

Property Rights, Incentives, and Efficiency

NATURAL RESOURCES IN INDIAN LEGAL SYSTEM¹

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INTRODUCTION

Land is just one of the many natural resources. But this is scarce and has been subject to law and property regimes more than any other natural resource. The issue of entitlements to use land is one of the central concerns of law economics (viz. Calabresi and Melamed, 1972). In this paper I will discuss land entitlements but from the perspective of other natural resource like water, forests, grazing ground and fisheries. These are land based natural resources. Their legal statuses are mediated through land entitlements but are not identical. I will be dealing land rights and land laws for most of the time. But the perspective is different from that of agricultural or residential land.

Law and economics literature on property rights is a rich literature. But its data base and set of questions are almost always, those of the developed countries. Those are not directly usable for an ex-colonial country like India because there are some major differences in the legal set up. The Indian legal system was modeled in Western system but with an incentive structure that was very different from that of the West. Difference in incentives lead to altogether different set of property rights even though the models were the same. In this paper I will try to identify the differences and identify the kind of issues that arise in countries like India. The approach and analytical tools of law and economics are universally applicable even though the set of questions inquired may not be. In this paper I will show that the method of law and economics may provide deep insight about the efficiency of natural resource use in India.

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PRIVATE PROPERTY LAW

HISTORICAL PERSPECTIVE

One of the basic assumptions of law and economics is that the goal of the state and the legal system is laudable: like increasing efficiency of resource use, facilitating development, protecting de facto rights, or even equity in distribution. It is doubtful whether the colonial state can be considered benevolent. Governments certainly are able to increase economic performance and wealth by providing clear, secure title. But government responses to the demands for property rights are influenced by a variety of political facts. As Alston, Libecap and Schneider (1996) suggested, "Researchers must pay special attention to the complex political and bureaucratic process by which property rights are assigned." A clear understanding of the motivation of colonial state will give us a clearer perspective of Indian law on land entitlement.

In the year 1600 the East India Company was granted a Charter by the Queen of Britain to have exclusive right to trade with India for fifteen years. The Charter was renewed again and again till 1853. After it defeated the *Nawab* of Bengal in 1757, following a trade dispute, the East India Company officials had not thought of going beyond trade. They established a protégé as the Nawab, who would then grant extra favours to them, against other competing traders. However, the next Nawab, in the line of protégés, refused to extend excessive trade concessions. The rising conflict was again settled in the battlefield. No further chance was taken. The Company decided to take up political power directly and approached the Mughal Emperor. In 1765, the Mughal emperor granted the request and East India Company received its first territorial possession. The Company however, received more than it had asked for, because within the Mughal governance structure the emperor could only grant administrative and revenue (*Diwani*) authorities together. Almost overnight, after this windfall gain, the Company learnt that revenue earnings for this massive and prosperous agricultural tract, was a far greater source of income than trade. The later history of the East India Company is not only of trade in merchandise but also of, in fact more of, land revenue extraction. The revenue earning incentive decided their efforts at changing local rules and reforming legal institutions.

The Company could not make law. As *Diwan*, it was bound by Mughal Law. As a trading company it was bound by British Parliamentary Law. In 1773, the British Parliament subjected the Company activity in India to a Regulating Act. The Act was revised again and again. The legal system introduced under the Regulating Acts was primarily to pave the way for private development of property. The system (a) defined and protected the private rights, including the property rights. To secure the rights from encroachment by executives a Judiciary independent of the executive institutions of the state and acting as a check on them was created. (b) To facilitate economic relationship between propertied subjects, the public law favoured markets and contracts and

developed a number of conventions like the validity of the sale of property, binding nature of contracts in debt etc. Under the 1833 revision of Regulating Act a Law Commission was established for evolving a new system of civil justice for India. Ultimately in 1860 direct rule was promulgated. However, within this legal set up it was the interest of the East India Company that was to be promoted. The private property regime in India was thus qualitatively different from its counterpart in England. In course of time, the British Parliament abolished the monopoly rights of the East India Company, but did not make and substantive change in the revenue system it had established. Essentially, it was the revenue system devised by the East India Company, which existed during independence. The incentive structures created by the Company at the early stages have imparted indelible effect on the development of natural resources the country. Therefore, to understand the Indian situation one has to start from the early colonial period.

PRIVATE PROPERTY AND NATURAL RESOURCES

What the East India Company had received from the Mughal emperor was not ownership of land but only revenue collection rights (*Diwani*) in *persona*. Current system of land rights are developed on this grant, which leads some authors say that there is no real (*in rem*) right on land in India. The windfall gain of revenue collection rights created an asymmetric information situation. The revenue paying capacities of estates were private information of the landlords. The first settlement the East India Company adopted makes excellent economic sense. Under the Farming System (1772), estates were auctioned to the highest bidders. Under the infamous Sunset Law, if an estate owner failed to pay as per the contract within the sunset of a specified date, his estate was auctioned again. Both principal and agent received handsome returns. But the short-term contracts led not to underinvestment but to disinvestment. Following severe rent extraction one-third of Bengal population perished in famines. Desolate tracts found few bidders. This led to gradual lengthening of contract period³ and ultimately to Permanent Settlement for a hundred years (the *Zamindari* system). By then the Company officials had a fairly good idea of the revenue paying capacities of different estates. Or so they thought.

The long term contracts and political stability under Company rule brought considerable prosperity to many parts of India. This is evident from available information. But under the Permanent Settlement, the Company earnings were fixed for a hundred years in perpetuity. Very soon the Company officials realised that such a contract deprived the Company of an opportunity of sharing a part of the prosperity consequent upon the establishment of political stability. Therefore, in areas annexed later, in other parts of India, some experiments were undertaken to devise settlement systems in which revenue rates could be revised from time to time. One of these was the *Raiyatwari* system. The main feature that distinguished this system from the *zamindari* system was that the government did away with the intermediaries and made settlements directly with the

³ Williamson shows that solution to holdup problem is longterm contract or vertical integration.

actual cultivators. In course of time the raiyatwari settlement became the predominant settlement system in India.

The transaction cost for implementation of this alternative was substantial. Even in the very first raiyatwari settlement over a small experimental area, the state had to undertake a survey conducting measurement and assessment of land comprising of nearly 80,000 cultivators. In contrast, the Permanent Settlement, requiring little change of pre-existing institutions, could be made without any demarcation of boundaries, without any survey of land, without any attempt to value the land in detail or to record rights. The task was merely to identify a local agent who would deposit the fixed revenue at a fixed time. Ryotwari system saw the beginning of the registration system in India. But in India, the motivation to adopt registration system was very different from that of the West.

Rarely is any privately owned goods registered with the state. Possession is its proof if the matter enters a legal dispute. However, a thief in possession can claim title. How does the real owner establish his claim? He may approach court. But courts have to verify the claims. The verification process is easy if the possessors had taken some precautionary care like branding of possession. Branding of cattle, stamping serial nos. on automobile engines etc. are some ways that private persons try to prove their ownership of valuable goods. But individuals rarely brand all their possessions. One way to ease the system of verification by Courts is to maintain a registry. But keeping registers of something for the whole of the territory is a costly work. This may be justified only in case of valuable possessions, like land (viz Cooter and Ulen, 1999: 139-140). In the past land titles were secured by other means, like systems publicity, particularly to neighbours (Ellickson, 1993; Arruñada, 2001). In the West the registration system started in some nominal form in sixteenth and seventeenth century. It spread very slowly. England adopted the Torrens approach only in 1925. US is still trying to implement it.

The US land system relies on the maintenance of a public record containing the history of all transactions for all privately owned land. This is a stock gradually built up over many years, receiving records as and when transaction occurred. A buyer consults this record to gather *evidence* that the seller has good title. The purchase is made in good faith and the purchaser bears the risk of loss if in future, a claimant appears. In the Torrens approach that is being promoted in many Western countries, including US, the state guarantees the owner's title (Miceli and Sirmans, 1995). Evidently, this is a better system. But the progress is very slow because of the high cost of registration. In US the title holders are required to bear this cost. In establishing the ryotwari system in India the state bore the whole cost of registration. The high revenue earning gave the state enough incentive to meet the huge transaction cost for identification and registration of all title holders who would be asked to meet the revenue demands of the state. The cost of registration of subsequent transfer of property was left to the private parties. Transfer of titles without registration were not valid. Thus, the judicial process was aided by the existence of exhaustive register of titles. Verification of titles became verification of the documents (*patta*).

In that period, and even now, there are not many countries with such an exhaustive land record. One of the major problems of registration system discussed by Western law makers and scholars is how to protect rightful owner against possibilities like existence of unrecorded claims, errors in the public record, or incorrect opinion of an attorney conducting a *title search*. Whole institutions have come into existence to protect against such risks. Most buyers in the US purchase private *title insurance*, which provides financial indemnification in the event of a loss. The colonial law makers did not bother about adverse possession. One revenue payee was just as good as another. The judicial process came to terms by accepting land record as enough of evidence. In turn, the judicial system in India relies too heavily on registration and records in the matter of land and natural resource.

The other distinctive feature of the early colonial land registration was the meaning of property. Revenue earning purpose determined what was to be registered and what not. The agricultural land that could yield revenue was property worth registration with private parties. The rivers, waterbodies, woodlots and grazing grounds, which would not yield any revenue, were not properties. In fact, except water, the rest of these were regarded as 'wasteland' (Brara, 1989), which would cease to be wasted only if the state could promote its cultivation. In a way these were open access public land but only till settled with private parties. State property would not be right term since their values as property were not yet recognized. But these were public land with acknowledged pre-eminence of state in deciding land use. In the Ryotwari area, settlements of land were made with individual tenants (ryots) against payments of land revenue. Local tanks, woodlots and grazing grounds not producing any revenue, were not settled. Of these, the water resources did not exist in natural state. India had extensive irrigation system, a feature with which the British was not at all familiar. The irrigation works required regular maintenance. Revenue earnings were crucially dependent on the health of the irrigation works. But there was no private party responsible for the maintenance. This fact compelled the state to become a *provider*. In the Permanent Settlement areas such a problem did not arise. Estate owners were registered. But affairs within their domains did not come under the purview of public law for at least a hundred years. Private contracts between zamindars and tenants⁴, misleadingly called customary law, were effective on natural resources, including irrigation systems.

The settlement systems introduced in India include two other major types. One was temporary settlement (*Mahalwari* system) of North India. Unlike Permanent Settlement here the revenue rates could be revised every ten or twenty years. This system, introduced after the ryotwari system, did away with the huge transaction cost. But at the same time enabled the state to receive shares of increased benefits consequent upon their rule. The other was retaining of Princely states, where consequences are similar to those of the zamindari system as far as natural resource development is concerned.

⁴ All government records during this period describe that zamindars construct and maintain irrigation works (Sengupta, 1980).

INCENTIVES AND DEVELOPMENT: WATER RESOURCES

The Collectors of raiyatwari areas, along with their usual duty of collection of revenue, had also the moral responsibility of looking after the then-existing irrigation works. The users managed most of those. But every year some among the numerous works, failed. Since this created difficulties in revenue collection, the revenue officials tried to organise repair works. The Company government spent large sums of money under this head. Soon it was found that the money was not being efficiently spent since the revenue officials did not have the technical expertise for this kind of works. A post was created thereafter for an engineer. By 1819 a whole department headed by civil engineers was in existence in south India. This was the nascent Public Works Department (PWD) with numerous personnel and considerable expense. The activity opened up scope for technological development. By around 1830's, the irrigation department in south India could produce engineers like Sir Arthur Cotton, who were fairly well-acquainted with the indigenous canal irrigation works on Kaveri River and could take up modernisation and extension projects. In due course this system would inspire modern canal development in USA. It was necessary to record the irrigation works. By the 1880's the PWD could release a complete list of nearly 32000 tanks, existing in the raiyatwari areas.

The differences in incentive structures led to a completely different course of development in Permanent Settlement area. Between 1810-1890 a single reference to the irrigation works would not be found in official reports. Till today, the irrigation departments do not acknowledge the similarity between the south Indian tanks (*erie*) and those of Bihar (*ahar*). In the Permanent Settlement area of Eastern India the state did not become provider. But its legal system did not only perpetuate the indigenous incentives but also let those reach levels of excellence. In all likelihood, the local irrigation system had actually prospered during this period owing to the political stability brought about by Company rule. With detailed evidence (Sengupta, 2001: 114-115) about south Bihar, an extensive area with an excellent network of indigenous irrigation systems, I have shown that this area was immune to famine throughout the nineteenth century when the rest of India had repeated visits of severe famines.

The long-term contracts in hundred years settlement retained the scope of some private initiative. Being relieved of holdup scare the zamindars in Permanent Settlement areas had made some investments in modernizing structures of indigenous irrigation systems. However, their financial capacities were limited. Also, some other reforms of the colonial system that remains out of our discussion, had created negative incentives. So investment and modernization was limited. Large Princely States had better capacities and a few of them did more for irrigation development. Some of the great irrigation works of modern India were constructed by the rulers of Princely states. In contrast, private incentive was either absent or discouraged in ryotwari areas because of public property understanding. The following case from south India would show the type of disincentive-

Case- 1: During the modernisation of the Tamirabararni irrigation system in the 1870s, when the British engineers decided to construct an eighth *anicut* (weir) on the river, the potential beneficiaries had collected a sum of Rs. 30,000 on their own for aiding the construction. But the government did not use it on the ground that the beneficiaries might in future, use this plea asking for a reduction of rent. The fund was used instead for building a road.

The state had resources. It used finance and modern technology to construct not only an additional weir on the River but also, in due course, 3 reservoirs and 2 hydel power stations. This was not the loan case. The colonial state constructed modern irrigation works along with railways. But unlike railways, construction of irrigation works were confined to ryotwari and temporary settlement areas, where the state could claim shares of benefits. Eastern India, the former Permanent Settlement area, did not find any state investment in irrigation until independence.

After independence the state is vigorously engaged in its provider role. Canal irrigation has been extended several times. But private initiatives have no space in this development programme. In rare cases, where private parties made some investment, different provisions of the Constitution as well as State and Central Acts have been used to keep private parties away from water resource development.

Case 2: Tata Iron and Steel Company (TISCO) has been getting industrial and drinking water from Subarnarekha River since its inception. For this purpose it had constructed two small dams. But after the large Chandil dam was built on the river the state government declared the small dams illegal. The government did not agree that TISCO has a riparian and prescriptive right over Subarnarekha water by the fact of use of the water for last fifty years.

Case 3: Tarun Bharat Sangh is a renowned NGO that has changed the face of dry Rajasthan by construction of hundreds of water harvesting structures through peoples' initiatives. The founder of the NGO was given Magsaysay Award in recognition. The groundwater has been so enriched by extensive water harvesting that part of it has regenerated into streams that had dried up for long. The NGO then constructed checkdams on these rivers. The state has challenged action saying that the NGO does not have any right to obstruct the flow of natural streams.

There are two types of rights on flowing water. England recognizes riparian right. In order to facilitate private development of water resources, US curtails riparian right under reasonable use doctrine, and extend prior appropriation right. The later has no room in India. Some believe that India follows riparian rights system. This is doubtful. The Indian Constitution allocates legislative competence only to state through three lists (Union, State and Concurrent). Water rights of users in India are defined only with respect of irrigation water from government irrigation projects (the Irrigation and

Drainage Acts). On natural water users have not been granted any entitlement. The state enjoys pre-eminence in deciding land use. At any time, the public property concept on natural resources may be upheld by the court or an administrative order proscribing a private investment, had it been made by a headstrong investor.

INCENTIVES AND DEVELOPMENT: OTHER NATURAL RESOURCES

Along with the irrigation works other natural resources like grazing grounds or forests vested with the government from the day of introduction of the ryotwari system. But here the state never became a provider. On some of these resources it became *regulator* e.g. with respect to forests (Guha, 1989; Pathak, 1994). But that was at a much later stage when the legal system over natural resources have already been shaped by earlier actions on water resources. Following large scale commercial exploitation in open access condition forest regulations for conservation started during the late colonial period. In stages, about 90 per cent of all forests in India have been declared reserved and protected. Delimiting forests is another exercise that has considerable transaction cost. Implementation of reservation order on a patch of forest takes ten to twenty years of work. Pursuance of any protective provision need considerable information about the physical details as well as monitoring, entry regulations, policing, regular estimation of forest appropriation etc. etc. All these transaction costs were justified by commercial use of forests.

As noted, land not yielding any revenue was regarded as 'wasteland' (Brara, 1989), waiting to be settled by the state as revenue earning land. Village common land, often used for grazing, was the major victim. This was treated as 'surplus' land that can be distributed for agricultural use. Some later Acts, like the Tenancy Acts noted the alternative use of grazing grounds, and included some restraints. But these are often violated. Failing to acquire by other means sufficient land for allotment to the underprivileged the officials noted that the village common land vested to the government provides an excellent option. In spite of instructions preventing the distribution of such land, privatization has been carried out extensively through formal distribution or through legalization of illegal grabbing (Brara, 1989; Iyer, 1993).

In sea fishing fishers' customary rights have not received any statutory sanction. But as yet, these corridors have not found any use to make the state interested. Hence open access continues here. The fishers continue to use the sea as in the past. Thus, the traditional physical rights perpetuate but being without statutory property rights the fishers have always been vulnerable to encroachments. Intercommunity conflicts on questions of trespass in customary territories have been plenty. Those reach the court only when there is a criminal offence. The fishers had to adopt the course of agitation when the government in 1970s allowed trawler fishing. They succeeded in imposing seasonal ban on trawler fishing. Another round of agitations started after India government gave international joint ventures a free access to fish in the exclusive economic zone of the country.

LATER ACTS

Some later Acts, Administrative orders and Judicial Awards amended some of the deficiencies and extended partial entitlements to pre-existing users. Specific mentions may be made about the Tenancy Acts, which addressed rights of tenants and village commons. It is not that these rights did not exist. The Acts and Orders documented some of the pre-existing rights, which could be produced as evidence in support of claims. The exercise was partial in coverage (Sengupta, 1993). The documenting process, the Survey and Settlement Operations starting from the late nineteenth century, were heavily contested, sometimes in organized form. As Bates (1989) would say, investing in bargaining may at times, be better option than investing in development. The records that emerged are not always the reality. But these did away with the necessity of discovery process for the courts. Here is a recent case:

Case 4: The custom of fishing in tanks by *dhimar* fishermen of MP was in existence prior to 1861 and continued thereafter. Lately, the local farmers challenged it. The litigations went all the way up to the Supreme Court. In 2003 the Supreme Court turned down the claims of the *dhimars* on the ground that customs become a source of law only when they are recorded in statutes and are recognized by courts (viz. Upadhyay, 2003).

While customs and traditional rights cannot be exercised in absence of documented records, new rights cannot be granted. The following is another case that shows how pre-eminence of the state in deciding land use may restrain its productive and welfare use-

Case 5: In 1986 the Rural Development department had introduced a Tree Patta Scheme for encouraging the poor to grow fuel, fodder and fruit trees on government lands. Under this scheme the beneficiaries were given legal status in respect of usufructuary rights in trees; no right whatsoever was granted on the land. In about three years the scheme was withdrawn on the ground that granting *pattas* (titles) amount to privatisation of government land and is inconsistent with the existing Tenancy Act and Forest Act.

The selective nature of application of law become clear when one recalls that the Forest Departments regularly issue contracts to forest contracts for commercial use of forests.

PARALLEL PROPERTY LAW

Legal anthropological studies bring out that in third world countries in particular, there exists multiple normative constructions of property rights. Natural resources may be treated as different property objects under different legal systems existing simultaneously. This is called 'legal pluralism' (viz, Galanter, 1981; Benda-Beckman, 1995). An introduction to Indian legal system is not complete without an introduction of parallel property laws and their implications.

CUSTOMARY RIGHTS

The colonial authority was concerned that it will be politically and socially cumbersome to administer English or Western Law to supplant an already complex set of native rules. It was therefore, decreed that a vast area of residuary law was to be administered by the British courts according to 'justice, equity, and good conscience'. This then became a vehicle for recognizing some version of native law rather than imposing Western Law in India (Galanter, 1989; Washbrook, 1981). Thus parallel to the enunciation of these policies of 'public' law the Colonial Government had also attempted to define the bases of a 'private' or a 'personal' law of their subjects. The private law was to be on prescribing the moral and community obligations to which the individual was subject, and was to be made by the 'discovery' of existing customary and religious norms. Several British administrators had worked hard to discover "customs" and pre-existing norms including indigenous property relations.

This approach suffers from some very serious weaknesses. First is incomplete coverage. Every single sphere of social and economic life has numerous customs and norms. How many of these would be documented? Secondly, documents are necessarily simplifications, even vulgarization, of the actual custom. Also, these are prepared with a fossilized notion of the custom while those actually vary over time and space. Quite often the 'customary' is a reconstruct and had ceased to exist in consequence of social dynamics. Laws enacted to perpetuate customs invariably fail to correspond to the dynamic ground reality (Scott, 1996). A proof of a customary right in a court is documented evidence - an official note or even a historical or an anthropological account. Their perfections, if not propriety, are open to question. The following case shows how 'customary law' can be coded as per the convenience of the state.

Case 6: There were above 30,000 tanks in Madras Presidency and regular maintenance of these tanks would need a colossal amount of fund. The Board of Directors of the East India Company was tight-fisted about allotting fund for this contingency. Faced with this situation the state pronounced that it was a customary practice of the farmers to contribute voluntary labour (*kudimaramath*) for this work. In 1858 an Act, called

Madras Compulsory Labour Act was passed ostensibly, to legitimize a custom. Note that the Act named it compulsory, not voluntary, labour Act. The Act empowered the revenue officials to summon farmers for unpaid labour for irrigation works. The meaning of *kudimaramath* has changed further in the next hundred years (Sengupta, 1991: 69-77). Now a days the irrigation department engages paid agricultural labour to conduct, as kudimaramath, those works which were being done by voluntary labour.

Both common and civil law in Europe emerged historically as a synthesis of plurality of older legal traditions. While modernising the legal system in the Meiji Restoration period Japan gave statutory recognition to customary communal and private rights (Tamaki, 1977; McKean, 1992). Customs and customary rights were not overlooked in these cases. But after those were integrated into the modern system customs were not enunciated again and again. In contrast, in India and in many ex-colonial countries, customary law forms a parallel stream. The following case shows what would happen to even European system if such a framework were adopted.

Case 7: Portugal had extended recognition to traditional common property (called *baldios*) system. However, privatization and nationalization of these commons continued and by 1966 the process was considered by the autocratic government as completed. In 1966 the concept of common property was omitted from the Civil Code. After ten years, in 1976 the new left-wing government began a programme of returning the commons (*baldios*) to the communities. The concept was reintroduced in the legal system. The same set of documents depicting traditional *baldios* had supplied the arguments on both sides, for and against revival of *baldios*. Meanwhile the actual *baldios* had ceased to be the old traditional types. There were already considerable dynamism within the *baldio* members and considerable differentiation and disunity. The law therefore, did never achieve what it was aimed at. Instead, it was wielded by the powerful groups in and out of *baldios* to further their specific interest (Brouwer, 1992).

PANCHAYAT ACT

Panchayat, or rule of five elders, is an indigenous system of local governance with a very long tradition. However, the modern Panchayati Raj system draws its inspiration from the Gandhian economic vision of village self-sufficiency, not from customary panchayats. The Constitution of India had only a Directive Principles (Article 40) recommending constitution of village panchayats as units of local self-government. But this turned out to be one of the most vigorously pursued Principle in India. Several states drafted Acts to comply with the directive but with less regard for the primary property Acts. The following case shows how Panchayat Act has become a parallel Act.

Case 8: Under Rajasthan Panchayat Act, 1953 all common lands belonged to the panchayats while the State Tenancy Act declared that all land in Rajasthan was the property of the state. Brara (1989: 2251) cited three judicial awards between 1981 and 1983 which had diametrically opposite views on the issue of ownership.

The 73rd Amendment in 1993 has made panchayats mandatory. Articles 243-G anticipates PR institutions to "function as institutions of Self-Government" preparing and implementing plans and schemes for economic development and social justice on subjects including forestry, fuel and fodder, fisheries, animal husbandry, water management, watershed development, drinking water, soil conservation, maintenance of community assets etc. Towards this end the State Governments are asked to endow the Panchayats with necessary powers and authority. The Eleventh Schedule which lists several natural resource management activities, is an innovation of the 1993 Act. Even though 29 subjects have been listed in the Eleventh Schedule the exact functions in relation to them to be transferred to Panchayats were left to be determined by the individual State Governments. Most States have just reproduced the Eleventh Schedule subjects in appropriate places without adding much substance to that.

Some efforts were made to form a similar system of judiciary. Primarily due to the high transaction cost of legal procedures the nationalist movement had developed a strong current demanding restoration of 'indigenous' law. The Law Commission, 1958 observed that the attraction of the indigenous system lay not in the intricacies of classical textual law but in the simplicity and dispatch of popular tribunals that applied customary law. Suggestions were made for re-establishing the judicial role of panchayats, through the formations of *Nyaya Panchayats*, *Lok Adalats* etc., that would substantially reduce the transaction cost. However, this approach has not made much headway.

PARTICIPATORY MANAGEMENT

The inefficient resource use scene under government and agency management has led to rethinking and designing of participatory management alternatives. Within the last couple of decades, there is global rethinking on how to rehabilitate common property rights within the primary property law. The essential approach is granting of additional entitlements to the users so as to create an incentive structure for participation in management. To understand the approach one may recall our discussion about the conditions in Permanent Settlement areas in the earliest period of colonial rule. Affairs within the estates were not brought under the purview of public law. Private contracts, usually relational contracts (Furubotn and Richter, 1997) like norms, customs and conventions, were effective within the domains. Legal system of this nature did not only perpetuate the indigenous incentives but also let those reach levels of excellence. I have discussed that the local irrigation system had actually prospered during this period. In the literature this is discussed as common property (Ostrom, 1990; Sengupta, 1991) as against private property and open access conditions under public property.

Some successes have been achieved in other countries. In India, as yet, success is limited. In India, the departmental objectives in the participatory programmes are narrow. In pursuance of the limited objectives only limited rights have been given to the users. User participation may reduce transaction cost. In the officially designed programmes in India, complex guidelines, elaborate rules, fanciful ideas of right holders and equitable distribution, and sharing of benefits with a large number of members as per the laid norms have not created much of incentive for participation. As yet, the judicial system has not acknowledged these departmental initiatives. Whatever nominal legal protection is available to participatory organizations is conditional upon departmental recognition and compliance with official norms and guidelines. Spontaneously developed cases are not by any means rare. In fact, spontaneity is an intrinsic requirement of participatory management based on local norms and conventions. Some of the spontaneously formed organizations in India have registered notable success. But law is against them. Case 3 discussed earlier is a case in point.

IMPLICATIONS OF LEGAL PLURALISM

Legal pluralism can easily be analysed in law and economics framework (Bouckaert, 1995). Multiple entitlements create ambiguity between the title holder as per primary property law and another claimant recognised by customary law, local law and administrative orders. Parties making claims muster whichever is convenient and disputes may linger in civil courts for decades with jugglery of explanations and sometimes with conflicts and criminal cases. Resolutions of disputes depend on personal leanings of the mediators. Explanations lead to many ambiguities and inconsistent judicial interpretations (e.g. Brara, 1989). Alternatively, judicial process is used only to bargain 'in the shadow of the law' (Cooter and Ulen, 2000: 398) leading to satisfactory private solutions outside the court (Sengupta, 2000). These are the two types of resolutions corresponding to 'legal centralism' and 'private solution' arguments.

Legal pluralism creates considerable problem for judges about the right approach to justify their judgments. The tradition of the common law judges is to refer to precedents and social norms. Civil law judges justify their interpretation of a code directly by referring to its meaning. In fact, the systems of law education in different countries train lawyers to follow the appropriate pattern of the country (Cooter and Ulen, 2000: 59). If a plural legal system requiring one approach in some cases and another in others, create immense problem for judges. Ambiguity is inevitable in such situations.

CONCLUSION

Summarizing the discussion we note certain characteristic features of the Indian legal system with respect to natural resources -

- Users do not have any statutory right over natural resources in Indian private property law. The state is pre-eminent in deciding use of natural resource containing land.
- There exists parallel property law creating ambiguity in legal explanation.
- Judicial system in India relies too heavily on registration and records. Verification of titles became verification of documents, not possessions as such.
- The state is not only a guarantor of property but also a provider and user of natural resources.

I have introduced several cases showing the adverse consequences of this structure of Indian law. How are these important to lawyers and judges? Let me end by quoting Coase. Coase (1960) concluded his seminal article by writing that, "courts should understand the economic consequences of their decisions and should, insofar as this is possible without creating too much uncertainty about the legal position itself, take these consequences into account when making their decisions."

REFERENCES

- Alston, L. J., G. D. Libecap and R. Schneider (1996), "The Determinants and Impact of Property Rights: Land Title on the Brazilian Frontier," *Journal of Law, Economics and Organization*, vol. 12, no. 1, pp. 25-61.
- Arruñada, Benito (2001), "*Property Enforcement and the Organization of Consent*", Universitat Pompeu Fabra, Economics and Business Working Paper Series 564, December.
- Bates, Robert H. (1989), *Beyond the Miracle of the Market - The Political Economy of Agrarian Development in Kenya*, Cambridge University Press, Cambridge.

- Benda-Beckmann, Franz von (1995), "Anthropological Approaches to Property Law and Economics", *European Journal of Law and Economics*, 2:309-336.
- Bouckaert, B (1995), "Comment on Franz von Benda-Beckmann, "Anthropological Approaches to Property Law and Economics", *European Journal of Law and Economics*, 2:337-345.
- Brara, Rita (1989), "Commons Policy as Process - The Case of Rajasthan, 1955-1985", *Economic & Political Weekly*, October 7
- Brouwer, Roland (1992), "The Commons in Portugal: A Story of Static Representations and Dynamic Social Processes", in F. von Benda-Beckmann and M. van der Velde ed. *Law as a Resource in Agrarian Struggles*, Agricultural University, Wageningen.
- Calabresi, G., And A. D. Melamed (1972), "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral," *Harvard Law Review*, vol. 85, pp. 1089-1128.
- Coase, R. H. (1960), "The Problem of Social Cost," *Journal of Law and Economics*, vol. 3, pp. 1-44.
- Cooter, Robert and Thomas Ulen (2000), *Law and Economics*, Reading, Mass. Addison-Wesley.
- Ellickson, Robert C. (1993), "Property in Land", *Yale Law Journal*, 102: 1315-1400.
- Furubotn, Eirik G. and Rudolf Richter (1997), *Institutions and Economic Theory: The Contribution of the New Institutional Economics*, Ann Arbor: The University of Michigan Press.
- Galanter, Marc (1981), "Justice in Many Rooms: Courts, Private Ordering and Indigenous Law", *Journal of Legal Pluralism*, 19:1-47.
- (1989), *Law and Society in Modern India*, Oxford University Press, Delhi
- Guha, Ramchandra (1989), *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalayas*, Oxford University Press, Delhi
- Iyer, K. Gopal (1993), "Government and Community Land in Bihar", in B.N.Yugandhar and K. Gopal Iyer ed. *Land Reforms in India (vol. I): Bihar - Institutional Constraints*, Sage Publications, New Delhi
- Miceli, T. J. and C. F. Sirmans (1995), "The Economics of Land Transfer and Title Insurance," *Journal of Real Estate Finance and Economics*, vol. 10, no. 1, pp. 81-88.

- McKean, Margaret (1992), "Management of Traditional Common Lands (Iriaichi) in Japan", in D. W. Bromley ed. *Making the Commons Work - Theory, Practice and Policy*, International Centre for Self- Governance, San Francisco
- Ostrom, Elinor (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge Univ. Press, New York
- Pathak, Akhileshwar (1994), *Contested Domains - The State, Peasants and Forests in Contemporary India*, Sage, New Delhi
- Scott, James, C. (1996), "State Simplifications: Nature, Space, and People," in Ian Shapiro and Russell Hardin eds., *Political Order, NOMOS XXXVIII*: New York University Press, New York. 42-85.
- Sengupta, Nirmal (1980), "Indigenous Irrigation Organisation of South Bihar", *Indian Economic and Social History Review*, April.
- (1991), *Managing Common Property: Irrigation in India and the Philippines*, Sage, New Delhi
 - (1993), "Land Records and Irrigation Rights", B.N.Yugandhar and K.Gopal Iyer ed. Lal Bahadur Shastri Academy studies, *Land Reforms in India, Vol. 1, Bihar-Institutional Constraints*, Sage Publications, New Delhi.
 - (2000), "Negotiation with an Under-informed Bureaucracy", in Bryan Bruns and Ruth Meinzen-Dick ed. *Negotiating Water Rights*, International Food Policy Research Institute, Washington D.C.
 - (2001), *A New Institutional Theory Of Production – An Application*, New Delhi, Sage publishers.
- Tamaki, Akira (1977), *The Development Theory of Irrigation Agriculture*, Special Paper No. 7, Institute of Developing Economies, Tokyo, Japan
- Upadhyay, Videsh (2003), "Customary Rights over Tanks: Some Plain Talks on Limits of Customs", *Economic and Political Weekly*, November 1: 4643-4645.
- Washbrook, David (1981), "Law, State and Agrarian Society in Colonial India", *Modern Asian Studies*, 15(3).