

**Property Rights, Collective Action and Poverty:
The Role of Institutions For Poverty Reduction**

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1 INTRODUCTION

The past two decades have witnessed a great expansion of our understanding of how property rights and collective action—which come together in common property—play a key role in natural resources management (NRM) (Wade 1988; Ostrom 1990;1999;2001; Baland and Platteau 1996; Rasmussen and Meinzen-Dick 1995; Agrawal 2001; Meinzen-Dick and Di Gregorio 2004; Bromley 1992). However, as governments, NGOs, and donor organizations place greater emphasis on poverty reduction, it becomes increasingly important to examine the key role played by property rights, and the scope for collective action, in generating wealth and well-being, and to look for ways to make this available to the poor.

Property rights over natural resources are the key assets on which rural people build their livelihoods. Secure property rights provide not only an income stream today, but also incentives to invest in productive technologies and sustainable management of the resources for the future. The rural poor are usually those with weakest property rights; thus secure rights over land, water, trees, livestock, fish, and genetic resources are fundamental mechanisms for reducing poverty. However, many government programs are implemented without an understanding of the complexity of property rights and have actually led to reduced tenure security for poor and marginalized groups, e.g. by weakening customary rights or allowing elite capture of property. Better understanding of how the poor can protect and expand their access to and control over resources can make a powerful contribution to poverty reduction.

There is also growing recognition of the importance of social capital as an asset for poverty reduction. Social capital creates the capacity for collective action (CA) that allows even smallholders to work together to overcome limitations of wealth, farm size, and bargaining power. Collective action is also needed to adopt many technologies and natural resource management practices that operate at the landscape level. As with property rights, the poor and women are often at a disadvantage when it comes to collective action because of social exclusion, lack of time to participate in meetings and activities, lack of education and confidence to speak in meetings, and domination by local elites.

However, much recent work on property rights and collective action focus on their roles in natural resource management (NRM), rather than on how they can contribute to poverty reduction. While sustainable NRM can contribute to poverty reduction, other aspects must also be considered, including the distribution of property rights—between and within communities and households. Furthermore collective action can contribute to poverty reduction in many ways besides through resource management, including through microfinance programs, joint input or output marketing, and a range of other enterprises. Collective action also underpins many Community Driven Development (CDD) programs for service delivery, e.g. of water supply or health care (Nitti and Jahiya 2004).

Though the issue of property rights and access to resources has long been recognized as one of the most critical factors affecting the level and dynamics of poverty,

it has also been one of the most politically contentious issues. Earlier projects often focused on titling and individual freehold tenure (e.g. Feder et al. 1988), without fully considering the benefits of prevailing customary rights (such as the role of flexible access rights in mitigating exposure to risk) or the true costs of establishing titled individual land-holdings and the problems the poor, especially women, faced in getting title (Lastarria-Cornhiel 1997). Even fewer policies have adequately considered the important role of collective action, even where group-level action is clearly needed to meet efficiency, equity and sustainability objectives.

Despite the importance of property rights and collective action for poverty reduction, there is still a knowledge gap regarding exactly how the poor are affected by changes in the property rights regime. Further research is required to directly address the question of how poverty shapes men's and women's incentives and abilities to engage in collective action (Thorp, Stewart, and Heyer 2003) and maintain claims to resources on the one hand, and how different property rights and collective action institutions affect the poor, women, and marginalized groups on the other. Distributional and equity consequences of alternative property rights systems and collective action interventions need to be evaluated. At the same time, it is critical to assess factors that condition the impact of these interventions, including the asset base of households and the community, the risks they face, and prevailing power relations and social and legal structures.

The failure of many cooperatives and community development programs in the 1970s can be traced, in part, to an insufficient understanding of the institutional conditions required for secure property rights and collective action to emerge as an autonomous, group-driven process. Demand for research on the links between poverty and the institutions governing property rights and collective action is widespread and growing (ActionAid 2003; Braden 2003; Datta and Hossain 2003). A wide range of policymakers (those guiding, local and national government officials, NGO decisions, donor representatives) require relevant research findings that can be transformed into policies on property rights and collective action to improve the livelihoods of the poor. While the poor themselves have often been ignored in policy debates (de Haan and Dubey 2003), today many development agencies and NGOs help them gain a voice in debates on poverty (Narayan and Pritchett 2000).

This paper presents a conceptual framework for examining how property rights and collective action can contribute to poverty reduction, including both external interventions and action by poor people themselves. We begin with definitions of the key concepts—poverty, property rights, and collective action. We then turn to an examination of how property rights and collective action are related to poverty outcomes, building upon the Institutional Analysis and Development (IAD) framework (Ostrom 1991; Oakerson 1992). This interdisciplinary framework allows analysis of a wide range of interactions, and is useful for eliciting relevant questions for examination in any particular case. At the heart of this framework is the action arena, which is shaped by initial conditions and, in turn, determines a range of outcomes. Applying this framework to poverty reduction, we present an analysis of the initial conditions of poverty, including the asset base, risks and vulnerability, legal structure and power relations. We next look at the dynamics of actors—both poor and non-poor—and how they use the tangible and intangible resources they have to shape their livelihoods and the institutions in which

they live. We conclude with a discussion of how this framework can improve our understanding of the outcomes in terms of changes in poverty status.

Discussing such complex and dynamic processes in one paper requires generalization, yet we know that both the material and institutional conditions of the poor vary from place to place, and change over time. Recognizing the importance of local circumstances, we have phrased many of the key points as propositions, to be considered for different situations, but not necessarily applying to all. We hope that this will provide a basis for further thinking and discussion; and in particular, for further empirical analysis, which can advance our understanding of the role collective action and property rights can play in poverty reduction.

2 CONCEPTIONS OF POVERTY

Poverty is globally acknowledged as a serious debilitation of human welfare and potential. Despite this general agreement, the exact definitions of poverty vary widely, from quantitative economic measures to broad definitions of social conditions. National definitions of poverty focus on the amount of income needed to purchase different bundles of consumer goods, starting with the cost of a minimum basket of food products, multiplied by a factor that account for the costs of associated quality and quantity of housing, clothing, transportation and utilities (<http://aspe.hhs.gov/poverty>). One of the most used international indicator of poverty is \$1US / capita. The dollar per day indicator is used by the United Nations Development Fund (UNDP) and World Bank to monitor progress toward the UN Millenium Development Goal (United Nations 2000) of cutting by half the percentage of people living on less than \$1 per day between the year 1990 and 2015.

Monetary measures of poverty are subject to widespread critique for being too narrow. Thus, while the World Bank uses income measures overall, both the "Voices of the Poor" studies and its *World Development Report 2000/1* made a compelling case for the need to consider poverty in broader terms of lack of material well being (food, housing), physical deprivation (health, education), social exclusion, little power and voice, and high vulnerability to social, economic and ecological shocks (Narayan and Petesh 2002).

The United Nations Office of the High Commission for Human Rights (UN OHCHR) definition of poverty is "a human condition characterized by the sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights" (www.unhchr.ch/development/poverty). This definition is directly relevant to an analysis of the links between property rights and collective action. For many of the world's rural poor, property rights are part and parcel of economic rights. And the ability to engage in collective action is an essential choice, capability and power.

Alternatively, Amartya Sen (1999, 87) defines poverty as 'capability deprivation', where capabilities are considered in relation to people's freedom "to lead the kind of lives they value and have reason to value" (1999, 18). Here, income – or lack thereof – is important only in the sense that it affects capability deprivation. Command over commodities is a necessary, but not sufficient condition to achieve specific functionings

((Sen 1985)). Whether or not an actor can make use of the commodity bundle depends on institutional arrangements (social, economic, political) which determine his/her capabilities to act. Property rights are one essential part of these institutional arrangement which define an individuals capability to act. While somewhat difficult to operationalize, Sen's approach differs from the previous definitions by considering the link between the individual and the social environment. Such an approach shifts attention from a focus on income to considering what causes people to be able to choose the kind of life they want to live. This broader focus brings to the fore social relations, choices, opportunities, etc., all of which may be affected by property rights and collective action institutions.

Scale issues are important to denote the poor, because we have to distinguish poor from less poor regions within a country, poor villages from less poor villages in a region and poor household from less poor within a village. Even within the households, some individuals may experience poverty more severely than others, either because of their gender, generation, or other factors. Because poverty is embedded in a socio-economic system, poverty is always relative to a socially defined threshold. A person with a given level of income, food, shelter, or clothing may be considered poor in one society, but not in another. In addition, we have to further specify the degree of poverty within the group of the poor: we find moderately poor and extremely poor, those poor who may have a chance to escape poverty and those who do not have a fair chance to do so and are often termed "chronic" poor.

Whatever the precise definitions used, poor people share several key attributes, which are both a result and a cause of poverty:

- inability to secure *basic needs* (shelter, food, health)
- lack of *income* (or assets that can provide income)
- *social exclusion* (from social networks or more formal organizations)
- *political exclusion* (inability to participate in the political process)
- lack of *opportunities* to improve their conditions
- *vulnerability* (e.g. natural disasters, socio-political instability, market/price risks)

The last condition, in particular, indicates that poverty is not a static condition, but rather must be examined as a dynamic process, changing over time; much recent research has been dedicated to investigating vulnerability, chronic versus transient poverty, and poverty traps (Hulme and Shepherd 2003; Barrett and Swallow 2004). Nonetheless, such analyses often focus on the individual or household, without taking into account the role of complex social interactions in determining vulnerability. One aspect often neglected is the role of power relations between the poor and other actors in society. In many cases, overcoming poverty requires overcoming relationships that keep people poor.

3 PROPERTY RIGHTS

Though there are many definitions of property rights, here we use the definition proposed by Bromley (1999) where property rights are defined as "the capacity to call upon the collective to stand behind one's claim to a benefit stream" (Bromley 1991, emphasis in original). Thus, property rights involve a relationship between the right

holder and other members of the group, as well as an institution that backs up the claim by placing a corresponding duty on others to uphold the right.

3.1 *Bundles of rights*

Rights do not necessarily imply sole authority to use and dispose of a resource (or full ownership). The claim to a benefit stream can refer to a number of different "bundles" of rights, which do not require complete control over a resource. There are many combinations of such rights, which vary according to the resource, society, and over time. Following the concept of property rights as developed under Roman law, these bundles of rights can be grouped as:

- the rights to use the asset (*usus*), which can include rights of access (to enter the resource domain, e.g. the right to go into a forest) and withdrawal (to remove something, e.g. to extract kindling, fodder, or fish);
- the right to appropriate the return from the asset (*usus fructus*), including earning income from it;
- the right to change its form, substance and location (*abusus*), which includes many decision-making rights such as management (to modify or transform a resource, e.g. by planting trees or shrubs, enlarging a canal, or restricting what can be harvested), exclusion (to determine who else may use the resource).

To these can be added alienation—the right to transfer rights to others, either by inheritance, sale, or gift). Complete title is generally interpreted as holding all four sets of rights—*usus*, *usus fructus*, *abusus*, and alienation (Pejovich 1990; Cooter and Ulen 1997).

If we look at property rights in terms of bundles we realize that different individuals, families, groups, or even the state often hold overlapping use and decision-making rights over specific resources. It is important to keep in mind that assigning an exclusive right automatically implies that others cannot receive the same benefit stream. In this sense this is a zero-sum game and "initial distribution" of rights counts in terms of who benefits and will benefit in the future. Both situations of enforcement problems and disputed rights show that property rights systems affect resource distribution and as such any perceived intervention geared toward changing the property rights system becomes a highly politically charged issue. This partly explains why, for example, land reform programs are prone to stir reactions from civil society and polarize factions.

3.2 *Supporting institutions*

To be effective property rights need recognition and legitimacy. This, in turn, implies the need for governance structures that enforce rights and the corresponding duties of others to respect those rights. The functions of these governance structures include supervision, sanctioning in case of non-compliance, and provision of forums for resolving disputes over property rights. The institutions that provide legitimacy can be diverse. Rights can be backed by state law, with police and courts at different levels to enforce and sanction. However, customary laws can also provide legitimacy to property rights claims, which may be enforced by village chiefs and local observances by social

exclusion, etc. Even religious laws or other normative principles may provide a basis for claiming rights; how effective these claims are depends on the extent to which others recognize those rights, either because of a sense of internalized legitimacy or external enforcement.

The presence of multiple legal orders, which provide the basis for claiming property rights, is referred to as legal pluralism (Griffiths 1986; Merry 1988). However, not all types of law are equal: they depend on the strength of the governance structures that back them up, which varies from place to place and over time. In some cases, customary or religious institutions may be very strong, and state laws have a weak effect, whereas in others, the state institutions hold much stronger sway.

There are three effects of weak property rights institutions that are of particular importance to the poor. First, the inability of the institution to enforce rights means that individuals holding these rights are either prevented from receiving a stream of benefits from a resource to which they might be entitled, or are uncertain about receiving future benefits (e.g. head-enders' capture of irrigation water that leaves tail-end farmers without water). Secure rights allow people to plan ahead and, particularly, to invest in a resource with the confidence that they will reap the returns. Similarly, where institutions are weak, the likelihood of disputes and conflicts among different rights-holders (or even non rights-holders!) increases; e.g. rent-seeking activities such as encroaching on common lands can lead to an eruption of violent conflict. Such rent-seeking may also lead to a change in the institution, as discussed below under outcomes.

Third, when there are multiple institutions (legal pluralism), those with claims backed by weak institutions may feel particularly vulnerable to potential changes that alter the capacity of that institution to enforce claims. For instance, many people rely on customary institutions for enforcing claims on common pool resources, but most people also recognize that the state has often claimed *de jure* ownership of the land. Thus, while at the present time, peoples' rights enable them to enjoy benefits from these resources, they are also faced with the possibility that the state may exert various rights to their detriment in the future.

4 COLLECTIVE ACTION

Collective action can be understood as an action taken by a group of individuals to achieve common interests (Marshall 1998). Collective action can be voluntary or obligatory for specific persons, e.g. in water users associations where all land owners in an irrigation scheme are obliged to join an association for collective action.² Members can act directly on their own or through an organization. In the two sections below, we first consider the circumstances that give rise to collective action and the different types of collective action most relevant to poverty alleviation, and then consider the supporting institutions that govern collective action.

² However, we exclude hired labor and corvee or forced labor from our analysis of collective action, because the incentive structure is very different. A group deciding to hire laborers, and raising the resources to hire them would be considered collective action, but the hired laborers themselves would not necessarily be participating in collective action.

4.1. *Focus of Collective Actions*

In many communities throughout the world, people work together to provide local goods and services they would not be able to provide as single individuals or that the government is not providing. They build and maintain local parks, religious buildings and community halls, operate volunteer fire control groups, and implement rules for local natural resource management. Sometimes local groups share responsibilities for provision with local or central governments, such as in supporting schools and health services (McCarthy 2004). Collective provision of goods and services is particularly important for the poor, who are often less served by government services, and may even provide a vehicle for poverty reduction programs, such as through community driven development (CDD).

Collective action can also be used to substitute for missing markets. Self-help groups and other mutual insurance mechanisms are examples of substitutes for imperfect credit markets. For example, where people cannot access loans individually (for instance, due to lack of sufficient collateral), groups can form to collectively secure loans. Many micro-finance programs are geared towards small groups that can rely on social sanctions to enforce reciprocal obligations among group members to assure repayment of loans (Wydick 1999). Given asymmetric information, monitoring by group members is generally more cost-effective than monitoring by the lending agency. In such cases, collective action can have the double benefit of substituting for a missing market and also allowing poor people to build assets through access to credit.

Third, collective action can be used by people to increase their access to higher level institutions and as well as their clout in those institutions. For example, people can come together to demand specific government services or insist on enforcement of their property claims. Alternatively, collective action allows groups to increase their bargaining power vis-a-vis local authorities. Finally collective action can enable local groups to benefit from knowledge/resources of other groups through federated structures, e.g. in order to influence policy decisions undertaken at higher levels of government.

Moreover, collective action is often exercised to regulate access, use and maintenance of common pool resources, and often includes undertaking such specific activities as devising rules, monitoring use, devising enforcement mechanisms and implementing sanctions. The role of collective action in natural resource management is probably the most well-studied context of collective action (c.f. Ostrom 1990; Bromley 1991; Baland and Platteau 1996; Berkes, Folke, and Colding 1998). However, collective action can also be exercised to create institutions discussed above, e.g. parent-teachers associations, burial societies, self-help groups, civic movements, as well as resource management groups.

4.2. *Supporting Institutions*

Collective action is often considered narrowly in terms of activities undertaken through formal organizations, but many formal organizations exist “on paper” only, and do not foster any real collective action, whereas much collective action occurs informally through social networks or even through people coming together temporarily for specific short-term purposes (Bruns 1992; Badstue et al. 2002). Thus, as with property rights, it is essential to look at both formal and informal institutions that govern collective action. The exact role of these governance structures depends on the nature of the collective action or good(s) involved, but in general they play a key role in coordinating the actions and contributions of members. This can include setting of rules, monitoring, and sanctioning, which reduce the incentives for people to break the rules or free ride, and also provides assurance to other members that others will also be contributing (McCarthy 2004).

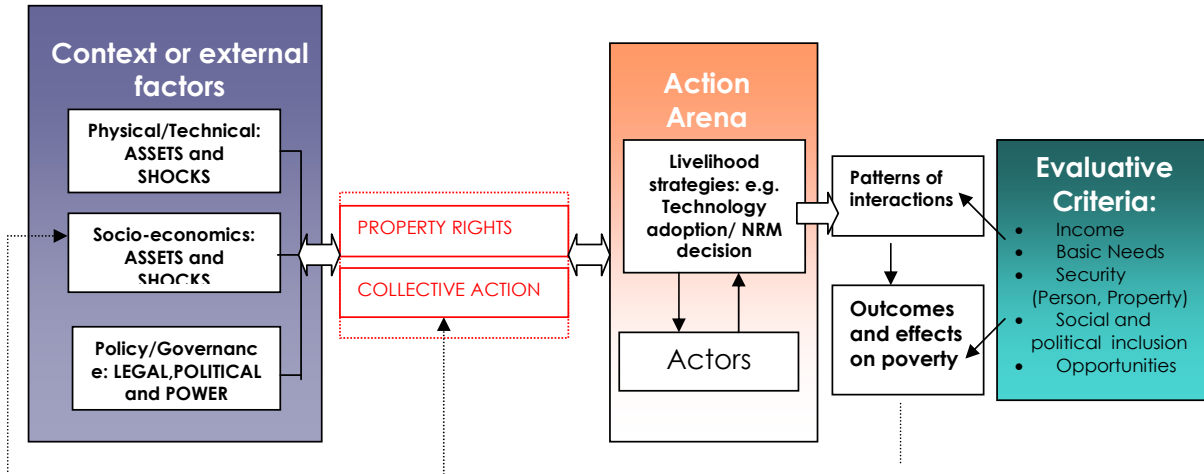
Collective action governance structures do not exist in isolation, but co-exist with and complement other governance structures, such as local and national government agencies and markets. Often, these different governance structures are not exclusive, but they may be overlapping or complementary.

5 PROPERTY RIGHTS, COLLECTIVE ACTION, AND POVERTY: A CONCEPTUAL FRAMEWORK

If we take a broad definition of poverty, then (lack of) property rights is inherent in the concept, affecting the asset base, exposure to shocks, and standing in power relations. Collective action is similarly an aspect of social capital assets, which can facilitate asset building, provide mechanisms for reducing vulnerability and strengthening one’s position in power relations. Whereas property rights have more direct connections to entitlements and through those to income, collective action relates more directly to capabilities, although both are linked to both income and capabilities. However, if we are to move from definitions of poverty to strategies for poverty reduction, then we need a more dynamic conceptual framework, to improve our understanding of how attention to property rights and collective action can contribute.

In this paper, we use an adapted version of the conceptual framework for institutional analysis (Oakerson 1992; Ostrom 1991) to investigate the relationship between institutions of property rights, collective action and poverty outcomes (see Figure 1).

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



The first box, the context or the external factors, represents the *initial conditions* that people face. The context shapes the initial opportunity set of the possible actions, although the actions themselves can affect the context in a long enough time period. These include the physical, technical, socioeconomic conditions, and policy and governance conditions. Each of these, in turn, shapes the nature of the existing institutions of property rights and collective action.

All of the external factors, as well as property rights and collective action, in turn, affect the *action arena*. The action arena is composed of an action situation and actors, who in turn have preferences, information-processing capabilities, cognitive schemata and action resources (assets, power etc.). These all delimit the space within which actors make choices and take action. When actors make choices and take action, they create patterns of interaction that lead to *outcomes*, which may, in turn, affect the initial conditions of the next round. In these interaction processes, actors may create institutions unintentionally, i.e. without being aware of the outcomes or which processes brought these about (non-intentional institutional choice), or they might intentionally try to change an existing institution. However, institutions *a priori* delineate the socio-economic space and the rule-boundedness within which actors make their choice and take action. For example, rules and norms may prescribe what kind of action out of a bundle of possible options is *normatively* desirable or acceptable (North 1990). Hence, while institutions affect action *a priori*, action may alter institutions – both intentionally and unintentionally - *a posteriori* (see Giddens 1984). Since we are interested in outcomes in terms of poverty reduction we analyze the outcome in terms of their effects on: satisfaction of basic needs, income, security, social inclusion, and political inclusion and more broadly on the opportunity set for livelihood improvement.

6 THE CONTEXT: INITIAL CONDITIONS AND POVERTY

Initial physical, socio-economic and policy conditions affect people's livelihood strategies and their well-being. *Physical conditions* can include physical assets, as a house or the conditions of a natural resources, technologies, natural phenomena as rainfall, agro-ecological conditions, and infrastructure, while *social conditions* indicate social structure and relationships, social norms, social cohesion and *economic conditions* include prices, production systems, and policies that affect level, returns and variability of returns on assets. Finally *policy and governance conditions* determine the underlying institutional structure and include the legal and political systems comprising the 'rules of the games' that operate in a society and the mechanisms that shape and change these. To investigate the relationship between physical/technical, social and economic categories and livelihoods strategies we focus on two overall conditions: **assets endowments** on the one hand and **vulnerability to shocks** on the other. In addition we look at the basic institutional structure, the **legal and political system** that regulates and governs basic interactions among people within a specific society and how that affect people livelihood strategies.

6.1. *Asset Endowments, Poverty, Property Rights and Collective Action*

We can distinguish physical, financial, social, natural, and human capital assets as all being part of the initial endowment of a person or household (Ellis 2000; Carney 1998). Assets endowments (or the pool of resources or assets available to an individual or household) include not only the well-recognized physical assets, but also rights to access, use and manage natural resources (e.g. collecting firewood from the forest, grazing common pastures), personal skills gained through education or other learning experience, and social networks based on trust and reciprocity, which all contribute to resources available to people. When we refer to tangible assets endowments (physical, financial and natural) we are actually speaking of (property) rights to these resources. Social and human assets endowments, are equally part of the resources available to people (see action resource section), although as these are intangible assets that are intrinsically link a person we do not consider them as objects of a property rights relation.

This asset base is fundamental in determining the starting point for the choice of livelihood strategy of an individual or household and in determining their well-being. Current asset endowments generally depend on intergenerational transmission of assets, past investments in health and education, and past policies.

In the reminder of the section we first look at individual as well as communal and public assets and poverty. We then highlight the role of asset endowments in allowing the poor to choose more productive livelihood strategies, and the link between assets and poverty traps. Subsequently we investigate the role of property rights on incentives to invest and asset accumulation and the role of collective action in local provision of public goods and services and in securing property rights to assets.

While in the next sections we focus on current asset endowment and the effect on the single individual, assets do not only affect actors decisions, but also their bargaining

position and thus the interaction pattern in the action area. The dynamics of this process will be investigated in a later section on action-resource and institutional change.

Asset endowment

Proposition 6.1: *The higher the initial asset endowment, the more choices a household has to use and invest these assets in productive activities.*

The link between available resources and ability to choose is universally recognized. While many economists restrict the choice concept to the individual choice of allocation of assets between different uses, other approaches, as Sen's capability approach (1999), views assets only as a minor component determining freedom of choice. It is nonetheless an important starting point to assess poverty, recognizing the constraints that people face and the opportunities that have in choosing their livelihood strategies.

Comentario: In reply to Benedikt: Proposition 6.1 was a tautology: we agreed and changed to assets increase CHOICES.

Individually-or Household-Held Endowments

Often the ability to work and acquire skills are the main resources poor people have. Poor people generally own few assets and often have to rely on contractual arrangements that provide access to other's assets at high costs. For example, contractual arrangements such as sharecropping can provide access to land - and even access to credit if combined with a credit contract, but the rental or interest rates are often high. Access to natural resources and their conditions also become important for those with few other assets: e.g. access to state owned pasture or to a small fishing ground can provide an important addition to household income. Here the conditions of the natural resources will clearly affect the level of income derived from the resource. Poor people often have access to marginal resources of low quality only, whose productive potential is very limited.

Communal and public assets

Apart from people's personal assets, people's livelihoods can benefit from access to assets held in common, by a group, a community or the state, such as access to public goods and services. Common goods, such as community forests or pastures, provide individual benefits; similarly, access to public health facilities or water delivery systems provides a benefit stream that improves people's livelihoods.

Other public services affect people's asset holdings through their *effect on vulnerability*. Access to health care, social safety net provision such as unemployment allowances, access to hardship loans or relief programs in the case of natural disasters can not only satisfy some basic needs, but can also prevent asset losses that may result due to distress sales or livestock deaths, or inability to work due to poor health and nutrition.

As much as security of rights to a private asset is a prerequisite to consider it part of person asset endowment, so public goods and services need to be accessible to affect people's livelihoods. Thus the presence of a school in the village, or of a health facility does not automatically imply access to all. Sometimes additional resources are needed (financial assets), or simply some people are excluded from access. In poor regions

public services might not be available at all, while poor people in well-serviced areas might still lack access to certain public services.

Proposition: *There is some bundle of assets required for households to move out of poverty traps and advance to more productive livelihood strategies*

Asset endowment both co-determine and constrain the level of welfare of people. In addition, the poverty trap literature indicates the presence of thresholds in transforming assets in income, that constrain the ability to allow for accumulation of capital goods that would allow higher returns (Dercon and Krishnan 1996; Dasgupta 2003; Barrett, Reardon, and Webb 2001). Poverty traps are inherently linked to asset poverty, as one of the characteristics of poverty traps is the existence of critical wealth thresholds that are difficult to cross (Barrett and McPeak 2003). In other words individuals and households may be constrained to a specific pathway and cannot move off this pathway (Pender, Scherr, and Duron 2001), (Hoddinott et al. 2003). They often end up in a pattern of persistent poverty and with a constantly depletion of the natural resource base they depend on (Coomes, Grimard, and Burt 2000), (Barrett, Place, and Aboud 2002). Barrett and Swallow (Barrett and Swallow 2004) indicate as sufficient conditions for the existence of poverty traps at the household level: incomplete access to financial markets, minimum efficient scale of production yielding high return which are beyond the means of the credit-constrained poor; or risk and subsistence constraints that discourage long-term investment in high-return assets (Zimmerman and Carter 2003).

While the vulnerability aspect will be dealt which in a later section, here we analyze wealth thresholds as they are determined by asset endowments.

A first threshold is the inability to satisfy completely basic needs, which affect the capacity of the individual to work and constrains accumulation of human capital which dramatically affect future earning (Dasgupta 1997; Strauss and Thomas 1998). It is largely recognized that *basic needs have to be met first* since they provide adequate health conditions that allow an individual to be more productive. Nutritional status affects both physical and mental development, and thus an individual's ability to work (Dasgupta 2003, 1). Infection is the major precursor for the onset of undernutrition (Jackson and Calder 2004), and the nutrition-infection problem is most common among children from households that are food insecure and have limited resources. This most extreme case of poverty trap at the microlevel is also responsible for intergenerational transmission of poverty where the household-scale financial constraints also results in underinvestment in the education of children and transmits poverty across generations (Lounsbury 1981).

Another major threshold that keeps households and individuals in chronic poverty is the inability to undertake lumpy investments that would allow to acquire physical or natural assets to move to a more productive livelihood strategy. Lack of access to financial assets, because of imperfect financial markets is the major constraint in this case. The poor generally have to self-finance and as they often cannot access these markets. Because many investments are not incremental but lumpy (livestock or land) the poor often cannot reach more productive livelihood strategies.

Subsistence needs and lack of access to external insurance also restrict the ability of the poor to undertake long-term and risky high yielding investments. The inability to undertake long-term investment does not only reduce current income flows, but can foster unsustainable management practices that deplete natural resources (soil, forest etc.), again affecting future income flows of the household and reducing the asset base also for future generations, thus increasing the likelihood to transmit poverty over generations.

In the next section we see how property rights and collective action institutions affects some of the constraints illustrated above.

Links to Property Rights and Collective Action

Property rights and incentives to invest

As discussed previously, assets provide the basis for choices. Investments are critical choices since they affect both current and future outcomes. For the sustainable productive use of agricultural and natural resources, property rights are crucial. For instance, there is little incentive to invest in soil conservation measures for a ‘squatter’ occupying public land without permission, because of the uncertainty of tenure. Uncertain tenure often implies that the risk that benefits from the investment will be lost (or appropriated by someone else) is extremely high. Thus the security of the property right is indispensable to provide incentives to invest.³

Property rights held by poor people are often insecure, which contributes to shorten the time horizons over which they consider investments/returns. Together with subsistence requirements, which also put more value of today compared to the future insecurity of property rights also contributes to hold the poor is low yielding livelihood strategies. This is particularly relevant when returns from investments in land do not accrue until long after the investment is made. Also, in the case of renewable natural resources in particular, insecurity of rights as well as rights of short-term duration, may also well affect choices to engage in “sustainable” resource management practices.

Collective action and local provision of public goods

Poverty and poverty traps can be exacerbated by lack of access to public services as safe water and health facilities. Where collective action is present it is often crucial for local public good provision.. Many communities around the world mobilize resources with own contributions and work, while others don’t. The likelihood that this happens depends on the capacity to undertake collective action as well as on the specific incentive structure, which depends on the expected benefits from the good provision, and the expectations about the behavior of others (Sandler 1992; Ostrom, Gardner, and Walker 1994; McCarthy 2004). Here social cohesion, the history of cooperation and trust -some

³ Note that in some cases, investing in land provides a basis for strengthening one’s claim to the property, and this can provide an incentive for investment. For example, in some cases planting trees may provide a basis for claiming land, or building a canal provide a claim on water resources. What matters in these cases is the security of those claims.

of the building block of social capital - play an important role in determining the capacity of a group to work together, avoid free-rider behavior, that allow to pool together resources and thus overcome credit constraints for provision of public goods and services.

Proposition 6.2: *Assets can be complementary, but different assets can also partly substitute for each other, particularly when markets are missing or imperfect.*

Of course, individuals and households hold a diverse set of assets, which can be combined in different ways to provide different livelihoods; alternatively, certain assets may be leveraged to gain access to yet more assets. Human capital, in the form of agricultural knowledge and/or experience in farming, greatly improves returns to land. This might seem basic, but many land reforms and land resettlement programs actually did not put enough emphasis on the human capital needed to make a piece of land productive, and often ignored access to other complementary inputs such as access to credit, input and output markets, transportation, storage, etc. Having animals allows one to exploit common grazing land; property rights to land can provide the collateral often required to access financial capital, and thus allow to escape low return livelihood strategies. Similarly, property may function to provide substitutes for other missing or imperfect asset markets. For instance, it has long been recognized that share-cropping contracts enable the tenant to shift some of the income risk of agricultural production to landlords (Cheung 1968; Eswaran and Kotwal 1985) share-livestock arrangements can perform similar functions. The poor can gather food from common lands when crops fail. Both of these latter examples indicate the importance of holding a diversity of assets in one's portfolio, especially for the ability to reduce vulnerability during hardship periods.

Access to certain public goods and services can dramatically increase the productivity of individually-held assets. The construction of a road reduces transactions costs of marketing by lowering transportation costs and likely increasing information flows, and may also increase the value of private land in the area. Similarly, efforts by a city council to reduce crime and rehabilitate a neighborhood can also affect land and housing prices in the area. Not only are the residents enjoying the benefits of reduced crime, but owners enjoy the revaluation of their assets. Tenants on the other hand might have to pay higher rents. Similarly, access to literacy programs and public education improve human capital, leading to higher future earning potentials of individuals. In these latter examples, the poor as well as non-poor benefit; who benefits relatively more will depend on a wide range of conditions. In general, however, public education and public health should have at least mildly progressive impacts on the poor. Increasing availability of food through increased access to market very often leads to reduced output and input prices; net impacts on producers can still be positive. However, the poor may gain relatively more, to the extent that they are net purchasers of food (Hazell and Haddad 2001).

Collective action for securing access and other property rights

Collective action is also a means for the poor to secure access to benefit streams derived from resources. We have seen before that property rights are only as strong as the

institutions that back them up, and collective action can provide the collective support to secure claims. Recognition of indigenous rights to resources and request for improvement in public service provision are two recurring examples. Especially in the case of common property resources, when individuals feel that their rights are threatened by outsiders or are neglected by 'official' state authority, the ability to organize around a common goal to stake a claim to a resource can make the difference between neglect and acknowledgment of rights. Collective action through organizations such as farmers' associations, or even widespread social movements, can provide a stronger voice in negotiations with government officials, NGOs and others. Studies have shown that leadership is another important ingredient, apart from the capacity to cooperate, for successful acknowledgment of rights (Krishna 2003).

6.2. *Risk and Uncertainty*

Poverty or well-being are determined not only by the assets and income of a household, but also by its degree of vulnerability. While poverty can be assessed at any one point in time, risks and uncertainties mean that people's livelihoods fluctuate. If we take as given different risks and uncertainties, such as climatic variability or market price fluctuations, then people have two options for confronting such risks. They can either take actions to mitigate exposure to various risks, often termed *ex ante* risk management strategies, or they can take actions after a negative shock has occurred, often termed *ex post* risk-coping strategies. Clearly, most people undertake both risk management and risk-coping strategies; though the capacity to do either or both will be affected by many factors, including household asset endowments. The vulnerability of a household to shocks is thus comprised of three components: 1) the exogenous characteristics of the risks and uncertainties (distribution of rainfall), 2) the extent to which they engage *ex ante* risk management strategies, and 3) the extent to which they can engage in *ex post* risk coping strategies. In this paper, we consider that exposure to risk is function of both exogenous risk characteristics as well as *ex ante* risk management strategies.

Though the potential impact of risk and uncertainty on subsistence farmer's in the developing countries has long been recognized (Ray, 1967; (Roumasset, Boussard, and Singh 1973; Hazell, Bassoco, and Arcia 1986), empirically it remains a difficult issue to study because of heavy data requirements (long time series are needed, and to appropriately capture co-variate risks, time series data is required for a wide range of variable). Also, it remains difficult and costly to capture farmers' attitudes towards risk and uncertainty, though some methods have been developed (Moscardi and de Janvry 1977; Dillon and Scandizzo 1978; Binswanger 1980; Antle 1987). To some extent, the advancements in geographic information system-based information and satellite imagery should help to reduce climate-based data constraints; advances in the use of experimental games, building on the Binswanger-type methodology, may yet prove useful and practical in understanding risk attitudes. Notwithstanding data constraints, the renewed emphasis on vulnerability, risk and uncertainty is motivated by the knowledge that increased globalization (via increased trade in goods and services, information exchange, increased mobility of people for jobs or tourism, etc.) introduces new uncertainties with both positive and negative impacts on risks of a wide range of variables. At the same

time, the effects of global climate change remain uncertain, but the occurrence of extreme weather events, in particular, are predicted to become much more severe predominantly in tropical and semi-tropical countries (Intergovernmental Panel on Climate Change (IPCC) 2001).

Proposition 6.2.1: Strengthened property rights or successful collective action can be used either to enable households – including poor households – to reduce exposure to shocks through risk management strategies and to help them manage shocks once they have occurred through improved risk-coping strategies.

Proposition 6.2.2: On the other hand, though people have limited or no possibility to affect many risks, both property rights and collective action may be successful in fundamentally changing certain risks – such as those arising from threats to personal security, or social and/or political risks such as tribal violence and elite capture of local resources.

We first focus on outlining the arguments behind proposition 6.2.1, and then consider how collective action, in particular, might be used to actually change risks, e.g. political risks, as proposed in 6.2.2.

Our purpose here is not to be exhaustive, but rather to point out they key links between different types of risks, poverty and vulnerability, and property rights and collective action. To begin addressing these issues, we first consider three broad classes of risks: *natural*, *economic*, and *political*. After discussing these risks, we introduce likely differential impacts on relatively poor households and marginalized sections of the population. We finish this section by considering the role of property rights and collective in specifically addressing the needs of poor and vulnerable households in confronting the myriad of risks they face.

Risks

In all three categories of risks, some of the risks will occur frequently, implying that people’s subjective assessment of the probability of having a relatively poor (or relatively good) outcome is likely to be well-formed. Other risks will occur only sporadically; people will generally have more difficulty in developing a good idea about the probability of these risks occurring. Finally, certain events might have some probability of occurring, but occur with such infrequency that there simply is no basis on which to assess that probability. We use these categories as illustrative: for instance, hail may occur regularly in some regions but only infrequently in others. Nonetheless, Table 1 below gives examples of these different types of risks for each category – natural, economic and socio-political – acknowledging that certain risks and uncertainties might change categories, depending on the specific location under study.

Table 1: Risks and Occurrence

	Frequent, Well-Known Probability	Less Frequent, Imprecise Knowledge of Probability	Rare Events, Probability Unknown
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Natural	Seasonal Rainfall	Drought	Earthquakes
	Hail	Floods	Forest Fires
	Endemic Pest Infestations	Morbidity/ Mortality	Epidemic Disease Outbreaks
	Frost		Global Climate Change
Economic	Seasonal Prices	Formal Sector Interest Rates	Asset Bubbles/ Stock Market Crashes
	Input Availability	Inflation	Introduction of “Revolutionary” Technologies (electricity, computers)
	Informal Loan Rates	Real Estate Values	
Socio-Political	Elections	Personal Security	Changing Regulatory Frameworks
		Property Security	Warfare, Revolutions
		Ethnic Discrimination	Genocide

Implications for Poverty and Vulnerability

Wealthier members of society can often self-insure, or purchase formal insurance, for well-defined and frequently-occurring events. In the absence of insurance, producers tend to favor less risky crops, generally leading to a higher concentration on subsistence crops (Fafchamps 1992; Sadoulet and de Janvry 1996). Lack of insurance (broadly conceived) has also been shown to lead to a lower likelihood of adopting new technologies (Feder, Just, and Zilberman 1985; Antle and Crissman 1990), to lower investments (Skees, Hazell, and Miranda 1999) and, despite higher concentration on subsistence crops, to greater diversification (Walker and Ryan 1990). Thus, both theoretical and empirical evidence suggest that, in the absence of viable insurance mechanisms, farmers have lower current incomes. Furthermore, absence of such mechanisms implies that some farmers may remain trapped in poverty, because of low technology adoption, innovation, and thus investment levels. To the extent that other asset endowments can “substitute” for insurance, it is more likely that anyone who is poor at some given point in time will be more likely to be trapped in poverty because of risks and uncertainties since wealthier members will continue to accumulate assets even when also exposed to risk because they can “afford” the luxury of try new crops, adopt new technologies or experiment/innovate themselves.

With respect to rare events, the poor, as well as others, will find it difficult to “plan ahead”. Generic planning, such as savings in liquid assets, can be used to insure against many unforeseen occurrences (though it may not be helpful in every

circumstance, particularly political instability). Since we generally use the asset base and income-earning potential of a household as a basis for assessing whether someone is poor or not, then clearly, we expect that the poor will be less able to use assets to save for future unforeseen contingencies. It is often the case that, in both developed and developing countries, citizens generally rely on the government to provide relief in the face of a natural disaster. Where effective, these policies should favor the poor relatively more; though there is a great deal of evidence to suggest that aid in crises situations – e.g. famine or floods – does not arrive on time, and is neither efficiently nor fairly distributed (Keen 1994). The bottom line is that many, many people remain exposed to large co-variate climate shocks, that disaster prevention and long-term development plans remain ineffective or stalled, and that more natural disasters can be expected in the future.

With respect to large, negative, economic shocks, it is less clear that the poor will suffer relatively more (as they may have relatively “less” to lose), but even asset market crashes may affect the poor to the extent that unemployment increases or demand for agricultural products decreases. Less dramatically, high inflation can decimate savings pushing people, particularly the elderly with fixed incomes, into poverty; large swings in primary market products (e.g. coffee, cocoa) can lead to both temporary and chronic poverty (the latter to the extent that coping strategies involve selling assets). Governments may also have safety net programs that protect the poor against economic shocks, but these are likely to be more limited than response to natural disasters, for a number of reasons. First, it is difficult to tie safety net responses to specific economic shocks, since, even if the exact nature and extent of the shock is known (not likely), it may be more difficult to assess who is suffering than is the case with natural disasters. Second, governments can often make credible commitments to take actions for a limited amount of time in response to a natural disaster, but more generic safety-net program benefits tend to get locked into the system, meaning that the distribution of power and interest group effects are likely to be more important; this latter is discussed in section

As with natural and economic risks, socio-political risks may be well-understood, such as election cycles, or may include infrequent or rare events. A major social risk concerns personal and property security. Personal security is often a major concern of people in developing countries (Smith, Barrett, and Box 2001), in both rural and urban areas. Communities that provide effective policing increase personal and property security; however, the rich often enjoy a higher level of public police service, and where even this is not sufficient, they can afford to pay for private guards. This has a direct effect on well-being: people who are subject to high risk of attacks on their person or property may be more restricted in what they can do, and may thus not be able to allocate their asset endowments towards activities that otherwise would increase their well-being.

Implications for Property Rights and Collective Action

Property Rights: One potential option for reducing vulnerability is to increase the security of access to various resources for the poor. Peru’s program to provide land titles to urban “squatters” who built houses on public lands has been shown to not only increase the value of their homes, but also increased access to credit (which can be used

for risk coping). It even increased the security in those homes, because of higher recognition and police protection (because the residents had gone from the “wrong” to the “right” side of the law), and this, in turn, allowed more household members to go out for work or schooling, because someone was not required to stay at home to guard the house (Field 2004).

Even secondary or tertiary rights can play an important role in reducing vulnerability. Oftentimes, use of common – or state-controlled – resources provides a safety net in times of extreme need. Such access functions as an ex-post mechanism to smooth consumption or maintain the asset base (e.g. livestock). Flexible access can help to absorb many shocks, including climatic, economic and, in certain cases, socio-political upheavals that affect local livelihoods but do not affect accessing these resources. In fact, such access may be conditioned on the households’ having suffered a shock; access rights may fluctuate specifically to reduce a household’s exposure to risk. For example, pastoralists may be allowed to graze their herds on the land of another pastoral group during years when their home rangelands are affected by severe drought (often with the expectation of a reciprocal arrangement.) These types of access claims can be exercised regularly to offset idiosyncratic – but regularly occurring – events such as seasonal rainfall, and also to offset potential losses from less frequent, but locally specific, events like floods and droughts.

On the other hand, flexible access rights can also be quite costly for a number of reasons. In times of generalized shocks – such as widespread and prolonged drought affecting large areas – flexible, informal property rights systems may lead to conflicts, increasing insecurity and risk of loss of property or person. That is, such rights may function best as safety-nets where idiosyncratic shocks affect a only a small portion of the relevant population. Secondly, flexibility and informality may (though not necessarily) imply a relatively low degree of tenure security; claimants may not have the incentives, then, to manage and invest in the resource for sustainability.

Thus, any attempts to increase tenure security must consider all of those that have pre-existing claims to the resource. If overlapping claims are not an issue, then moving to more formalized, individual claims to improve tenure security may increase security for the poor, enabling them to make sure that others (elites) will not grab the land in the future. But, then, it goes without saying that any process to increase land tenure security, through formal titling for instance, must function in such a way that poor and marginalized members of society do not lose pre-existing claims to local elites through a process of land-grabbing. Legal aid and information on the process of titling must focus on educating the population of their rights and responsibilities in the process. In cases where there exists a complicated structure of overlapping claims, recognition of flexible access rights and multiple overlapping claims can increase tenure security and also acknowledge access rights of the poor and marginalized; however, developing methods to “legitimize” such systems, and thus increase tenure security, is quite difficult. A process of negotiating who is in the “group”, and the respective strengths of claims as well as how conflicts will be settled, and then developing a legal framework that simultaneously recognizes local overlapping rights can be quite arduous, but it is still necessary if such systems are to be sustainable and accessible to the poor and marginalized.

To summarize, increased tenure security in particular can be very valuable in reducing vulnerability to nearly any type of risk – be it natural, economic or socio-political, or be it frequently occurring or rare events.

Collective Action: Collective Action can be undertaken to address each of the three types of risks under each of the three categories. First, it has long been recognized that local people often rely on social networks that function as insurance networks. Funeral societies—ranging from informal to highly formal organizations—are found in very many countries and cultures. Empirical work also bears out the capacity of local networks to smooth consumption (see the review of this literature in (Hoddinott et al. 2003; Deaton 1992; Lim and Townsend 1994; Kurosaki and Fafchamps 2002). When one person suffers a shock, he or she can rely on family or friends to provide resources, at least to smooth consumption, and possibly to provide labor, or redistribute assets such as livestock. But, similar to flexible property rights, local insurance mechanisms are often unable to buffer households from large-scale shocks, particularly if the event is also long in duration, such as prolonged droughts or prolonged disability due to sickness (Paxson 1992; Udry 1994; Fafchamps, Udry, and Czukas 1998; Skoufias and Quisumbing 2003). Collective action then needs to operate at higher levels, in order that the “group” has access to a sufficiently large resource base over which to spread risks.

Additionally, a group dependent on non-private resources (e.g. common pool resources) may act collectively to undertake risk management strategies that directly reduce exposure to a shock. For instance, the group may improve water supplies through various investment and maintenance activities; or, they may undertake soil erosion control measures that mitigate the impact of droughts or floods on the productivity of the natural resource base. The latter are activities that affect a wide cross-section of community members or perhaps all; in these cases, collective action will benefit all. However, the distribution of benefits and costs might either be income-neutral, progressive or regressive. If all are expected to contribute the same amount to soil erosion control measures undertaken on common pastures, for instance, those with more ruminant livestock are likely to gain relatively more; in such cases then, wealthy herd owners are likely to gain at the expense of the poor. On the other hand, if wealthier members are asked to pay proportionately more for, say, maintenance of local domestic waterpoints or a livestock crush, then net benefits may be progressively distributed. In other cases, people may be asked to contribute based on how much they are expected to gain, in which case the net benefits will be neutrally distributed.

Alternatively, a smaller sub-group may form to take advantage of “economies of scale”; for instance a group of relatively poor farmers might group together to bring produce to market and/or to gather and share market-information. Such activities can specifically reduce market risks, particularly where markets are imperfect and local traders otherwise enjoy a degree of bargaining power. Thus, increasing networks of potential buyers reduces the likelihood of having to sell at a low price; increased access to market information enables producer’s to change production or marketing plans to reduce risks of sending too much of the wrong crop to the wrong market.

Collective action may also be called upon to increase personal or property security (as in neighborhood watch programs). It can also enhance the political voice of

local, often isolated communities, in order to increase tenure security of these groups, to make sure that government disaster-relief programs provide safety-nets in times of crises that are locally appropriate and available on time, and to provide information flows that reduce uncertainty over potential government policy changes. Furthermore, promotion of “open” groups – groups whose membership is both voluntary and open to all who may be affected by collective action – may well provide a forum for integrating members of local communities who see themselves as otherwise very different. Such forums, and the capacity to undertake activities together, can help reduce conflicts among different sectors of society and, potentially, make the likelihood of wide-scale social unrest less likely.

Nonetheless, as discussed above in section 4, it must be recognized that groups acting collectively are often co-opted by wealthier members who may find their own best interests somewhat at odds with group welfare. Closed groups may spend a good deal of energy on excluding non-members from benefits; collective action can be used as a vehicle for sub-populations to secure greater relative benefits and access to resources at the expense of other sub-populations. In many cases, it is precisely the very poor who are actively shunned by other community members, and who are often excluded from joining, or actively participating in, local collective action. It is thus important not to romanticize the concept of collective action, but rather to understand group formation, group dynamics and power relations, and to examine how decisions are made as to participation, making, monitoring and enforcing agreements, and the resulting distribution of benefits and costs from collective action.

To summarize, both collective action and property rights can be instruments to help the poor escape poverty and/or prevent those with few resources from falling into a poverty trap. Increasing tenure security for the poor and marginalized groups is certainly one mechanism for reducing risks and uncertainties. Mechanisms to improve security may be relatively straightforward in areas with relatively low climatic variability where most land-based resources are *de facto*, if not *de jure*, under private tenure. Even here, however, changing the property rights regime might spur land-grabbing and speculation, much to the detriment of the poor. Increasing tenure security in highly variable environments is likely to be more costly, particularly when there are many common pool resources, and existing tenure systems are flexible. If it is determined that greater tenure security would improve continued access by the poor (and others), thus improving the insurance value as well as increasing group-level investments and management practices, then in order to avoid conflict and reduce the probability that poor and marginalized groups actually lose rights, novel tenure arrangements need to be developed. Unfortunately, very little is really known about the optimal design and implementation of such tenure arrangements, and this remains a very important understudied research issue.

Collective action has been shown to be very effective in insuring against frequent, and to a lesser extent less frequent events, particularly when such events affect households differentially. Local collective action is much less effective in reducing exposure to generalized shocks – either natural or economic – simply because, by definition, such shocks affect a large portion of households. These shocks require tapping into external resources, such as from government, market, or international NGO assistance. However, collective action can be used to assert political voice, and,

potentially, could ensure that local peoples are receiving the appropriate type of assistance at the right time. It is also possible that local collective action can feed into the process of designing disaster relief programs.

6.3. Norms, Legal Structures and Power Relations

Legal, political and power structures have a strong impact on the assignment of property rights and their change, the kind of collective action pursued, resulting livelihood strategies and, thus, on poverty reduction. Besides others, they determine if property rights to assets are accessible to the poor, the way rights are negotiated in different public arenas and if collective action can perform a double task of contributing to income generation and enabling participation and democratization. However, legal, political and power structures do not only differ considerably between countries but also between governance levels.

Legal and political structures

Citizens in most developing countries are still confronted with not only the remnants of colonial legal legacies and their resulting path dependencies on constitutional (balance of power, centralization) or institutional choices (judiciary, titling system) but also on policies. These have contributed to control-and-command economies, dominant public sectors, centralised administrations, concentration of power and only limited willingness to give up powers to the private sector or civil society organizations or to opt for more decentralized governance. This system is blamed for not addressing the livelihood needs of the poor, their marginalization and de-linking from economic growth and political change, and withstanding their attempts to raise their voice.

However, since 1989 several countries actually have gone through far-reaching institutional reforms particularly in their legal systems, their power relations and resulting governance. Today some are in a 'dual transition' to more democratic systems and market based economies (Gordon 1996), such as Mozambique or Mongolia. Others concentrate on economic transition only (e.g. Ethiopia, China, Vietnam); some started from a post-war situation (El Salvador, Nicaragua, Cambodia); others foster democratization (South Africa, Indonesia). At least on paper, they are establishing constitutional structures based on guiding principles as division of power, multi-party systems, rule of law, accountability, subsidiarity, market incentives, competition, and participation. Driving forces have been i) integration of world markets, ii) domestic economic and institutional reforms through privatization, substitution of rationing systems by the price mechanism, and an establishment of enabling framework for contract choice, iii) domestic policy reforms for democratization and inclusion of the marginalized, and iv) a transparency-enhancing revolution in information technology (Srinivan 2003; Bardhan and Mookherjee 2004; Gray 1997; Posner 1998; Pradhan 1998; Shah 1998).

Most of these guiding principles are inclusive as they contribute to integrate the poor, protect human rights, break up monopolies, create transparency, make politics accountable, reduce income differences and give greater voice to people at the local level. The rule of law, for example, implies that people can use the existing legal system to structure their economic activities and resolve disputes (Hay, Shleifer, and Vishny 1996). Subsidiarity requires that the distribution of power and responsibility is in favor of lower governmental institutions at smaller jurisdictions, and political authority is always allocated at the lowest possible level, that is, close to the citizens as sovereign (Vanberg 1997; Ngaido and Kirk 1999; Ngaido and Kirk 2001).

In other countries, these processes are driven forward only half-heartedly, concentrating on selected economic reforms, while leaving out democratization. Governments hesitate to restrict predominant public law in favor of private law or to include all economic transactions into one civil code encompassing sale, rental, mortgage contracts for goods and services, including different natural resources. There are two preconditions to secure private transactions: give long-term investment incentives, respect individual and group rights or react on the needs of multiple resource users which are often the rural poor.

However, even reform countries often undervalue and misinterpret the problem of adequately transferring norms, legal and political structures and power relations into a comprehensive institutional environment, which is often to the disadvantage of the poor: Multiple norms and rules to allocate bundles of property rights and to decide on multiple bases for claiming are deeply rooted in villages, communities or along ethnic lines (Meinzen-Dick and Pradhan 2002). Here, various legal mechanisms coexist: statutory, religious, customary, organizational law, codes of conduct, and even donor law. Legal pluralism is, thus, more often the rule than the exception (Benda-Beckmann and Benda-Beckmann 2001). Any rigid conception of statutory law, such as giving land security exclusively by individual titling, does not necessarily capture secondary or temporary access and use rights.

In other circumstances, the statutory framework is not enforced at lower levels and a state monopoly is not accepted. It still competes with other, often informal mechanisms to deliver goods, such as reputation and thrust to enforce agreements and to resolve conflicts (Hay et al. 1996). In transition and post-conflict countries where mutual trust and social capital have been severely undermined, the legal system has problems in offering substitutes. Here, informal legal processes still fill gaps as screening devices in selecting reliable partners when formal contract-enforcement is weak. In this context, complex and long-term contracts, such as rental for forest land or inheritable leasehold, are rare, resulting in high economic costs, few innovations, low growth rates and inaccessibility to the poor.

Federalism and decentralization: role of the state and its performance

There is strong evidence that enforcing contracts, limiting power of oligarchies, taming the leviathan, developing democracy and including the needs of the marginalized requires federal, multi-level governance. This implies decentralization and devolution. It is

questionable if a centralized state is really targeting the poor or is more accountable to them than the local level (Galasso and Ravallion 2001). The idea behind federalism is, thus, to encourage a more efficient allocation of resources, foster local participation, create a sense of democratic community and helps to protect liberties (Inman and Rubinfeld 1997). In addition, decentralized governance increases competition in the delivery of public services leading to lower prices and closer access of the poor (Litvack, Ahmad, and Bird 1998), without leading necessarily to a "race to the bottom".

For a long time, fiscal federalism (Tiebout 1956; Oates 1972), were used as a yardstick even for developing countries (Bardhan and Mookherjee 2004). The competition between (lower) jurisdictions in supplying rival combinations of public goods would lead to an efficient supply of such goods - based on the assumption that citizens practice 'voice' by electing their local representatives or 'exit' by moving to other jurisdictions. In a federal system, central government is assigned responsibility for the delivery of those (public) goods with significant positive externalities from one sub-national unit to others, while local governments have the responsibility for those activities which serve a heterogeneous population and for which spillovers are limited (Besley and Coate 2003; Inman and Rubinfeld 1997; Seabright 1996). In addition, federal structures reduce local information costs (Srinivasan 2003). However, with decentralized provision, spillovers will not be captured leading to an underprovision of public goods. Thus, uniformity and standardization are key drawbacks of centralized provision, whereas the inability to exploit scale economies is the main one for decentralization (Bardhan and Mookherjee 2000b;2003; Seabright 1996).

Decentralization and devolution work to establish federal governance. Decentralization assigns fiscal, political and administrative responsibilities to lower levels of government (Litvack, Ahmad, and Bird 1998; Meinzen-Dick, Knox, and Di Gregorio 2001). Devolution refers to the transfer of authority over (natural) resources from the state to non-governmental bodies, such as user groups, or the private sector(Meinzen-Dick, Knox, and Di Gregorio 2001). Decentralization has, thus, a strong political dimension. It helps to change existing power structures and to improve participation by engaging the disenfranchised in the political process (Bardhan 2002). In this context, the (central) state still has an active role to play as a catalyst in mobilizing people and neutralizing the power of local oligarchies.

However, enthusiasm on fiscal federalism has given way to a more critical perception where some results are being questioned. Working towards a developed federal system, as in India, goes much further. It is ideally characterized by the supremacy of the constitution, the distribution of the different powers of government among bodies with limited and coordinated authority and the authority of the courts to act as interpreters of the constitution(Dorn 1990). This implies the existence of a functioning administrative apparatus at lower jurisdictions and efficient control over it enabled by participatory democratic processes in civil society (Srinivasan 2003). With limited access to education and training, the poor can neither be part of this administration nor efficiently control it.

Poor villagers, women or tenants with combined tenancy cum credit contracts can neither use their “voice” option to vote out incapable, corrupt politicians (being their landlords) nor can they “exit” by moving to other jurisdictions (Litvack, Ahmad, and Bird 1998). They have high mobility costs, often there is no acceptance outside their home region where the differentiation between ‘insiders’ and ‘outsiders’ is sharp (Bardhan and Mookherjii 2000c). Corruption and lack of accountability remain endemic, a factor that has largely been ignored when focusing on fiscal decentralization only (Bardhan and Mookherjii 2003). There are even opposing opinions on decentralization as a means to reduce corruption (Seabright 1996): it is not necessarily a powerful instrument to defuse ethnic, religious or other conflicts (Srinivan 2003), as it may encourage state erosion and dissolution. Decentralization may even be decreed from the top and be misused by the state to get rid of old burdens and obligations in times of tight budgets, as examples in rangeland management have shown (Ngaido and Kirk 2001).

Strong differences exist among jurisdictions with respect to access to information, administrative capabilities, preferences of citizens over their consumption level - differences which go far beyond heterogeneity in preferences of citizens. Differences arise as well between local politicians in their preferences for equity, efficiency and the role of poverty in their local political agenda (Srinivan 2003). Those in power in a village need not share the center’s objectives for poverty reduction programs and may as well be less accountable to the poor (Galasso and Ravallion 2001).

Any successful decentralized delivery of public services, thus, critically depends on the accountability of decision makers. Accountability implies informing about and explaining what local administrators are doing, but also the capacity to impose sanctions on those who have violated their public duties (Ackerman 2004). This does not necessarily hold at local level (Litvack, Ahmad, and Bird 1998). Accountability can only be assured with residents being informed about local conditions, being able to monitor service delivery and exerting pressure on officials(Bardhan and Mookherjii 2003). Many examples show that ideals of local democracy do not materialize well, in Asian landlord villages, nor in Latin American post-hacienda systems or for laborers on commercial farms in Southern Africa (Deininger 2003). Local information on under-performance or corruption is difficult to get bundled and be used as a strategic resource. Evidence shows also that severe internal distributional conflicts exist in heterogeneous communities (Srinivan 2003; Galasso and Ravallion 2001).

Proponents of decentralized programs claim that more information is available at the local level about the poor, and that local institutions have strong incentives to make use of this information to improve program performance (Galasso and Ravallion 2001). However, this informational advantage can easily be compromised by greater capture of benefits by local elites (Bardhan and Mookherjii 2000a). If localities are only insufficiently homogeneous, decentralization may paradoxically diminish the accountability of local governments to the marginalized, whereas the poor may enjoy some cohesiveness and consideration through uniform programs coming from the central level (Seabright 1996). Bardhan and Mookherjee (2000b) conclude that no uniform conclusions about relative vulnerability to special interest capture can be drawn. Local

capture should often be treated as an exogenous parameter reflecting high poverty levels and weak political institutions.

Power, political voice and poverty

Decentralized governance may be necessary but not sufficient to implement and enforce the legal and regulatory framework at the local level and to support the poor. As we have seen, it very much depends on power relationship between different claimants (Meitzen-Dick and Pradhan 2002). Power, by classical definition, is "... the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests." (Weber 1947, 152). Those in power do not necessarily have the same interests with regard to road infrastructure, clean water, secured land rights as do the citizens have, Their own preferences may therefore be only a poor guide to the benefits to be expected by their constituencies (Seabright 1996).

There is only limited empirical knowledge on the political economy of decentralization for societies in which opportunistic or corruptive behavior of politicians, bureaucrats or managers is prevalent (Srinivan 2003). The exercise of power in decentralized structures may increase the latent danger that, for example, public expenditure is channeled in a way that leads to a greater share of public resources being spent on services used by the non-poor (Litvack, Ahmad, and Bird 1998). This applies as well to the implementation and enforcement of legal instruments, such as adjudication and titling to secure land rights.

Homogeneous communities are rather an exception. Heterogeneity in which elites exercise considerable power may be a consequence of religious, ethnic or caste affiliation, occupational status, wealth differences, in-migration, or others. In these localities, decentralized programs aimed at the poor, are in danger of capture, in particular, public spending on private goods (Galasso and Ravallion 2001). Greater inequality in land is accompanied by an even worse distribution of reserve utilities and hence lower power for the poor and exclusion from decision making. Inequality in asset holdings within villages affects the ability to devote time and money to participatory processes to make elites more accountable. Empirical studies have shown that the more unequal villages are in terms of land distribution, the worse the outcome of poorly targeted policies through public programs (Galasso and Ravallion 2001). In addition, there are no optimistic signs for imminent, self-correcting mechanisms whereby community-based targeting allows programs to reach the poor better in highly unequal villages.

Participation through self-help is often regarded as a silver-bullet to break the vicious cycle of power, marginalization and poverty. A regularity in cross country data shows that participatory political regimes are associated with significantly lower levels of aggregate economic instability and that participation contributes to moderate social conflicts and to induce compromise (Hadenius and Ugglä 1996; Rodrik 2000). However,

to get participation started, certain requirements are needed including time or money investments. The very poor get generally excluded due to their very high opportunity costs for meetings and coordination; others who are able, remain hesitant as effective participation requires a critical mass of activists. The same applies for political pressure groups. Besides free rider problems, participation may be weak as long as the right to form coalitions is not enshrined in the legal framework and cannot be enforced. On the other hand, unless there is meaningful political participation by all groups, the mere existence of a democratic political system is insufficient, e.g. in India with a long democratic tradition but no inclusion of low castes (Litvack, Ahmad, and Bird 1998).

Implications for property rights and collective action

Property Rights

Securing property rights on productive resources, enabling the transfer of these rights or redistributing rights through land reforms can significantly help the poor in escaping poverty traps (Deininger and Kirk 2003; Deininger 2003). The assignment of legally secure, marketable rights to individuals and groups enhances efficiency and gives access to additional assets via rental and sales markets(Carter 2004). In addition, redistribution of land ownership or long-term use rights may be necessary to overcome deep rooted inequality in asset ownership, break the power of a dominant oligarchy and bring scarce resource into the hands of the most productive. Whether the land market alone can accomplish this redistribution through market assisted mechanisms or an active role of the state is (again) needed, remains a contested issue (Deininger 1999; Deininger 2003).

Secured land access contributes to the livelihoods of the poor through additional farm income, enhanced food security, increased security against economic shocks (see 5.1.2) as well as through dynamic effects when accumulating real, financial or human capital (Carter 2004; Quisumbing, Estudillo, and Otsuka 2004; Deininger 2003). However, higher incomes will only be generated in case of thin rural labor markets and hired farm labor being less productive than family labor. The literature on the farm size and productivity relationship seems to confirm that (medium-sized) family farms are more efficient than large holdings due to high work effort of family members and high supervision costs of hired labor on large estates (Binswanger, Deininger, and Feder 1995; Carter 2004; Deininger and Kirk 2003). Increased food security can be achieved by security of tenure through increased consumption leading to a better nutrition status which, in turn, is transformed into better education standards and economic growth. This is particularly applicable where poor women are not discriminated and are equally eligible either for individual or, at least, joint land titles with their husbands.

Any establishment of formal property rights through statutory law, however, may improve only the situation of the poor partly while excluding others: formalizing ownership rights means weakening secondary, informal, often temporary rights e.g. collection and access options for others (Meinzen-Dick and Pradhan 2002). As long as the poor depend on such combinations in a world of legal pluralism, the adjudication of permanent, exclusive rights and the lining of exact boundaries will exclude third parties.

The ability to activate land sales and rental markets through strengthening of enforcement capacity of the legal framework, crucially depends on the functioning of complementary rural financial markets (Carter 2004; Deininger 2003). If poor households are excluded from credit for farm inputs due to high transaction costs, owned or rented plots cannot be used productively. Even where liberalization of the financial sector has started, there is a danger that capital markets remain wealth-biased. In addition, if tenure reforms are not well implemented (transparent, decentralized and participatory titling) due to lack of information, capture strategies etc., the use of land as collateral remains costly.

Besides ownership rights, there is a renewed focus on functioning land rental markets. They are acknowledged as the key buffer institution for the poor: The lifting of legal restrictions on tenancy in Asia (India, China) and Africa has given poor households new chances for self-employment. However, land owners are only willing to sign rental contracts if they are assured that no ownership claims will be brought forward by tenants (Deininger 2003).

In countries where the majority of the poor remain dependent on agriculture, securing property rights and improving the functioning of the land sale and rental markets may not be sufficient for poverty reduction. In Brazil, Colombia, South Africa, Namibia, Zimbabwe, the Philippines, or Cambodia, redistributive land reforms are discussed as an instrument to help the landless. However, successful redistributive reforms depend on preconditions which are rarely fulfilled and will in any case create winners and losers often leading to severe conflicts in society (Binswanger, Deininger, and Feder 1995; Deininger and Kirk 2003): Here, society has to decide who is entitled to land, if market forces will be sufficient to include the poor and will the state expropriate owners? They have to decide how compensation will be assessed and how to finance it, what are the minimum skill and experience requirements of beneficiaries and what are viable minimum farm sizes.

The way land reforms are implemented has an impact on poverty reduction itself: Experiences with market-assisted land reform have given mixed results (Carter 2004; Deininger 2003) Based on a willing-buyer, willing-seller basis, the poverty reduction effect may be small. Indebtedness of beneficiaries can bring the process to an end and be criticized by civil society organizations. Conventional state-driven models through expropriation (at best by the rule of law and compensation, often by force) entail the danger of rent seeking, clientelism, exclusion of ethnic minorities, resistance of former land owners, violence, deadlocks, or the eviction of farm laborers.

Simply redistributing land to the poor is one step, giving beneficiaries an economic perspective on their farms is entirely another one (Deininger and Kirk 2003). Training and extension are required as well as management practices and access to credit and marketing. Land reforms will not work if beneficiaries do not organize themselves through collective action on parallel terms: either as a pressure group against a hesitating state machinery or to organize joint marketing or credit supply. Thus, land reforms are

rather complex instruments; their poverty reduction impact critically depends on complementary measures.

Although these reforms are assessed critically for their final poverty impact, some complementary pro-poor effects remain. What is often ignored when comparing costs and benefits of redistributive policies is the substantial positive spillover effect in terms of enlarging the stake of large numbers of the poor in the political system by strengthening local democracy (Bardhan 2002). In India, for example, local democracy and institutions of decentralization work better in those states where land reforms and mass movements have been more active. Beyond its direct economic impact, land redistribution can change the local political structure in a village, by giving voice to the poor and integrating them into self-governing institutions, such as beneficiary committees, as in the Philippines. Land reforms, in turn, stimulate competition for farm inputs in local markets and make it more difficult for established oligarchies to dominate these markets further (Bardhan 1996). Strengthening the position of the poor ideally feeds back to the contextual factors: capture strategies of local elites are weakened if, for example, land becomes mortgagable through titling and new credit sources are opened, or if the planning horizon increases as land improvements will be compensated in the case of contract foreclosure. The decollectivization of agriculture in China since 1978 has been one of the world's most egalitarian distributions of land cultivation rights. It has substantially mitigated the capture of local governments or other institutions by an oligarchic group of owners of immobile production factors, such as land, which still is a major challenge for other rural communities, in like in India, the Philippines or Latin American countries (Bardhan 2002).

Collective action

Collective action may work in two directions to address norms, legal and power structures: first, it is an important lobbying instrument to shape norms and values as a guiding principle for institutional reforms. At best, it can force decision makers to develop a comprehensive institutional environment. Collective action can influence the center to change the existing political balance into a more pro-poor direction. Through collective action, groups can more easily protect their interests vis-à-vis other groups competing on a limited 'cake' and vis-à-vis the state (Hadenius and Ugglå 1996). In case of implementation failure, collective action can substitute for missing state institutions - at least partly. Secondly, collective action leads to economic cooperation through saving clubs, farmers, herders or water associations and service cooperatives. However, collective action at a local level often remains limited in its impact if it is not backed - at least in the first phase- by external support, either through local branches of international NGOs, donors or other apex pressure groups.

Since the 1990s, experiences have shown that policy changes have been influenced by local stakeholders through collective action: This applies to rural land registration in Cambodia where village groups identify eligible beneficiaries, decide on plot boundaries, or settle conflicts (Zimmerman and Kruk 2003). Collective action been practiced during tenure legislation reforms in Sahelian countries organized by pastoralists' lobby groups to

include their indigenous rights of temporal access (Ngaido and Kirk 2001). In Benin has to shaped resource legislation to the needs of users through “round tables” (Kirk 1999).

Collective action also helps to disseminate information and publicize shortcomings and drawbacks of policy reforms (Litvack, Ahmad, and Bird 1998). Agrarian Reform Communities in the Philippines use mass media to inform the public about deadlocks in the implementation of land reforms (Polestico, Quizon, and Hildemann 1998). In addition, loosely organized groups emerge spontaneously if conflicts arise from the resistance of land owners to hand over reform land. In this context, collective action is an instrument to curtail power of the majority to expropriate minorities. There are numerous examples where groups being dependent on common pool resources get stronger incentives to push collective action if the national legislation acknowledges their group rights (Otsuka and Place 2001; Meinzen-Dick, Knox, and Di Gregorio 2001). In addition, collective action is important if credit markets remain biased towards the more affluent, bad road infrastructure makes marketing costly, lack of access to telecommunication leads to information asymmetries, or if extension services are not available in less-favored rural areas. In these cases, collective action is the founding stone for hybrid organizations, either through loose informal arrangements for a single purpose (joint truck rental for marketing after harvest), as through more formalized cooperation contracts (regular joint use of machinery) up to service cooperatives, or farmers’ associations.

Formalized organizations, such as cooperatives with their jointly owned enterprise (dairy, saving bank, etc.) gain momentum through market liberalization and privatization of former government activities. Their establishment through collective action delivers public goods (competition, lower prices) as well as club goods (extension service, information for members) and private goods. However, their success is questioned if cooperative values have been discredited in the recent past, either through forced collectivization in socialist countries (Binswanger, Deininger, and Feder 1995), or appropriation by state agencies, fraud mismanagement (Dülfer 1994) or in case of strong heterogeneity in local communities.

However, heterogeneity does not has no necessarily have a bad influence on collective action (Hadenius and Ugglå 1996). Civil society organizations are often more likely to strengthen popular influence on decision making compared to homogeneous ones: when people from different economic and social strata do cooperate, the effect in terms of overcoming problems of mistrust and suspicion is probably greater than when people who already have much in common cooperate. Experiences of the first credit cooperatives by Schultze-Delitzsch and Raiffeisen underline the role of more affluent promoters contributing their human capital (Dülfer 1994).

To be sustainable, collective action often needs supplementary impulses from outside, at least during the infant stage. Collective voices from poor in remote areas will only be heard in the capital if catalysts, such as NGOs, take up the message and use their channels of communication and lobbying to address critical issues: the inclusion of indigenous rights and the rights of women into the legal framework in Laos or Cambodia,

the respect of intellectual property rights of local users on biodiversity (devil's claw in Namibia and South Africa), the voice of the landless in agrarian reform in Brazil or the Philippines are some examples. In all cases local collective action has to be linked to other organizations of civil society to get a national or international reach (river basins such as the Mekong, Nile or Ganges) and to influence politics, to urge the fulfillment of norms and human rights (gender, ethnic minorities) and to represent a forceful countervailing power.

7 THE ACTION ARENA

We now turn from an examination of the initial conditions in our framework to a more detailed analysis of the dynamics of the action arena. This encompasses the actors, action resources that they draw upon, and the factors that lead to change in material conditions as well as institutions themselves. Accordingly, this is in the first place a positive view. However, it is the basis for a normative approach dealing with design principles and the process of creating and changing institutions.

7.1 *Actors*

Actors may be individuals, e.g. citizens of a state, of a "community", or they may be collective entities, such as organizations acting as a coherent agent, e.g. a specific government department, a private company, the state or an NGO. While collective actors such as organizations may, in principle, be able to act as coherent agents, they may often send ambiguous signals when there are internal contradictions within these.

We first have to distinguish between internal and external actors and then sort out specific change agents among these actors. We define internal actors as those who are to follow the specific rule system, which emerges from institutional bargaining. External actors may influence the bargaining processes of institutions that define rule systems for *other* actors. These external actors may act as benevolent agents or as opportunistic rent-seekers.

In general, "community" is taken as a boundary of local socio-economic systems, and "community" mostly refers to the administrative village boundaries. However, social relations need not necessarily be confined to the village boundaries, but can be confined to sub-units within a community or across community boundaries. For example, people may relate more to those of a similar caste or sub-community within a village, whereas migrant laborers may find their source of economic livelihood outside the realm of their community. Thus the socially, economically and politically most important relations for specific actors in a village may not match with the village confines.

Change agents are those actors that can influence other actors towards a specific path of institutional change. Change agents can have a positive as well as a negative influence, and this influence may be intentional or unintentional. For example, a rent-seeking elite—or other interest group—may deliberately seek to bend institutional arrangements that favor their specific interests at the expense of others (Krueger 1974). On the other hand, some development interventions, even though carried out with good intentions, have also yielded ambivalent impacts and thus may have created some unintentional negative side-effects.

In neo-classical economics, "rational" actors are assumed to be perfectly informed, forward-looking utility maximizing agents with a coherent set of preference orderings. The insights from New Institutional Economics and recent findings from experimental economics show that behavior may not be forward-looking, but rather ex-post rationalizing behavior which is rule-bound (fairness considerations), cognitively restricted (mental models) and satisfying rather than maximizing. Thus, people often do not act as would be predicted by "rational" behavior; knowledge of the rules and mental models can help understand the outcomes of actors and changes in the institutions themselves that are effected by change agents.

Proposition *In institutional change processes, the very poor in particular, can be considered a particularly vulnerable type of actor, because their bargaining power to influence the shape and path of change is weak, relatively speaking and they may have little capabilities for by-passing rule systems.*

To assess the effects of institutional change on poverty alleviation, we have to take a closer look at who the poor are, what characterizes them and what it is in institutional change that may affect them specifically and differently than the non-poor. In this the distinction between moderately and very poor is essential, because while moderately poor may have some assets and be well embedded in social relations, the very poor are often chronically poor *because* they lack these assets and may not be integrated into existing local social networks.

In order to assess how role of agency may be different for the poor than for other actors, we have to distinguish different categories of action resources an actor has at hand and the type of interactions that allow actors to make their action resources effective as power endowments in bargaining situations.

7.2 Action resources

Action resources are those intangible and tangible assets that give actors the capability for agency. Agency includes the capabilities to exercise livelihood choices, to participate in collective action on various levels, to influence other actors' agency choice as well as to involve in political processes. Many of the potential effects of assets were discussed above in section 6; in this section we therefore focus on less tangible action resources, as well as the interactions between tangible assets and participation in institutional change processes.

Information and the ability to process it

Proposition: Knowledge, the capability to combine information with skills, is a key power resource, because it enables powerful actors to change the perceived values of different alternatives and may allow them to direct changes in particular directions.

Information and knowledge are a key power resource (Schlüter 2001; Theesfeld 2004). It enables the powerful actor to change the perceived values of the different alternatives (Young 1995). If no market exists, information considered valuable will often be slowly distributed for fear of reducing its value (Bouquet and Colin 1999). Since

information often spreads through networks and relationships, the access to or the cost of acquiring information is often unequally distributed. Hence, it is the social nature of information flow which may place the poor in a particular disadvantage, because they may not be part of networks through which information spreads. *Knowledge* is the coupling of information with the skills to use it. *Skills* can be classified into expert power (hard skills) and personal power (soft skills). Expert power originates from both, education and experience (Alston, Libecap, and Schneider 1996)and enables one to use information more efficiently. Personal power is linked to charisma, to communication or to agitation capabilities. These personal characteristics appear to be of major importance when dealing with informal institutions emerging from interaction at the local level (Schlüter 2000, 2001).

Knowledge is to be further differentiated according to geographical scale, because having knowledge about one's own community and the social functioning of it is a different sort of thing than knowing about global phenomena, modern technology etc. Tacit knowledge is based on experiences while academic knowledge is based on structured learning. Which of the two is more important in a specific power contest depends on the particular social bargain. Krishna (2003)found that where local agents had a good understanding of outside processes, they were able to direct collective action toward development outcomes. Making use of local clientele networks in order to influence power struggles over property rights or institutional bargaining will certainly involve a great deal of tacit knowledge on locally embedded phenomena of social functioning which can only partly be grasped with academic knowledge and study.

Cognitive schemata

Proposition: *Cognitive schemata and shared normative models may place constraints on the functioning of the poor in social bargaining, because of limited exposure to education and the outside world as well as the politics of morality which may ascribe a limited social say to the poor by social definition.*

Cognitive schemata define the borders of what is imaginable to an actor, in both his/her understanding (knowledge) and normative perspective, and thus provide the limits of what an actors can perceive as feasible in their life. Douglas North uses the term ideology in ascribing these two aspects: ideology offers us a reality, a mental model or cognitive map. Second, it proposes a guideline of how the world should be structured, the normative aspect of ideology (North 1990). Cognitive dissonance, the difference between mental models and the way the world works, affects whether an actor can think and process what is going on. This may be a challenge particularly for those who have never been exposed to the outside, to things that challenge their thinking. Risk aversion, which is often attributed to the poor, may not only derive from the poor asset stock, but equally from limited exposure to the outside world that may restrict their capability to think beyond specific boundaries.

Furthermore, ideologies in the normative sense – sharing an imagination how the world *ought* to be - are essential for legitimizing group solidarity. Here, those social sections that have the ruling power in sub-groups of a society often use social conflict in

society for cementing and fostering patron-client relations along kinship lines, which bring the poor in even stronger dependency to the rich.

Social prestige

Proposition: *The social "standing" within a community or social group or vis-à-vis powerful and influential actors (state, private entrepreneurs) is an important action resource endowment. This social standing derives from two sources: the "habitus" of an actor and on embeddedness in social networks in a social group (community).*

The "habitus" an actor demonstrates in the public and private realm (Bourdieu and Accardo 1993) is essential to how he or she can gain recognition as a leader in public discourse and collective action: How does an actor behave, what clothes does he/she wear, what cultural knowledge can he/she show in public? How can he/she speak in public? This habitus may become an important power resource to influence the perceived choices available to other actors. For example, in deeply hierarchical societies, such as the Indian caste system, actors from low caste origin may not be used to speak in public and their habitus may signal subordinate behavior, which cannot be easily overcome, whereas the high caste elite has grown up in the repeated exercising of social superiority. Such schemata of social habitus cannot be easily overcome. They are often rooted in cognitive schemata, which are constantly reconstructed in social interaction.

Social standing is also influenced by the embeddedness of an actor in social networks in a community. There may be formal and informal networks. Recognized membership in specific organizations may be a necessary entry-point to the public arena where collective action is negotiated. For example, many irrigation associations allow only landowners or heads of households to be members. Wives or landless households are not included, and hence do not participate in public discourses over collective action for managing the irrigation, although they are affected by the decisions of the group (Meinen-Dick and Zwarteveen 1998). At the same time, formal membership may not be sufficient to have a say because relative bargaining power also depends on other action resources. Social networks may nevertheless be essential, when they provide space for actors to combine forces and to increase their relative leverage power in order to reinforce their own identities and self-confidence. Women's savings groups around the world, for example, when successful, often increase the bargaining power and the confidence of women to use this bargaining power also in the public realm. Hence, social networks and the assets that an actor can derive from such networks depend on the ability of actors to call upon those social networks.

Both, the "habitus" of an actor and the ability to draw upon social networks influence what recognition local actors receive from outside the immediate community. Hence, they provide the space for networks with powerful actors on a higher spatial level than the village. In many clientele societies, these "political assets" are an important source of benefit streams, for example in the form of employment, welfare benefits etc. These may affect not only the capabilities of individuals, but also of groups, as noted by Krishna (Krishna 2003).

Time

Proposition: *Opportunity costs of time for collective action can be extremely high for the poor.*

The poor cannot easily allocate time for other purposes than income earning and livelihood activities confined to earning a living. For example, poor women in many regions have to work hard throughout the day and can hardly afford to participate in public meetings, because they are busy with fetching firewood, collecting water, preparing food etc. Similarly, contributing labor to collective activities may prevent poor wage laborers from earning their daily income. Opportunity costs of time may, however, change over the year; wage laborers may be able to participate in collective action when there are no work opportunities available to them in specific time periods of the cultivation cycle. Thus, timing and location of meetings and other collective activities will affect the extent to which poor people can attend and influence decisions.

Tangible assets

Proposition: *Poor people may lack the tangible assets to contribute to collective action which may, in the longer term, prevent them from becoming embedded in social support networks because they fall out of reciprocal relationships.*

As noted above, a defining characteristic of poverty is paucity in tangible household assets. In addition to time or labor contributions, participating in collective action, or even membership in social networks, often requires some financial contribution, gifts, or hospitality. If poor households are not able to contribute or reciprocate due to lack of assets, they may gradually fall out of social networks and institutions that govern resource access and property rights, in particular if membership depends on contributions. Poor people often face a tradeoff between short-term requirements and long-term needs: while it may be quite costly to participate (due to required contributions or foregone opportunities to earn), not participating may, in the long term, undermine the social embeddedness of the actor in the social network.. In the Bangladesh participatory poverty assessments, such social relations were a defining characteristic of different categories of the poor: the “social poor” may not always be able to feed their families but could still provide some hospitality and are trusted in the community; among other deprivations, the “helpless poor” cannot entertain guests; the “bottom poor” have very little social interaction, are not even invited for hospitality by others, and are therefore screened out of NGO groups which provide loans or other assistance, (Nabi et al. 1999).

Proposition: *Control over tangible assets not only provides action resources to households and individuals, but also confers on them greater status, and can influence their access to information and cognitive schemata. Hence, property rights play a major role in the resources available to any actor.*

Those with more assets have more options to pursue their livelihoods or other objectives, both individually and collectively. Someone with a large farm, rich soils, and reliable water supplies may be able to choose which crops to grow. If, in addition, they have education, a vehicle, and live near good roads, they have more options for off-farm activities. Those with surplus time and abilities may also choose to lead collective activities. Those with fewer assets may still participate in collective endeavors to overcome the limitations of their individual assets. But the very poor, with meager assets, may be limited in both the individual and collective activities in which they can participate.

In most societies, tangible assets also convey status. The wealthiest households with most land occupy a higher place in many agrarian societies, while the landless may not even be considered full community members. This has repercussions also for access to information and other collective resources. In many agrarian societies, extension agents are most likely to visit wealthier landowners than landless tenants. Even within the household, control over assets influences the bargaining power of individuals. Fathers who control the household land may exercise authority over their sons. Research has shown that women with control over assets have more decision-making power on intrahousehold decisions (Quisumbing, Estudillo, and Otsuka 2004).

Finally, property rights affect one's cognitive schemata. As noted by Oliver and Schapiro (1995), "income feeds your stomach, but assets change your head." That is, having secure assets provides security, which allows one to take a longer-term perspective, and hence take advantage of opportunities. Hence, both tangible and intangible assets play a major role in shaping the action resources of individuals, households, and even communities.

7.3 Action resource, power endowments and the social bargain

The endowments of an individual or collective actor with power resources determines those assets that an actor has at hand to put into the bargaining play of institutional change processes. Generally, power is defined that one actor can adversely affect someone's freedom of action: the more powerful actor can change, distort and/or restrict the (perceived) choices available to the other actor(s) (Weber 1947, 152). This includes the ability to change the other players' preferences, cognitive schemata and constraints they face. If we use a game theoretical conceptualization of bargaining over institutions, an actor's power resource are the player's capabilities to change the payoff structure of the other player(s).

The analysis of power resources makes sense only in a comparison of various actors and their power asymmetries relative to each other (Schlüter 2000). In an institutional game, bargaining success is a function of a player's ability to produce credibility for his/her strategic action (credible commitment). In game theoretical terms,

it is essential to understand how players can influence each others' strategy and how the expectations each player holds on the probable action of the other players are formed and changed. One important resource in this regard is the relative distribution of the costs for non-coordination in a game. Theoretically, players with more action resources at hand may be in a position to wait until a new round of negotiation starts or he/she may recruit co-ordination alternatives (Hanisch 2000).

In considering the relative bargaining power, we have to distinguish between (1) positional power and (2) sanctioning power. (*Cite?*) Positional power stems from an actor's office or structural position, which may allow this actor to access specific information or to hold information away from other actors, to access specific political networks or executing power on other actors for the good or evil, for example in distributing welfare benefits. Unevenly distributed sanctioning power, on the other hand, offers specific actors the ability to install one's alternative on other actors, for example, because one has resources to credibly commit in a bargain or to harm the other in case of non-compliance.

In the action arena of social bargaining over institutions, we need to distinguish the specific action resources the different players can put into play, which they have independently of the strategic situation at play and the type of interaction or transaction at play, because the type of interaction may influence in how far actors can make use of specific action resources and how effectively action resources can be transformed into power endowments. In other words, the type of interaction determines the transformation of potential into actual action – and thus power – resources. For example, an action resource that may be highly valuable in situation A may not be of much use in situation B.

8. OUTCOMES

Outcomes from the action arena can be evaluated in terms of how the poor and non-poor fare on all the critical aspects of poverty: the ability to secure basic needs, the level and distribution of income, degree of social and political inclusion, opportunities, and vulnerability. While the exact outcomes will vary depending on human agency, the initial conditions and action resources available to various actors will play a major role in shaping these outcomes.

The distribution and strength of property rights are therefore critical for maintaining, increasing, or reducing poverty. Collective action can, but need not necessarily, leverage the power between more powerful and weaker groups. However, often poor depend on clientele networks with rich and therefore, empowerment of poor groups "against" the more powerful can also backfire and disempower the poor even more, for example, if they, as a result of this, fall out of the earlier clientele network.

In the case of property rights, it is not only the formal rights that matter, but how they are put into practice. Similarly, it is not collective action per se, but how it is institutionalized and organized which matters. This leads to complex issues of rent seeking, horizontal inequalities, and power plays between actors, that need to be considered in order to understand how property rights and collective action can affect the outcomes of specific action situations.

In addition to direct outcomes in terms of the welfare of individuals, what happens in the action arena can also change the initial conditions for the next round of interaction. For example, people working together to build an irrigation system may be able to increase the stability of water supply for their crops, thereby increasing the asset base, productivity potential, and reducing vulnerability. Other interactions can change socioeconomic conditions, and policies. In this paper we are particularly interested in institutional change, particularly as it relates to property rights and collective action.

Property rights systems are dynamic: the distribution of rights, as well as how they are interpreted and enforced will change over time. Some of this change is driven by changing material conditions including population pressure and resource scarcity (Demsetz 1967). But shared mental models, normative and cognitive frames also play a major role in determining what is considered the "right" property rights system and how actors derive rights and duties from these mental models.

Collective action is, by definition, dynamic. While the underlying institutions, including both organizations such as farmers' associations as well as social institutions like norms of mutual assistance, can provide some stability to repeated forms of collective action, even these institutions change over time.

Poor people may be able to influence change in these institutions in their favor, but their lower level of action resources makes such outcomes more difficult to achieve. External change agents can assist in such processes, but the complexity of institutional change means that favorable outcomes are not automatic, even if external agents are genuinely interested in reducing poverty. However, understanding how to influence collective action and property rights institutions merits serious attention as part of poverty reduction strategies.

9. CONCLUSION

Property rights (or the lack thereof) over a range of assets is a defining characteristic of poverty. Many poverty reduction programs, from group-based microfinance to cooperatives to community-driven development are premised upon collective action. However, much of the conceptual and empirical literature on property rights and collective action has dealt primarily with natural resource management, rather than poverty reduction. Our attempt in this paper is to bridge these domains, so that the understanding of what makes for collective action and property rights institutions can lead to more effective poverty reduction, by poor people themselves and by external agencies. At the same time, poverty studies offer key insights that can lead to better understanding and programs for natural resource management, including the concepts of asset thresholds and poverty traps, as well as the central importance of agency and capabilities of all people, including poor men and women.

Three characteristics of the initial conditions of the poor are particularly relevant for understanding the constraints and opportunities they face. These include their assets (including natural, physical, financial, human and social capital); the sources of risk and uncertainty that cause vulnerability; and the power structures created by the legal and governance structures. The outcomes of actions by the poor and non-poor, in turn, affect

whether poor people experience any improvement in their welfare, including their income, security, social inclusion, and political inclusion and livelihood opportunities.

Power plays an important role in the process of institutional change. In our framework, power comes in at two levels. On the one hand, the broader power structure of a society create a specific context within which power struggles in the local action arena take place. This power context depends on who rules the country, who dominates the administration etc. On the level of the action arena, we find actors with different action resources and power endowments. The power endowments depend on the action resources an actor can put into play and the specific interaction situation. An action resource which can become effective as power endowment in situation A may not be very helpful in situation B. There is, however, a general trend that the poor have much less action resources at hand compared to the less poor and this already places them in a relative disadvantage independently of the specific action situation. Social networks often are inclusive to their members and exclusive to outsiders. Since the poor often lack the resources to invest in reciprocal social relationships that go beyond their own spheres, they are often not part of those powerful networks.

The examples given in this paper illustrate the great variety of outcomes that are possible. While human agency certainly plays a major role in these outcomes, the options available to men and women are strongly conditioned by their material conditions and the institutional environment in which they live. But people's action and interactions can also shape both the physical and institutional environment in which they operate. Understanding these effects can provide insights into how policies and programs can improve the choices and capabilities of poor people to pursue their goals.

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