influencing access to assets and collective organization. The fourth section spotlights the importance of property rights and collective action for poverty reduction, by both defining these concepts and offering suggestions on how to measure them in poverty studies. The fifth section considers the action arena, where actors interact to produce patterns of interaction that are associated with the state of poverty as defined here. The sixth section briefly touches upon how to define and evaluate outcomes, and the last section concludes by tying all the discussions back to the conceptual framework.

2. CONCEPTUAL FRAMEWORK: A BRIEF OVERVIEW

The conceptual framework that serves as a basis for this paper is described in Di Gregorio et al. (2008). Figure 1 shows the structure and elements of the framework. Its main purpose is to provide a guide for research on the role of property rights and collective action in poverty reduction. For those studying poverty, as well as for practitioners and policy-makers, it offers a new approach and provides an institutional lens of the causes of poverty and the important role of institutions in improving welfare (di Gregorio et al., 2008).

To analyze how institutions of collective action and property rights influence poverty outcomes, the framework distinguishes between the "context" section and the "action arena" section. The "context" deals with the initial socio-economic and political conditions that make up the opportunity set for possible action. Three main aspects of the context are identified for closer examination of their role in poverty reduction and their relationship to the institutions of collective action and property rights: asset endowments, vulnerability to shocks, and power structure of the legal and political system.

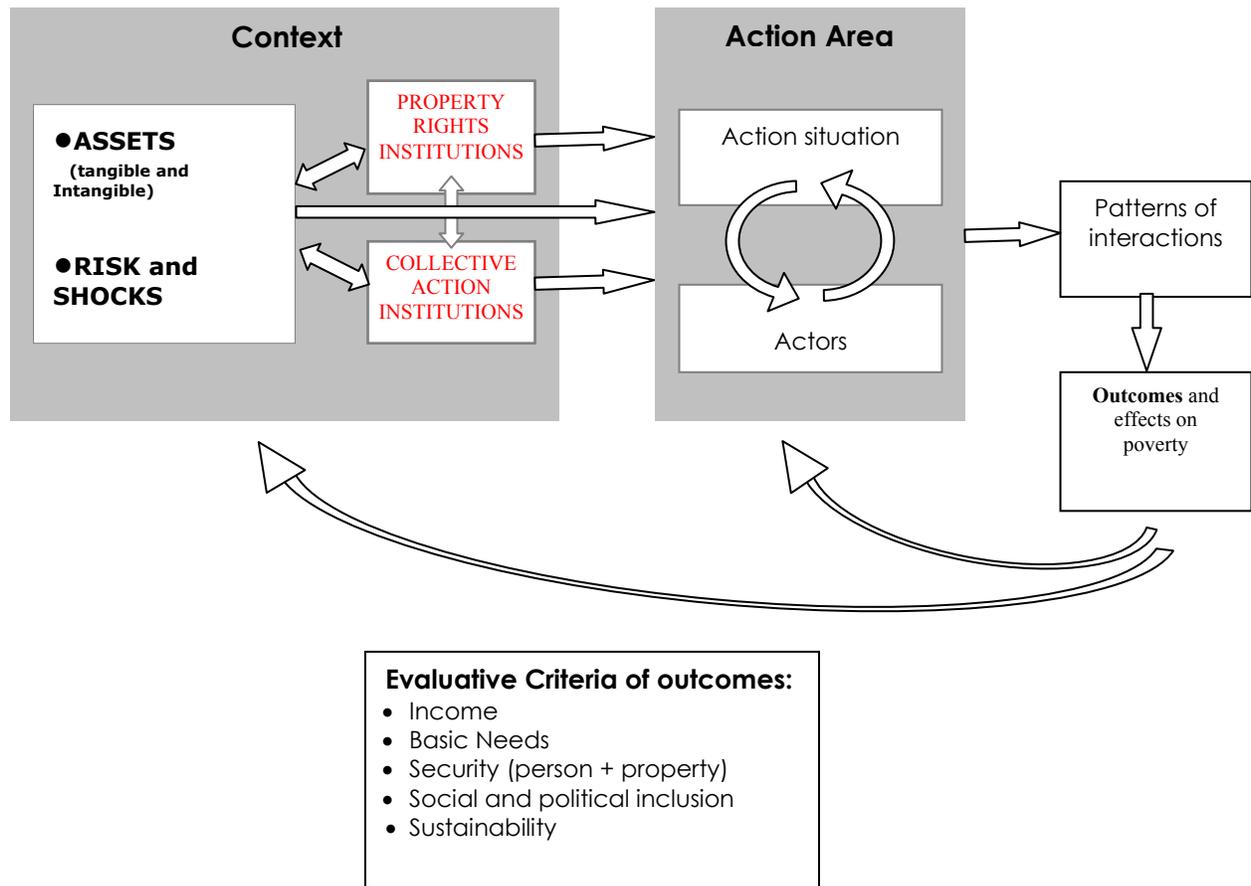
The "action arena" shows how multiple actors, including individuals, states, and organizations, make use of and change institutions to reduce poverty. The

dynamics in the action arena are conditioned by the actors, action resources they draw upon, and the factors that lead to the change in both material conditions and institutions. Actors may be individuals (citizens of a state or members of a community) or collective entities (organizations acting as a coherent agent). Action resources are the tangible and intangible resources that give actors the capability to act, i.e. to exercise livelihood choices, participate in collective action on various levels, to influence other actors' agency choice, and to participate in political processes.

In an action situation actors make choices and follow strategies based on their action resources, the rules that define the action arena, and the attributes and expectations about the behavior of other actors involved. These choices create patterns of interaction which in turn produce outcomes. If these outcomes are positive for all actors involved, they will maintain the structure of the action situation. However, if the outcomes are not positive for some or all actors, they will try to change their strategy in the action situation using their bargaining power, which is shaped by their context.

The outcomes of action situations, which are of a particular interest in our analysis, can be distinguished between structural outcomes, which affect the existing context, including property rights and collective action institutions, and "poverty outcomes," which directly affect the conditions of the poor. The latter category can be evaluated according to a number of poverty dimensions, which are represented by the evaluative criteria in the framework. These six criteria are: ability to satisfy basic needs, income levels and distribution, personal security and security of property, social and political inclusion, and the sustainability of institutions and resource bases.

Figure 1: Conceptual framework on property rights, collective action and poverty



3. UNDERSTANDING POVERTY: SOME MEASUREMENT AND METHODOLOGICAL ISSUES

Defining poverty

Poverty refers to whether households or individuals possess enough resources or abilities to meet their current needs (Coudouel et al, 2002). This definition also implicitly includes the probability or risk of falling (deeper) into poverty at some point in the future, i.e. an individual's or household's vulnerability to shocks. Vulnerability is important because it affects individuals' behavior with regard to investment, production patterns, and coping strategies, including their perceptions of their own situation.

Poverty is usually determined on the basis of income or consumption thresholds, which define an individuals or households ability to meet a basket of basic goods and services (Coudouel et al, 2002). Income and consumption poverty involves the identification of a monetary measure of household welfare in order to capture total income or household expenditure over a period of time. Measures of income and consumption poverty are useful in the estimation of the extent (i.e. how many individuals below poverty line), depth (i.e. how far off households are from poverty line), and severity (degree of inequality among the poor) of poverty (Coudouel et al, 2002). These indicators can also be used to separate the poor into various categories (e.g. extremely poor, moderately poor etc.) in order to assess their characteristics and policy preferences to facilitate policy targeting (Angelsen and Wunder, 2003; Krishna, 2007. Because consumption reflects the portfolio of goods and services available to a household subject to its income, it is thought to be a better measure of poverty than income (Coudouel et al, 2002). It also reflects a household's access to credit and its savings. On the other hand, since incomes may fluctuate throughout the year, households and individuals may potentially face difficulties recalling their income, and snapshot indicators may be misleading.

However, many poor people in rural areas of developing countries consume the goods they produce or barter them for other goods as they have little or no interaction with markets. This creates difficulties in determining the monetary value of their production. One can theoretically value self-consumption, but it is difficult to do so with precision. Therefore, income and consumption may be incomplete measures that fail to capture the local complexity and dynamics of poverty (Warner, 2000). Indeed, poverty has many other dimensions which are non-monetary. For example, even if you have enough goods, they are worth little if you are not healthy enough to enjoy them. On the other hand, a government by raising taxes to provide better public services or better public health may increase income poverty, while reducing poverty more broadly (Deaton, 2001).

Amartya Sen (2001) recommends a broader conception of poverty that reaches beyond a shortage in income. Poverty is also associated with insufficient outcomes with respect to health, nutrition, and literacy, and with deficient social relations, insecurity, low self-esteem, and powerlessness. These basic capabilities in turn enhance people's ability to be agents of change; they enhance people's ability to question, challenge, propose, and ultimately usher in new ways of doing things.

These different measures of wellbeing are not substitutes for one another, nor can one dimension serve as a proxy for another, and, even though income growth may help to achieve the reduction of non-income poverty, it is neither necessary nor sufficient. For example, improvements in public health such as malaria eradication, vaccinations, and clean water led to considerable improvements in life-expectancy in many countries of Africa that were experiencing little or no income growth. Similarly, in Costa Rica, Cuba, pre-economic reform China, and the Indian state of Kerala, health and educational poverty has been effectively eliminated; however, all these are income poor countries (Deaton, 2001).

Thus, a multidimensional perspective of poverty provides a more complete picture of deprivation. However, it also complicates analysis as more indicators, variables, and relationships must be considered (Chambers, 1997). In particular, designing reliable ways of representing non-market income and services and determining the effects of social and political dimensions like decision-making, power relations, and political participation, present a distinct challenge. Additionally, multidimensionality makes comparability across settings more difficult while also requiring the determination of relative importance of these dimensions for policy targeting and resource allocation (Kanbur and Shaffer, 2007).

The different definitions of poverty shape our understanding of what poverty is, and how severe it can be, i.e. its multidimensionality. In addition, several studies show that the poor are not static and that there is some mobility around a threshold (see stages of progress project by Anirudh Krishna;² Hulme et al. 2001; Hulme and Shepherd, 2003). This has opened a new set of studies aimed at understanding the dynamics of poverty, i.e. the characteristics of and conditions under which individuals and groups are caught in poverty traps or the types of assets and conditions that allow individuals to move and stay out of poverty.

Measuring poverty

Different definitions of poverty imply different indicators, some more quantifiable than others; thus, different methods must be used to fully capture the multidimensionality of this concept. Household surveys (or objective methods) are used to analyze the welfare distribution and poverty characteristics, while participatory (more subjective) methods provide an opportunity to document and study poverty based on reporting by the poor themselves according to their own perceptions. The question of the relative strengths and weaknesses of aggregate household surveys and more participatory methods has been the focus of much interest by both researchers and practitioners (Kanbur and Shaffer, 2007; Zeller et al, 2006; Kanbur, 2003). Household surveys usually involve the collection of nationally representative sample data of income or consumption through questionnaires that capture the variables of interest, often standardized across countries.

Qualitative/contextual research tools range from participatory assessments such as wealth ranking to ethnographic and sociological case-studies to institutional political investigations. Such methods are often more appropriate for capturing the

² <http://www.pubpol.duke.edu/krishna/index.html>

social and institutional context of people's lives than quantitative methods (Booth et al., 1998). They can capture information that may not be well represented in household surveys such as intrahousehold inequalities; subjective perceptions of poverty according to gender, ethnicity, etc; non-market dimensions such as poor and women's foraging activities; poor peoples' priorities for action; coping strategies; and cultural, political, and sociological determinants of poverty.

There is a growing recognition that a judicious combination of qualitative and quantitative methods can help solve problems that are associated with each type of method taken separately (Kanbur, 2003; White, 2002). Often, the distinction between qualitative and quantitative methods is fuzzy because qualitative methods can yield quantitative results and vice versa (Ravallion, 2005a). Kanbur and Shaffer (2007) indicate that these approaches vary in a continuum along five dimensions: type of information, population coverage, degree of population involvement, inferential method, and disciplinary framework. Based on these differences, studies that use both methods benefit from the richness of qualitative and quantitative data analyzed through a variety of techniques.

For example, in assessing poverty issues in several countries in East and Southern Africa, Ellis and colleagues adopted both qualitative and quantitative techniques for data collection. The qualitative part addressed the policy and institutional context of livelihoods at community level, while a quantitative component addressed assets, activities, incomes, and vulnerability factors at household level. Through this mix of methods, useful insights were obtained regarding the institutional context within which individuals and households attempt to construct viable livelihood strategies (Ellis et al., 2003; Ellis and Bahigwa, 2003; Ellis and Mdoe, 2003; Ellis and Freeman, 2004).

A series of case studies on the impact of agricultural research on poverty in Bangladesh, Kenya, Zimbabwe, Mexico, China, and India (Adato and Meinzen-Dick, 2007) found qualitative and quantitative data to be important complements. The case-studies drew upon participatory poverty assessments (PPAs) as well as quantitative indicators of poverty. Household surveys provided broad representation and the ability to quantify changes in welfare status, particularly where panel surveys were available. Qualitative data, including focus groups, semi-structured interviews, and ethnographic observation provided important insights on the dynamics of poverty, particularly perceptions of vulnerability, the role of institutions, and power relations.³

In sum, PPAs and qualitative techniques more generally serve to highlight possible complications in the meaning of poverty, to emphasize the role of a wider range of causal processes than has been recognized by mainstream poverty analysis, and to guide the uses that are made of quantitative data in arriving at appropriate policies and practices (Booth et al., 2006).⁴ Moreover, an analysis of

³ Other useful examples of such studies are found in Howe and McKay (2007) and Adato et al. (2006).

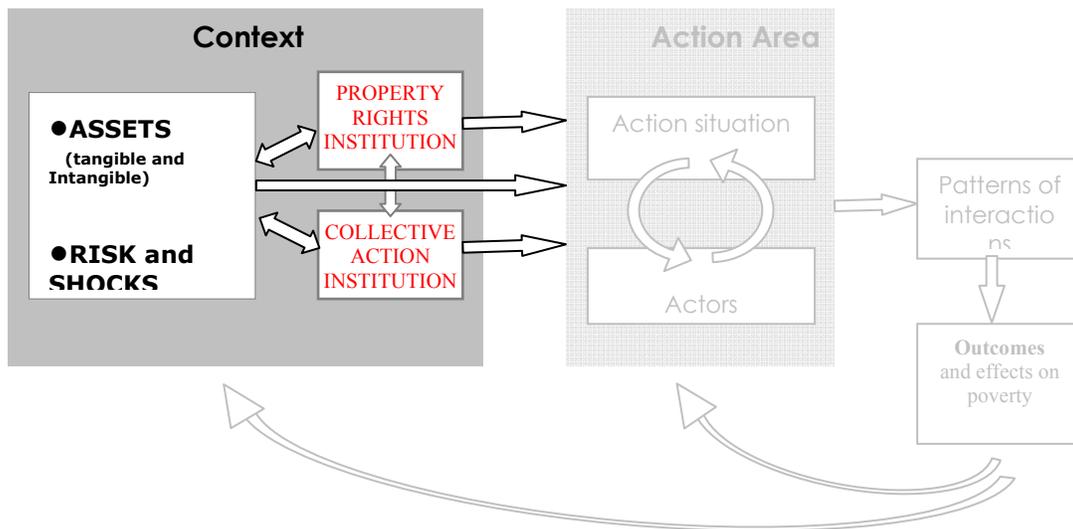
⁴ While the policy relevance of case studies and qualitative techniques rely on cases being typical for larger groups of households, Russell (2005) suggests that a case study even of a small number of families such as he conducted in Sri Lanka can generate additional policy-relevant knowledge that would be missed by conventional surveys. For example, detailed cost burden data of illness and related asset or coping data help inform health financing debates. Moreover, free health care services

causes is more compelling if it is informed by the poor's own vision of the dynamics of poverty and the processes leading to impoverishment and disimpoverishment. Quantitative techniques, on the other hand, provide the opportunity of assessing times-series and trends along relevant dimensions, cross-sectional comparisons between different individuals, households, groups, and communities, and across regions, countries, and continents, and estimating prevalence and distribution within population areas (Mayoux and Chambers, 2005). Additionally, such techniques offer the credibility of numbers that are often useful for influencing policy makers.

An additional approach to studying poverty, proposed by German and Stroud (2007) links together development research and practice. Participatory action research (PAR), which combines participatory action learning and action research, allows the actors themselves (individuals, communities, institutions) to identify key challenges and come up with solutions through dialogue and reflection as well as gain better understanding of the process of development. The main benefit of this approach is the combination of action (improvement in well-being) and research (advancement of understanding of causes of poverty). However, German and Stroud strongly encourage researchers to apply PAR in combination with the empirical research methods discussed above.

3. THE CONTEXT: SOME POINTS OF ENTRY

In this section we discuss the significance of contextual factors to poverty reduction and suggest ways to measure them. Contextual factors include assets, risks and shocks, and legal/political structure as depicted in the diagram below.



Evaluative Criteria of outcomes:

- Income
- Cost burdens
- Assets
- Health
- Impoverishment

protected the poor from high direct cost burdens. Over time it protected assets and mitigated or prevented livelihood decline. The case studies also showed that survey figures may underestimate illness cost burdens and their implications for impoverishment.

Role of Assets

The poor employ multiple income-generating activities, which depend on ownership/access to assets that enable them to diversify their livelihoods in order to construct viable pathways out of poverty or to maintain their current consumption (Winters et al., 2002; Ellis, 1998). For example, in a recent wealth ranking exercise in eight villages in Malawi Ellis et al. (2003) found that households described as well-off are distinguished by having landholdings of 1.5–2 hectares, up to five heads of cattle, three to five goats as well as hiring nonfamily labor seasonally, owning bicycles, and sometimes owning non-farm service sector businesses. Ownership of fishing gears was a key wealth indicator in the fishing villages. Poorer households, on the other hand, possess little or no land, no cattle or goats, and rely on casual work or safety net transfers to get by.

Assets are more than just income or ownership of animals or farm equipment. In addition to both cash and in-kind income, key assets include social institutions (kin, family, village), gender relations, and property rights needed to sustain a certain standard of living. Access to social and public services such as education, health services, water supplies, and roads plays a key role in livelihoods. Social capital comprising different types of networks and social organizations is increasingly recognized as critical for enabling the poor to secure access to different types of assets (Ellis, 1998). Assets are thus important for constructing livelihoods and for preventing people from sliding into poverty when faced with risks. They are also the basis of agents' power to act and to reproduce, challenge, or change the rules that govern the control, use, and transformation of resources (Bebbington, 1999). Whether and how people organize to access these diverse forms of assets (i.e. collective action), or whether they can lay enforceable claims to these assets (i.e. property rights) is central to poverty reduction efforts.

Rights to land and other natural resources are particularly important since many rural populations continue to depend directly on agriculture and common pool resources such as forests, fisheries, and pastures as a basic livelihood strategy. In many cases, these assets are a source of income that enables individuals to invest in improved farm practices or even in non-farm assets, and broaden the scope for further income generation or to reduce risk. Similarly, by investing in networks and collective activities, individuals and groups are able to increase the assets in their command as well as reduce income risks that result from climatic variability, disease, and other shocks as seen in the next section.

Risk and shocks

Most literature on poverty emphasizes that the poor are extremely vulnerable to shocks, which pushes them into greater impoverishment and often perpetuates chronic poverty (Jalan and Ravallion, 1999; Krishna et al., 2004; Dercon, 2002). It is important to keep in mind that while vulnerability to shocks is an element of the multifaceted concept of poverty, it should not be equated to poverty since not all poor are vulnerable, and not all vulnerable are poor. In addition, some researchers

see poverty as a more static concept defined in terms of asset ownership, while vulnerability is seen as a dynamic state which may affect the poor more than income and asset poverty (Davies and Bennett, 2007; Moser, 1998).

Just like poverty, vulnerability is a multidimensional concept: shocks come from multiple sources, affect whole communities (covariate) and individual households (idiosyncratic), influence one or more livelihood sources at a time, and demand multiple sophisticated responses. Moreover, shocks leave the poor with numerous "layered" consequences: a decline in income might not just lead to a decline in consumption of certain goods, but to the deterioration of nutritional status, which will push the poor further into the vicious cycle of poverty (Jalan and Ravallion, 1999; Dercon and Krishnan, 2000). This complex reality is exacerbated by pervasive imperfections in credit and insurance markets and often unfavorable legal and political environment that make it difficult for the poor to weather shocks (Udry, 1994).

Generally, shocks are categorized into climatic shocks (floods, droughts), economic fluctuations (price changes), insecurity and political instability, and individually specific shocks (Dercon 2002; Little et al. 2001). Little et al. (2001) also add insecurity and political instability as a source of risk in many developing countries. Health shocks are identified as the most harmful in the short- and long-term by many studies (Fafchamps and Gubert, 2007; Krishna et al., 2004; Dercon, 2002). However, while risks that the poor face are multiple and pervasive, the poor should not be seen as passive recipients of their "fate." On the contrary, in the context of complex and uncertain environment, they have become skillful managers of their portfolios employing multiple strategies to cope with shocks (Davies and Bennett, 2007; Moser, 1998). These strategies include risk-coping mechanisms, which involve self-insurance through assets, savings, and informal group-based risk-sharing (which usually consists of informal credit and gift transactions), and risk-management strategies, which involve income diversification and income skewing (Alderman and Paxson 1994).

Since the previous section already considers the multiple roles that assets play in the livelihoods of the poor, it is important to just mention that the poor mobilize various assets (physical, human, financial, social) when faced with a shock. Examples of this use include increasing family labor supply by involving women and children in productive activities, using housing for home-based enterprises, selling livestock and other assets, and calling upon social relations (Moser, 1998; Davies and Bennett, 2007). However, there are several issues that make assets an unreliable source of self-insurance. Often, they are impossible to liquidate or are sold at low prices due to increased supply during a covariate shock. In addition, just owning an asset is not enough: its real value during a shock depends on the ability to manage it, transform it into income, and benefit from it based on the property rights regime, governance environment, necessary infrastructure, and availability of information and markets (Moser, 1998; Dercon, 2002).

Social institutions are among the most-used tools in the risk-management portfolio of the poor. They represent part of the asset base that is often used for transfers such as gifts and loans in the time of uncertainty. Since formal credit and insurance mechanisms are often absent, the poor establish informal networks for risk smoothing upon which they can call upon in time of need. Most of such

informal transactions are done between families and neighbors or friends within the same village for easier monitoring of reciprocity and repayment (Fafchamps and Lund, 2003; Fafchamps and Gubert, 2007). Such informal credit transactions play an important part in stabilizing consumption in the circumstances of fluctuating incomes.

As for the risk-management strategies, these mechanisms usually include income smoothing activities through income diversification (combining several sources of income, usually farm and off-farm) or income-skewing (allocating resources to low-risk, but low-return activities) (Dercon, 2002). While it may seem as the optimal way to manage shocks, research shows that this method may not always work best to insure against income shocks since farm and non-farm activities may move together during a time of uncertainty. In addition, Davies and Bennett (2007) show that in some situations, as in the case of Ethiopian pastoralists, diversifying sources of income by investing in activities other than those around cattle may result in the breakdown of social capital, a crucial asset widely utilized by the pastoralists during shocks.

While the poor employ multiple strategies to deal with risk, the impact of shocks is heterogeneous and is based on their asset portfolio and other coping strategies available to them. This fact is important to keep in mind when studying risk since studies have shown that even the informal mechanisms tend to work less for the poorest and that the better-off households in the communities fair with shocks better (Jalan and Ravallion, 1999; Dercon and Krishnan, 2000). In addition, this heterogeneity is played out on the household level: research has shown that income fluctuations affect women and girls more than the male members of the household, which in most cases is a result of legal regulations (such as divorce and land tenure rules) that favor men over women (Dercon and Krishnan, 2000; Behrman and Deolalikar, 1990).

The discussion above emphasizes the need to take a more critical approach to examining risk and vulnerability. First and foremost, while vulnerability is an essential element of the state of impoverishment, it is not synonymous with it. Similarly, it is important to carefully study the relationship between vulnerabilities and capabilities as well as between vulnerabilities and asset ownership (since, in addition to ownership, there must be the ability to manage the assets) (Moser, 1998). When trying to measure an impact of a shock on a household and evaluate a household's response to it, it is first useful to examine the nature of shocks (frequency, intensity, geographical spread, and predictability) that affect the household and the community where the household resides. Then, it is necessary to consider other factors that might condition how the household deals the current and potential shocks. Such information includes data on physical and human capital combined with the data on the functioning and opportunities in the labor and asset markets (which will also allow to identify vulnerable households); survey of existing institutions, both formal and informal (especially social arrangements), customs, and legal framework (divorce laws, tenure systems) (Dercon and Krishnan, 2000); data on informal credit and insurance systems (Udry, 1994; Davies and Bennett, 2007); and information on coverage and past performance of existing social safety nets (Dercon, 2002).

Institutions, legal and political environment

For many scholars, poverty is inherently a political problem (Hickey and Bracking, 2005; Moser, 2005; Mosse, 2004; Engberg-Petersen, 2002). Its persistence reflects its institutionalization within social and political norms and structures, and its legitimization within political discourse. The broader institutional environment in which local level actors are embedded influences the conditions they face—whether they have rights and the kinds of rights they can claim, whether (and how) they can be part of organized groups, and whether they can even organize freely without fear of disruption or retribution. Elements of the broader institutional environment include laws (both statutory and customary), maintenance of order, the nature and effectiveness of macro-economic policy, the nature of state-society interactions, political regime, infrastructure development, investments in human capital, etc. All these elements can serve to limit or enhance the extent to which actors, whether individual or collective, can access their assets.

Power and poverty

Before looking at factors of the external environment and how to make them operational, it is important to consider the problem of power, because the distribution of power is a primary determinant of the institutions that get adopted and implemented (Knight, 1992). Robert Dahl's (1961, 1957) research of power issues suggested that "*A has power over B to the extent that he can get B to do something that B would not otherwise do.*" This conception of power can be determined by examining who participates, who gains and loses, and who prevails in a specific decision making arena. However, participation in decision making overlooks the problem of non-participation or inaction and narrows the scope of policy to actions that increase participation (e.g. education, increased income); participation itself may face power constraints.

Bachrach and Baratz (1962) suggest that power includes situations where individuals/groups work to limit the scope of public debate and decisions to those issues that are relatively harmless in themselves. This second, hidden, face of power is concerned not only with participation and outcomes in a given decision arena, but also with the exclusion of certain participants and issues. Lukes (1974) introduced a third dimension to the concept of power: power can shape the ways the powerless perceive their wants: "*A exercises power over B when A affects B in a manner contrary to B's interests.*" In Luke's view, power makes existing social, economic, and political relations seem natural. This conception includes the complex idea of the hegemony of the powerful and the production of a "false consciousness" among subordinate groups who appear to be in consensus with systems that oppress them (Mosse, 2004).

Because power manifests in different and complex ways, including dimensions that are intangible and non-material, it is difficult to measure. The second and third dimensions of power are especially difficult to operationalize because they are not easily observable. The poor, in particular, may act in ways that diminish their well-being because speaking out against ruling elites may

jeopardize access to scarce opportunities or may even pose a risk to their lives (Engberg-Pedersen, 2002; Webster, 2002). Scholars have, however, attempted to study these dimensions and the mechanisms by which they manifest. The first dimension of power is widely understood and involves the use of resources by actors to manipulate decisions. These resources include wealth, votes, jobs, positions in organizations, social and cultural status, rules, etc., and they can be directly observed or obtained through both qualitative and quantitative techniques such as administering surveys, interviewing key informants, wealth ranking, or mapping outcomes.

Certain aspects of the second dimension of power (i.e. keeping issues and people out of a decision-making arena) can be observed or determined, and the mechanism by which it is affected can be identified. For example, the threat or use of force, the threat or use of sanctions, intimidation, the manipulation of rules to exclude or just simple inaction by those in positions to take action are some indicators. The third dimension is the most difficult to operationalize and involves identifying the means by which a more powerful individual or group can shape the way a less powerful individual or group conceives of their issues and situation, or keep potential issues relevant to the less powerful out. Measuring this dimension involves determining how power shapes and influences/determines how less powerful groups and individuals *conceive* of the possibilities and strategies of challenging power where conflict is less visible or latent. It may involve the study of how social myths, symbols, and language are used and manipulated in power processes, i.e. locating the power processes behind the social construction of meanings and patterns.

For example, Gaventa's (1980) study of power relations in the Central Appalachia region of the United States attempted to uncover the three dimensions of power. He found that non-decision making power functions through institutional practices and revealed the processes by which dominant actors manipulate myths, rumors, and symbols to exercise third-dimensional power. He also demonstrated that the three dimensions of power are mutually reinforcing and that historical studies are crucial to discover whether routines of non-conflict have been established and how they have been maintained.

Scott (1990), on the other hand, focuses on language and ideology to understand how power relations may underscore the apparent consent of subordinate groups who have been forced to conceal their activities and real opinion from public authorities. He relies on a wide range of methods including linguistic ethnography, sociolinguistics, folklore, history to interpret rumors, gossip, folktales, gesture, jokes, folksongs, trickster tales, and slave narratives. His work not only unveils the problem of conducting research among subordinated groups, but also suggests that decoding the hidden language of those subordinated is crucial to understanding large scale collective action such as rebellions, riots, and social movements.

Because the mechanisms of power comprise laws, rules, norms, customs, social identities, and standards that constrain and enable inter- and intra-subjective action, to exercise power is thus to act upon social limits to action and other social boundaries that define the field of what is possible, for another or for the self (Hayward, 1998). As a consequence, the analysis of power relations requires looking beyond the distribution of political resources and their intended use in

interaction to include how power shapes the field of what is possible, not only for actors typically identified as 'powerless' but also for those who seem 'powerful.' It also includes the notion of political representation, which concerns the creation of classifications through which individuals/groups interests are represented within political systems.

Moser (2005) suggests that methodologies and tools aiming to provide a better understanding of the way that power affects the production and reproduction of poverty and insecurity must include an analysis of rights regimes, which identifies rights regimes at different levels and their associated domains and operational or authority structures. The analysis will need to include a channel of contestation matrix, which identifies various institutional channels through which claims can be contested (political, legal, policy, administrative, social, and private sectors), the types of claims that relate to each institutional domain, and the method of citizen action that can be used to make those claims.

The study of power relationships, which is crucial to understanding why the poor are poor in the first place and why they remain poor, is complex and requires the study of both overt and covert processes, an analysis of which issues make it to the public agenda as well as the converse, analyses at multiple levels, and a historical and contemporaneous analysis of political, social, and cultural institutions. It is largely a qualitative and interpretive exercise.

The broader institutional environment and poverty

In measuring the impacts of broader reforms on the property rights, access, and collective organizing of the poor, both qualitative and quantitative techniques can be used, and the dimensions of poverty discussed in earlier sections can be taken into account. However, the primary measurement concern is one of attributing causality to a reform process. This can be incorporated into research design by conducting a survey of the affected communities before and after a reform. Alternatively, areas where the reform has been implemented versus where it has not been implemented can provide the basis for generating the nature of effects or different levels/stages of implementation. If conducted in the same country, then there can be opportunity of keeping the political regime, political culture, bureaucratic capacity, aid dependency, etc. relatively constant. A cross-country study would need to take cross-country variation across the aforementioned dimensions into account. In addition to this, different categories of individuals (men, women, poorer, wealthier) and groups can be asked directly what the effects of reform processes have been on their access to resources and capacity to organize either through individual or community-level surveys and participatory techniques. Key informants from both the public sector and NGOs can be interviewed as well.

Developing country elites' perceptions of poverty may also matter to the extent that such views may influence collective action for strategies to tackle poverty and provide services to the poor. A particular concern may be to determine whether and how poverty represents a threat to contemporary elites, including whether or not poverty might impact negatively on elite welfare and thus provide a reason for elites to support pro-poor reforms (Hossain, 2005).

In his assessment of methodological implications regarding the impacts of broader institutions, Fox (2004) relies heavily on qualitative analytical techniques, with identifying sub-national comparisons and institutional ethnographies being particularly essential in the analysis of institutional change and poverty reduction. In studying the outcomes of decentralization for example, a focus on sub-national variation may allow for comparisons that control for social, political, and economic differences, subsequently permitting the analysis of relationships between specific institutional changes and social actors. Institutional ethnography may allow an examination of behavioral changes associated with pro-poor reforms, capturing both obvious and hidden patterns. Fox also highlights that carefully performed institutional ethnographies at sub-national levels can reveal patterns of variation that can be aggregated to produce generalizable results. It goes without saying that such in-depth assessments should be participatory, drawing from stakeholder analysis of how these institutional reforms affect them.

5. TYING IT ALL TOGETHER: THE ROLE OF INSTITUTIONS

While much has been written on the role of assets, risks, and political structures for poverty reduction, this paper attempts to bring these disparate bodies of research together and analyze their importance for poverty-related studies by looking at them through the lens of institutions, particularly those of property rights and collective action. This is done by demonstrating the close links that exist between all the elements in the context section of the conceptual framework of Di Gregorio and colleagues and by showing how examining each of its elements in connection with the institutions of collective action and property rights may shed new light on poverty-related research.

The discussion in the previous sections points out numerous points of intersection between assets, risk, and institutional environment, and the institutions of collective action and property rights. For example, both collective action and property rights are part of the asset base of the poor: the former is one of the “capitals” in their portfolio, and the latter is an intangible asset that allows the poor to directly own and/or benefit from physical and other assets. Moreover, as discussed above, social relations are crucial for risk-smoothing in times of shocks; property rights, by granting various rights to a resource, allow the poor to effectively use their assets during economic and climatic fluctuations. Lastly, policies and laws enacted at national and regional levels can affect the property rights of the poor by enhancing access to assets, for example, through redistributive land reforms or decentralization reforms where elite capture has been thwarted. In other cases, legal reform or state action can improve the collective organization of the poor.

Therefore, collective action and property rights are an integral part of the context in which the poor live. The next section will present ways to conceptualize and measure property rights and collective action to examine their impact on the desired outcomes.

Property Rights and Poverty Reduction

Rights to Land and Resources

Rights over land and other natural resources play a fundamental role in human society. The distribution of wealth and poverty is a reflection of underlying property rights. In this section, we provide suggestions on how to examine under what conditions access to land is likely to be an important contributor to efforts of reducing rural poverty and how we can measure the importance of land access for poverty reduction.

Descriptive analyses can provide a general indication of the correlation of income and consumption and land holdings, often forming the basis for more intricate quantitative procedures. For example, in Tanzania Ellis & Mdoe (2003) compared the size of land holdings across income terciles and quartiles and found that the population in the highest income quartile owned, across all villages studied, over twice the amount of land owned by the group in the lowest income quartile. Several longitudinal studies have also used income and/or expenditure to capture the welfare-enhancing effects of land in different settings, for example, in Chile (Scott, 2000), among resettled farmers in Zimbabwe (Gunning et al., 2000), and in Cote d'Ivoire (Grootaert et al, 1997). In these studies, household incomes and expenditures serve to proxy household welfare. The effects of household land holdings on household welfare over time are examined, often taking into account that income/expenditure levels may be influenced by the levels of other assets (such as livestock, hired labor, machinery, transfers, etc), shocks including environmental shocks (droughts, floods, earthquakes), household specific shocks (crop damage, livestock losses, windfalls, disease/accidents), as well as the attributes of household heads (education) and of the geographic location. By taking into account these variables, the authors were able to isolate the effects of land holdings (i.e. size and access) on household welfare.

In addition to identifying effects, it is useful to consider the conditions under which land access and availability may be of value to poverty reduction efforts, including the interactions of various assets with land. Finan, Sadoulet, and De Janvry (2005) have considered these different dimensions in Mexico. For example, they construct a welfare index which, in addition to measures of income and consumption, consists of various dwelling characteristics (running water, electricity, presence of a bathroom, number of rooms, and dirt floors), household durables (ownership of a blender, refrigerator, television, and truck), and other contextual variables such as access to infrastructure (roads, health centers) and ethnicity. Their findings show that households' access to only one hectare of land can be sufficient to enable them escape poverty if they have access to a paved road. In South Africa the post-apartheid land restitution and redistribution programs have done little to contribute to poverty reduction (Bradstock, 2005). Households allocated a plot of land could not exploit it because the plots were too distant, or due to credit failures or low human capital development. Thus, the value of land for livelihoods depends on how that piece of land interacts with other assets. In general, the welfare-enhancing effects of access to land may be limited

by the lack of access to complementary assets or unfavorable policies and institutions (de Janvry et al., 2001).

Rights to land and other resources are increasingly perceived as a bundle of rights (Schlager and Ostrom, 1992) as opposed to just simply private, state, or common property. These bundles comprise: access (the right to enter a defined physical area and enjoy non-subtractive benefits); withdrawal (the right to obtain resource units or products of a resource system, for example, catch fish, divert water); management (the right to regulate internal use patterns and transform the resource by making improvements); exclusion (the right to determine who will have access rights and withdrawal rights, and how those rights may be transferred); and alienation (the right to sell or lease management and exclusion rights). Even without complete ownership (i.e. the right to alienate), individuals and groups may still have access to resources that make significant contributions to their livelihoods, for example, where pastoralists graze livestock on fallow land that may belong to individual farmers. On the other hand, groups may collectively own resources, with shared access restricted among recognized members. The unbundling of rights reveals the multidimensionality of land and resources and allows for the possibility that resources can be used in different ways by different user groups. Unbundling also separates the question of whether a particular right is 'well-defined' from the question of the effects of having a particular set of rights (Ostrom, 2000). Whatever the stick in the bundle that an individual or group holds, one of the key concerns is whether those rights and claims are secure and have the potential of sustaining current consumption or increasing consumption over the long term.

In many parts of the developing world common pool resources such as forests, fisheries, and rangelands, which may all be held under different property arrangements such as state, common property, or private, contribute significantly to rural livelihoods. Many studies show that access and withdrawal rights to the commons often have a positive impact on the livelihoods of the poorer and marginalized members of communities through meeting regular subsistence needs, providing some cash income, or even serving as safety nets during lean times (Meinzen-Dick et al., 2006).

In order to reach a valuation of the contribution of environmental resources to household livelihoods, researchers assessed the quantity of products harvested or collected from the commons through interviews, weighing, and consumption assessments (Adhikari, 2005; Beck and Nesmith, 2001; Cavendish, 2000; Jodha, 1986, 1995; Dei, 1992). Households would report on the value of their resource consumption or sales; locally-traded substitutes can be used to assign values where one is unable to assign a price to the resource. Errors in estimating contribution of environmental resources to household livelihoods may result from a failure to measure and account for the entire (or more comprehensive) portfolio of products. Such oversight may occur because some products in a household's portfolio of goods are not traded in formal markets and thus cannot be priced. Moreover, some products may be excluded from a household's budget due to problems with recall. The distinguishing feature is that such income is 'earned from wild or uncultivated natural resources' often 'within the first link in a market chain' (Sjaastad et al, 2005).

Conceptualizing and measuring security of rights

It is generally recognized that secure rights to land are a necessary condition for livelihoods maintenance and poverty reduction because they provide the incentives required for individuals and/or groups to undertake investments in land management activities that enhance land and resource productivity and sustainability. Place et al. (1994) describe tenure security as comprising of freedom from interference from outside sources, the possibility of continuous use, and an ability to reap the benefits of labor and capital invested in the resource, i.e. the duration and assurance of rights. Duration refers to the length of time over which the individual/group may enjoy specific rights, while assurance refers to the ability of individuals to exercise their rights.

How tenure security is conceptualized and measured has not been consistent. Some researchers have equated tenure security with the possession of registered land titles (Feder et al., 1986) or with the legal comprehensiveness of the proof of ownership (Deininger and Chamorro, 2004). In their review of property rights and technology adoption, Place and Swallow (2000) show that some researchers have focused on the breadth of rights (i.e. the number of rights in the bundle that are held by individuals) or the presence/absence of key land rights as perceived by respondents, or whether land has been purchased, rented, or leased as proxies for tenure security. In this last method authors often theorize that holdings under lease rights have a greater risk of appropriation.

Golan's (1990) study in Senegal's peanut basin (cited in Schmid, 1994) for example identified three levels of tenure security: fields with secure rights; fields with moderately secure rights, which could not be taken away from the farmer/manager, but for which the farmer/manager could not determine the crop, seed, or pesticide use, or did not know if they would be working the field in the following year. Insecure fields were those where someone had the rights to take away the land from the farmer/manager. These indicators are largely qualitative, but quantitative values can be computed from them to determine levels of tenure security.

A different proxy for security can be the right to transfer or alienate a resource. Place and Hazell (1993), for example, grouped land rights into three categories: complete rights whose current managers can sell; parcels that cannot be sold but can be given or bequeathed, i.e. preferential transfer parcels; and parcels that may not be permanently transferred, i.e. limited transfer parcels. These studies conducted in Kenya, Uganda, and Rwanda found that even management rights (i.e. with limited transfer rights) derived from customary authority did not affect investment decisions and productivity. Other studies conducted in Africa (Migot-Adholla et al., 1991; Bruce and Migot-Adholla, 1994) also found little difference in productivity, investment levels, or access to credit; "incomplete" but well-defined rights under customary law were sufficiently secure. Thus, households with rights to alienate land or to make long-term improvements on land are not necessarily more secure than those with only use rights to land. Similarly, the range of rights held over a resource may not always impede investments in and income generation from that resource for as long as the right is secure. Nonetheless, transferability can be valuable. It can increase the ability to raise cash through sale or rental of the property (also through credit) and by allowing farmers to endow heirs with key assets (Baland et al., 2007; Lyne, 2005).

The significance of land title in security and investment is, however, not straightforward (Deininger and Chamorro, 2004). There is the possibility that investment may in fact drive security. In certain cases tree planting or borehole/water well development, land clearing, investment in soil quality, etc. may lead to higher levels of tenure security for the investor as the investment itself may signify a means of staking a claim to the land (Gray and Kevane, 2004; Brasselle et al., 2002; Sjaastad and Bromley, 1997). Thus, there is the possibility of reverse causality as land rights may be endogenous, which needs to be controlled for as done by Braselle et al (2002).

Tenure security can also be determined by considering the nature, levels, and intensity of conflict/disputes, including encroachment and direct evictions. Working in Ethiopia, Deininger and Jin (2005) measured tenure security by village-level or individual experience of land reallocation taking into account households' expectations about future village-level reallocations. The presence, accessibility, and effectiveness of dispute resolution mechanisms, whether statutory or customary, may also signal the presence of secure rights and claims. In addition, whether the enforcing entity is seen as legitimate can provide an indication of whether or not rights will be respected. Multiple and competing legal systems for land allocation and distribution, especially if uncoordinated, can signify some level of insecurity (Meinzen-Dick and Pradhan, 2002). Moreover, people can improve the security of their rights, whatever the stick in the bundle, through investing in their relationships with others. Berry (1993) demonstrates that rights over land and resources are linked with social networks and patronage. In Southern Ghana, Goldstein and Udry (2004, cited in Udry and Conley, 2005) find that people with weak ties to group leadership are reluctant to fallow their land for fear of finding it reallocated to a rival when it is time to re-establish cultivation. Women who are at the margins of political networks fallow relatively less. Thus, if rights to land are acquired by ongoing negotiations, security will be dependent on the terms by which people participate in the relevant networks (Berry, 1993).

As we have seen in the preceding paragraphs, the usefulness of an objective analysis of the different dimensions of tenure security is greatly enhanced when informed by people's own perceptions of whether or not their rights are secure, and their actual experiences with security. In Cameroon, following the Land Ordinance of 1974, for instance, farmers only engaged in the titling process until their parcels were fitted with concrete boundary markers and did not pursue registration and titling (Firmin-Sellers and Sellers, 1999). For them, these markers, which symbolized government authority, were sufficient signals to keep off others' land and secure their rights. Consequently, what individuals and groups do to modify processes to suit their immediate needs is an important dimension of security to explore.

Tenure security can thus be evaluated in different ways including: the range of rights vested in individuals and groups, whether these rights face any threats in the short and long term, the mode of acquisition of these rights, the terms by which the rights were acquired, disputes, and the material/physical ways in which people attempt to secure their rights. The general point is that while researchers and practitioners may seek common ways to measure tenure security, the sources of insecurity may vary widely and so will the proxies and measures. Nonetheless, the

implications of insecurity on welfare can be approximated by using the indicators outlined in earlier sections of the paper.

Collective Action and Poverty Reduction

Conceptualizing collective action

Collective action is a multi-layered concept, which has been subject to multiple interpretations and applications in research. It may take different forms in different contexts and is difficult to conceptualize, operationalize, and measure (Poteete and Ostrom, 2004). In some cases, collective action can appear as institutional development (e.g. creating rules for community forest management); in others, it may take the shape of resource mobilization (e.g. jointly investing in watershed maintenance). Other forms that cooperation may take include coordination of activities and information sharing (Poteete and Ostrom, 2004).

Case-studies of cooperation in natural resource management conceptualize collective action in different ways according to how it plays out in their particular contexts. Pender and Scherr (2002) view it as a factor in organizational development promoting collective regulation of natural resources and collective investment in protecting common lands or watersheds to achieve collective benefits. However, even though commonly-used definition of collective action created by Marshall⁵ implies that organizations may serve as a channel for collective action, Meinzen-Dick et al. (2002b) warn about the potential pitfall of equating organizations with collective action, since the latter can exist without a coordinating organization. Besides, not all organizations produce collective action. Others view collective action as levels of participation in decision-making and benefit-sharing in natural resource management (German et al., 2006; Krishna, 2001).

On the other hand, some to choose to focus on the 'social movement' aspect of the functional definition of collective action, highlighting its potential to mobilize people beyond just managing a common property resource to larger-scale cooperation around rights to a resource (for example, Branford's and Rocha's (2002) account of the Landless Peasant Movement in Brazil). Yet others view collective action as a set of social structures (formal or informal), norms, and rules that bring people together. Badstue et al. (2005), for example, see collective action as a social arrangement, linked by a set of rules and responsibilities, for the mutual supply of seed between a well-defined group of farmers in the Central Valley region of Mexico.

It is clear from the case-studies mentioned above as well as so many others that there is no single way of conceptualizing collective action. Consequently, using a comprehensive, but disaggregated approach that considers different aspects and forms of collective action is necessary (German et al., 2006). This would also include a careful consideration of the form collective action takes in a given context

⁵ "Action taken by a group (either directly or on its behalf through an organization) in pursuit of members' perceived shared interests" (Marshall 1998)

to be better able to draw comparisons when appropriate (Poteete and Ostrom, 2004). In addition, it is important to keep in mind that collective action may manifest itself not only as an institution (rules of the game applied over and over again), but also as a one-time event (e.g. political rally or one-time watershed maintenance activity) or a process (see examples of participatory action research in Sultana and Thompson, 2004; German et al., 2008).

Identifying the nature and form of collective action is incomplete without considering the factors that influence cooperation. One of the principal areas to focus on in collective action research is the issue of costs (both tangible and intangible) and incentives for cooperation (Swallow et al., 2002; Meinzen-Dick et al., 2002a). Where the costs of cooperation are higher, for example due to community heterogeneity, large distances, externally imposed systems, or traditional societal practices, collective action is less likely to exist or be effective (Pender and Scherr, 2002; Godquin and Quisumbing, 2006; Badstue et al., 2005). Institutional mechanisms that limit free riding can also increase the likelihood of collective action. These include face-to-face communication and shaming non-cooperators, participating in and influencing rule-making, and graduated sanctions that are credible (Ostrom, 2005; Ostrom, Walker and Gardner, 1992; Ostrom, 1990). However, formal recognition and validation by government authorities can assure cooperating groups that their activities will not be disrupted in the future (Agrawal, 2001). Technological change and market integration are other factors that can undermine collective action (Agrawal, 2001).

Furthermore, Meinzen-Dick et al. (2004) suggest that there are several concepts such as agency and social capital that are closely related to the notion of collective action. The concepts of social capital and collective action are especially prone to be confused, misused, or used interchangeably. However, there is a profound difference between the two. Social capital refers to the norms of reciprocity and networks or associations that promote collective action for mutual benefit (Putnam, 1993; Woolcock, 2004). This and other definitions (see Fukuyama, 2000; Narayan and Pritchett, 1999) suggest that social capital serves as the structural basis for collective action by providing the normative framework for the latter. To better differentiate between the concepts, Uphoff (2000) suggests viewing social capital as a stock variable that captures social relations, and collective action as one of the flows associated with it. Krishna (2001) adds that social capital can be seen as propensity for mutually beneficial collective action.

The Role of Collective Action in Poverty Reduction

How does collective action work to improve well-being? By providing information, reducing the likelihood of opportunistic behavior, and facilitating mutually beneficial joint action, it can enhance the ability of participants to access and defend resources, transform them into income, and access institutions and organizations that can facilitate resource access, defense, and transformation (Adato et al, 2006; Bebbington, 1999; Johnson et al., 2002). In addition, collective action can increase the negotiating power of the poor and improve their access to resources. In its capacity to foster empowerment, it may serve to strengthen the bargaining power of disadvantaged community groups (Agarwal, 1994). Women, for example, benefit from collective action via the increased role in negotiation of their rights in

the public domain and greater representation in decision-making as well as improved livelihoods (Pandolfelli et al., 2007). Therefore, collective action is an empowerment tool, engendering political equity and catalyzing the discussion and creation of equitable processes (German et al. 2006). Moreover, collective action allows a more effective technology adoption due to the lowered information costs and the landscape scale of adoption (see Swallow et al., 2002 and Ravnborg et al., 2002).

Networks of trust and mutual accountability linking individuals in communities (not usually all members of the community) are critical in helping to break the problem of access to financial capital (Okten and Osili, 2004; Haddad and Maluccio, 2003; Putnam, 1993), to diversify households' livelihoods portfolios, to cope with shortages of labor and inputs (Bird and Shepherd, 2003), to protect themselves against unexpected expenditures (Dercon et al, 2005), and as a mechanism for risk-smoothing and dealing with shocks (Fafchamps and Lund 2003). From the examples above it is clear that increased participation in groups or networks implies greater enjoyment of public services, the use of more improved agricultural technologies, increased opportunities for participation in credit programs, and assistance in mitigating the consequences of various forms of risk on households incomes.

Measuring collective action

Meinzen-Dick et al. (2004) emphasize that when studying collective action, researchers face three main challenges: how to conceptualize collective action, how to develop an appropriate analytical framework to measure it, and how to operationalize it for empirical research. Some suggestions on how to conceptualize or define collective action (as well as the related concept of social capital) are discussed in the previous section, so this section provides suggestions on how to measure it while doing research. In addition to the difficulties in direct measurement arising from the multi-faceted and dynamic nature of collective action, there are other challenges in trying to operationalize collective action for studies due to the subjective nature of the variables used to describe it (trust, reciprocity, reputation, participation, etc.) (Poteete and Ostrom, 2004). Furthermore, most scholars agree that the appropriate approach to analyzing or measuring collective action depends on the purpose of the study, which means that the empirical manifestations of this concept are also contextual (Meinzen-Dick et al., 2004; Poteete and Ostrom, 2004; Krishna, 2001).

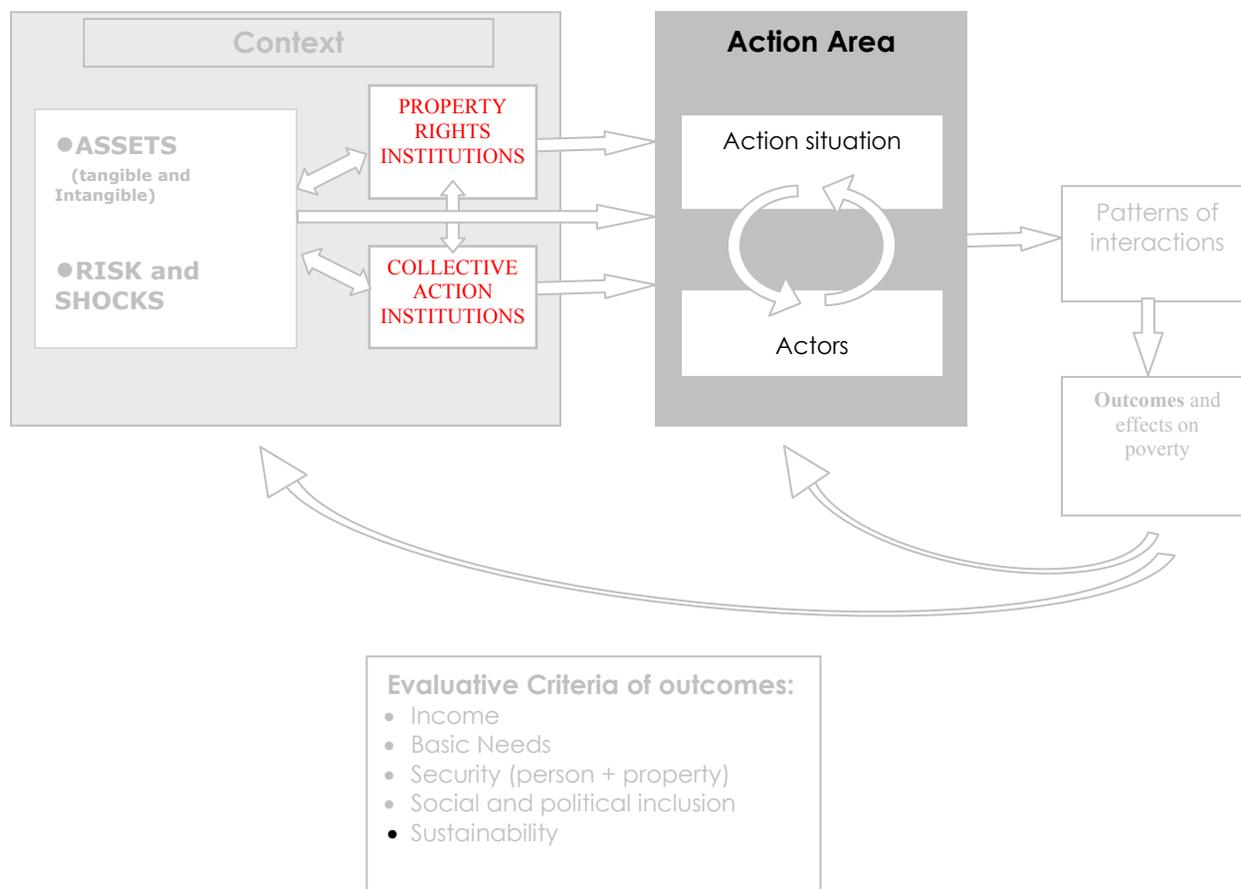
To capture the dynamism of collective action, Meinzen-Dick et al. (2004) propose examining its spatial and temporal scales. The spatial scale refers to the unit of analysis that is chosen in a particular study. While some studies of collective action on the resource units (see Meinzen-Dick et al., 2002a and Badstue et al., 2005), others study the concept in terms of social units (Padmanabhan, 2006). Yet others, such as McCarthy et al. (2004), suggest looking across multiple units including household-level data, community-level institutions, and information on the outcomes of cooperation. In addition, examining collective action across the temporal scale may be necessary to investigate changes over time. However, there are many challenges for such studies due to the difficulty (and expense) of collecting such time-series data and the potential complications in the statistical

analysis (Meinzen-Dick et al., 2004). Dercon et al. (2008) and Quisumbing et al. (2008) attempt to conduct such analysis and measure the welfare outcome of collective action using panel data from Ethiopia and the Philippines, respectively. They operationalize collective action as participation in local institutions such as burial societies and productive networks.

When considering linkages between poverty and collective action, there is a possibility of reverse causation between income and collective action. For example, better-off households might have a higher demand for associational life because they have more leisure time and more resources to contribute to a particular group. On the other hand, participation in networks may lead to higher incomes through the mechanisms described above (mutual insurance, group borrowing, cooperation in technology adoption, etc.). This ambiguity introduces endogeneity into the empirical estimations and may lead to biased results.

Quantitative techniques, such as the instrumental variables approach, can be used to try to clarify the relationship between income and collective action. This technique requires that you have a third variable (or set of variables) that are correlated with the independent variable of interest (collective action) but not with the dependent variable (income). This third variable is the "instrument" you use to establish causality. Since it is unrelated to the dependent variable, it is not endogenous and thus avoids any bias in estimation. In an instrumental variable approach, the instrument is used to predict the value of the independent variable since the instrument is exogenous; so is the predicted value of the independent variable. The key then in establishing a relationship between social capital and income is to identify a variable (an instrument) that is a determinant of participation in social groups or networks, but is not directly related to income (Ravallion, 2005b).

The action arena



The action arena comprises the dynamic part of the conceptual framework where actors possessing different types and varying levels of action resources, facing a specific action situation that is embedded within a given structure of legal and political institutions, interact with each other to produce some outcomes. Analyzing the action arena allows us to understand how poor people interact with each other, why they face certain outcomes, and how they can change outcomes.

Holland and Brook (2005) suggest that there is a need to understand how individual agency can affect the systemic forces by which institutions (rules of the game) are established to benefit the powerful. Moser (2005), on the other hand, pushes for greater focus on identifying the social and political processes that empower or disempower people in different arenas of negotiation, such as negotiations over rights.

These actions include creating channels by which the poor (or their representatives) can access, control, or contest policy processes; or engage in political discourses in which poverty/poverty reduction are significant issues; or identify social and political practices of the poor that can form a basis for

influencing decision-making, agendas, policy, and program implementation (Engberg-Pedersen and Webster, 2002). These strategies are envisioned to enable the poor to gain voice and capacity to influence agendas, shape discourse, and make demands, which in turn may help them access, control, or secure rights to assets, services, and resources.

But how do we establish individual and collective agency, i.e. the action resources that individuals and groups possess that influences whether or not they can affect a particular situation or decision making arena? Measures of individual power and of the action resources held by individuals remain relevant in this section. Thus, assets (physical, human, natural, social, and financial) that enable people to withstand shocks and expand their choices are important indicators of their individual and collective capacities to change institutions. As indicated in the earlier sections of this paper, those can be measured and analyzed using a variety of quantitative and qualitative techniques.

Habitus, or one's view of the world and one's place in it, is an important consideration when trying to understand poor men and women's capacity to act (di Gregorio et al, 2008). Habitus is one's disposition, which one develops through personal histories of the self-reinforcing experiences of his or her social location. By internalizing the social structure and one's place in it, one comes to determine what is possible and what is not possible for one's life and develops aspirations and practices accordingly. Each piece of learning reinforces the behaviors and preferences that will keep the individual locked into a particular social location. The material, social, and cultural conditions of a particular social location teach an individual what is possible, appropriate, and expected. These world views are then externalized into actions and subsequent patterns of interactions, e.g. privileged groups maintaining positions of power and less privileged groups remaining in subordinate positions (Bourdieu, 1973). The consequences of habitus on poverty are large.

To examine how habitus affects agency, it might be useful to track the history of action and inaction, combined with a careful disaggregation of society across the more common cleavages such as gender, race, caste, ethnicity, religion, region, and class can provide insights into. Alternatively, actors can be interviewed directly to establish what they view as their opportunity structure and what they need to succeed. For example, education policy analysts have attempted to operationalize habitus by measuring student's beliefs about their future (Dumais, 2002; McClelland, 1990). Other studies have used life histories as an initial way to determine variables that could then be measured in more quantitative ways. In a study of women and poverty, Fram et al. (2006) used unstructured interviews focused on women's life histories to find out their experiences in major domains of their lives and to examine events and decisions that women understood as influencing their longer-term well being. Clearly, it is extremely difficult to represent one's habitus or worldview in a single or even a large set of variables; however, scholars have shown that the effects of habitus on well-being can be isolated either through historical analysis or through quantitative surveys as well as data analysis techniques that account for correlation among independent variables as well as endogeneity.

As we saw earlier, collective action and property rights are essential action resources for the poor. Moreover, collective action can make other action resources

available to the poor by linking them with other groups through social movements or connecting them with others who can represent their interests in different arenas. However, in most cases, collective action for poverty reduction can be more effective if it involves broad coalitions between policy makers/government agents and civil society actors (Fox, 2004). Analyzing the nature and level of linkages between citizens and public services can help determine the extent to which synergistic strategies or coproduction is present (Evans, 1996).

Similarly, beyond their direct economic importance, property rights—especially access to land—fulfill a number of social functions which enable the poor to take advantage of various action resources. In many rural communities, land distribution is associated not only with the well-being of the household, but with its social standing in the community. This position in turn shapes access to many government services, influence in local politics, participation in social networks, and determines intrahousehold relations. Securing property rights for the disadvantaged elements of a rural community will ensure their greater participation in the associational life and presence on the local political arena, which can lead to a favorable outcome of interactions in the action arena.

Outcomes: From measurement to evaluation

The objective of poverty-related research is to examine how various policies, programs, and interactions between multiple actors in a poverty context affect the well-being outcomes for the poor. These outcomes are usually complex and multifaceted. The conceptual framework of Di Gregorio et al. (2008) proposes several criteria that can be used when evaluating poverty outcomes (see Figure 1). These criteria range from those that are easily examined quantitatively (income levels) to those that require a discussion of definition and measurement methodology (inclusion, sustainability) since the latter may be identified and understood differently in different settings.

Nonetheless, all the criteria in various combinations may be used to come up with indicators to evaluate (not just measure) poverty outcomes. Depending on the objective of the evaluation, relevant outcome indicators can be aggregated into a comprehensive index. Alternatively, different indicators can be reported individually. For policy making, however, it is imperative that the way indicators are aggregated into an index is made explicit. It is also critical that tradeoffs between the different outcomes that indicators may lead to are assessed and clarified, including the implications for different segments of society. While it may introduce difficulties in comparing across settings, it is also useful to bear in mind the objectives of the poor themselves when considering tradeoffs. At best, the use of indicators that people themselves can monitor and report on is desirable. For all the criteria, i.e. incomes, sustainability, social and political inclusion, security, etc., a positive change is aspired for in our definition of poverty reduction.

6. CONCLUSION: BACK TO THE CONCEPTUAL FRAMEWORK

The main purpose of this paper was to provide a pathway to conduct poverty-related research with special attention to the issues of property rights and collective action. It did so by attempting to “unpack” the elements of the conceptual framework and posing relevant questions that catalyze deeper investigation of factors underlying poverty and shedding more light on how people’s livelihoods are affected by collective action and property rights.

Another effort that this study attempted was to emphasize the crucial importance of institutions as the backbone for all poverty-related issues. By demonstrating how various dimensions of institutions (power dynamics, tenure regimes, social networks) serve as indicators of broader institutional change in favor of the poor, it tried to draw attention away from the traditional “one-sided” measures of results and highlight the need for a more comprehensive analysis and a detailed evaluation of outcomes. By “operationalizing” the conceptual framework (see Figure 1), we hope to provide a useful tool which can drive poverty-related research that would take into account the multi-faceted nature of poverty examined through the lens of institutions.

Researchers and practitioners have independently done much to explore the role of collective action and property rights for poverty reduction. Our review brings together methodological lessons from these often unrelated pieces. It shows that there are gains to studying poverty reduction from the dimensions of institutions of collective action and property rights as they seem to be critical determinants of the diverse assets that people can use to improve their well-being. Further, an understanding of how these institutions affect poverty is increased when multiple methodologies are used to study its multidimensionality.

However, the kind of research that this conceptual framework calls for faces numerous challenges. Policy instruments that foster collective action and pro-poor property rights reforms often occur over the longer run. Moreover, poverty reduction and institutional reform are not part of an agenda that is favored all round, especially when the relative position of powerful interests is challenged. Research itself can be dangerous for the researcher and for those providing information, yet understanding power and how it shapes the way collective action and property rights can attain some poverty reduction outcomes is critical yet often overlooked. In sum, it is evident from this review that innovative research designs are needed if we are to establish the causal relationships between institutions and poverty.

REFERENCES

- Adato, M., M.R. Carter, and J. May. 2006. Exploring poverty traps and social exclusion in South Africa using qualitative and quantitative Data. *Journal of Development Studies* 42 (2):226–247.
- Adato, M. and R. Meinzen-Dick, eds. 2007. *Agricultural Research, Livelihoods, and Poverty: Studies of Economic and Social Impacts in Six Countries*. Baltimore, MD: Johns Hopkins University Press and International Food Policy Research Institute.
- Agarwal, B. 1994. *A field of one's own: Gender and land rights in South Asia*. Cambridge, U.K.: Cambridge University Press.
- Agarwal, B. 2001. Participatory exclusions, community forestry, and gender: An analysis for South Asia and a conceptual framework. *World Development* 29(10): 1623-1648.
- Agrawal, A. 2001. Common property institutions and sustainable governance of resources. *World Development* 29(10): 1649-1672.
- Adhikari, B. 2005. Poverty, property rights and collective action: Understanding the distributive aspects of common property resource management. *Environment and Development Economics* 10: 7–31.
- Alderman, H. and C. Paxson. 1994. Do the poor insure? A synthesis of the literature on risk and consumption in developing countries. In *Economics in a Changing World, Vol 4: Development, Trade and the Environment*, D. Bacha, ed. London: Macmillan.
- Angelsen, A. and S. Wunder. 2003. Exploring the forest-poverty link: Key concepts, issues and research implications. CIFOR Occasional Paper No. 40. Bogor, Indonesia: Center for International Forestry Research.
- Bachrach, P. and M.S Baratz. 1962. Two faces of power. *American Political Science Review* 56(4): 947-952.
- Badstue, L., M. Bellon, J. Berthaud, A. Ramirez, D. Flores, X. Juarez, and F. Ramirez. 2005. Collective action for the conservation of on-farm genetic diversity in a center of crop diversity: An assessment of the role of traditional farmers' networks. CAPRI Working Paper No. 38, Washington, D.C.: International Food Policy Research Institute.
- Baland, J-M. and P. Francois. 2005. Commons as insurance and the welfare impact of privatization. *Journal of Public Economics* 89: 211-31.
- Baland, J-M., F. Gaspart, J-P. Platteau, and F. Place. 2007. The distributive impact of land markets in Uganda. *Economic Development and Cultural Change* 55 (2): 283-312.
- Bebbington, A. 1999. Capitals and Capabilities: A framework for analyzing peasant viability, rural livelihoods and poverty. *World Development* 27(12): 2021-2044.
- Behrman, J. and A. Deolalikar. 1990. The intrahousehold demand for nutrients in rural South India: Individual estimates, fixed effects, and permanent income. *Journal of Human Resources* 25(4): 665-696.
- Berry, S. 1993. *No condition is permanent: The social dynamics of agrarian change in Sub-Saharan Africa*. Madison, Wisconsin: University of Wisconsin press.
- Beck, T. and C. Nesmith. 2001. Building on poor people's capacities: The case of common property resources in India and West Africa. *World Development* Vol. 29 (1): 119-133.
- Bird K. and A. Shepherd. 2003. Livelihoods and chronic poverty in semi-arid Zimbabwe. *World Development* 31 (3): 591-610.
- Booth, D., M. Leach, and A. Tierney. 2006. Experiencing Poverty in Africa: Perspectives from Anthropology. Q-Squared Working Paper No. 25. Toronto, Canada: Centre for International Studies, University of Toronto.

- Booth D., J. Holland, J. Hentschel, P. Lanjouw and A. Herbert. 1998. Participation and combined methods in African poverty assessment: Renewing the Agenda. Issues, Department for International Development.
- Bourdieu, P. 1973. Cultural reproduction and social reproduction. In *Knowledge, education and cultural change*, Brown, R., ed. London: Tavistock.
- Bradstock, A. 2005. Changing livelihoods and land reform: Evidence from the Northern Cape Province of South Africa. *World Development* 33 (11): 1979–1992.
- Branford, S. and J. Rocha. 2002. *Cutting the wire: The story of the landless movement in Brazil*. London: Latin American Bureau.
- Brasselle, A.S., Gaspart, F. and J-P. Platteau. 2002. Land tenure security and investment incentives: Puzzling evidence from Burkina Faso. *Journal of Development Economics* 67: 373-418.
- Cavendish, W. 2000. Empirical regularities in the poverty-environment relationship of rural households: Evidence from Zimbabwe. *World Development* 28 (11): 1979-2003.
- Chambers, R. 1983. *Rural development: Putting the last first*. Essex, England: Pearson Education Limited.
- Chambers, R. 1997. *Whose reality counts? Putting the last first*. ITDG Publishing.
- Coudouel, A., J. Hentschel, and Q. Wodon. 2002. Poverty Measurement and Analysis. In *A Sourcebook for Poverty Reduction Strategies*, Klugman, J., ed. Washington, DC: World Bank.
- Dahl, R. 1961. *Who governs?* New Haven: Yale University Press.
- Dahl, R. 1957. The concept of power. *Behavioural scientist* 2:201-215.
- Davies, J. and R. Bennett. 2007. Livelihood adaptation to risk: Constraints and opportunities for pastoral development in Ethiopia's Afar region. *Journal of Development Studies* 43(3): 490-511.
- Deaton, A. 2001. Counting the world's poor: Problems and possible solutions. *The World Bank Research Observer* 16 (2): 125-147.
- Dei, G. 1992. A Ghanaian rural community: indigenous responses to seasonal food supply cycles and the socio-environmental stresses of the 1980s. In *Development from within: Survival in rural Africa*, Fraser Taylor, D. and F. Mackenzie, eds. London: Routledge.
- Deininger, K. and S. Jin. 2005. The potential of land rental markets in the process of economic development: Evidence from China. *Journal of Development Economics* 78(1): 241-270.
- Deininger, K. and J.S. Chamorro. 2004. Investment and equity effects of land regularisation: The case of Nicaragua. *Agricultural Economics* 30:101-116.
- De Janvry, A., G. Gordillo, J-P. Platteau, and E. Sadoulet. 2001. *Access to land, rural poverty, and public action*. Oxford University Press.
- Dercon, S., Hoddinott, J., Krishnan, P., and T. Woldehanna. 2008. Collective action and vulnerability: Burial societies in rural Ethiopia. CAPRI Working Paper 83. Washington, D.C.: International Food Policy Research Institute.
- Dercon, S., J. Hoddinott and T. Woldehanna. 2005. Vulnerability and Shocks in 15 Ethiopian Villages, 1999-2004. *Journal of African Economies* 14:559-585.
- Dercon, S. 2002. Income risk, coping strategies, and safety nets. *The World Bank Economic Observer* 17(2): 141-166.
- Dercon, S. and P. Krishnan. 2000. In sickness and health: risk sharing within households in rural Ethiopia. *Journal of Political Economy* 108(4): 688-727.
- Di Gregorio, M., Hagedorn, K., Kirk, M., Korf, B., McCarthy, N., Meinzen-Dick, R. and B. Swallow. 2008. Property rights, collective action, and poverty: The role of institutions for poverty reduction. CAPRI Working Paper 81, Washington, D.C.: International Food Policy Research Institute.

- Dumais, S.A. 2002. Cultural capital, gender, and school success: The role of habitus. *Sociology of Education* 75 (1): 44-68.
- Ellis, F. and H.A. Freeman. 2004. Rural livelihoods and poverty reduction strategies in four African countries. *Journal of Development Studies* 40 (4): 1-30.
- Ellis, F. and G. Bahiigwa. 2003. Livelihoods and rural poverty reduction in Uganda. *World Development* 31 (6): 997-1013.
- Ellis, F. and N. Mdoe. 2003. Livelihoods and rural poverty reduction in Tanzania. *World Development* 31 (8): 1367-1384.
- Ellis, F., M. Kutengule and A. Nyasulu. 2003. Livelihoods and rural poverty reduction in Malawi. *World Development* 31 (9): 1495-1510.
- Ellis, F. 1998. Household strategies and rural livelihood diversification. *The Journal of Development Studies* 35 (1): 1-38
- Engberg-Pedersen, L. 2002. The limitations of political space in Burkina Faso: Local organizations, decentralization and poverty reduction. In *In the Name of the Poor: Contesting Political Space for Poverty Reduction*, Webster, N. and L. Engberg-Pedersen, eds. London: Zed Books.
- Evans, P. 1996. Government action, social capital and development: Reviewing the evidence on synergy. *World Development* 24(6): 1119-1132.
- Fafchamps, M. and F. Gubert. 2007. The formation of risk sharing networks. *Journal of Development Economics* 83: 326-350.
- Fafchamps, M. and S. Lund. 2003. Risk sharing networks in rural Philippines. *Journal of Development Economics* 71:261-287.
- Feder, G., T. Onchan, Y. Chalamwong, and C. Hangladoran. 1986. *Land Policies and Farm Productivity in Thailand*. Baltimore, MD: John Hopkins University Press.
- Finan F, E. Sadoulet and A. de Janvry. 2002. Measuring the poverty reduction potential of land in rural Mexico. *Journal of Agricultural and Resource Economics* 27 (2): 580-580.
- Fox, J. 2004. Empowerment and Institutional Change: Mapping "Virtuous Circles" of State-Society Interaction. In *Power, Rights, and Poverty: Concepts and Connections*, R. Alsop, ed. Washington DC: The International Bank for Reconstruction and Development/The World Bank and the Department for International Development.
- Fram, M.S., J. Miller-Cribs, and N. Farber. 2006. Chicks aren't chickens: Women, poverty and marriage in orthodoxy of conservatism. *Journal of Women and Social Work* 21 (3): 256-271.
- Fukuyama, F. 2000. Social capital and civil society. IMF Working Paper No. 00/74, Washington, D.C.: International Monetary Fund.
- Gaventa J. 1980. *Power and powerlessness: Quiescence and rebellion in an Appalachian valley*. Urbana, IL: University of Illinois Press.
- German, L., Mazengia, W., Ayele, S., Tirwomwe, W., Tanui, J., Taye, H., Begashaw, L., Nyangas, S., Chemangeni, A., Cheptegei, W., Tsegaye, M., Admassu, T., Alinyo, F., Mekonnen, A., Aberra, K., Tolera, T., Jotte, Z., and K. Bedane. 2008. Enabling Equitable Collective Action & Policy Change for Poverty Reduction and Improved Natural Resource Management in the Eastern African Highlands. CAPRI Working Paper 86, Washington, D.C.: International Food Policy Research Institute.
- German, L. and A. Stroud. 2007. A framework for integration of diverse learning approaches: Operationalizing agricultural research and development (R&D) linkages in Eastern Africa. *World Development* 35 (5): 792-814.
- German, L., H. Taye, S. Charamila, T. Tolera, and J. Tanui. 2006. The many meanings of collective action: lessons on enhancing gender inclusion and equity in watershed management. CAPRI Working Paper No. 52, Washington, D.C.: International Food Policy Research Institute.

- Godquin, M. and A.R. Quisumbing. 2006. Groups, Networks, and Social Capital in Rural Philippine Communities. CAPRI Working Paper No.55, Washington, D.C.: International Food Policy Research Institute.
- Golan, E.H. 1990. Land tenure reform in Senegal: An economic study from the peanut basin. LTC Research paper 101, Madison, WI: Land Tenure Center, University of Wisconsin.
- Goldstein, M., and C. Udry. 2004. Gender, power and agricultural investment in Ghana. Manuscript. London, UK: London School of Economics and New Haven, CT: Yale University, 2004.
- Grootaert, C., R. Kanbur and G.Oh. 1997. The dynamics of welfare gains and losses: An African case study. *The Journal of Development Studies* 33(5): 635-657.
- Gunning, J., Hoddinott, J., Kinsey, B., and T. Owens. 2000. Revisiting forever gained: Income dynamics in the resettlement areas in Zimbabwe, 1983-1996. *Journal of Development Studies* 36 (6): 131-154.
- Haddad, L. and J. Maluccio. 2003. Trust, membership in groups, and household welfare: Evidence from KwaZulu-Natal, South Africa. *Economic Development and Cultural Change* 51 (3): 573-601.
- Hayward, C.R. 1998. De-facing power. *Polity* 31 (1): 1-22.
- Hickey, S. and S. Bracking. 2005. Exploring the politics of chronic poverty: From representation to a politics of justice? *World Development* 33 (6): 851-865.
- Hossain, N. 2005. Productivity and virtue: Elite categories of the poor in Bangladesh. *World Development* 33 (6): 965-977.
- Howe, G. and A. McKay. 2007. Combining quantitative and qualitative methods in assessing chronic poverty: The case of Rwanda. *World Development* 35 (2): 197-211.
- Hulme D, and Shepherd A. 2003. Conceptualizing chronic poverty. *World Development* 31 (3): 403-423.
- Hulme, D., K. Moore, and A. Shepherd. 2001. Chronic poverty: meanings and analytical frameworks. CPRC Working Paper 2, Manchester: University of Manchester, IDPM.
- Jalan, J. and M. Ravallion. 1999. Are the poor less well insured? Evidence on vulnerability to income risk in rural China. *Journal of Development Economics* 58: 61-81.
- Jodha, N. S. 1995. Common property resources and the dynamics of rural poverty in India's dry regions. *Unasylva* 46(1):23-29.
- Jodha, Narpal S. 1986. Common property resources and the rural poor in dry regions of India. *Economic and Political Weekly* 21: 169-181.
- Johnson, N., R. Suarez, and M. Lundy. 2002. The importance of social capital in Colombian rural agro-enterprises. CAPRI Working Paper No. 26, Washington, D.C.: International Food Policy Research Institute.
- Kanbur, R. and P. Shaffer. 2007. Epistemology, normative theory, and poverty analysis: Implications for Q-squared in practice. *World Development* 35 (2): 183-196.
- Kanbur, R. 2003. Q-squared? A commentary on qualitative and quantitative poverty appraisal In *Q-Squared: Combining Qualitative and Quantitative Methods in Poverty Appraisal*, Kanbur, R., ed. Permanent Black: Delhi.
- Krishna, A. 2007. For reducing poverty faster: Target reasons before people. *World Development* 35 (11): 1947-1960.
- Krishna, A. 2006. Pathways Out of and Into Poverty in 36 Villages of Andhra Pradesh, India. *World Development* 34 (2):271-288.
- Krishna, A. 2004. Escaping poverty and becoming poor: Who gains, who loses, and why? *World Development* 32 (1): 121-136.

- Krishna, A., D. Lumonya, M. Markiewicz, F. Mugumya, A. Kafuko, and J. Wegoye. 2006. Escaping poverty and becoming poor in 36 villages of Central and Western Uganda. *Journal of Development Studies* 42 (2):346–370.
- Krishna, A., P. Kristjanson, M. Radeny, and W. Nindo. 2004. Escaping poverty and becoming poor in 20 Kenyan villages. *Journal of Human Development* 5 (2): 211-226.
- Krishna, A. 2001. Moving from the stock of social capital to the flow of benefits: The role of agency. *World Development* 29(6): 925-943.
- Little, P., K. Smith, B. Cellarius, D. Coppock, and C. Barrett. 2001. Avoiding disaster: Diversification and risk management among East African herders. *Development and Change* 32 (2001).
- Lyne, M.C. 2005. Institutional Change to Promote a Rental Market for Cropland in the Communal Areas of KwaZulu-Natal, South Africa. In *The New Institutional Economics in African Agriculture*, J. Kirsten. Manuscript.
- Marshall, G. 1998. *A dictionary of sociology*. New York, NY: Oxford University Press.
- Mayoux, L. and R. Chambers. 2005. Reversing the paradigm: Quantification, participatory methods, and pro-poor impact assessment. *Journal of International Development* 17(2): 271-289.
- McCarthy, N., C. Dutilly-Diane, and B. Drabo. 2004. Cooperation, collective action and natural resource management in Burkina Faso. *Agricultural Systems* 82(3): 233-255.
- McClelland, K. 1990. Cumulative disadvantage among the highly ambitious. *Sociology of Education* 63 (2):102-121.
- Meinzen-Dick, R., E. Mwangi and S. Dohrn. 2006. Securing the commons. Policy Brief No. 4. CGIAR Systemwide program on Collective Action and Property Rights. http://www.capri.cgiar.org/pdf/polbrief_04.pdf.
- Meinzen-Dick, R., Di Gregorio, M., and N. McCarthy. 2004. Methods for studying collective action in rural development. *Agricultural Systems* 82(3): 197-214.
- Meinzen-Dick, R. and R. Pradhan. 2002. Legal pluralism and dynamic property rights. CAPRI Working Paper 22, Washington, D.C.: International Food Policy Research Institute.
- Meinzen-Dick, R., K.V. Raju, and A. Gulati. 2002a. What affects organization and collective action for managing resources? Evidence from canal irrigation systems in India. *World Development* 30(4): 649-666.
- Meinzen-Dick, R., A. Knox, B. Swallow, and F. Place. 2002b. Introduction. In *Innovation in Natural Resource Management: the Role of Property Rights and Collective Action in Developing Countries*, Meinzen-Dick, R., A. Knox, B. Swallow, and F. Place, eds. Baltimore and London: Johns Hopkins University Press.
- Moser, C. 2005. Rights, Power, and Poverty Reduction. In *Power, Rights, and Poverty: Concepts and Connections*, R. Alsop, ed. Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank and the Department for International Development
- Moser, C. 1998. The asset vulnerability framework: Reassessing urban poverty reduction strategies. *World Development* 26(1): 1-19.
- Mosse, D. 2004. Power Relations and Poverty Reduction. In *Power, Rights, and Poverty: Concepts and Connections*, R. Alsop, ed. Washington DC: The International Bank for Reconstruction and Development/The World Bank and the Department for International Development.
- Narayan, D. and L. Pritchett. 1999. Cents and sociability: Household income and social capital in rural Tanzania. *Economic Development and Cultural Change* 47: 871-897.
- Okten, C. and U. O. Osili. 2004. Social networks and credit access in Indonesia. *World Development* 32(7): 1225–1246.
- Ostrom, E. 2005. *Understanding Institutional Diversity*. Princeton, NJ: Princeton University Press.
- Ostrom, E. 2000. Private and Common Property Rights. In *Encyclopedia of Law and Economics*, Bouckaert, B. and G.D. Geest, eds. Aldershot: Edward Elgar Publishing.

- Ostrom, E 1990. *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press: Cambridge, UK.
- Ostrom, E., J. Walker, and R. Gardner. 1992. Covenants with and without a sword: Self-governance is possible. *American Political Science Review* 86 (2): 500-514.
- Padmanabhan, M.A. 2006. Collective action in plant genetic resources management: gendered rules of reputation, trust and reciprocity in Kerala, India. CAPRI Working Paper No. 56, Washington, D.C.: International Food Policy Research Institute.
- Pandolfelli, L., R. Meinzen-Dick, and S. Dohrn. 2007. Gender and collective Action: A conceptual framework for analysis. CAPRI Working Paper 64, Washington, D.C.: International Food Policy Research Institute.
- Pender, J. and S. Scherr. 2002. Organizational Development and Natural Resource Management: Evidence from Central Honduras. In *Innovation in Natural Resource Management: the Role of Property Rights and Collective Action in Developing Countries*, Meinzen-Dick, R., A. Knox, B. Swallow, and F. Place, eds. Baltimore and London: Johns Hopkins University Press.
- Place, F. and B. Swallow. 2000. Assessing the relationships between property rights and technology adoption in smallholder agriculture: A review of issues and empirical methods. CAPRI Working Paper 2, Washington, DC: International Food Policy Research Institute.
- Place, F. and P. Hazell. 1993. Productivity effects of indigenous land tenure systems in sub-Saharan Africa. *American Journal of Agricultural Economics* 75(1):10-19.
- Place, F., M. Roth, and P. Hazell. 1994. Land tenure security and agricultural performance in Africa: Overview of research methodology. In *Searching for land tenure security in Africa*, J. Bruce and S.E. Migot-Adholla, eds. Dubuque: Kendall/Hunt.
- Poteete, A. and E. Ostrom. 2004. In pursuit of comparable concepts and data about collective action. *Agricultural Systems* 82: 215-232.
- Putnam, R. 1993. The prosperous community: Social capital and public life. *The American Prospect* 13: 35-42.
- Quisumbing, A., McNiven, S., and M. Godquin. 2008. Collective action and vulnerability: Local and migrant networks in Bukidnon, Philippines. CAPRI Working Paper 84, Washington, D.C.: International Food Policy Research Institute.
- Ravallion, M. 2005a. Can qualitative methods help quantitative poverty measurement? Q-Squared Working Paper No. 1. Toronto: Center for International Studies, University of Toronto.
- Ravallion, M. 2005b. Evaluating Anti-Poverty Programs. Prepared for the *Handbook of Agricultural Economics Volume 4*, Holland, N., R. Evenson, and T. P. Schultz, eds. Accessed electronically from <http://siteresources.worldbank.org/INTSARREGTOPLABSOCPRO/34004324-1145382108227/20892476/EvaluatingAntipovertyPrograms.pdf>.
- Ravnborg, H.M., A.M. De la Cruz Rebolledo, M. del Pilar Guerrero, and O. Westerman. 2002. Collective Action in Ant Control. In *Innovation in Natural Resource Management: the Role of Property Rights and Collective Action in Developing Countries*, Meinzen-Dick, R., A. Knox, B. Swallow, and F. Place, eds. Baltimore and London: Johns Hopkins University Press.
- Russell, S. 2005. Treatment-seeking behaviour in urban Sri Lanka: Trusting the state, trusting private providers. *Social Science and Medicine* 61 (7): 1396-1407.
- Schlager, E. and E. Ostrom. 1992. Property-rights regimes and natural resources: A conceptual analysis. *Land Economics* 68 (3): 249-262.
- Schmid, A. A. 1994. Property, power and politics. In *Access, control and management of natural resources in sub-Saharan Africa: Methodological considerations*, Lund, C. and H.S. Marcussen, eds. Occasional Paper No. 13/1994. International Development Studies. Roskilde University, Denmark.
- Scott, C.D. 2000. Mixed fortunes: A study of poverty mobility among small farm households in Chile, 1968-86. *Journal of Development Studies* 36 (6):155- 180.

- Scott, J.C. 1990. *Domination and the Arts of Resistance: Hidden Transcripts*. New Haven, CT: Yale University Press.
- Sjaastad, E. and D. Bromley. 1997. Indigenous land rights in sub-Saharan Africa: Appropriation, security and investment. *American Journal of Agricultural Economics* 81 (2): 467-478.
- Sjaastad, E., A. Angelsen, P. Vedeld and J. Bojo. 2005. What is environmental income? *Ecological Economics* 55: 37-46.
- Sultana, P. and P. Thompson. 2004. Methods of consensus building for community-based fisheries management in Bangladesh and the Mekong Delta. *Agricultural Systems* 82(3): 327-353.
- Swallow, B., Garrity, D., and M. van Noordwijk. 2002. The effects of scales, flows, and filters on property rights and collective action in watershed management. *Water Policy* 3(6): 457-474.
- Swallow, B., J. Wangila, W. Mulatu, O. Okello, and N. McCarthy. 2002. Collective Action in Space: Assessing How Cooperation and Collective Action Vary across an African Landscape. In *Innovation in Natural Resource Management: the Role of Property Rights and Collective Action in Developing Countries*, Meinzen-Dick, R., A. Knox, B. Swallow, and F. Place, eds. Baltimore and London: Johns Hopkins University Press.
- Udry, C.R. and T.G. Conley. 2005. Social networks in Ghana. In *The Social Economics of Poverty: On Identities, Communities, Groups and Networks*, Barrett, C., ed. Oxford and New York: Routledge.
- Udry, C. 1994. Risk and insurance in a rural credit market: An empirical investigation in Northern Nigeria. *The Review of Economic Studies* 61(3): 495-526.
- Uphoff, N. 2000. Understanding social capital: learning from the analysis and experience of participation. In *Social Capital: A Multifaceted Perspective*, Dasgupta, P. and I. Serageldin, eds. Washington, D.C.: World Bank.
- Warner, K. 2000. Forestry and sustainable livelihoods. *Unasylva* 202.
- Webster, N. 2002. Local organizations and political space in the forests of West Bengal. In *In the Name of the Poor: Contesting Political Space for Poverty Reduction*, Webster, N. and L. Engberg-Pedersen, eds. London: Zed Books.
- Webster, N. and L.Engberg-Pedersen. 2002. *In the Name of the Poor: Contesting Political Space for Poverty Reduction*. London: Zed Books.
- White, H., 2002. Combining quantitative and qualitative approaches to poverty analysis. *World Development* 30 (3), 511-522.
- Winters, P., B. Davis, and L. Corral. 2002. Assts, activities and income generation in rural Mexico: Factoring in social and public capital. *Agricultural Economics* 27: 139-156.
- Woolcock, M. 2004. Empowerment at the local level: Issues, responses, assessments. In *Power, Rights, and Poverty: Concepts And Connections*, Alsop, R., ed. Washington DC: The International Bank for Reconstruction and Development/The World Bank and the Department for International Development.
- Zeller, M., M. Sharma, C. Henry, and C. Lapenu. 2006. An operational method for assessing the poverty outreach performance of development policies and projects: Results of case studies in Africa, Asia, and Latin America. *World Development* 34 (3): 446-464.

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