SECURING COMMON PROPERTY REGIMES IN A 'MODERNIZING' WORLD

Synthesis of 41 Case Studies on Common Property Regimes from Asia, Africa, Europe and Latin America

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ABSTRACT

Common property regimes remain a significant property arrangement in many parts of the developing world. Resources held under such regimes continue to play a major role in sustaining the livelihoods and socio-cultural practices of many communities, particularly of the poor and marginalized sections of such communities. This paper provides a broad synthesis of the status of common property regimes, from a community perspective, from a total of 20 countries in Africa, Asia, Europe and Latin America, covering a diversity of resources including forests, trees, rangelands, and fisheries.

While privatization for large scale commercial development and the expansion of small-holder agriculture are significant threats to CPRs, other threats include the appropriation of CPRs for conservation under various arrangements and obligations, legal ambiguities and a non recognition of customary law. Communities together with their partners have devised strategies for securing their common property regimes in particular and access to resources from the commons more broadly. We outline these efforts as well.

We argue that those elements that pertain to the orthodox security of private, individual property such as state recognition and backing are also relevant and fundamental to securing CPRs (the private property for a recognized group) primarily from external threats. We also suggest that securing the rights and entitlements of individuals and sub-groups to resources held under common property arrangements is crucial. Strengthening internal governance structures and arrangements (such as conflict resolution, rule making and enforcement), and making them more equitable and accountable may ensure more equitable decision making and benefit distribution, both of which are crucial for securing against internal threats.

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1. INTRODUCTION

In many parts of the developing world, the rural poor increasingly depend on shared resources for their livelihoods. In India for example, community forests contribute up to 29 per cent of the income of poorer households, close to US \$5 billion a year (Adhikari, 2005). Similar studies in Zimbabwe find that the poorest quintile (i.e. bottom 20%) of the population generated up to 40% or more of their total income from resources shared in common, which drops to 29% for the highest income households (Cavendish, 2000).

An increasing number of studies demonstrate the significance of commonly held resources to rural lives and livelihoods (Beck and Nesmith, 2001; Jodha, 1992; Adhikari, 2005). While these studies have provided important snapshots of particular places and resources, assessments of a more global nature are necessary to help establish the extent of reliance on resources from the commons both for policy makers concerned with poverty reduction strategies, as well as those interested in the sustainable management of resources. The past few years has seen an increase in the interconnectedness of developing and developed economies. In addition, crises (including armed conflict and oil shocks) have affected many countries. There is need for new cross country comparisons to update our knowledge on common property and to provide some early insights in light of the rapidly changing social, economic and political conditions.

This synthesis paper gives an overview of main findings from 41 case studies on common property from 20 countries in Africa, Asia, Europe and Latin America. Between June and September 2005, FAOs Land Tenure Service, the CGIAR's Collective Action and Property Rights initiative (CAPRi) and the International Land Coalition (ILC) sent out a call for case studies to contribute to a joint study on "Rural Common Property in a Perspective of Development and Modernization." The main purpose of soliciting case studies was to enable a general assessment of the current status of common property and to begin identifying lessons and interventions that can elevate the status of CPRs particularly in policy debates. To this end CAPRi, ILC and FAO sent out (via their list servers and their networks) the call for case studies,

A total of 41 case studies were contributed by researchers, civil society organizations and government project officers.² These discussed examples of common property as it relates to a variety of resource settings, including forest and agro-forestry areas, pastures and rangelands, agricultural lands, and freshwater and marine resources.

This draft synthesis paper seeks to provide an overview of findings from these case studies. While we appreciate that the study is broad, we view it as a valuable starting point for drawing out patterns and emerging concerns with regard to the broader goal of securing access and right to CPRs, at a global level, across a range of natural resources.

This paper addresses the following questions dealt with in the case studies:

- 1. How do people access CPRs and what are sources for legitimacy?
- 2. How secure is tenure in common property regimes?
- 3. What are primary pressures and challenges to CPRs?
- 4. What is the nature of conflicts and how are they managed?
- 5. What forms of innovations have communities, states and development partners undertaken (are undertaking) to enhance the viability and livelihoods of CPRs?

1.1 TENURE SYSTEMS AND ACCESS TO COMMON PROPERTY REGIMES

¹ In addition, an internet forum on common property, involving case study authors and other participants took place in September and October of 2005. Comments from this discussion were incorporated into this paper.

² A list of cases is available in the Bibliography. All cases are currently available via the Internet at http://www.landcoalition.org/program/policy.htm, and will be published in electronic format as a compilation later this year. CAPRi and ILC wish to thank the case study authors and participants in the internet forum for their significant contributions and active roles in building up the analysis that is reflected in this paper.

Common property refers to some form of shared resource tenure – usually involving a group that is defined that uses and manages the resource. A common property regime represents a set of institutions, regulations and management practices subject to collective decision-making. The term refers to the kind of tenure that exists, not the resource itself.

It is important to note that while common property regimes are defined primarily as collective rights, they may also represent a range of different rights for both individuals and groups such as access, withdrawal, management, exclusion, alienation (Schlager and Ostrom, 1992). These multiple rights to the same resource may also be exercised at different times, for example post-harvest access to farm fields by herders, or the breakdown of territorial borders among the Karamojong during wet seasons, or access to individually-controlled fruit trees during dry season in Muzarabani district of Zimbabwe, and the collection of bamboo on individually owned land in northern Thailand. In some cases there is a distinct spatial element, such as when fallow land adjacent to private farmland is treated as individual property, while similar fallow lands, if contiguous, are treated as common property. This shifting in rights over time and space is captured by the 'tenure niches' concept (Bruce, 2000).

Common property regimes are also distinct from (but related to) **communal tenure**, which refers more broadly to community-based tenure systems, in which some form of customary authority (e.g., an extended family, clan or other social grouping) holds allocation rights. Resources under communal tenure may, in practice, be used and controlled individually or collectively (Otsuka and Place, 2001). Even under communal tenures, common property may in some cases take up a large share of communal lands--, in the Segun Guillermo Valera, a *campesino* community in Peru, common use land makes up 79 percent of the community's total area, the remaining 21% being managed by individual families. Similar examples can be drawn from Cameroon, India, Nepal, Zimbabwe and South Africa.

Common property, livelihoods and equity: Why do common property regimes matter?

A large body of literature provides a range of examples on the equity, efficiency and sustainability functions of common property regimes. Access to resources via CPRs has been noted to sustain and even enhance the livelihoods of the rural poor, whether through domestic consumption or commercial use. Poor women are important beneficiaries of access created via common property arrangements. In more variable environments marked by seasonal and spatial variations in water and pasture, livestock mobility is a crucial element. Common property regimes allow recognized users to access these variable resources, but also to take advantage of economies of scale in the provisioning of services and infrastructure. The case studies reinforce these functions of common property.

In the Kangra district of Himachal Pradesh 77 percent of lowest-income households (out of five income groups) plant on common lands. For high income households, this figure is somewhat lower, 58 percent, but still high enough to show broad reliance on the commons among district residents. (Dasgupta 2005) In Saigata village, in the interior of India's Maharashtra state, common forest areas provide 100 percent of fodder, fuelwood and timber. The market prices of these resources are between 20 and 100 percent higher outside the village (Ghate 2005).

Through Nepal's forest leasehold approach, more secure access to common forest land via 40-year community leases has increased food security and improved opportunities to earn cash income (Shrestha 2005). Access to common property may also serve as a "resource safety-net" for vulnerable households during difficult times. One example is access to fruit trees in northern Zimbabwe, which (as noted earlier) are treated as common property during the dry season, when there are fewer alternatives to fulfil nutritional needs.

In drylands areas, common lands are also a key resource for grazing and especially watering livestock – e.g., in arid pastoral lands in Ethiopia. Pastoralists who use these lands rely heavily on their herds as their main source of food and nutrition. Where access to common grazing lands and water sources is lost, food security may be jeopardized.

In addition to the direct benefit gained from accessing the commons, secure access to CPRs may have "livelihood ripple effects" in which access to the commons are linked to other aspects of local development. The cases in this study include examples of how access to CPRs has increased school attendance where children spend less time collecting fuelwood, or where families can draw on income

from commercial production of resources from the commons to pay for school fees, as one case from Nepal illustrated. (Shrestha 2005) Reduced time needed to collect fuelwood, fodder and other forest products is a significant benefit for women, who often bear these responsibilities. In Nepal, some forest leasehold groups have also become a point of organizing for microfinance and literacy activities, especially for women. In this way, effective group management of common property can help to empower poor men and women, in ways that may contribute to poverty reduction. In Uganda on the other hand, where communal land is privatized, families may be forced to move to more isolated areas. This leads them to lose access to basic public services, such as health care, schools or roads (Obaikol 2005).

Close to 50% of the cases identified the importance of resources from the commons in generating incomes over and above meeting subsistence. Marketable goods include products that have been traditionally cultivated, as well as new ones being introduced, including cash crops. In Akok village in southern Cameroon, new cash crops such as cucumber and cocoa are now grown along with traditional products, such as cassava and plantain, on common forest lands (Mala 2005). Market access also seems to help in the reduction of pressure on the commons. In Colombia's Providence and Santa Catalina islands, as economic opportunities increase, reliance on crabbing for household income declines (Alayòn Hurtado 2005). In the Laid community in rural Scotland, where community land ownership has existed for generations, most residents now have sources of off-farm income and one-third of permanent residents are not engaged in agriculture at all (Seki 2005).

However, market access on its own is not a panacea. In Kumaun in northern India, where despite market links there remains high dependence on village forests for fuelwood and fodder –the cost of commercial alternatives are prohibitive, even for better off households.

These cases reinforce the common perception that vulnerable rural households benefit from secure access to common property, particularly as a safety net against extreme poverty. Secure access to the commons on its own is not sufficient to reduce poverty. Access to other productive assets – human, physical, financial and social capital – is also a critical ingredient. Nonetheless, CPRs continue to play a primary role in the lives and livelihoods of the rural poor, even as economies become more liberalized and globalized.

1.2. ACCESS TO RESOURCES HELD UNDER COMMON PROPERTY ARRANGEMENTS

This section provides an overview of how individuals and groups are able to gain rights to use, manage, and generally derive benefits (including household consumption and incomes) from resources that are held in common. The case studies indicate that access to the commons is often determined via group membership, through the state, or through organized community action and increasingly through projects.

Group identity and residence

In at least 14 of the cases, rights to common property (and to individual lands under communal tenure) are based on some form of group membership, including ethnicity, village affiliation or residency. In some cases, outsiders are excluded from accessing common property under all circumstances. In others, exclusion is seasonal, such as in pastoralist settings where exclusion occurs in the dry season. A few cases described the flexibility of customary authorities to negotiate access with outsiders, such as migrant farmers.

Group identity can be conferred in different ways and may be based on lineage, clan-affiliation or even long term residency. In Benin for example, tenurial rights among the Chabe are based on chieftaincy that is derived from lineage. Similar systems exist in Cameroon, while among the Khasi-Jaintia society in India's Meghalaya state, rights to communal lands are derived through residency which is itself a function of clan affiliation. Land and resource allocation and distribution is the function of recognized customary institutions and is often restricted to members who share a common lineage. Individual rights of constituent families or individual members are recognized and allocated on a long term basis, with limitations on land transactions. Transfer is limited to inheritance in

families and no sales are allowed, especially to outsiders. The duration of rights is often determined by evidence of continuous use.

Even though identity may be the basis for primary, more permanent rights, such identity-based systems, through longstanding processes of negotiation, often recognize and accommodate the rights of non group members. Migrant farmers borrowed land from the Chabe lineages in Benin, while transhumant herders were provided with areas for seasonal settlement. However, any interventions on the land that may confer more permanent rights, such as tree planting, were restricted from migrants and farmers. Because of its connection to ancestral or lineage-based claims, migrants and other newcomers may face difficulty gaining access to land and other natural resources (Dangbégnon 2005). This is an issue of distinct policy relevance as it may form the basis for excluding longstanding claimants as pressures on collective resources increase. Nonetheless this shared identity can serve as the basis for collective action over and above resource management to include the defense of identity-based territories, networks for risk spreading/management and micro-credit schemes.

While group rights may serve to protect the rights of the group as an entity, women's rights, and the rights of lower status or poorer individuals continue to be constrained. Women's access to land is indirect through males, i.e., husbands or sons. This form of secondary access may serve to protect and maintain minimal rights for women under two conditions—for as long as they are married/husband is alive, and for as long as common property is not individualized.

Access to common property may also reflect power differentials between groups. Land and water access among Ethiopian pastoralists distinguishes between primary, secondary and tertiary users, depending on the relative strength of groups. Similarly, the more powerful "grand tribes" of Mali's Gao pastoralists reserve the best pastures for themselves (Hamadoun 2005).

The state and access to the commons

In several cases, government departments have created some forms of rights for local communities through various pieces of legislation. The Takieta forest reserve of Niger demonstrates a case where local communities are granted usufruct rights in conservation areas as a starting point for their management. However, with the introduction of a new project by SOS Sahel the government gave full authority to the affected community, the project and other actors to devise new forms of management agreeable to them (Bachir et al. 2005). Here, the forest user Association Kou Tayani, working with facilitators of the Takiéta Joint Forest Management Project, outlined a process to identify resources, exchange information with other user groups, convene multi -stakeholder forums to determine common concerns and approaches, and to elect representatives from among different users to serve on a commons management group. Over a five-year period, these processes – which were made possible in the first place through the state's agreement to devolve natural resource management – helped to bring about changes in social relations and improve the ability of user groups to manage and resolve conflicts over the commons (Bachir et al. 2005).

Joint Forest Management in India represents a longer term effort by the Indian government to grant and provide statutory backing for local forest users. Under these programs, local committees are registered as trusts and thus become recognized bodies. This is supposed to benefit forest resource users by allowing them to receive support services from the government and participate in benefit-sharing. However, communities' enthusiasm for joint projects with government are often coloured by a general distrust of forest departments. In Saigata, even though the forest department instructed all divisions to implement joint forest management, it took four years of negotiation before communities registered their committees. In addition, it was not until the state intervened that women were provided an opportunity to participate in JFM council meetings (Ghate 2005).

State action of a different kind played a key role in recognizing collective rights in Guatemala, where in 1984 the government established agrarian communities as a counter-insurgency move. In this case, farmers' cooperative associations (*Empresas Campesinas Asociativas* or ECAs) were created by government. Initially, the government sought to control their leadership and disassociate ECAs from the communities, leading to corruption within the associations. Five years later in 1989, at a time of political change in the country, a new ECA was formed by local farmers in the Santo Domingo

municipality. A more genuinely community-based (i.e., bottom-up) approach has helped address farmers' land access problems, and also has supported collective sales and actions to improve farmers' market strength (Vay Ganon 2005).

Beyond recognizing local use and creating minimal usufructuary rights, there has been an increased incidence in the decentralization/devolution of state functions to lower administrative units and in certain cases to communities. Such processes can create opportunities for strengthening common property regimes. Under state decentralization/devolution programs such as those in Burkina Faso, Ethiopia, Mali, Niger and Uganda, specific legislation recognizes local management groups, committees or councils and accord them rights to use and manage the resource base. Under Ethnic Federalism, the Ethiopian, state allows local customary authorities to assume a stronger role in managing conflicts over common lands (Unruh, 2005). Afari leaders are able to draw on the support of the national government for this effort, which has included the establishment of special committees to mediate land disputes.

These examples illustrate how different forms of state action, often in collaboration with local users, can serve to strengthen the rights of local communities and the basis for their organizing to manage the commons, including in building their accountability to different groups of resource users.

Decentralization can also weaken commons management by establishing a parallel local administrative structure whose authority undermines customary institutions. In Zimbabwe, the 1998 Rural District Councils Act provides natural resource management powers to rural councils - functions formerly carried out by local chiefs. This has contributed to the decline of customary institutions for managing the commons (Chidawkai 2005). The chiefs have no legal power to create and enforce rules on natural resource management in communal lands. It now rests with the Rural District Councils (RDCs) who can make decisions without consulting the chief. In Muzarabani, even low-level leaders from the Village Development Councils or councillors can challenge a chief's decision. Nonetheless, people have continued to apply local regulations, although in a very limited way.

By contrast, decentralization in Thailand has empowered local government authorities but without reducing the authority of existing village institutions to manage community resources (Kijtewachakul 2005). The sub-district administrative organizations (SAOs), have the ability to tax land where *sorpor-kor* (a form of state-recognized land certificate) exists and manage a budget for forest conservation activities. SAOs also allocate individually managed cropland. Village committees retain the authority to mediate and negotiate land access among villagers, particularly lands that are used for shifting cultivation.

As the above examples show, the state can create and sustain community rights and access to resources in various ways. Through a more involved process of decentralizing authority and rights, the state can provide a basis for creating, and strengthening common property regimes. By mandating joint management, the state also creates access and legitimizes local use. In other cases, tension may still remain between local bodies and the state, even though state recognition has been given.

Access created through the state programs can also be risky and problematic. While having the potential to strengthen common property regimes and secure the rights of women and the poor, there is the risk that decision making and benefit flows may be captured by more influential groups. Without rules that are understood and recognized by a majority of the population, opportunities can arise for powerful groups or individuals to exploit the commons for a disproportionate gain. Yet, this situation might also provide a chance for the poor and marginalized to access natural resources that would otherwise not exist. In addition, there is need to harmonize overlapping sectoral laws and policies during decentralization processes to minimize the risk of cross-sectoral conflict.

Access via projects

Statutory law is not the only way in which states recognize common property rights. In certain circumstances there is an interfacing of states and projects in creating tenure and access opportunities for local communities. Wildlife or forestry conservation projects in national parks or forest reserves

can provide opportunities for communities to negotiate agreements with their governments to improve tenure security.

In Thailand, the implementation of the Upper Nan Watershed Management Project (UNWMP), a joint project between the Danish and Thai governments that began in 1997, has created a channel through which forest resource users can negotiate some recognition of their access and use rights (Kijtewachakul 2005). Through this project, villagers were able to negotiate for zoning forests between conservation and utilization areas to ensure recognition of their access and use rights to valuable timber and non timber products. The project was able to facilitate this outcome largely by enhancing the bargaining power of communities with the state and providing space and opportunity for the users to interact with state officials. Similarly the Takieta Joint Forest Management Project in Niger was started by SOS Sahel in 1995, with the aim of promoting processes that would lead to decentralized and sustainable management of the Takieta Forest Reserve, taking into account the needs of the different user groups. By the end of the project, the Forest Service signed an agreement recognizing and supporting participatory management of the forest by adjacent communities.

Projects have played a similar role in Nepal, where the state claims ownership rights to forest areas. Through a partnership with the International Fund for Agricultural Development (IFAD), the Nepali government now leases forest lands to community groups, targeting poor, women and the disadvantaged. In this case, with support via an international development project, the state has recreated group rights in areas where common forest lands previously existed and is still recognized and understood by local residents (Shrestha 2005). Leasehold areas are degraded forest lands, so there is less competition for their use by more powerful people.

Access via organized community action

Systems of common property may also emerge through organized action by communities, either for management and regulation of resource use or action aimed at defending the resource from unwarranted incursion. In Saigata village, in the interior of India's Maharashtra state, the self-organization of a forest users association in the 1970s in response to deteriorating forest condition established clearer rights and responsibilities to common forests. Active collective management of forest resources has prevented resources from being treated as open access, facilitated by strong leadership from within the community:

In this case the growing denudation of the forest disturbed Mr. Suryabhan Khobragade, a resident of Saigata... He had witnessed the changes in land-use patterns since the days of the 'Malgujar', when he was working for him as child labor. Between 1955 and 1975, the forest around Saigata had changed from thick canopy forest to degraded land. Yet, he was also aware of the fact that it would be difficult to dissuade the fellow villagers from giving up their income generating pursuits without offering them an alternative. After many discussions with the like-minded people in the village, it became clear that asking the fellow villagers straightforwardly to stop anti-forest activities would not yield the required response. Instead, something positive needed to be done circuitously, to bring the community together... Community action first began with setting up of 'Krishak charcha Mandal' (farmers' discussion group) where majority of the farmers shared his concern about the deteriorating condition of the forest, resulting in scarcity of fuel wood and fodder. After many rounds of discussions, it was thought that a plan was needed to start the process to rejuvenate the forest. Mr. Khobragade initiated an effort to first identify the dependence of each household on forests. (Ghate 2005)

This process led to the establishment of a local forest protection committee, which is now elected by the forest users association. The committee has taken steps to make common property rights more secure through more sustainable use of the forest. It established, for example, different forest zones and regulations such that harvesting could take place in one zone, but not in all simultaneously. Uses were also restricted – in one zone, fresh wood cutting was prohibited; another was set aside for cutting grass to use as fodder.

Several cases provide examples of how organized community action helped defend community access to shared resources, often through making the resource base more sustainable. In the Takieta forest reserve case, the management committee organized more support activities for local users in its first 5

years than the state forest service had undertaken in the previous 40. The management group also established itself as a legitimate actor to engage national and local authorities. In 2001 the forest user association successfully thwarted a proposal by the minister of agricultural development to drain lake water with motorized pumps in order to expand market gardening. The group demonstrated that the lake was already effectively managed for fishing, watering livestock and existing small-scale gardening, and that these would be negatively affected if a pump were installed (Bachir et al. 2005).

In Laid village in Scotland and several *campesino* communities in Peru, proposals for mining exploration generated self-organized community mobilization. In the case from Peru, poverty rates are higher where mining takes place – 50% and 77% in the two regions where gold production is highest. *Campesino* communities are not able to oppose concessions, but according to the laws, they may receive compensation. In recent years, this situation has pushed communities to organize themselves in defence of collective rights, in the face of the threats and conflicts posed by mineral exploration, such that collective action may increase the security of their rights (Burneo 2005).

Collective action is also taking place in Indonesia with communities reclaiming common lands that lie within national park space, often working together with non-governmental organizations (Galudra 2005; RMI 2005). In West Kalimantan, Indonesia, the NGO-facilitated Community Forestry Strengthening Program (*Program Pemberdayaan Sistem Hutan Kemasyarakatan* – PPSHK) has complemented local collective action, such as community mapping, with an advocacy campaign in the provincial capital. In the absence of a statutory framework that recognizes indigenous rights to land and territory, this combination has provided some improvement in tenure security for common property users, via informal agreements between communities, their NGO partners and provincial officials. These examples demonstrate how collective action by communities, including that undertaken in alliance with supportive outside organizations, can contribute to expanded and increasingly secure access.

In sum, this section has illustrated that access to common areas can be created and sustained in several ways: through community membership and identity, via the state's recognition and rights and claims and provision for use and/or management rights, through project innovations and also by community organizing, either self-organization or external facilitation. The next section discusses how these various rights are guaranteed and/or secured. It also highlights the tensions present within legal plural systems where multiple systems for authorizing resource rights exist.

$1.3.\ SOURCES$ OF LEGITIMACY AND AUTHORIZATION FOR COMMON PROPERTY REGIMES

Customary law and practice

Customary law and practice often forms the basis of group tenure and collective resource management. Customary systems generally have a collective element to resource management, e.g., forms of group decision-making that determine access and use, or joint use and management of resources in common areas. These systems may range as follows:

- Lineage-based access to CPRs (e.g., via family or clan)
- > Control and management by customary institutions other than those based on lineage
- > Customary ties of reciprocity between and among groups

A large number of cases demonstrate the authority of customary and reciprocal institutions in the regulation of common property regimes. Among the 41 case studies received, only from Japan was an example described where there is not reliance on customary authority for the regulation of common property regimes. The rest all indicate some form of customary system (both with and without state support) for regulating access to forests, fisheries and land. In southern Cameroon, assets and access to land and natural resources is determined both by local elders/lineage heads as well as traditional chiefs. However, an absence of effective organizational or leadership structure in some cases, such as in the Adamaoua region of Cameroon, has contributed to conflicts between individuals and groups.

Among the Somali herders of Ethiopia, the lineage is the primary arrangement through which resources are accessed (Unruh, 2005). The arrangement is characterized by changing allegiance

between clans and their further segmented units, in order to access spatially changing grazing and watering resources. These changing alliances at the hands of local elders define rights and obligations. Domestic groups (i.e., groupings of several families) are the basic unit of identification in the Khasi-Jaintia society in India's Megahalaya state, as well as the basis for whether a village member enjoys rights to use common village forests.

In general, these local, customary-based systems of authority are losing power as state administration, markets, increasing populations, migration and other pressures increase. Sometimes customary control may be so challenged that prior regulated commons may deteriorate into open access situations. This is noted by the Mau Community Forest Association (MACOFA) in its case from Kenya, where there has been a gradual alienation of the community from resource governance by existing forest administrative structures (Karangathi 2005). This alienation has created opportunities for the collusion of local leaders and government officials to appropriate common lands and monopolize benefits from the commercial exploitation of the natural resources.

In the Adamaoua region of Cameroon, 63 percent of cattle-owners use common land for grazing; only 3 percent have individual rights to grazing land. While farmers' groups (*Groupes d'Initiative Commune*) exist, there is no comparable organizational structure for the management of community pastures. As a result, conflicts emerge, both between individuals within communities and across different herder groups (Deffo 2005). This situation is compounded by the recent privatization of common grazing areas. In the 1970s, the government, with support from the World Bank, created public ranches designed to boost production. Initial demonstration ranches were subsequently privatized and, through this process, dignitaries, traders and other more powerful individuals were able to appropriate large parcels of prime pasture land that had previously been under community control. Today, these pastures are fenced off with barbed wire, limiting herders' mobility. Intensified competition for the remaining pastureland has contributed to the destruction of social ties on which access to the commons was historically based. In turn, this has minimized the community nature of pasture lands and increased pressures that lead to land degradation.

Similarly, in the Muzarabani district of Zimbabwe, traditional leaders are increasingly unable to enforce customary rules, leading to a gradual decline in their powers (Chidawkai 2005). This has contributed to less sustainable practices, such as harvesting fruit before it is mature. In addition, state-sponsored migration is changing the demographics in Muzarabani and increasing pressure on local customary institutions to manage community resources. The impact of new immigrants is two-fold: an increase in human and livestock populations with new demands on the environment as well as a breakdown of local natural resources management practices. Most immigrants do not always know or respect existing local rules for natural resource management. The creation of new settlements not only disempowered traditional leaders but increased competition for resources and subsequently the rate of forest loss.

Karamajong elders in Uganda have also recognized a decline in their authority, which reflected (and perhaps reinforced) a lack of cooperation among pastoral groups. The imperative of conflict resolution encouraged local leaders to establish new rules between groups involved in armed conflict, and to revitalize communication by holding smaller peace meetings at the neighborhood level (Unruh 2005).

Beyond providing the basic rules that determine who can access what resource, when and with what responsibility, customary institutions are the basis of norms of reciprocity among subsets that have authorized access to resources. Land access in pastoralist areas of Ethiopia are cemented by reciprocal social practices, e.g., exchange of milk and animals for land access, or "bond friendship" in which households keep cattle on their land on behalf of herd owners, in exchange for keeping a portion of their products (Aredo 2005a). In soame cases, this mutual exchange has such a long tradition that the source of livelihood for family groups has become highly interdependent. Among Japan's collective irrigation associations, rules concerning common water resources are rarely violated, in part because reciprocity and group identity are strong norms in rural Japanese society.

While the monitoring process is designed, violations of rules in distributing water either in general or in particular are unusual because of the group consciousness, mutual trust, and reciprocity that are deeply

embedded in Japan's rural society. Rationality can be classified into "farsighted rationality" and "short-sighted rationality," in terms of how self-interested individuals behave collectively in achieving benefits (Sarker and Itoh 2003). Far-sighted, rational individuals consider that if each individual contributes to the entire group, each individual will benefit in the long run and over time. Short-sighted, rational individuals believe that even if they do not contribute to the entire group, they will still reap the rewards. This can be the case in the short term but in the long run, these individuals experience the disadvantages of their action. Given the long-standing commitment of the rural people of Japan to their customs and customary rules of groups, the irrigators are usually far-sightedly rational (Sarker 2005).

It is important to note that customary institutions may also authorize access by non community members. In the Chabe community of Benin, migrant farmers and herders have gained access to common land following negotiation with the *agani*, the family groups native to the area who control local decision-making institutions. Implementing negotiated agreements are difficult, however, in part because of different concepts of land rights held by migrant farmers and pastoralist herders – this creates need for *agani* to facilitate negotiation between the two groups as well (Dangbégnon 2005).

How do customary institutions work? In some cases, *group identity and the respect* for the collective plays a role in deterring violations of collective tenure arrangements. Compliance is more often than not based on collective respect for local authorities over and above the possibility of punishment for infringements. However, among Somali pastoralist communities where clan affiliation is strong, grazing rights are also enforced via *collective guilt* and group deterrence. The idea of collective (clan) guilt as opposed to individual guilt and responsibility for infractions, along with the threat of punishment and retaliation by opposing clans prevent clan members from breaking rules. In other examples, such the Saigata, India case discussed earlier, material sanctions serve to enforce the collective interest. The village forest committee set fines that are graduated to fit the nature of the offense.

Religious norms and beliefs also play a role in maintaining adherence to rules governing common property. In several cases, use and access to the commons is restricted by local religious institutions, both in terms of kinds of use (e.g., prohibitions in northern India on collecting leaves in spring season) or where resources may be accessed (e.g., delineation of sacred forests in the Halimun area of West Java, Indonesia and in the Himachal Himalaya region of India). Violation of religious norms can cause an individual to be shunned, with social, economic consequences.

In many Western African countries *dialogue between groups* is also fundamental in establishing rules and resolving conflicts. In Kemon village in Benin, local leadership encouraged the different groups to negotiate boundaries, which led to an agreement and co-existence of hunter and herder groups in the area. Among the Karamajong cluster in Uganda, dialogue between the elders of different groups allows them to define rules for conflict management. However, more and more pastoralists ignore the rules and decisions taken through this system, which leads to an increase in armed conflict.

While customary systems, regardless of whether or not they are backed by the state, seem to be prevalent in authorizing CPRs in many parts of the world, they face both internal and external challenges. The low status of women and the privileged status of local elites are continued challenges. In addition, customary systems often have low legal standing relative to state-backed systems.

Even though several countries examined in the cases recognize some forms of collective natural resource management, most statutory systems do not treat customary norms and rules as legitimate sources of rights to land and other resources. Several case studies noted that state policy and laws are based solely on systems of state or individual ownership, excluding the possibility of common property rights. After independence, the Malian state claimed a tenure monopoly in the country; the legislation passed confirms that modern law takes precedence over customary practice (Hamadoun 2005). In this and other cases, the problems associated with the imposition of "modern" rules are: a different logic to rules and regulations other than that known and practiced by local users; difficulties in applying and enforcing the state's rules; and no provision for multiple uses of resources (e.g., conservation is equated with stopping of any exploitation).

In other cases, the state backed the privatization of commonly shared resources, excluding customary claimants and undermining customary systems. In Botswana, state policy after independence has

favoured privatization of common pasture lands (Taylor 2005). The 1975 Tribal Grazing Lands Policy (developed through a World-Bank supported process), followed by the 1991 National Policy on Agricultural Development, created leasehold ranches to reduce grazing pressure. The exclusion of extensive tracts of lands for private interests has increased pressure on remaining communal rangelands. At the same time, rights to pasture are considered more at the level of the individual citizen than at an aggregated level of social organisation, such as tribe. This has served to break down traditional management systems to the extent that many pasture lands are now characteristic of open access systems.

Similar government led programs in Burkina Faso (Nelen et al. 2004) tried to establish ranches and encourage sedentary use by pastoralists and their herds. Nationalization and privatization programs have been widely implemented by governments. In all cases, such programs have undermined customary authority and have excluded customary claimants from access.

But customary systems are also subject to internal problems as well. Favored elites often get away with circumventing rules and evading sanctions. Although local councils in Himachal Pradesh in India have the power to enforce rules, local elites can very often escape these rules as they can afford facing the council in court (Aggarwal 2005). In similar cases from Nepal's leasehold forestry initiative, these actions generated disputes and led to conflict within communities. In some cases, the forest leasehold groups – which were formed through targeting the poorest households, in an effort to avoid elite capture – had to negotiate some form of shared rights with non-group members to keep the peace (Shrestha 2005). These examples illustrate how challenges remain in designing policies through which the households which most need resources from the commons are able to draw upon and benefit from their use.

The status of women and their participation in decision making is yet another concern. Despite their established role in commons management and use women are rarely involved in important decisions, creating a gap between decision making and actual resource use. This may create a gap between decisions made about common property and those responsible for its use and management. Although women are taking on increasing responsibility for agricultural work in Peru's *campesino* communities, but have little say in community decisions concerning land and collectively managed natural resources – despite recent advances in gender equality in other areas (Burneo 2005). In the case of community forests in Kenya, the decision-making structure is male-dominated, even though women constitute the majority of users. Here, as in most other areas in Africa, access to land by women mostly is through men, i.e. husbands and or sons. This makes their access to land difficult especially if they do not have influential people who know them to assist in negotiating on their behalf. The same situation prevails during land inheritance.

Where women do participate in decision-making, the process is not necessarily tolerant of dissenting views, or sensitive to gender dynamics. In one case from Uganda, women who cared most about fuelwood, suggested that fast-growing trees be planted, so their fuelwood needs could be met. This suggestion was ignored, and instead the focus was on commercialization of forest resources, purportedly for community benefit (Obaikol et al. 2005; Obaikol 2005).

However, the situation is changing in some places, especially where there are clear affirmative action rules that require the inclusion of women in decision making. The IFAD-supported forest leasehold program in Nepal is targeted at poor women, providing them a window for influencing commons management in the participating villages (Shrestha 2005). Similarly, the village forest committee in Saigata, established relatively recently in 1979, provides for gender balance on its executive committee – three women and three men. Through this concerted effort to involving women and other marginalized groups of the community gender disparity in decision-making has been gradually reduced, through specific attention (Ghate 2005).

Thus customary systems are able to guarantee access rights to groups and individuals to the commons, including to groups and individuals that are not necessarily 'members' for as long as the non-members are willing to negotiate and follow the general rules of access, particularly those rules that discourage the creation of permanent rights that may compete with legitimate members. But customary systems are vulnerable to non recognition by state systems and often fall short of being representative of the

interests of all relevant community members. State-supported policies such as settlement of immigrants, privatization or nationalization tend to challenge the authority of legitimate customary systems, with negative consequences both for the security of access to the commons as well as to their sustainable management. The status of women as decision makers on land and related issues is low under customary systems, however there is an increasing demand for the inclusion of women, especially by projects that are aimed at fostering equity in natural resource management and access.

State legislation

In statutory legal systems, written titles are the most common form of proof of land rights. In some countries, though, there are now laws that allow for certification of communal property, such as in Scotland and Uganda, through which the property rights of community associations are recognized. This does not mean, however, that resource users necessarily manage communal land as common property; communal titles may be provided for land that is, in practice, individually used and managed.

Uganda's 1998 Land Act provides a framework for communal ownership, including a process to form and register Communal Land Associations. Within communal lands, individuals have also established their separate parcels, in accordance with customary law and practice. In Scotland, the 2003 Land Reform Act similarly provides for communities of small-scale farmers known as "crofters" to make collective purchase of land that has been cultivated under customary practice (Seki 2005).

Some statutory laws recognize collective rights, but only of certain groups or in certain areas. In India a tribal rights bill has been recently proposed at the national level that would give ownership rights over land to tribal communities in India (Ghate 2005). In 1997, the Philippines passed a similar bill, the Indigenous Peoples Rights Act, which recognizes the rights of indigenous communities to ancestral lands and provides for procedures through which these land claims are registered with the state.

In several cases, under statutory law forest land is property of the state or the nation (e.g., India, Indonesia and Niger). Local residents may not have state-recognized ownership rights to forest land or other forest resources under these systems, but only usufruct and sometimes management rights at best. In practice, as the cases from Indonesia and Niger illustrate, there may be space for negotiation between communities and the state to establish rights claims and make them more secure or, as Subrata Singh terms it in the case on India's Orissa state, an "assumed commons" in which communities use and manage lands as commons so long as government agencies remain inactive in the management of areas under state tenure (Singh 2002).

2. SECURITY OF TENURE IN COMMON PROPERTY SYSTEMS

Practitioners and scholars often consider tenure security as a function of the breadth of rights, the duration of those rights and whether the rights are assured i.e. can be exercised without disruption or threats into the future. However, communities of users also have their own perceptions of what tenure security means, which may be reflected by the measures taken to legitimize claims to collective resource rights.

The right and ability to exclude "outsiders", i.e., those who are not considered community members such as migrant farmers in northern Zimbabwe, commercial interests (mining companies in Peru), or the government itself – for example, apartheid-era land seizures in South Africa – is a critical dimension of tenure security for communities. The availability of alternative ways to document rights that are affordable, accessible and readily understood by common property users is yet another dimension of tenure security for communities.

In cases from Mali, South Africa and Uganda, for instance, the processes, mechanisms and certifications required to register land via the state administrative system are not always understood by or not familiar with local residents. High costs, complicated processes and, in the case from Mali, the signature of the president are some of the requirements for legal ownership. Consequently, people

do not follow those rules but find their own ways of securing access to land, including both individually and as common property land.

These examples suggest that the conception of tenure security can and should be broader than conventional definitions used by scholars and practitioners. They are not only concerned with the range, duration and assurance of benefits, but also with accessible and affordable methods for documenting those rights, as well as the problem of representing multiple interests.

Among residents of Ekutheleni, South Africa, a key concern is that the documenting rights to common property via the state's land administration processes is too costly for local residents. Professional surveys also fail to capture the range of interests represented by the customary tenure system in place. Realizing the benefits of secure access to resources is also perceived as an indicator of tenure security. Access to credit and other support services depend on public recognition of rights to land and property and, in practice, are thus signals to communities that tenure is secure.

Ekutheleni residents, working with the non-governmental Association for Rural Advancement (AFRA), have sought to bridge these local practices with the state's administrative processes in order to increase security of tenure over community lands. AFRA describes the existing system in Ekutheleni as one that "provides a functional tenure security for most people in the community", but which operates without state support or with connections to public institutions and the services that they provide.

Ekuthuleni has a system around land that works, most of the time, for most people. It's cheap (food and alcohol for the boundary witnesses and R40 a year to the *Inkosi*), it's very local (walking distance at any time for a new allocation, access to dispute resolution) and it relies pragmatically on a mix of historical practice, environment and specific social need. AFRA thought that if the system - its mechanisms, rules, practices and institutions - could be described very clearly and a paper system created to reflect and support it, such records would begin to meet household needs (AFRA 2005).

Thus far, the residents of Ekutheleni have yet to succeed in their efforts to gain recognition for their rights, leading AFRA to conclude that "the institutions that uphold registered property rights and the way they are arranged and link to one another are part of a structure that excludes the poor" (AFRA 2005).

Community mapping is increasingly being used to link communities both to state processes for documenting land rights and linking maps to participatory land-use planning and territorial development. The case from the Parinari district in the Peruvian Amazon describes how mapping is used to identify the best uses and limitations of a territory and can serve as the basis for establishing rules on resource use. This second point is especially important in the context of lack of clarity of rights to common property, as the establishment of norms and sanctions are important options for the sustainable use of resources (Guzman 2005). The work of the Philippines Association for International Development (PAFID) in Mindanao also illustrates how mapping is used as a tool for linking communities to state processes for securing territorial rights, in that case the registration of ancestral domain claims that are recognized under IPRA's provisions.

3. PRESSURES, CHALLENGES AND THREATS TO THE COMMON PROPERTY REGIMES

The case studies identified a range of pressures and challenges to common property systems. Some of these may be considered as either "internal", i.e., coming from within a community of CPR users, or "external" i.e., rooted in processes or institutions outside the control of local CPR users. In other instances, the challenges seen – such as environmental degradation or actions to privatize the commons – are a combination of both internal and external factors. Finally, some of these pressures may not generate challenges or threats, but rather opportunities to empower poorer households to enjoy more secure access to common property resources – as will be discussed in the final section of this paper. These pressures and challenges are multi-dimensional, with interrelated causes, which we

attempt to illustrate in order to capture implications for tenure security as well as efforts at multiple levels to defend or improve local communities' rights and access to the commons.

Key challenges are as follows:

Internal changes and pressures	External changes and pressures
Encroachment and environmental degradation	Increased connection of rural areas with towns and urban markets
Increased demand for land and natural resources for market-oriented production	New opportunities to produce for markets, i.e., demand for cash crops
Limited role of women in decision-making	Roles of the state: Policies that encourage private land use / private property Establishment of national parks and conservation areas Policies to increase FDI Population transfers Lack of coherence among policies, laws and institutions Decentralization State ideologies that discount role of communities in sustainable NRM
User fees	Integration of customary and statutory systems, particularly creating affordable and understandable systems for state recognition of land rights
Elite capture of resources from the commons	Space for community organizing
Out-migration from rural areas (particularly working-age men)	In-migration from other regions
Decline in reciprocity and participation in customary NRM institutions	

3.1. ENCROACHMENT / ENVIRONMENTAL DEGRADATION

In several cases from India, population increase is contributing to encroachment and degradation of forest resources. As individuals engage in time-saving activities, there is greater incentive to overutilize forest resources, leading to their degradation. In addition, because local elites are not sanctioned for rule breaking, community controls for joint resource management break down, creating a near open-access situation in some community forests. In the central Himalayas in India, user groups were primarily responsible for encroachment in the respective community forests (Aggarwal, 2005). Here, most community forests had adequate resources within them to meet user needs and neighboring community forests were typically less accessible in terms of distance. Moreover, violations by non-members were more easily detected and reported by all users. The rise in encroachment can be explained by the increasing size of the user groups due to rise in population as well as greater pressures on women to engage in practices that were time saving but destructive to the forest.

Endogenous processes of privatization and informal but permanent boundary demarcation may often mark the encroachment of individuals into community spaces. In the Himachal Himalayas of India there is a tendency towards privatization of common grazing lands in the villages. Here, open lands are increasingly being bounded by stonewalls and iron poles by users. For a large number of users, this is a preemptive strategy against anticipated future land pressures due to an increasing population.

Encroachment is often linked with population pressure on resources, but also may reflect power dynamics within communities and changing roles (or absence) of the state. One case from the Patha region of India's Uttar Pradesh state suggests that land grabbing is linked to population pressure but

facilitated by lack of good governance to safeguard access by poor community members to the commons:

With the abolition of Jamindari system, government created common property resources like ponds, grazing spaces, plantation area play grounds under the GramSabha (a village-micro-unity governance). With the increases in the population pressure on land, the village started encroachment and grabbing of these common property resources as well as the land of illiterates and poor community. Though government has well structured administrative system to maintain the existence of common property and a good governance system but it has been alleged the land grabbers have a knot with these officials (Prasad 2005).

3.2. ROLES AND ACTIONS OF THE STATE

In many of the cases, there is an increase in the demand for land – both internally from common property users and externally from outside investors. This change is linked to greater opportunities to produce for markets (i.e., growing demand for cash crops) as well as closer links between rural areas, towns and urban centers. The combination of these internal and external factors is creating pressure to change both the use of the commons (e.g., conversion to agricultural land) and the form of tenure that governs them (e.g., conversion to private property).

Support for privatization by state policy and laws

Earlier sections in this paper have shown that in Botswana the 1975 tribal grazing lands policy, followed by the 1991 national policy on agricultural development, resulted in the privatization of tribal communal lands and a concentration of pastoral resources in the hands of the wealthiest cattle owners. Poor cattle herders lost access to common pasture lands. There is, however, no evidence that the range is improving following privatization policies, instead pressures on remaining common pastures are on the increase (Taylor, 2005).

Peru's 1920 constitution recognized *campesino* communities and guaranteed their collective property rights. In 1933, these communities gained juridical person. Until 1993, under this framework, community lands were inalienable. With a new Land Law (*Ley de Tierras*) introduced in 1995, this inalienable character was reversed. The law sets out processes through which land can be sold to persons outside the community group, opening them up to land markets. Despite this change, common property remains protected by the 1993 constitution, and counter-proposals to re-establish the inalienable character of community lands are under development (Burneo 2005).

Privatization policies are also increasingly linked to the state's promotion of foreign direct investment in extractive industries such as mining and logging. Mining may pose difficult conflicts because subsurface mineral rights are often vested in the state, even where people's rights to common property are recognized by the statutory or customary law. Mining concessions may take up great swaths of land area: in the area around Matheniko reserve in northern Uganda, about 22,000 out of 24,000 hectares has been licensed to mining companies (Obaikol et al., 2005). The possibility of new mining activities often spurs collective action to defend common property rights, as is shown in the cases from Laid village in Scotland and the *campesino* communities of Peru. In Indonesia, government, in accordance with policy to accelerate foreign and local investment, provides concessions to plantation and mining companies, often in forested areas.

Non-recognition of customary institutions

In Zimbabwe, customary institutions for NRM are not legally recognized. The communal areas forest produce act of 1987 allows only limited use—limited to subsistence as opposed for economic benefit. There is little in the existing legal framework that supports community control and/or management of land and land based resources—12 laws and several government institutions govern natural resources, most of which were established in colonial period and retained after independence.

Ambiguities in National level Policies

In Kenya, lack of a clearly defined national land policy to provide some coherence between different land-related laws, as well as some procedural constraints for access and management of collective

resources. The Trust Lands Act (Trust Lands are lands held for local communities in trust by elected representatives) for example, in its current form, provides local councils with excessive discretion—they can change tenure systems on trust lands without community consultations.

In spite of an early recognition of village forests in India (est. under Forest Act of 1927) and subsequent legislation in 1931 providing for the governance of the village forests, more recent revisions of the Van Panchayat Act in 1937 reduces the autonomy of forest councils requiring that they consult with district administration in the governance of forest resources e.g. when changing rules, or adding/changing forest guards. This limits the responsiveness of local councils to changing needs and environmental conditions. Similarly, revisions of the Forest Conservation Act of 1988 prohibit local forest councils to undertake reforestation without permission from the central government. While practice of local forest councils contradicts this restrictions (e.g. auction of dead trees, etc), longer term resource governance is undermined due to a lack of ability of local councils to effectively use local information to meet changing needs and environmental pressures. Indeed, a lack of legal support and trends towards curtailing the power/authority of local councils to govern resources does impair incentives for longer term decision making and planning by local forest councils.

Nationalization of commonly used resources

The creation of national parks and forest reserves has removed large tracts of common areas from prior users and vested control and ownership in state agencies. In Uganda, close to 36% of the Karamoja area is gazetted as protected area permitting very limited use by Karamojong pastoralists (Mwebaza, 2005). The remaining 64% of Karamoja is designated a controlled hunting area and permits grazing, settlement and resource use. In 1996, part of this area was given under concession by government to marble and gemstone mining companies. Also the wildlife statute of 1996 upgraded the controlled hunting areas to protected areas, bringing them under complete state control.

Similar processes led to the creation of Lake Mburo and Kidepo Valley national parks in southwestern Uganda where the Ankole pastoralists reside and the Awash national park in Ethiopia where Afari pastoralists live (Obaikol, 2005; Unruh, 2005). In Indonesia two waves of nationalization in 1979 and 2003 saw the government transfer large portions of high valued (biodiversity and watershed) forest land from community control to the Natural Resource and Conservation Agency (Galudra, 2005). The government took over land over that had prior contested claims. In the Sopsai watershed of Thailand most of the forests were demarcated as forest reserves under the 1964 Forest Act (Kitewachukul, 2005), resulting in more than 1 million households today residing within national forest reserves.

By removing land from the management of communities, governments undermine the efforts of users at creating effective management regimes. Pastoral and other systems are disrupted, significantly changing resource access and use, while legitimacy and conflict resolution mechanisms are negatively affected.

3.3. INTRODUCTION OF CASH CROPS, AGRICULTURAL EXPANSION AND COMMERCIALIZATION

Commercialization of natural resources and the products derived from them was, among the case studies, the most frequently discussed pressure on common property systems. Rural areas are increasingly connected to regional and national markets, and while domestic use of common-pool resources still play a significant role in supporting rural livelihoods, a number of cases also depict an increasing reliance on cash income and an expansion of opportunities to earn income via commercial use of the commons, including through small-scale agriculture. While this trend may provide rural households with new chance to improve their livelihoods by drawing on resources from the commons, it may also lead to disputes among different user groups or between the poorer and the better off families within a given community.

The cases also presented numerous examples where outside investments are competing with local residents for access to the commons, particularly in capital-intensive sectors such as mining, logging

or plantation agriculture. In these cases, there is greater concern that commercialization of the commons is having a negative impact on rural livelihoods, and that the benefits are being captured largely by actors from outside the community.

Changes in the purpose of resource and broader economic change are, in some cases, also contributing to decline in customary controls and regulations. Social regulations are more relevant for households that rely on resources from the commons for subsistence and may become irrelevant in the context of broader economic change. The case from Kumaun in northern India describes how increased participation in the market economy is threatening the continued functioning of local, customary institutions for voluntary work (*shamdran*). Villagers are now expecting compensation for communal work and there is now less reciprocity and a greater reliance on direct state intervention. As a consequence, irrigation and water catchments are declining for lack of maintenance (Aggarwal 2005).

Agricultural expansion and individualization of the commons

Increasing commercialization of commodities derived from common areas often increases the value of the resource and encourages privatization. In some cases, producing for the market may challenge or disrupt customary institutions that are the basis for the management of common property. This is seen in the case from the Muzarabani district of Zimbabwe, where the value of *masawu* trees is increasing and leading to an increase in private claims to trees. Common lands adjacent to individual farms are being claimed, by clearing and fencing land around the (Chidakwai 2006).

Ultimately, land use priorities may shift, especially if common properties are not accurately valued. In Benin, the introduction of cashew nuts (a cash crop) led to demands by farmers to individualize the commons. This undermined existing agreements between farmers and herders for joint and sequential resource use. Herders no longer had access to migration corridors across cultivated lands in their regular transhumance, which increased the potential for disputes between pastoralists and farmers. In this case, negotiated agreements between the two groups, facilitated by local customary institutions, were in some cases able to manage these disputes (Dangbégnon 2006).

In some cases, new tenure arrangements are emerging with the spread of agriculture, to support mixed production systems, e.g., agro-forestry or agro-pastoralism. These systems do not necessarily emerge as a "natural" outcome of changing production systems, though – as this case from Benin illustrates, negotiation among different groups may be needed for the initial tenure regime to evolve and support "hybrid" production systems effectively.

Whether this is possible can be related with the scale of production associated with a given agricultural product, particularly cash crops. In the area near Akok community southern Cameroon, the introduction of improved palm oil varieties over the past 15 years has created large plantations, generally owned by urban investors. This process includes purchases of land that had been treated as common property by local users. As a result, the institutional rules governing common land and resource management have been disrupted more by the commercial palm oil sector than by other cash crops, such as cocoa, whose production can be managed on a smaller scale (Mala 2006).

Local level commercialization may in some cases create new incentives for joint management of the commons, such as in the case of Nepal's leasehold forests, where poor communities are restoring degraded forests, the planting of timber trees and the growing of herbal plants for sale in local markets (Shrestha 2005). Still, this is a process that appears to have more costs than benefits for common property and those that are dependent on it. Environmental costs, including long-term resource depletion and degradation, may emerge through more intensive commercial use of the commons, as one case from India illustrates:

Laitsohpliah village (...) was well known as a major supplier of fuelwood at the local market of Sohra (the local name of Cherrapunjee). On every local market day a truck load of fuelwood would be sold. The situation today is different. Uncontrolled felling and commercialisation of timber has brought about large-scale depletion of the protected forest. The village council did not anticipate the crisis and local user groups are facing the consequences of this depletion. The trees in the forest are insufficient to meet their livelihood needs, which are compounded by a lack of alternative employment opportunities. A forest-based dependent village is today faced with critical livelihood problems. People are now are unable to keep the children in school, leading to high dropout rates. Young and adult

members of the village migrate from the village in search of employment. Some individuals started to mine the land to extract stones, sands, and coal to sustain their livelihoods (Kumar and Nongkynrih 2005).

External capital investment in the commons

Often where commercialization is instigated by outside investment in resource exploitation, local residents may benefit economically, but the largest share of benefits is enjoyed by outside investors. Without access to large-scale capital, investment opportunities for local residents may be limited; this creates economic leverage for outside investors when negotiating agreements with local CPR users. This became an important point for discussion among participants in the internet forum on the case studies, in which concerns over commercialization and elite capture of the commons emerged,

Outside investment is most often associated with greater access to state institutions, policy- and decision-making processes, as well as outright corruption and abuse of power. Non-compliance with regulations and partial (or non-existent) implementation of laws may contribute to both elite captures of benefits from commercial use of the commons, as well as environmental degradation. The cases from Indonesia, Kenya and Peru's Amazon region illustrate these challenges.

Commercialization of collectively managed forest resources, in particular, may not benefit women. In Indonesia example, while women play important roles in agriculture and forest management, timber and logging industries tend to be male-dominated. Capital-intensive commercialization in the forestry sector therefore shifts benefits out of women's hands and into men's.

Elite capture within communities may also be associated with increased commercialization. In Indonesia where village heads were responsible for distribution of benefits received from investors - natural resource benefits are not shared equally within communities. Better-off migrants who live in areas where CPRs are present may benefit more greatly than members of indigenous communities.

Improving the security of tenure over common property resources may therefore contribute to poverty reduction, by limiting encroachment and strengthening local residents' bargaining position vis-à-vis outside interests, as well as tenure security within communities as a means of preventing elite capture. Access to other resources besides land (e.g., water along with grazing land) should also be ensured in areas where these are complementary in local production.

3.4. MIGRATION AND POPULATION SHIFTS

Rural out-migration is another development associated with the increased links between rural communities, surrounding regions and urban centers. In several cases, rural out-migration – particularly of working age men – has become a factor in the management of the commons. In the Kumaun region of India, the high rate of male out-migration has left much greater responsibility for resource management on already overburdened women. Women increasingly lop oak leaves in summer, despite local bans, because of household labor shortage and time needed to collect leaves and fodder (Aggarwal 2005).

Migration of families within rural areas, i.e., in-migration, may also influence the common property arrangements, particularly where migrant farmers begin competing with other groups for resources or, as in the Zimbabwe case, do not have knowledge of or respect for local customary institutions that manage the commons.

3.5. ELITE CAPTURE

"Elite capture" of common property – disproportionate use and benefit of CPRs by wealthier or more powerful households in a given area – may take different forms. The case from the Patha region of Uttar Pradesh, described earlier, illustrates how encroachment may reflect existing power dynamics within communities, such that better off families or individuals with connections to local institutions may appropriate individual claims to the commons.

Establishing costs to accessing the commons may also contribute to the exclusion of the poorest households from the commons. User fees in Raid Mawbuh village in India's Meghalaya state are acting as a form of "indirect privatization". A fee of 150 rupees was imposed for felling trees in community protected forests, replacing customary rules for how and when trees in this area could be cut. While this fee is not a burden on wealthier members of the community, poor villagers are complaining that they are not able to pay this amount – as household budgets are only around 300 rupees per month (Kumar and Nongkynrih 2005).

In Nepal wealthy families that have been excluded from a leasehold scheme targeted specifically at strengthening poor families' rights and incomes, have sometimes encroached on the scheme either by grazing livestock or planting trees (Shrestha 2005). This example might be considered a kind of elite "re-capture" or "partial capture", in the sense that poor households still retain access to the commons, but these rights – envisioned to be vested in poor and marginalized households – are shared with non-poor community members as the outcome of a negotiation process.

3.6. HIV/AIDS EPIDEMIC

In regions where there are high and increasing rates of HIV/AIDS, such as southern Africa, access to land and natural resources – particularly by women and female-headed households – is in jeopardy. This, in turn, creates or exacerbates food security and nutrition challenges, making it all the more difficult for families hit by the disease to sustain themselves. This is illustrated in one of the cases from Zimbabwe:

Due to the high death rates, and the amount of time needed to care for the sick, the orphans and vulnerable children, it leaves very little time for the management of CPRs at community level, yet the same CPRs are a source of medicines for the sick and also provide nutritious foods to assist the depleted immunities of the poor and vulnerable. This therefore means that the pandemic has reduced the capacity of the communities to sustainably manage the CPRs, which are important for their livelihoods (Mgugu, 2005).

4. CONFLICTS AND CONFLICT MANAGEMENT

This section considers examples of conflict over CPRs that are presented in the case studies. In many of the cases, changes that are occurring – both internally and externally – affect the way that land and other resources are managed as common property. When disputes over the commons emerge, often the poor and marginalized are left no or little access to vital resources – such as grazing areas, water, wood or fruits – and left more vulnerable.

Many case study authors indicate that recent changes and emerging trends are the most important reasons for an increase in conflicts, and the decreasing ability by most communities to solve and manage conflicts. As conflict itself generates more insecurity, disputes threaten to create a vicious circle.

4.1. EXAMPLES OF CONFLICTS AND THEIR CONTRIBUTING FACTORS

The case studies identify a number of factors that contribute to conflict over the commons. As earlier examples have shown, the potential for conflict increases when local authorities traditionally responsible for overseeing natural resource management lose power and influence, a trend seen in many customary systems of common property. Other factors, including changes in the socioeconomic environment or in state policies, may combine with weakening customary institutions to increase the likelihood of conflict over resources from the commons.

The development of urban markets in developing countries, and increasing links between these markets and rural areas, is generating higher demand for products derived from natural resources, and greater pressure on the commons. In India's Orissa state, forest resources have historically been used

to fuel (primarily urban) development. The majority of timber that is felled in the state is destined for consumption in urban areas; bamboo is also harvested to supply the growing paper industry. This exploitation not only left many communities facing shortages of basic necessities – e.g., fuelwood, fooder and supplementary sources of food – it also increased the value of having access to common forest areas. This in turn has created tensions between villages and increased the potential for conflict between communities (Singh 2002).

In a number of cases, scarcity of resources (degradation, migration) is identified as one of the reasons for increased conflict. Among Afar pastoralists in Ethiopia, population increases have limited options for preventing unauthorized use, resulting in more disputes. Armed conflict has grown increasingly common as means for excluding access to commons; alternatively, Afar are faced with degradation from *de facto* open access. Resource scarcity is a product of many factors, including the establishment of protected areas and construction of dams (Unruh 2005).

Conflicts often exist where different production systems interface. Several case studies noted conflicts between mobile pastoralists and sedentary farmers in arid and semi-arid parts of Africa. Examples from Ethiopia, Mali and Niger describe how nomadic and sedentary systems may co-exist, as well as come into conflict. Increasing crop cultivation and in-migration by cultivators can make it problematic for pastoralists to get to river and water holes. Sedentary groups also may start engaging in pastoral activities and raise livestock, thus entering in direct competition with pastoral herders.

The likelihood of conflict also increases where there is tension between modern and traditional resource management systems. Many modern rules are incompatible with the lived customary rules, and provide opportunity for outsiders/non-claimants to gain and thus undermine their authority. After independence, the Malian state claimed a tenure monopoly in the country with statutory law takes precedence over customary practice. As a result it became difficult to apply and enforce rules governing the commons, and to manage the contradiction between authoritative texts and development logic, particularly when conservation is equated with stopping any form of resource use (Hamadoun 2005).

Government policy and other actions that lead to displacement and involuntary resettlement contribute to conflicts over common property. These can occur when government does not recognize the interests of common property users in a given territory, and either target the area for large-scale development projects or resettling migrant farmers. In one case from Mali, dam construction disrupts the social peace and creates potential for conflict. Although the newly created waters create opportunities for some, others lose out through the displacements created (Hamadoun 2005).

As mentioned earlier, in India the state owns forest lands that, in practice, are treated as common property. This gap between state ownership on paper and group use and (in many cases) collective management in practice can lead to conflict, particularly where the state is not active or effective in managing the resources.

The people of many villages across the Angul district have been facing the threat due to high powered electric lines passing through their forests leading to felling of trees (35feet wide) across their forests to reduce the loss of power due to earthing. The forests in both revenue as well as the forest lands in most villages are being protected and regenerated by the communities for the last 20-30 years but the permissions are sought from the district administration and the forest department; the compensation goes to the government exchequer; the amount for compensatory afforestation and the trees harvested are grabbed by the forest department. The communities protecting the forests are neither asked permission for nor are compensated for the efforts they have put in. The result has been further degradation of the forests... More critically, the government has even denied the compensation to the communities for the loss of plantations due to the construction of canals, where the district administration had given permission to the village institution to take up plantation and process of leasing the land to the community was in progress (Singh 2002).

Attempts by governments to attract foreign investment through exploitation of natural resources – often in areas where they are treated as common property by local residents – may contribute to conflict. In Peru, mining concessions are given out, often without the consent of the villages that at best can ask for a compensation for the land. Legally, communities are not able to oppose the

granting of concessions. Concessions given for petroleum exploitation in West Africa, as well as game reserves and timber concessions in many countries (e.g. Mozambique), are given out by governments; despite the fact that communities access to resources is limited or they are cut-off entirely from resources, sacred sites, or neighbouring villages with whom they exchange goods.

4.2. MECHANISMS FOR CONFLICT MANAGEMENT, INCLUDING MEDIATION

Conflict mediation and management are closely linked to the ability to enforce rules and guarantee rights as their functioning depends not only on their power but more importantly on their legitimacy in the eyes of resource users. Many enforcement mechanisms simultaneously work as conflict management mechanisms: if the decisions by the relevant institutions are respected many conflicts do not break out.

Other cases also show that the legitimacy of arbitration mechanisms can be build by starting through dialogue. Hybrids of customary and modern rules have formed as well, which derive their power from their inclusiveness, i.e., a legitimacy based on the process used, rather than the institution itself. One of the cases from Uganda describes this, referring to the role of Community Land Associations (CLAs) in managing conflicts:

In the two case studies of conflicts, the individual violators of the CLA's presumed boundaries, felt as if they were powerless against the CLA. In discussions with district level key informants, the leaders cited "*rules are rules*." Not only does the drive for conservation of the forest seem to be the rule, those in conflict felt they had few means to negotiate. However, according to BUCODO, for one of the two conflict sites visited, the CLA had engaged in dialogue and consequently reduced the requested riparian buffer (and increased the land allowed to the farmer) (Obaikol et. al. 2005).

There have been positive experiences in increasing the capacity of existing systems and institutions. Support for these efforts has come from various sources: local institutions, governments, NGOs or international organizations. Under Nepal's forest leasehold initiative, rich or upper caste community members do not have access to common forest lands. In some cases, however, they encroached on the land of leasehold groups. Group members responded by providing incentives to the encroachers to stay out of these lands, an approach implemented in partnership with NGO facilitators. These strategies include the construction of pathways for people and animals, new ponds, forest crops and grass seeds to plant on their own land, and have led to a decrease in tension and conflicts (Shrestha 2005).

In the Ouèssè community in Benin, migrant farmer and pastoralist groups are accustomed to negotiating access to and use of resources with local customary leaders; however, without direct links between the groups, conflict over lands – used as pasture by herders and for cultivation by farmers – has been difficult to manage. In one case, an external project played a mediating role by setting up a joint committee with representatives from different groups to decide on access and use rules.

Contrary to the situation in Savè area, a project for the Management of Natural Resources which was active in the *Commune* of Ouèssè to support the initiatives of the hunters in Kemon through a communicative intervention. The project was able to fulfil a role as mediator because it applied the *appui-conseil* (support and advice) approach instead of the coercive manner in which the government had worked during the communist regime and had fought the transhumant herders.

The appui-conseil framework is based on participatory processes and the support of the stakeholders to help them sustain the actions in which they already are engaged. The principal objective of the appui-conseil is to provide a methodological guide for implementing various actions with villagers to improve pastoral resources management in the village Kemon and its territory. The concrete objective of the appui-conseil was to establish a better social relationship between the different stakeholders, a condition which would enable a sustainable management of land and associated pastoral resources (vegetation and water) (Dangbegnon 2005).

In recent years, the Ethiopian government has begun efforts to reduce conflict over CPRs among different pastoralist groups. In the eastern part of the country, the government has worked with traditional leaders to organize peace and development conferences and peace committees. In 2003,

the government undertook a large-scale study of the roots and impact of conflicts in pastoral areas; its findings, though, have not yet been made public, limiting its usefulness as applied to conflict management (Aredo, 2005b).

Also donor projects can play a catalytic role in strengthening or developing institutions for conflict management in an area that stretches across for countries:

The Karamojong Cluster provides a case where several state boundaries intersect significantly with a pastoral commons problem. ... That the role of the donor (OAU/IBAR) was so large in this example perhaps attests to the problematic national border environment of the Karamojong Cluster (Unruh 2005).

While these examples suggest a positive role from outside institutions, strong organizations may also be able to resolve disputes on their own, as in the case of Japan's Land Improvement District (LID) councils.

When a general conflict does arise between upper-stream and down-stream areas, during the time of water scarcity for example, the irrigators inform the LID, which resolves the conflict through meetings. Despite the fact that the government has substantially subsidized LID, the government is neither used nor welcomed to resolve an internal problem. The LID has greatly contributed to reducing the disputes and increasing "fairness" in distributing irrigation water (Sarker 2005).

5. MEETING THE CHALLENGES: OPPORTUNITIES FOR INNOVATIONS

This section provides a sense of what is being done at different levels to protect local and community access to the commons. Strengthening the security of access to the commons has taken different forms, including the development of new laws and policies, decentralization of state authorities, support to customary institutions, and initiatives of collective action and local organizing. Other innovations seek to develop new socio-economic institutions or improve the environmental sustainability of how the commons is used. In all these cases, the redistribution of power has been a fundamental element.

5.1. STATUTORY REFORMS (CONSTITUTIONS, LAWS, ETC.)

Cases where there has been implementation

In Kenya, the Forest Act has special provisions that grant access to forest adjacent communities to collect fuel wood, grazing, water and some timber rights. Despite widespread mismanagement, the now prohibited system of non resident cultivation was important in the establishment of forest plantations, yet by allowing cultivation of food and cash crops, it also met the livelihoods and income needs of forests adjacent communities.

The Indian Forest Act of 1927 provided for the creation of village forests; the forest council's rules of 1931 provided for the creation of governance structures for village forests, e.g. forest councils and their election. 73rd amendment to the Indian constitution gives rights to local communities to harvest and market 33 minor forest products. Panchayat Act of 1996 gives local institutions or panchayats power to control local plans and resources.

In Peru the 1920 constitution guaranteed collective property rights and subsequent legislation provided farming juridical personality. While the inalienable character of community property was revised in 1995, group rights to land are still protected by the 1993 constitution, and a 1987 law was passed to indicate internal organization and procedures within the *campesino* communities (Burneo 2005).

Changes to the legal framework may also create an "enabling environment" for rural peoples to take part in decision-making that affects them, including policy processes that concern the commons. The 1997 Thai constitution, for example, requires the state to support peoples' participation in natural

resource management and relevant decision-making. This provision is now being used as a basis for advocating policies that recognize local property rights systems (Kitewachakul 2005).

Cases where there has not been implementation

During the 20th century, the Crofters Holding Act of 1866 provided crofters (tenant farmers) in Scotland with rights to land and legal protection against being cleared off the lands. Recent legislation, Land Reform Bill of 2003, provides crofting towns with right to purchase their lands or to continue renting on the conditions they gain approval from the community, form an association and identify a development plan. While the community buyout of land in Laid township has not yet taken place, informal negotiations are still taking place between the residents and the current landlord (Seki 2005).

Uganda's Land Act provides a governance framework for common property. It recognizes customary rights and ownership, which includes communal ownership of resources. The Wildlife Act of Uganda also recognizes rights of use of the commons and allows these to continue. Devolution to local governments via the Local Governments Act provides district councils with authority for the environmental conservation; district councils may further devolve control of local hunting and fishing to lower bodies (Obaikol 2005).

In South Africa, the 2004 Communal Land Rights Act (CLRA) provides for the registration of tenure rights to community members. While more difficult questions are yet to be answered (e.g., distributional issues, ownership structure and governance of resources), community tenure rights may provide a basis to address threats that are causing communities to lose their lands. The case from Ekutheleni, though, emphasizes that this will only be achieved if a middle ground is identified between local tenure systems and state land administrative practices, which thus far has proved difficult to find. Without this change, the new legislation has thus far failed to offer new solutions to Ekutheleni residents (AFRA 2005).

5.2. DECENTRALIZATION AND CHANGING RELATIONS BETWEEN STATE AND CUSTOMARY AUTHORITIES

In Ethiopia, even though land belongs to the state, administrative powers and authority have been decentralized to local ethnic authorities and regions gaining power to manage their own affairs. The constitution fully recognizes customary and religious law; important customary institutions and authority were revived. In addition councils of Somali elders, *Guurti*, (and of the Afar) are being formed within regional governments. There is now significant interaction between customary institutions that regulate access to the commons and regional and state authorities.

Decentralization has seen an improvement of communication among community members, smaller neighborhood meetings for conflict resolution. It has also been relevant for conflict resolution because increased conflicts among different ethnic communities were linked to declining effectiveness of customary mechanisms in the wake of the state. In Niger, decentralization, based on the new *Code Rurale*, began in the 1990s. This has increased possibilities for local experimentation with community based CPR management.

The rural district council's act of 1998 in Zimbabwe devolves natural resource management authority to rural development councils, which are the lowest level of administrative body with power to manage budgets and to remit to local communities. However, under the traditional leaders act, village leaders are also responsible for making sure that communal lands are allocated in accordance with the community land act, which governs communal land system (with title vested in the president as representative of the state).

While devolution is seem as important it may often be complicated by the conflict between traditional and modern institutions, which lack clarity on their roles and responsibilities, yet traditional leaders still common respect on civic and cultural issues, and could still form basis for promotion of sustainable, community-based NRM.

Government plays an active role in reinforcing the self-governance structure of the organizations and does not participate in the management that is the responsibility of the irrigation organizations that in turn self-govern their resources based on their built-up irrigation institutions, social customs, trust, and reciprocity (Sarker 2005).

5.3. COLLECTIVE ACTION AND ORGANIZING

The most common forms of response to pressures and threats to the commons are collective action and community organizing. Some form of collective action was seen in nearly half of the cases, often with the goal of adapting and creating more supportive local arrangements, including the renegotiation of power arrangements between communities, the state and other actors. The link between collective action and community empowerment is seen most clearly in cases where common property users face external competition for resources (e.g., cases from Indonesia, Peru and Scotland).

In India, in Saigata for example, when deforestation became a threat in the 1970s, migrant farmers established local discussion groups that were intended to determine the causes of fodder and fuel wood scarcity. These groups identified consumptive uses that were contributing to forest degradation and organized Dandaar skits in traditional theaters to disseminate information on self-restricting consumption of forest resources. A forest protection committee was also formed in 1976 which regulated forest access and use.

Leasehold forests in Nepal create new commons for the poorer sections, and have helped poor and women gain leverage to undertake other empowerment activities. Land-poor women and men can restore and make degraded forests lands productive again, meeting the goals of sustainability and poverty reduction, with micro-finance helping women who have less access to credit relative to men. However, better off and upper caste groups have tried to undermine this initiative e.g. by grazing; livestock and damaging crops in leasehold areas or uprooting tree crops planted in leasehold areas. (Shrestha 2005).

Partnerships between communities and non-governmental organizations or project-related institutions are increasing support to local collective action. In Indonesia, in order to protect their access and use of the commons, Nyuncung villagers created communication forums with neighboring villages that shared similar threats. This forum on people's forests formed a united front against the extension of the national park. Together with a local NGO, the local communication forum introduced a zoning of forest use, ranging from strict conservation areas, through regeneration/restoration areas, through to open areas that could be used for cultivation. This zoning of forest use is intended to secure Nyncung villagers' access rights while protecting and conserving forest areas (Galudra 2005).

In addition to increasing the leverage and collective strength of communities, collective action may contribute to adaptations and innovative approaches to addressing specific challenges, including socio-economic innovations, environmental innovations and adaptations to conflict management.

Socio-economic innovations

In Peru, renting out of some common pasture lands to community members who lack sufficient individual land, or who need to leave fields fallow for some period generates incomes for communities. However, in other cases, these commons areas can be used freely by *campesinos* employing a rotation system to control degradation.

In Niger, Takieta forest reserve is the only source of common forest in an area otherwise occupied by farms. While the reserve is state-owned and managed on paper, de facto it is common land. The introduction of new activities such as honey/fish/fuel wood production and forest rehabilitation in addition to older activities introduced by the forestry service in the 60s such as seedling production, tree planting and forest rehabilitation have been important in conserving and protecting the forest commons.

Environmental innovations

Environmental degradation, such as deforestation, may take place where common pool resources are not adequately managed (i.e., *de facto* open access). Collective action, and supportive legal or policy frameworks, may contribute to more sustainable use of the resources from the commons.

Increased efforts by community groups and the local government in the Kangra district of Himachal Pradesh have led to reforestation. The poorest households reported the highest rate of tree-protection, with two-thirds engaged in some form of forest conservation, suggesting that the poor can play a key role in increasing sustainable resource use.

In Nepal, forest rehabilitation by leasehold groups has helped to reverse degradation and increase biodiversity – forests are now at almost full coverage, up from an average starting point of 32 percent at the program's outset.

The national wetlands policy in Uganda requires that use of common wetlands be non-destructive, e.g., it allows for collecting reeds, tree-cutting or fishing, so long as these do not degrade the wetland ecosystem.

Conflict Management

In the Ouesse community of Benin, external facilitation by NGOs resulted in the strengthening of local organizations for conflict resolution but also in the creation of new organizations for the management of pastoral resources. These organizations and committees comprised representatives from conflicting communities (farmers, herders, hunters), and were able to implement resource sharing agreements, including delineating grazing areas and herders fees for water use and restoring a degraded range (Dangbegnon 2005).

6. CONCLUSIONS

There are various ways in which access to the commons is created and sustained, including through community membership and identity, collective organizing, and state action. In addition to its role in developing and implementing laws and policies, other kinds of state action can also support common property regimes, including its role in endorsing projects for community-based natural resource management and adapting the working relations with local institutions.

Customary systems remain an important source of legitimacy for access to the commons. In some cases, it is possible for non-group members to negotiate access and use of the commons through customary institutions. Customary systems, however, remain vulnerable where they are not recognized by the state, particularly when governments take actions or establish policies that undermine the authority of customary institutions.

The case studies described fewer instances where state legislation is the main source of legitimacy for common property rights, when compared to the examples given of customary systems playing this role. In some cases, new laws have been passed in recent years that provide a basis for recognizing group rights to land and resources; implementation of these, however, is still limited. Nonetheless, the cases emphasize the importance of developing a statutory framework to support common property regimes, as evidenced by numerous examples where efforts to develop such legislation is underway.

The cases highlight three key tenure security concerns on the part of common property users: affordability, familiarity, and utility not only in documenting rights but also in developing systems for managing the commons effectively and sustainably. This last concern, in particular, highlights the practical need for linking secure access to land and resources with opportunities to use them for livelihood needs, in ways that balance current and future consumption.

State actions and policies may contribute to nationalization or privatization of the commons in a variety of ways. States may assume or claim direct control over the commons, such as through the establishment of protected areas. Policies and legal reforms may encourage private land rights either directly, by opening up community lands to the market, or indirectly, by supporting investments in sectors (e.g., commercial ranching) that tend to be based on individual property rights. As discussed

earlier, state actions and policies may also undermine customary institutions that manage the commons, or generate overlapping claims to the commons (land and other resources) that make it more difficult for groups to establish secure rights.

The expansion of agriculture is creating new opportunities for rural households to earn cash income but also poses the risk that common lands may be individualized, with poorer or marginalized groups (e.g. pastoralists or indigenous forest communities) excluded. The cases illustrate that there are viable ways to negotiate arrangements that can support mixed production systems, and manage or prevent conflicts among different groups of resource users.

While both large-scale commercialization and small-scale agriculture are contributing to individualization of the commons, the case studies exhibit much greater concern about the impacts of the former. In most cases, when resources from the commons are captured by external investors, local residents are not enjoying any benefits. There is often a power imbalance between communities and outside investors, which makes it more challenging – though not impossible, as many examples can testify – for community groups to establish grounds for negotiating shared rights to the commons.

These examples suggest that customary systems are able to adapt to new types of conflict, particularly if facilitation or assistance is made available to support this adaptation. In cases where horizontal conflicts emerge between different user groups, steps can be taken to strengthen the capacity of local institutions that manage the commons also to manage and prevent disputes. In cases where there is a vertical conflict, i.e., one where there is a power imbalance between the parties in conflict, support to community organizing and collective action can help to even the playing field, increasing the ability of community groups to negotiate more secure access to the commons, which is the issue most often at the heart of such disputes.

The cases suggest that collective action is proving an effective and robust approach to addressing many of the challenges that common property regimes face. Still, there is wider recognition that new legislation and policy reform are needed as well, in order to support commons property systems and ensure that the rights of both groups and individuals within those groups are secure. Many cases note that draft laws or policies are being developed, and recommend these as key actions to be taken. In fewer of the cases, such laws and policies already exist, and attention must now be given to implementing them. The seemingly uphill challenge of developing and implementing laws and policies that support common property reflects, at least in part, the need to increase the visibility and voice of rural peoples who depend on the commons for their livelihoods.

The case study findings reinforce the well recognized observation that access to common property plays an important role in reducing the vulnerability of poor rural households, and often functions as a safety net against extreme poverty. Access to the commons is particularly crucial for pastoralist communities, for whom food security is primarily, if not wholly, dependent on access to pastures and water sources by their herds. Beyond the demonstrable links between common property and livelihoods, there are ripple effects in which secure access to the commons increase other important linkages that foster human development and capacities.

As indicated in the summary access can be created through community identity, collective action and through state action. Customary systems remain an important authority backing and enforcing common property, however these continue to be threatened by the state as well as the market expansion. Paradoxically, customary systems remain vulnerable where they are not recognized by the state, particularly when governments take actions or establish policies that undermine the authority of customary institutions. In many cases, there was need to have some form of state recognition through legislative provisions that allow for group rights. But even as customary systems continue to authorize access to CPRs the role of 'projects' in creating access appears on the increase. These projects involve various management/negotiated arrangements between local communities, state and other development actors. There is thus an opportunity for improving the capacities of all relevant actors to play their roles effectively. Partnerships with non-governmental organizations, development project facilitators and the state can all provide important support to local institutions that manage common property, and facilitate adaptation to pressures and threats facing the commons.

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^{*} Before title indicates that the paper was contributed as a case study to this initiative