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Governance, Property Rights and Sustainable Resource Use: Analysis with Indian Ocean Rim Examples

Abstract

Governance and property rights are closely linked and sustainable (natural) resource use is influenced by both. In studying the matter we need to take account of what is the legal position (the position *de jure*) and the actual situation (the position *de facto*). The situation as far as legal rights are concerned often diverges from the practice in developing countries because of costs and problems involved in enforcing property rights. Realistic policies must take this into account.

In the past Western economists seem to have concentrated on two contrasting forms of property rights as far as resource management is concerned, namely, private property and open-access property. This dichotomy has tended to result in their support for the establishment of private property or where this is impractical, state property. The effect has been to dispossess the owners of communal or village property with many adverse consequences, examples of which are available from India. Where state property or control over natural resources, such as forests and fish, has been established, this has tended to be top down. The economic and social wisdom of this is being increasingly questioned and there are calls for greater community control over natural resources or their co-management. Some of the issues involved are illustrated by examples primarily from India. Furthermore, difficulties of sustaining communal resource systems in a dynamic world are discussed.

1. Introduction and Historical Background

Economists have been aware of the importance of good governance and property rights for the sustainability of resource use and economic welfare for a considerable time. Adam Smith for example clearly believed that the first step towards assuring the economic wealth of nations is good governance, or more specifically peace, order and good government. Although the term sustainable development was not in vogue during Adam Smith's time, there is little doubt that he and all the great classical economic scholars were concerned both with means to achieve economic development and the sustainability of that development once achieved. This is for example obvious in the works of Ricardo, Marx and John Stuart Mill. Marx was concerned about the sustainability of the capitalist market system whereas both the concerns of Ricardo and John Stuart Mill are about the way in which population growth and the limited availability of land resources might restrict economic growth. Marx thought that the evolution of economic system would culminate in the establishment of communism, a form of governance which in his view would establish sustainable economic systems. On the other hand, Ricardo and John Stuart Mill concerns were that economic growth might prove to be unsustainable and that economic systems might eventually gravitate to stationary (sustainable) state in which the majority of the population lives at the subsistence level. Most economists, with the exception of the Marxists, assumed that for the most part the system of private property rights would prevail and did not specifically explore the influence of property rights on economic activity. In fact, major interest in this issue amongst economists did not emerge until the second half of the 20th Century (e.g., Gordon, 1954; Ciriacy-Wantrup, 1968).

Property rights and governance are closely intertwined. When individuals or groups have property rights in resources, depending on the nature of these rights, they are able to govern the use and allocation of the resources involved. It therefore becomes important as to who has these rights and how they will be enforced. Ease of enforcement may require state or community support for these rights. Otherwise the cost of retaining or obtaining rights

may be excessive and subject to brute force rather than the rule of law. Such an uncivilized state of affairs can be expected to have disastrous economic consequences.

Considerable debate exists in Western societies about the extent to which individuals and communities should be governed by higher authorities especially by central government. This debate has been sharpened in recent years by argument about whether natural resource use should be controlled by central government and its representatives or by local individuals and communities. This has to do with the extent to which individuals should be governed in their use of natural resources and the extent to which local communities should be controlled by higher authorities.

Berkes (1994) suggests that the desirability of central state control of natural resources has its origin in the writings of Thomas Hobbes. Hobbes argued in the *Leviathan* (1651) for the necessity of a central absolute authority such as the sovereign because left to their own free will individuals would be incapable of promoting their common good. Jean-Jacques Rousseau (1762) took the opposite point of view. He believed that left to their own free will individuals would organize themselves into communities to promote their common good. Local communities could effectively govern themselves and absolute central authority was unnecessary and less likely to promote the common good. Indeed, he felt that such free local communities were likely to live in harmony with nature. Centralists and those favouring the nation-state looked upon this as romantic point of view.

It can be argued that Adam Smith introduced a third point of view in the *Wealth of Nations* (1776). In this work he argues against Mercantilism, and state monopolies, all of which are able to prosper under absolute monarchy or absolute central authority extolled by Hobbes. Smith's system is based upon private property rights and freedom for individuals rather than rights of local communities as such. Furthermore, the function of the state is to facilitate individuals to pursue their own self-interest subject to competition with others and within a regime of private property rights. The role of the state is to facilitate the operation of the market system by ensuring secure private titles to property, providing penalties for

infringement of private property rights, providing services to ensure security of private property and the enforcement of economic or commercial obligations as in the law of contracts or the laws relating to sale of goods.

In addition, the state and its institutions, as well as community bodies, may find it worthwhile to foster social values which uphold this system. Some of these values for example, appear to have found expression in Protestantism and in Islam (Devahuti, 1965).

Thus, it seems that there are three somewhat different strands of thought relating to governance in Western societies. In turn these have consequences for property rights. The Hobbesian system seems to favour the ultimate allocation of property rights to the crown or absolute central authority, Rousseau favours control of property by local communities (communal control) whereas the market system favoured by Smith, supports a system of private property rights. Let us consider the nature of property rights.

2. Property Rights - An Array or Spectra of Possibilities

Property rights have many possible dimensions. In the literature four broad types of property regimes have been identified:

- (1) private property in which rights rest with an individual or legal entity;
- (2) state property (*res publica*) in which property rights rest with the government;
- (3) communal property (*res communes*) in which the resource is controlled by an identifiable community of users; and
- (4) open-access property (*res nullius*) for which access is free and open to all.

In practice, the divisions between these types of property are not hard-and-fast. For example, the state may have some rights in relation to private property e.g., it may impose an easement on the property, or there may be some rights of trespass by the general public on private or state property.

When a resource is private property, the right of exclusion exists, as is also the case for state and communal property, e.g., the local community may exclude members of other communities or individuals that do not comply with communal regulations. However, as North (1981) points out, exclusion is not always economic. Consequently, property for which exclusion exists as a legal possibility may become *de facto* open-access property or result in opportunistic use of the property by other than its owners, so that partial access occurs. Consequently, the type of market failures that occur for open-access property arise. This has happened in some cases where State ownership has replaced communal ownership. This is because the state has been less able to enforce or regulate the use of this property than the local community. An example is the transfer of community forests in Nepal to the State Forestry Department with its headquarters in Kathmandu. Whereas the villagers kept deforestation under control, the Forest Department proved to be unable to do this (Mishra, 1982). In some cases, even when property is made legally state property, it in fact remains under communal control as occurred in some parts of India, and also in some Polynesian and Melanesian communities in the Pacific. For example, marine areas adjoining villages remained under the communal control of these villages although legally they became crown or state property after colonisation.

3. The Prejudices of Westerners in Considering Property Rights, particularly Economists and the Practices of European Powers

Westerners appear to have shown a preference for two types of property rights: those of private property and state property. They have largely dismissed communal property as a means of management of resources. In fact, they have tended to treat it synonymously with open-access arguing that common property results in serious failures in resource allocation and conservation. As is well known, open-access can result in socially damaging natural resource abuse, lack of investment in protection and husbandry of natural resources and the

loss of resources and species which it is socially optimal to retain. This however need not occur if communal governance is the case. Indeed, there will be circumstances in which communal governance offers the best prospect for the optimal conservation and management of a natural resource, e.g., fish or animals which migrate in the local community, a forest such as water-source forest which provides positive externalities to the rest of the community, and so on.

British and European practice was in the main to make all property either crown or state property or private property. In Britain itself, the extent of communal rights over property was whittled away with the passing of time, communal land either being enclosed to become private property or being assigned to the crown or the state. This practice was extended to Britain's colonies. Forested land in India, although it actually was communal property and managed by local communities was widely assigned to the crown and eventually to the Government of India or Indian state governments. Thus, local communities were dispossessed of their traditional resources and their governance of the use of these. In many cases, this has accelerated environmental deterioration and has been the source of deep social conflict.

Gradgil and Iyer (1989) argue that prior to British colonial conquest, India had developed systems of communal management which favoured sustainable use of its natural resources. They go on to claim that 'British rule led to disruption of communal organisations and converted communally managed resources into open-access resources. These have subsequently been used in an exhaustive fashion. However, pockets of good resource management under communal control have persisted and are now serving as models for the reassertion of such communal control' (Gadgil and Iyer, 1989, p. 240). The type of effects described by these authors was not peculiar to the British in India. It was repeated elsewhere by other colonial powers as well as by the British. Furthermore, governments of newly independent countries often continued the policies which reinforced the power of the central government of the nation state. Even in the case of the People's Republic of China, similar

issues have arisen, e.g., in relation to the governance of the natural resources in Jingpo areas of China (Zhuge and Tisdell, 1996).

Although Gadgil and Iyer (1989) suggest that British colonialism in India was a major force creating open-access resources in place of communally managed ones, there is no doubt that the British system, in many cases, dispossessed local communities of their communal property which was then effectively converted into state property, not open-access property, either legally or in practice. Some central governments have continued with this process of dispossession of forest-dwelling communities and tribal groups, e.g., by attempting to establish areas for nature protection or of allowing the forest lands of minorities or tribes to become the private property of dominant groups in the country. The transmigration program in Indonesia for instance is an example of the latter as is the incursion of Bengali farmers onto forested land in the Chittagong Hill Tracts. In Australia, the assignment of aboriginal land to the early white settlers is another example where private property rights were effectively substituted for the communal ones of indigenous people. Both central and colonial governments were unsympathetic to communal property rights.

This may have been partly by design and partly as a result of ignorance. Even today there appear to be a few Western economists who believe that a resource held in common by a community is *res nullius*, a thing belonging to no one. This implies that such a resource is not appropriately managed for sustainability and suggests that there need be no moral questions about dispossession of the local community, because after all the resource belongs to no one. It is, therefore, a 'convenient' fiction. It is unfortunately one that some Western economists still believe. For example, one of the authors (Tisdell) had a public clash (at the International Conference on Global Agricultural Science Policy held in Melbourne in August, 1996) with an American economist (supported by an Australian one) who claimed that all forested land used for slash-and-burn agriculture in Asia was open-access land. This is, of course, not so and displays considerable ignorance. In fact, communal rules, for slash-and-burn agriculture differ between village communities in different parts of Asia.

4. Administration of Resources by the State, Local Communities and by Co-Management

All natural resources exist at a local level, and it is local people who for the main part depend most heavily on these resources for their livelihood and welfare, particularly in developing countries. But this has not prevented governments from using their power to gain control over many natural resources at the local level, and to manage these, as in the case of state forests, or to transfer these to private owners or lease these for economic use. Historically this process has diminished communal control over the management of natural resources. But there has been a reaction to this process amongst some economists and anthropologists. They see this process as undermining the sustainability of natural resource use.

The proponents of communalism claim that it results in practices that 'influence respect, responsibility, and stewardship and are highly participatory. The planning for management of resources held as common property is carried out by those most directly affected by their decisions, decisions that are designed to contribute to the continuing sustained use of the living resources. These practices, emphasize, local control, self management, and to the extent possible, self sufficiency. They are based on co-operation rather than competition, the collective sharing of a resource rather than the individual attempting to maximize yield without reference to the commodity' (Jacobs, 1989, p. vii).

Berkes and Farvar (1989) see considerable virtue in communalism and traditional communal resource management systems. Berkes and Farvar (1989, pp. 3 - 4) point out that they 'emphasise *responsibility* to the community, rather than unbridled individualism glorified in some Western industrial cultures. Communalism is an important mode of thinking and of managing resources throughout the world from the nomads of the Arabian peninsula to native Amerindian peoples. It is no accident that traditional resource-management systems are often community-based'.

For the main part Berkes and Farvar (1989) sees only the positive side of communalism and in doing so, draw up a research agenda for social scientists and ecologists (Berkes and Farvar, 1989, pp. 5 - 6). It is suggested for example, that ‘the economists studying communal resource-management systems might concentrate on how joint control (by members of a community) saves scarce resources, as compared to state management or individual control’ (Berkes and Farvar, 1989, p. 5).

In reality, the arguments in favour of communalism are far from watertight. Ideal governance is likely to call for a variety or array of forms of governance: in some cases local community control of resources are ideal, in others formal state control of resources may be needed and in many cases, co-management by the state and local community may be called for, and in still other cases, management of natural resources is best let to individuals or households acting on their own free will. The important issue is to identify the circumstances in which these different types of governance may be socially ideal.

It is not possible to develop the theory of ‘ideal’ governance here but factors which should be taken into account in deciding between different forms of governance can be listed. To do so, should at least be a start in overcoming preconceptions about ideal forms of governance. Consideration of these factors suggests that co-management or side-by-side management (Tisdell, 1995a, 1996) of natural resources by the state and local communities is often ideal.

Difference in knowledge can affect the ideal form of management of resources. The set of knowledge of local communities differs as a rule to that available to state authorities particularly those located in central places remote from local communities. In many cases, local knowledge will be more appropriate to the sustainable management of local resources. However, the state *may* have additional valuable knowledge, e.g., as a result of research work or monitoring. Therefore, it can be important to work out side-by-side procedures to *share* this knowledge effectively.

Local governance or involvement of local communities in formulation of rules for management of local resources, is likely to result in greater compliance with these rules. This is both because the regulations will have greater acceptance locally (they are more likely to have social legitimacy), the purpose may be more easily comprehended locally as this adds to motivation to comply with the regulations and monitoring may be easier and administration costs lower, when these activities are mainly the responsibility of a local community which supports the regulations.

In relation to the Philippines, Alcala and Vande Vusse (1994, p. 14) observe, 'It is common for the personnel of the government agency interested with the protection and conservation of natural resources to assume that the agency does in fact manage them. Laws are enacted and numerous rules and regulations are promulgated by these agencies. To many, this is resource management. The government, however, does not have the capability, personnel and equipment needed to ensure that its policies, rules and regulations are enforced. The government must in reality, depend upon the people who daily use coastal resources to make proper management decisions'. They go on to point out that in the Philippines fishers are the real-day-to-day managers of fishery resources and government needs to co-operate at the village level if fishery resources are to be managed effectively.

At the same time, it needs to be recognised that there are cases in which it is not socially optimal to leave the management of resources to communalism. Consider the following cases: (i) Use of natural resources by a community for its own benefit may damage other communities due to unfavourable external environmental effects. State intervention may be needed to take account of the wider community. However, this needs to be done in an appropriate way and the intervention may fail completely if it is entirely top down. (ii) The distribution of political power, control over resources and distribution of income in some local communities is far from ideal. Without government intervention, situations of this type can persist. It may be necessary for central government to intervene to change or modify governance structures at the local level, even though this intervention should be sensitively

done if required. The actual governance processes that exist at local level are usually the result of a long period of social evolution and may be very sustainable and conducive to resource sustainability. This is why care is need in trying to impose new social structures. Nevertheless, due to technological changes and exogenous change, governance and social structures of value at one time in history may be inappropriate at a later time.

Table 1 lists some considerations that might be taken into account in comparing communal management of resources within state management and with co-management by the state and local communities.

Table 1 Factors to take into Account in Comparing State Management of Resources with that by Local Communities, and with Co-Management	
1.	Differences in knowledge about possible management practices and their impacts on productivity, environment and so on.
2.	Differences in knowledge about the social acceptability of various management procedures.
3.	Compliance with regulations - knowledge, monitoring, motivation.
4.	Transaction costs involved in the implementation of management procedures and economics of administration.
5.	Distribution of income and power in community and state governance structure.
6.	The existence of environmental externalities or spillovers extending beyond local communities.

5. Indian Rim Observations and Social Dynamics

Despite the negative comment by Gadgil and Iyer (1989) about the role of the British in alienating communal property in India, significant amounts of communal resources remained. In Tamil Nadu for example, remaining communal lands include *poromboke* or lands incapable of cultivation and set aside for public or communal purposes, and assessed and unassessed wasteland. Blaikie, *et al.*, (1992) estimated that such land covered almost 20 per cent of the geographical area of Tamil Nadu in 1981-82. Most was forested but smaller portions were used for cultivation and permanent pasture. They find that problems arise from the bureaucratic control of common property resources (CPRs). ‘The bureaucratic regulation

of CPRs is of particular concern in CPR-dependent villages, for this regulation is often subject to manipulation by local power to the disadvantage of poorer people' (Blaikie, *et al.*, 1992, pp. 262 - 263).

There is little doubt that 'modern' schemes for community based resource management (CBRM) can become hijacked by politicians, local or central ones. This has led to some despair. Sandalo (1994, p. 180) drawing on experience in Palawan in the Philippines observes that, 'Community organising has become almost like a fad, similar to the planned sprouting of NGOs. Every project proponent in an area is organising activities'. He finds that much time is spent in unproductive meetings and that CBRM has become subject to political patronage and interventions. Finally, he finds that government intervention to protect the environment are inconsistent. While in one place CBRM is being fostered to rehabilitate degraded environments, in other places, the natural environment is being destroyed with state permission. He says, 'in Honda Bay [Palawan], for example, mangroves are being rehabilitated simultaneous with the conversion of other existing areas into fishponds, in addition to the indiscriminate and unchecked cutting of trees for housing materials and charcoal making' (Sandalo, 1994, p. 181).

Communities can vary in many different ways that depend upon variations in social customs and codes. To some extent, castes in India society (and tribal groups) form sub-communities, interconnected with a wider community. Gadgil and Iyer (1989) argue that this stratification of Indian society has promoted sustainable resource use. It divides society into economically complementary groups so overall mutualism exists. They claim the caste system 'promoted sustainable resource use in two ways: by restricting access to many specialised resources of any given locality to just one endogamous group, and by linking together members of different endogamous groups in a network of reciprocal exchanges and mutual obligations' (Gadgil and Iyer, 1989, p. 242). Berkes (1989, p. 237 - 238) summarises the view of these authors in the following terms: 'Before colonisation, the ecological niche diversification (by varied caste access to different natural resources) ensured monopoly for a

local group in the use of specific common-property resources, and was instrumental in the long-term sustainable use of these resources. The historical trend of a deteriorating resource base throughout India is traceable to the forced conversion of communal property into state and private property, increased commercialisation, and the generally increased demand for resources'. While Gandhi had desired to reverse this trend, Nehru reinforced it increasing the power of the state with the backing of urban middle and trading class (Gadgil and Iyer, 1989, p. 251). He favoured top down policies and industrialisation and paid scant attention to the environment (Roy and Tisdell, 1995).

Nevertheless, the caste system still manages to function to some extent and there are at least remote areas of India where different groups still occupy different ecological niches and are involved in the type of exchanges indicated by Gadgil and Iyer. For example, this is so in part of Northeast India (Ramakrishnan, 1992; Tisdell, 1995b). However, these systems are under stress as a result of increasing population, demands for cash for industrial goods and growing commercialism. It is doubtful if they can be sustained. New institutional arrangements can be expected to emerge, but not necessarily in harmonious fashion.

In a world of change we also have to consider the dynamics of alterations in governance. As technology and other factors alter, the most desirable form of governance is liable to change, irrespective of whether governance is considered at the communal or state level. Major changes occur in property rights and governance over time. Thomson *et al.*, (1992) have outlined such changes in relation to land rights in Thailand. From the early 1800s onwards, there was a constant tendency in Thailand to increase the privatisation of land and the security of private tenure of land, particularly in relation to arable land. Much land was also put under state ownership. Consequently, the amount of land used as common property in Thailand has been greatly reduced since the beginning of the last century, a pattern similar to the European one.

In their concluding comments based on the Thai case, Thomson *et al.* (1992, pp. 154 - 155) seem to support the evolution of private property rights by stating that, 'The costs of

organising collective management are extremely high and its effectiveness is problematic. Privatization does, however, risk inequality at the subdivision stage when control over the resource itself is allotted to particular individuals. If this is one-time allocation, with no easy mechanisms to rectify maldistribution, inequities can pose a serious problem. It should be noted that maintaining common-property institutions in no way avoids equity problems; they are simply pushed back a step. They reappear when annual or other increments of reduction from the resource are harvested and distributed to users. Distribution rules specify who gets what, when, and how. The potential for inequity inherent in such regulations and practices is substantial'. They also indicate that community management of common-property resources is only likely to work if the political and economic costs of such management are low.

6. Concluding Comments

It is only in recent times that social scientists have started to come to grips with the complexities of governance, different forms of private property rights and their relationship to sustainable resource-use and development. Most economists have been slower than other social scientists to appreciate the complexities of the situation. Some still seem quite unsophisticated in their knowledge of these subjects, even though renewed interest in institutionalism is altering the situation.

Discussion of Indian Ocean rim examples highlights the importance of considering the dynamics of variations in property rights and governance (see also Ostrom, 1990). The Indian situation has undergone considerable change and this has been particularly so for Thailand. North (1981) has argued that socially optimal patterns of property rights are likely to evolve in society and that social evolution is towards the increased creation of private property rights. The latter has certainly been the case in Thailand. However, it is not entirely clear that evolutionary social and political processes result in an ideal distribution of property rights. Land may well become private property which socially may be better retained as common-property. It is not that evolutionary social processes involving property rights and governance lead invariably to perverse social consequences, but they do not necessarily result

in the best of all possible worlds either. Therefore, they need to be subjected always to critical intellectual scrutiny.

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