

Some Notes on Common vs. Private Property Rights to Natural Resources

S. Movik

Introduction

Have economists got it all wrong? Thus muses Federico Aguilera-Klink (1994) as he claims that the argument for privatisation of common property is fuelled by a misconception of terms. Most economists refer to Adam Smith when they proffer the case for private property as the most efficient means of easing transactions between rational human beings, and thus spurring economic growth. However, Smith also very much emphasised the importance of moral and legal restraints within the market, in order to exert a counter-pressure, a restraining hand, on the rational actions of self-interested individuals. Is private property really the best means by which to create sustainable growth, as some argue? Judging by the trends of privatisation that is seen in today's society, one may certainly be led to believe so. However, before the reader throws away this paper in anguish over yet another naïvist who has not understood that capitalism, and by inference, private property, is here to stay, let me please make one point clear at the outset. My intention is not to deride the concept of private property as such, which unquestionably serves its purpose in many contexts. The issue here is not a debate about common property vs. private property *per se*, but rather to look at the key arguments offered by proponents of both institutional arrangements, exploring some examples that underpin or undermine these arguments, as well as analysing the driving factors of institutional change towards the establishment of private property regimes. When looking at differing institutional set-ups, particular attention will be paid to the variations in outcomes in terms of equality, efficiency, and environmental sustainability. The paper will round off with some remarks regarding the soundness of arguments and the applicability of differing institutional arrangements to varying contexts.

Defining and Explaining 'Property'

The historical basis of the term 'property' relates more to the characteristics of *person*, than to physical objects as such, according to Bell (1995). When the term was first applied to land in the 17th century, it was understood that property in land was indicative of the social position of the owner. Only later did property come to mean the right of alienation, as it is understood to imply today. Previously, people 'belonged' to land – but in the 18th and 19th centuries, a transformation occurred whereby land now belonged to the people. Hence, the term 'property' is infused with historical meaning.

A modern definition of property is provided by Ostrom and Schlager (1996), who state that a property right is a 'social relationship between a resource user and other potential users, with respect to a particular object, place, or feature of the land'. Another definition offered by Libecap (1989) defines property rights as 'the social institutions that define or delimit the range of privileges granted to individuals to specific assets'.

Property rights, then, are essentially institutions (North, 1990), and the stability of these institutions has more to do with whether an individual judges adherence to the rules to be cheaper than misbehaviour - rather than based on that individual's general satisfaction with the institution (Finke, 2000). The main point is that property institutions create expectations about the behaviours and strategies that other actors choose. Given these definitions, and the common understanding that property rights are institutions, debates on common vs. private property have still been dogged by confusions and misunderstandings due to different interpretations of central concepts. Hence, it seems prudent to provide a brief overview at the outset in order to clarify some key terms and concepts. First, there is a tendency to mix up *common property* and *open-access* regimes.

'Open access' implies that no one has a legal right to exclude anyone else from using the resource, whereas common property denotes a situation where members of a clearly defined group has the legal ability to exclude others from the resource (Ostrom, 2000). Often, the case of privatisation has been advocated in order to curb what has traditionally been perceived as the 'tragedy of the commons' (Hardin, 1968). However, the commons that Hardin refers to are actually open access (McCay, 1996). The next mix-up occurs when talking about *common property regimes* and *common pool resources*. Whereas the first refers to the institutions governing resources, i. e. the social relationships, the latter refers to the physical characteristics of the resource (Ostrom, 2000; McCay, 1996). The key issue is that 'property'

is not a feature of nature, but of culture – hence, ‘common property’ does not describe the resource itself, but rather the relations that society establishes towards that resource. Elinor Ostrom has long argued for the supplanting of the term ‘common property’ with ‘common pool’ to avoid such confusion. Common pool resources often have specific characteristics; such as mobility, fluidity, or extensiveness, and present problems to human institutions due to the difficulties in bounding or dividing them. All common pool resources share two attributes: a) it is costly to exclude individuals from using the resource through physical barriers or legal instruments, and b) the benefits consumed by one individual subtracts from the benefits available to others. Using ‘property’ in the term employed to refer to a type of good, reinforces the impression that goods sharing these attributes tend to share the same property regime everywhere - which is not the case (Ostrom, 2000). Hence, ‘common pool’ is not the same as ‘common property’ (McCay, 1996).

More conceptually, a ‘property regime’ may be said to consist of two components – *property rights*, which are bundles of entitlements defining owners’ rights and duties in the use of a particular resource, and *property rules*, which are the rules under which those rights are exercised (Bromley, 1991). Property rights regimes differ by the nature of ownership, the rights and duties of owners, the rules of use, and the locus of control (Hanna and Munasinghe, 1995). A simple taxonomy of four different types of property regimes has been widely used throughout the property rights literature, namely the following:

Private property – *res privatae* – assigns property to identifiable individuals, which guarantees them the control of access and the rights to a socially acceptable uses (Black, 1968; quoted in Hanna and Munasinghe, 1995).

Common property – *res communes* – is owned by an identified group of people, invested with the right to exclude non-owners, and the duty of maintaining the property through constraints placed on use (Bromley, 1989; and others).

State property – *res publicae* – is owned by citizens of a political entity (the State), who in turn invest rule-making authority with a public agency, and citizens have the right to use the resource within the rules established by that agency (Black 1968; quoted in Hanna and Munasinghe, 1995).

Open access – *res nullius* – is characterised by the absence of rules and rights to govern a particular resource; in other words, it is non-property open to all (Bromley 1989).

However, even though this simple categorisation provides a framework for thinking about property rights regimes, the actual tenure regimes seldom conform to the idealised categories of property identified by scholars (McCay and Jentoft, 1998).

Despite the prevalent confusion regarding terms as outlined above, there tends to be agreement that clearly defined property rights are considered a pre-requisite for efficient allocation and sustainable use of resources, as the danger of appropriation may cause disruption of investment, or create incentives for exhaustive usage. However, property rights institutions are under constant pressure of change, as it implies restrictions on available alternatives, and self-interested individuals will have the incentive to change institutions to better serve their own interest (Finke, 2000, North, 1990). But alterations tend to occur slowly, as the build-up of new expectations takes time.

The Case for Private Property Rights

Harold Demsetz in 1967 wrote a paper entitled 'Towards a Theory of Property Rights' where he argued forcefully that private property rights were superior to communal property rights by virtue of the fact that private property rights *internalises externalities*. Taking title to land as an example, he stated that private ownership to land would internalise many of the externalities associated with communal ownership, and that an individual owner, vested with ability to exclude other potential users, could realise the rewards emanating from a well-managed property. A situation where owners carry both the benefits and associated costs creates incentives to utilise resources more efficiently, according to Demsetz. An accompanying argument was that private ownership greatly reduces the costs of negotiating remaining externalities – in other words, the transaction costs of negotiation are lowered within the setting of a private property regime. To substantiate his argument, he refers to a case study of an Indian tribe in the American Southwest engaged in fur trade, based on the work of the anthropologist Eleanor Leacock. The findings of Leacock demonstrated a clear relationship between the evolution of private ownership to land among the Montagne Indians,

and their increased engagement in the commercial fur trade, a fact Demsetz used to underpin his point about private property leading to greater efficiency and productivity.

Arguments in support of private property rights have emerged after Demsetz wrote his paper to reinforce the main claims. Key arguments include greater security of tenure, induced investment and hence higher productivity and efficiency, the potential of private property to function as collateral for loans and thus enable investments, and the belief that secure private tenure curbs degradation by taking into account externalities.

The Peruvian economist Hernando de Soto is an ardent advocate of the formalisation of private property rights, as he sees the absence of formal entitlements as one of the key stumbling blocks to getting poor people out of their poverty. The main line of argument is that poor people actually do own assets, but that these assets are worthless without formal title because they cannot be used as collateral or investment – informally owned assets represent ‘dead’ capital, whereas a formal titling systems would enable the conversion of that dead capital into ‘live’ capital. Although de Soto to a great extent focuses his research and writings on urban dwellers and entrepreneurs, his arguments extend to cover ownership of natural resources as well, particularly land in rural areas. His main critics have argued that it is not possible to formalise titles in many rural contexts, as territorial boundaries tend to be fluid and where livelihood strategies – consider e.g. pastoralists in dryland Africa – depend on communal ownership of land as a means of risk spreading. We’ll return to these issues in the Discussion later on.

The Case for Common Property Rights

Much research has been conducted in the recent past to investigate the features of common property regimes, and many authors have emerged with optimistic writings stating the benefits of maintaining common property regimes in a variety of circumstances, perhaps with particular emphasis on certain natural common pool resources and management systems such as e. g. irrigation systems, social forestry, herding livestock, etc. Key features characterising a common pool resource, are high exclusion costs, the production of public goods, the benefit of spreading risk among members of a group, and the widely presumed equitability of communal systems (Ostrom, 2000).

Much of the research on common property systems has centred on identifying the conditions under which such systems thrive, and has consequently given rise to two major lines of arguments. Basically, two conditions must be fulfilled in order for common property management systems to function – one is a clear demarcation of physical boundaries of resources, and the other is the presence of unambiguous social boundaries, i. e. group membership must be in place for common property arrangements to work.

It is useful in this regard to employ Agrawal's (2000) synthesis of major research findings related to common property regimes. He has looked in particular at Wade's, Ostrom's, and Baland and Platteau's work, and what he has found, is that many of the enabling factors determining the viability of institutions for the commons that the authors have arrived at overlap - although there are some discrepancies. Below is presented an (abridged) overview of the resulting list of enabling factors, or preconditions, that, according to the researchers, need to be fulfilled in order to ensure a viable institutional framework for common property regimes to function in a sustainable manner.

There are four major categories; characteristics of resources, characteristics of the group using the resources, institutional arrangements, and external environment.

a) Resource characteristics

Small size; well-defined boundaries; low levels of mobility; possibility of storage of benefits from the resource; predictability.

b) Group characteristics

Small size; clearly defined boundaries; shared norms; past successful experiences; appropriate leadership; interdependence among group members; heterogeneity of endowments, homogeneity of identities and interest; low levels of poverty.

c) Institutional arrangements

Rules simple and easy to understand; locally devised access and management rules; rules easily enforced; graduated sanctions; availability of low-cost adjudication; accountability of monitors to users.

d) External environment

Low-cost and adaptable technology; low levels of articulation with external markets; supportive, non-interfering state, nested enterprise.

Some examples of successful community management that apparently adhere in part to these principles, are the *iriaiichi* system in Japan - where strict management rules were formulated informally by community members and enforced effectively by rotational patrolling and severe punishment schemes - and communally managed forests in the hill regions of Nepal (Otsuka and Place, 2001).

Factors Driving Privatisation

Now, having attempted to explain the term property and associated concepts, and having also outlined the major points of view used to argue the case for private vs. common property, it would be instructive to have a look at what factors underlie the current trend of privatisation of natural resources. The reasons for change 'stems from perceptions of entrepreneurs in political and economics organisation that they could do better by altering the existing institutional framework at some margin' (North, 1990). In the subsequent section, a few examples will be discussed and analysed in view of how they fit in with the perceived trend of privatising resources, followed by a discussion on the merits and demerits of the different regimes in various circumstances.

Many economists believe in the superiority of private property rights as it guarantees return on investment for rights holders. However, a change in property rights only occurs when the benefits outweigh the costs. The basic tenet is that changes in relative prices lead to changes in property systems (Finke 2000; Ensminger, 1992; North 1990). This concept, of relative price changes inducing institutional changes, has been dubbed the 'Dyson-Hudson-Smith' - model (Finke, 2000). However, relative price changes is not the only factor causing a move towards private property rights, as will be seen in the following.

Hard-stuck beliefs

Another driving factor leading to increased privatisation is the fact that the very idea of privatisation itself holds such strong appeal. Scholars of private property rights contend that

this type of property regime is superior to common property regimes (Agrawal 2002, Ostrom, 2000). Coupled with the fact that there has yet to emerge a strong, unified theory of common property regimes, it should come as no surprise that the private property view is so prevalent. However, as research is moving forward, there is still hope that the view might be more balanced in the future. As Baland and Platteau (1996) state, there is no unequivocal difference between common property regimes and private property regimes in terms of efficiency of resource use. Hence, it might be purported that private property regimes will tend to prevail as superior until enough substantial evidence has been amassed to go against the grain of the mainstream thinking.

Incentives and the ratio of benefits to costs

In order to explain the strong appeal of private property rights, consider an example from agriculture – a farmer who owns his own land and labour is likely to see a strong relationship between his investments into his private property and his produce. However, were he to be a member of a co-operative, that relationship and the incentives to invest would be much weaker. The more people that see the relationship between investment and productivity as weak, the more they will be enticed to free-ride, and the weaker the economy will become in a generalised manner of speaking. Incentives, then, is a key principle (Ostrom, 2000). Concerning the ratio of benefits to costs, this relates in part to the characteristics of the resource, as extensive and fluid resources make it hard to enforce rules, and therefore could result in costs of upholding a common property arrangement outweighing the benefits (Libecap, 1989).

Demographics

One aspect that has not been treated in any great detail by common property theorists, according to Agrawal (2002), is the issue of demographics. Increased urbanisation and migration towards the cities will tend to undermine institutions in the rural areas, as the group dynamics underpinning the institutional functioning depends to some degree on the stability of the group - particularly referring to the points regarding smallness, homogeneity, and interdependence of individuals in a group (Agrawal, 2002). If the group is fragmented by a high degree of mobility of its constituents, which is what happens when rural dwellers start migrating to the cities in search of work, there is a palpable danger of the institutions collapsing, and either reverting to open access, or moving towards some form of privatisation as each individual seeks to maximise his or her self-interest.

Markets

Concomitantly with the trend of increasing urbanisation and migration, there is a widening spread of market relations. Scholars to a large extent agree on the fact that increasing integration with markets tend to have a negative impact on common property regimes – specifically when improved infrastructure helps to integrate rural resource systems users with markets and other users (Chomitz, 1995 and Young, 1994; cited in Agrawal, 2000).

Common property institutions are often established and designed in order to spread risk, by pooling resources – e.g. mobility and storage are means of coping with oscillations in production, but the market offers a competitive way of dealing with these same risks; by allowing individuals to specialise within one field. Specialisations allow the producers to exchange their surplus output, and hence individual produces can mitigate the need for migration and storage. Moreover, markets also present ‘alternative arenas for the provision of credit and generation of prestige in ways that can undermine local institutions’ (Agrawal, 2002). Libecap (1989) notes that forces driving institutional change in property regimes relate to new market prices and production possibilities that old arrangements were not easily able to grasp.

Game theory has been a key tool in analysing collective action problems, and has brought to light many interesting observations. For instance, Baland and Platteau (1996) observe that the payoff structure of a leader in a co-ordination game matters a lot, and, paradoxically, ‘nice’ – i. e. non-punitive - leaders do not ensure better co-operation than do ‘not-nice’ leaders. Power is another aspect of key importance, as a powerful leader may ‘lay down social norms that force everybody to co-operate, regardless of their individual interest’ (Baland and Platteau, 1996). And, following the synthesis of design principles, small groups characterised by ‘sameness’ and ‘togetherness’ are more likely to succeed in collective action settings than groups lacking these features. However, game theory has also shown that many different outcomes can be sustained as equilibria by rational actors, making the problem quite complex, and leading some authors to state that ‘what evolution produces will largely be a matter of historical accident’ (Binmore, 1992; cited in Baland and Platteau, 1996). Culture and history also matter greatly, as do political parameters (North, 1990; Libecap, 1989).

However, even though many of the above factors point towards increasing privatisation, this transformation is not simply brought about by converting common property regimes into

private property regimes at the snap of one's fingers. Private property rights depend on a common set of rules for enforcement, who has rights, and how returns shall be distributed (V. Ostrom, 1989; cited in E. Ostrom, 2000). Even though crafting a set of rules that provide strong incentives for the majority of individuals involved, implementing private property rights regimes might still be met with strong resistance from people who had vested interests and benefited from the previously existing system (Ostrom, 2000; Baland and Platteau, 1996; Libecap, 1989). Furthermore, Libecap (1989) states that the net social gains from changes in property rights at any time are likely to be modest, as it is difficult to resolve the distributional conflicts inherent in major changes in ownership arrangements.

Some Examples

Privatisation and Pastoralism in Mongolia

Studies done on Mongolian pastoralists (Fernández-Giménez, 2002) clearly demonstrate the existing conflict between pastoralists' need for tenure security and spatially flexible patterns of resource use. 21st century Mongolian herders struggle to maintain a lifestyle of transhumance spanning millennia, while confronting institutional challenges that have arisen as a consequence of modern reforms aimed at liberalisation.

After 70 years of Communist rule, Mongolia held its first democratic elections in 1990, and subsequently began the process of reforming its society and economy. National-level structural changes were implemented in order to free up the economy. This meant, among other things, that pastoralist herders now bore the sole responsibility of all production inputs, risks and responsibilities as the collective – the regulatory institution for pasture use – was dismantled, and livestock privatised. The loss of the collective as an institution has resulted in a deterioration of services, and the pastoralists have largely been left to their own devices. High unemployment in urban areas has led to an increase in urban-rural migration, as the abolition of collectives has opened up the opportunity for non-herders to buy their own livestock. Thus, many city-dwellers have migrated to the countryside in the hope of making a living of livestock, leading to the situation where more households have to share the same resources.

Concomitantly with the process of privatising livestock, herders have also gained the exclusive rights to livestock shelters that have been built by themselves. Thus, although most pasture land is, technically speaking, State property managed on a commons basis, in reality

herders that set up shelters simultaneously lay claims to surrounding land, in effect establishing an individual right to that plot. In a sense, there is an ongoing process of privatisation of land along with the privatisation of collectives and shelters. Why should this be problematic? Wouldn't demand for secure shelters in turn lead to a demand for formal property rights that would guarantee the owners' rights against trespassers?

There are basically four reasons why it is difficult to establish a system of formal title among Mongolian pastoralists. Herders use multiple, overlapping, and contingent resources with inherently shifting and vague resource boundaries, in combination with a prevalence of numerous and overlapping user groups pledging an ethic of access – thus making it difficult to exclude other potential users. Increased privatisation would lead to increased sedentarisation as herders would need to remain on their plots in order to protect it from intruders. Mobility would decline, and with a reduction of mobility, there would be an increase in out-of-season grazing on fragile areas and also an increase in trespassing, augmented by the influx of new herders from nearby towns and cities. Apart from a bigger concentration of herders and less mobility, another consequence of the liberalisation has been an increase in inequality, as the more powerful have grasped the chance of gaining rights to more land in absence of a formal regulatory system and the breakdown of informal arrangements. The key challenges, therefore, comprise a prevalence of power asymmetry, i. e. unequal access to resources, and problems of bringing about collective action due to large and heterogeneous groups. Another major problem is that of legitimacy – if the ongoing process of privatisation is brought underway without gaining legitimacy with pastoralists at large, this lack of legitimacy will result in a *de facto* situation of open access.

Agriculture and Acrimony in Spain

In Europe, there was a trend of increasing privatisation of the commons during the 18th and 19th centuries, and below follows an example of how this process influenced forestry regimes in Spain. There was a prevalent belief that common property institutions as such were inefficient, and they were therefore done away with on a grand scale, including those that were in fact quite well-functioning (Aizpurua *et. al.*, 2000). Overlapping and flexible property rights were not considered conducive to the introduction of market liberalism. However, attempts at reform from the central government in Madrid met with fierce opposition from farmers and villagers in the regions, who had established a regime of common management where rights of access depended on an individual's relationship with the local community,

and where no-one had individual shares of the property. Flexible use patterns and arrangements prevailed that were not adequately understood by the authorities. At the beginning of the 18th century, the central authorities passed a law that turned all common property into public property. This new piece of legislation only acknowledged two kinds of property rights, namely public and private - hence the notion of 'communal property' disappeared altogether from legal jargon. However, for the time being, the change was merely nominal, not having any real impact on the actual situation – farmers basically went about their ways as they always had. Later on, environmental concerns on the part of the central government caused it to intervene more forcefully into local politics in an effort to implement reforestation schemes on agricultural lands in an attempt to increase the declining forest cover. As there now existed only two forms of land rights, private and public, and most of what had previously been communal land now was public and therefore under the jurisdiction of the State, farmers resorted to applying for private property rights as means of resisting government meddling. This is what happened in Northern Galicia – where the process of individualisation was, paradoxically, a means by which to defend common ownership – the peasants' initial opposition against privatisation eventually turned in its favour (Galilea, 1998).

Concern with Commons in Zimbabwe

Studies that have been carried out on social forestry schemes in Zimbabwe have caused some researchers to warn against the undue optimism on the part of 'common property idealists'. They assert that there is a fair degree of misplaced optimism regarding common property resources management (Campbell *et. al.*, 2001). Their studies bring to light the prevalent breakdown of local institutions for communal management, and the lack of other alternative institutions to take their place. The authors say that the degree to which common property management has been portrayed as being relatively easily implemented and successful – 'even in the presence of adverse pressures' – could lead one to believe that it is fairly easy to implement CPR-systems, and they wish to take issue with this notion. Their analysis is largely based on observations of the communal areas of Zimbabwe, and these areas consist of grazing and woodlands that are jointly used by surrounding households. The absence of appropriate national legislation hampers the incentive to develop viable local management systems, argue the authors. An example is the fact that locals' usage of resources is merely allowed to fulfil their 'own needs', a restriction that Communal Lands Forest Products Act does not impose on outsiders who may exploit resources by obtaining permits from the state, thus bypassing

village structures. Different sections of the community living in these areas demand different things from the communal lands – the richest 20% want the commons largely for cattle feed, whereas the poorest 20% are reliant on a range of woodland resources to sustain their incomes. Thus, the joint management systems tend to be dominated by the more powerful interests, benefiting certain sections of the community at the expense of others. The demise of community values and a rise of individualism and household-oriented behaviour, is resulting in the decline of co-operation. There is a general trend of breakdown of ‘traditional’ institutions for management, with the resulting lack of enforcement of rules, etc. Furthermore, poor soils and low rainfall productivity of many woodlands result in low value – this fact contributes to the difficulty of communal management, as transaction costs are more easily overcome when the value of the resource is high.

Discussion

In the case of the Mongolian pastoralists, privatisation was largely driven by the government’s desire to open up the economy to new markets, perhaps, I would suggest, in combination with hard-stuck beliefs regarding the gains to be had by privatisation. It was initially a supply-driven process, whereby the government issued a decree that the former Communist institutions, the collectives, should cease to exist, along with the new situation that livestock shelters were the property of the builder. These factors then led to an endogenous process of individualisation of land, but without formal titling, as land still legally belongs to the State. Thus, one ends up with a sort of ‘limbo’ situation, where some natural resources are privatised – livestock – whereas corresponding resources – land - is not. The results have been increased inequality, increased uncertainty, and decreased flexibility, all serving to make the life of the pastoralists more tenuous.

In this instance, it might have been an idea to go ‘all the way’, i .e. to formalise private ownership to land in order to halt degradation and increase security and productivity. But it is far from certain that a formalisation of rights would have been appropriate in such a setting. Evidence from pastoralist communities in African drylands has shown that implementing formal titles in such environments is fraught with difficulties. Cousins (1996) underscored this by stating that ‘nonexclusive rights [function] best in non-equilibrium ecosystems’. Bromley and Larson (1990) developed a model to test whether private property

regimes were superior in terms of halting degradation, but found that the model rejected any such superiority. On the basis of these findings, they argued that implementing private property as a solution to resource degradation in developing countries was not going to solve the prevailing problems. Finke (2000) also states that private property systems don't make sense in arid regions. Furthermore, Bromley (1989) attacked the belief that private property rights *per se* are needed in order to spur economic growth, accusing the proponents of this view of confusing cause with effect. A study by Migot-Adholla and colleagues (Migot-Adholla et. al 1993; quoted in Lund, 2000) reinforces these standpoints. Studies of linkages between land tenure and productivity in Kenya and Ghana yielded no marked differences – productivity did not increase with individual tenure arrangements. Rather, it was concluded that factors *other than* land tenure were decisive in determining the level of development.

Regarding the argument of privatisation increasing security of tenure, Bromley and Sjaastad (Bromley and Sjaastad, 1997; quoted in Lund, 2000) hold that the security-investment argument may be reversed, i. e. that farmers need to invest in their land, e. g. by irrigation or tree planting, in order to obtain security of tenure, which makes the argument of the need for securing rights in order to make investments less convincing. Moreover, the notion that private property rights increase tenure security ignores the fact that it might increase the security of some, but often *at the expense of others*. Especially in an African context, where a plurality of tenure systems tends to be the norm, i. e. where one user has the right to plant and harvest trees, and another to graze animals, a third to grow crops, etc., increasing security of tenure for one of them would necessarily exclude the others. But it tends to be forgotten that increasing security will, in many cases, result in the corresponding decrease of security among other stakeholders. Lund (2001) thus argues that the privatisation processes in Africa have actually led to increased insecurity and conflicts. In his view, institutionalising conflict resolution mechanisms is more important than clear-cut reforms, and this contention would also seem to apply in the Mongolian case. So, in Mongolia, instead of concentrating a lot of resources into formalising rights, it would seem advisable to focus on other institutional arrangements to govern resource management – e. g. institutions regulating mobility and resource use behaviour, rather than allocation of physical resources.

In the case of Spain, it is a sort of perverse example of how privatisation was driven not by any of the factors discussed under the section 'factors driving privatisation', but as a means of protecting what was perceived as a well-functioning commons system. Hence, we have here a

functioning communal system characterised by homogenous communities (the villages in rural Spain at that time may be assumed to be pretty homogenous) where a system of co-operation emerged as a common understanding, as the value of the agricultural land was high enough to merit the transaction costs involved in crafting common property management institutions. However, when these very institutions were threatened by the State, the farmers saw privatisation and fragmentation as the only means by which to protect their own interest, thus getting rid of a well-functioning management arrangement.

Even though the Spanish example would seem to augur well for communal management in the situations where the State does not meddle, the example from community forestry projects in Zimbabwe serves the purpose of illustrating how undue optimism can be carried too far for the cause of communal management. Common property literature resonates with optimism regarding the potential of common property regimes for sustainable management. Communal forestry management in Zimbabwe has not been particularly successful, and the researchers (Campbell *et. al*, 1990) ponder whether this is due to the absence of an enabling State – for example, locals are restricted in the use of forests, whereas external agents are able to buy permits of extraction. Local institutions are breaking down, and are unable to cope with increasing market demands. Heterogeneous groups and the absence of legitimacy of local institutions pose serious problems for the implementation of common property arrangements. Some pertinent questions that arise from the investigations of Campbell *et al*. are: Are some natural resources more conducive to management on a commons basis than others? They note the prevalence of irrigation systems in the literature on common property resources (see e.g. Ostrom, 1992; Tang, 1992; Uphoff, 1986). And, as already noted, the value of the resource will definitely influence the likelihood of success. Another point pertains to the researchers themselves; the observation is made that few of the researchers involved with studies on common property management are from developing countries. Hence, they argue that developing country researchers need to become more aggressive in their publications and circulation of their research. They also venture the opinion that CPR enthusiasts may be based more on ideology than facts, which is precisely the error committed by the other side of the camp, as documented by the former World Bank economist Joseph Stiglitz (2002). The IMF's pressure to liberalise and privatise in developing countries certainly appears to be fuelled more by ideological conviction than empirical foundation.

The authors thus lament the lack of congruence between theory and reality, but press the point that they are not negative towards CPR *per se*, but would like to see a more nuanced approach

towards common property management. In their view, the current classification of property rights is too simplistic, and does not do justice to the real-world situation.

Regarding the issue of equality in commons systems, many have argued that common property regimes promote redistribution and equity. During the later decades, a large amount of research has been done on communal management systems, and this steadily increasing body of research has proved that the common property regime is not merely a residue of 'pre-modern' societal relations, but rather a well-functioning arrangement in many contexts. Common property regimes function best when groups are small and homogeneous, and when the so-called 'design principles' are adhered to in general (clear borders, etc). However, the notion that well-functioning common property systems are necessarily egalitarian does not hold true, as pointed out by Quiggin (1993). He claims that the general attraction of common property regimes has been the appealing perception that such regimes embody equity – but empirical research has revealed that there are a lot of common property systems that exist with inherent and sustained inequalities. He argues that common property can only be understood in the context of associated private property institutions. (For example, individual smallholders with private property rights may congregate into common property regimes in order to achieve economy of scale).

Taking as the point of departure the assumption of an existing common property regime for a common pool resource, it could be possible to see that the major factors determining whether this common property regime would evolve into a private property regime hinges very much upon the success or failure of the collective action, i. e. whether or not communal management is viable. Hence, it would make sense to discuss the factors based on the design principles synthesised by Agrawal, as these characterise what is believed necessary to achieve a well-functioning communal management arrangement. If the arrangement fails on too many points, it would be tempting to claim that there would be an inevitable move towards privatisation.

However, this approach is flawed in some respects. First, even though the synthesis provides a starting point, it does not represent a comprehensive theoretical underpinning for addressing the characteristics of common property resource management. Agrawal (2000) notes that such lists of enabling factors suffers from epistemological difficulties, and, as he puts it, 'instead of focusing on lists of factors that apply to all commons institutions, it is likely more fruitful to

focus on configurations of conditions that contribute to sustainability'. Part of the problem lies in the preponderance of case studies as the major research approach, coupled with different analytical approaches. Another objection to working from a foundation consisting of these data, is that even though one could state that a commons institution would likely fail if a given number of the enabling criteria were not met, this would not necessarily lead to the natural emergence of private property regimes. Instead, the system might collapse altogether and revert to a open access resource, or the State might intervene to establish a centralised state-governed system.

Conclusion

As we saw initially, 'property' is not a thing, but a condition, a process, defined by the social relations between people. Hence, a property right that is not recognised by others doesn't have much value – it is the social recognition of a property holder's rights that count. This notion is important, as the concept of property sometimes tends to be treated as something in and of itself, outside the realm of social relations.

Keeping this fact in mind, it goes to show that the increased tendency of privatisation and individualisation of property rights, fuelled by a variety of factors, also implies that these rights necessarily must be recognised by others, be it by force or consent. In a sense, then, the degree of privatisation depends on the legitimacy of the process, i. e. whether it is demand – or supply-driven. Privatisation that is imposed from above often will fail because it lacks the most essential feature of property rights, recognition of the rights of title holders.

Demsetz' original notion that privatisation occurs in order to internalise externalities is not an adequate explanation in all cases, as we have seen from the section on driving factors. The associated arguments, like greater security of tenure, induced investment and hence higher productivity, also fails to materialise in many cases, but again this would seem to be linked to the process itself, whether or not the establishment of privatisation is endogenous or exogenous. As noted, exogenous creation of private property arrangements tends to fail because it rests on the above assumptions that do not necessarily hold true. This is particularly true in contexts of ecologically marginal lands, where notions of property often are flexible and fluid in order to accommodate the variability and stochastic nature of the surrounding

environment, where risk reduction tends to be more important than maximisation of productivity. This was the case both in the Mongolian example, and also a host of other examples from the African regions, where formalisation processes have been set in motion with the hope of reaping gains of increased security and productivity, but where the necessary conditions were not met.

Turning to the case of the commons, one could be excused for infusing the idea with undue optimism based on ideological conviction, given that it offers a potentially viable alternative in the cases where private property regimes would naturally fail. However, even though research has shown that there are many cases where common property systems seem to work well, the optimism need to be tempered, and some of the ideas of commons as being inherently more egalitarian needs to be scrapped. Based on the synthesis of several common property researchers' work, there seems to emerge a consensus around certain factors that are conducive to common property regimes, i. e. small and homogenous groups, clear demarcation of boundaries, and a high-value resource – and, moreover, the support of an enabling State. However, this begs the question, what happens in the cases where these conditions are not met, and where privatisation is not a viable alternative – such as e. g. in arid or marginal areas, where migration and demographic fluctuation has given rise to a diverse and large population that does not easily agree on terms of co-operation? I think this situation emerges as one of the most interesting issues, as it presents a challenge to both schools of thought - as well as a very real challenge in terms of practical policy-making, such as e.g. institutionalising conflict-resolution mechanisms.

Thus, it seems also that the general arguments underpinning the two schools only hold true under certain specific conditions, such as when group size is small, homogenous, and valuable resource, then this is conducive to fostering co-operation. On the other hand, privatisation would occur in instances where resources are valuable as well, where there are not too many overlapping and multifunctional rights already in existence, and perhaps most importantly, where it is demand-driven, rather than imposed from above.

Hence, it appears that it serves no purpose to lionise one of these approaches, as there will be differing contexts suitable for different institutional solutions. As was noted in the section on driving factors for privatisation, apart from markets, demographics and incentive structure, culture, politics and haphazard evolution also play great roles in determining how, when, and

to what extent privatisation processes occur. What is important to keep in mind, however, is that even though a natural resource management regime functions well in one setting, it doesn't necessarily follow that it is transferable to a different setting. This points towards a need to depart from ideological stances, and rely more on empirical evidence when making policy decisions regarding whether or not to introduce private property rights to natural resources.

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