BASIC ISSUES IN MANAGEMENT OF COMMON RESOURCES

by

Chhatrapati Singh

Paper presented at the 1992 Conference of the International Association for the Study of Common Property; at Washington D.C. (U.S.A.)

Basic Issues in the Management of Common Resources

Chhatrapati Singh *

Most of the discussions concerning the management of 'Common Property Resources' have been in the context of forests, grazing lands and wastelands. Interesting and useful as these are, they are, in a sense, limited in scope since they deal with fixed land based resources. Of all 'common property resources' the most common and used is water. Being one of the most vital resource for survival, the rules concerning the common use of water have tended to be more clearly articulated than those relating to forests or grazing lands.

This paper is an exploration of some of the basic issues concerning the management of common resources, in the context if water laws. It is hoped that a comparitive and cross-referential analysis of water laws and those concerning other resources, such as forests and grazing lands, will throw some significant light on the basic issues concerning management of common resources in general. The comparitive analysis of water law, hence, is intended to be the context for a more general reflection on the legal status and the normative framework for all that may be called non-private property, which in the modern discourse, largely Western, has begun to be called 'Common Property', 'Common Access' or 'Common Pool' resources.

The discussion that follows is devided into two sections. The first deals with the basic assumptions involved in conceptualizing natural resources as 'private', 'public' or 'common', on the basis of the insights one may gain from water laws. The second section concerns the specific manner in which laws concerning water have evolved and how they relate with, or compare with, corresponding rules for other natural resources, specially forests and grazing lands.

The paper is exploratory and discursive, the conclusions that need to be derived and other implications for natural resources laws, is left to the readers inclinations.

I. The Conceptual Framework

The manner in which one conceptualizes the normative or legal status of a particular natural resource, would also determine the parameters, or indicators, for the model one utilizes for the analysis concerning that resource. Ronald J.Oakerson, for instance, outlines the following parameters for any analysis concerning 'common property resources', namely : Physical attributes, jointness, indivisibility, decision making arrangements, conditions of collective choice, operational rules, external arrangements, patterns of interaction, outcomes, efficiency and equity.[1] (Oakerson, 1985). Numerous analysis of 'Common Property Resources' have been carried out using these parameters, ranging from resources such as fishing areas, forests, parks, ground water to grazing lands[2] (Eg: Thomson, Fenny and Oakerson, 1985). (Easter, Palanisami, 1985).

The point of raising the question about the basic normative framework concerning natural resources is that the parameters that one choses would need to be modified if one were to conceive the notion of 'common property' differently. After a week's deliberations on the various issues concerning 'Common Property' resources at the first international conference on the subject, Daniel W.Bromley[3] comes to the relevant conclusion that there are various problems in the use of the terms, which besides the linguistic differences, also concern the meaning which we put into terms such as 'common', 'common pool', 'property', etc. Amongst the differences he mentions there are some outstanding ones, such as how 'common' is a 'common property' in terms of the units that go into making the 'jointness' - individuals, families, communities, etc. These seem to vary according to the cultural context. He also notes difficulties with terms such as 'free-riders' and 'common pool' resources. The subsequent deliberations by Elinor Ostrom points out further problems with issues of collective choice, in terms of how a sub-set of a collective choice can be mixed up with the choice of a larger class.[4]

Involved and interesting as these discussions are about 'collective choice' and 'common property', they clearly seem to still miss out on some of the more fundamental issues which would be apparent to someone familiar with the historical details of the manner in which natural resources issues have legally arisen in the

Indian or the Asian context. The obvious differences and shortcomings of the insights and percepts seem to be as follows:

a) The 'common property', 'common pool' or 'common access' discourse, despite proclaiming to be ecologically sensitive, is totally anthropocentric. It fails to see the relationship between the well being of human kind and that of other living creatures. In fact, the very opening statement to the first International Conference on Common Property Resources, by David H.Fenny, states that we are concerned because the exploitation of natural resources is affecting the livelihood of the vast population of the under-developed countries.[5] True as it is, it nonetheless fails to notice that almost all land and water laws of the Developed countries, as well as those made for the colonies, concern themselves merely with the use of the resources for mankind. The water laws, for example, deal only with irrigation, and assume that all natural waters are meant for the benefit of mankind alone. They show no concern for ecology. Even important cases in American law, such as the Mono Loke and Marks v. Whiney, as we shall see in detail later, which on the surface seem to be concerned with ecology, eventually provide solutions in terms of 'public property rights', as if other creatures had no rights at all. In brief, the common property resources (CPR) discourse has as yet failed to recognize that the natural resources it is dealing with cannot be dealt with in terms of the benefits to human kind alone, if a true

ecological sensitivity is to be shown; and moreover, if an understanding of the interdependence of human on its natural environment is to be exhibited. In such a context the parameters for determining the sustainable use of a CPR would have to be redefined.

b) The second major issue concerning the notion of 'common property' relates to the traditional economic differentiation between 'pure private goods' and 'pure public goods'. The 'privateness' and the 'publicness' is defined in terms of 'exclusion' and 'jointness'. Various outcomes can be determined in these terms, and conclusions can also be derived for the management of CPRs (Elinor Ostrom, 1986). The minor problem here is with the notion of 'private good' and 'public good', Most economists and lawyers now know that the distinction between 'private law' and 'public law' is nebalous. The traditional view that the state is not allowed to enter your bed-room has now been given up. Many issues concerning 'private family laws' are now governed by the state, such as in matters of divorce, family planning, adoption, women's rights, etc. The major problem concerns what is meant by 'private' and 'public'. The serious proponents of 'private property' rights and 'public property' rights do not seem to clearly see the major cultural differences in the notions of 'privacy' or 'public'. To translate

'privacy' in terms of 'exclusion' is a Western bias. This becomes most obvious when one considers 'CPR's' such as time and space. The notion of 'private' and 'public' time and space in different cultures in very different. As a consequence the manner in which the closure, easement and trespass rules operate in different cultures is also different. If one does not understand this one may easily make the mistake which C.Ford Runge, and many other Western theorists make, when applying their mind to the problems of 'CPRs'. Runge states that in developing world the 'CPR' regime closely resembles the "early stages of European Economic development....". By looking at the form of the super-imposed colonial laws and practices he totally misses the substantive differences in the cultures. For instance, due to the different perception about 'private' and 'public', one may easily find the following variations in the Indian context, the gamut of which does not fit into the Western distinction of 'common property resources' :

i) private property commonly used (permanently).
Example : Village tanks, temples, hospitals, sarai (motels)
(Built by local landlord, rich-persons and due to religious persuasion, sanctions and rewards).

ii) private property commonly used (seasonally).
Examples : fields after harvest, tanks, wetland areas.

iii) Common (community) property privately used.
Example : Wetland areas (on lease) individual.
(gairmazarua aam lands).

iv) Common (community) property commonly used.
Example : Dev Bans (divine forests) ; village tanks; grazing lands; temples;

v) Public (government) property privately used.
Example : forest areas on perpetual or temporary lease to industries, miners.

vi) Public (government) property commonly used.
Examples : demarcated common access forests; parks;

These distinctions distinguish the private, community and public properties used commonly. They do not as yet explain how 'private' a private property is, or conversely how 'common', the commons are. Explanation of these would require details of the cultural variations. The point here is not to go into these details but only to point out that describing something as a 'private' or 'public' is not a sufficient criterion in itself to distinguish the normative framework in relationship to a particular resource.

The term 'common pool resource' makes sense only in certain limited legal context. It presuposes that the parts of the resource under consideration are already in private possession and that people are pooling it together. Such is the case in the context of people buying shares of a company and pooling their privately

owned money in a common kitty; or people owning parts of the bank on a lake and pooling in to ensure the sustainance of the lake. The term 'common pool resource', hence, is not without presuppositions, it assumes certain private control over the resources. The reference to natural resources as 'common pool resource' is, therefore, already loaded with legal bias and needs to be avoided when such a meaning is not intended.

c) The third major issue concerning the current discourse on natural resources relates to the assumption that the use of all resources can be conceptualized only in terms of 'property' relationships, --- private, public or common. The traditional Roman Law, the Indian Dharmasastra as well as the Islamic law proclaimed that natural resources, such as water, were not to be included within the legal regime of 'property' relationships. The dharmasastras also included the natural forests and mountains in this regime. The kings or rulers could proclaim their sovereignity and territorial rights over such resources, but never ownership. At most, as the dharmasastras proclaim, the kings were mere trustees of such resources, who safeguarded them for the benefit of the people. In Islamic law the natural resources belonged to Allah, and people could have only usufruct rights on them.[6] The modern American Public Trust Doctrine, it must be noted, has very little in common with the traditional legal view. The doctrine interprets the trust in terms of public

(agency or individual) property rights pooled together, or in terms of the property rights of the state.[7] In the modern discourse on CPRs the traditional view is glossed over as a figment of the part. The traditional view, however, is not without reason. One major factor for this oversight is that in recent times the CPR issues have limited themselves to land based resources, such as forests, grazing lands, river beds and lakes. They, by and large, have not touched upon more remote resources, as the land on the moon, or even the marine resources. The high seas are still conceived as 'no man's property', although regulations on fishing and navigation on high seas and oceans are there. The other major factor, however, is not a matter of oversight. It seems to have deeper roots in the Western psyche.

In his First Treatise on Government John Locke analysed the Bible as saying that god created the world to be shared and enjoyed by everyone. (Human beings alone, of course). In his Second Treatise on Government he argued that the only way the sharing could be secured was by assigning property rights to individuals. He, therefore, argued for basic or fundamental property rights for citizens, which it was the duty of the sovereign to protect. Theft of private property would be a very serious crime in such a scheme of legal arrangement.[8] Locke's writings, which led to various Bill of Rights and revolutions, also led the Whigs and the Utilitarians to interpret all human relationships with natural resources in terms of ownership, and more specifically property relationships.

The existential security of the individual has been equated with this or her legal relationship of ownership with the natural resource. A person's existence is not secure unless he or she certainly and clearly owns parts of the earth and its resources. This dogma of the seventeenth century seems to have taken deep roots in the Western psyche, and hence even today discourse on natural resources is, by and large, in terms of 'property' rights and ownership, whether of individuals or groups and whether in specific or common resource.

If one looks at the existential situation carefully what human beings, and all other living things, need to be secure about is use of the natural resources, whoever may own it. Locke's argument, that if God wants us to share the earth, does not imply that it needs to be partitioned in terms of 'property', and that only people have 'basic property rights'. It implies only that all creatures have a basic right to use the resource, that there are natural usufruct rights (for at least the basic needs) for all creatures, including human.

Seen in this way, the traditional view that natural resources such as rivers, forests, space, etc., are outside the 'property' regime, is legitimate. An anthropocentric appropriation of such resources, through a construed legal fiction like 'property' and 'rights', in total exclusion of all other living beings, is nothing but dishonesty to nature (god too) and self-deception through

we attempt to apply the 'property' concept to other common resource, such as sunlight, air, time. Imagine the oddity of the case if so much of air, sunlight or time were described to be someone's private property ! As argued, it is sufficient if everyone's right to use of the resources could be ensured for all living creatures, without vesting it as 'property' for the use of human beings alone. Unfortunately, even the so called 'deep ecology movement' (of the American variety) does not seem to be willing to give up the anthropocentric 'property' relationships as concerns the environment.

Having noted some of the basic issues involved in the management of common resources, let us turn now to review the types of rules that have been used in the management of natural water resources. The point of documenting these rules is to review them in light of the foregoing discussions, as well as to reflect in what ways, if any at all, can they be applied to other common resources.

II. The Legal Framework for Management of Water:

One may distinguish the traditional principles of distribution from the modern ones. Three basic traditional principles, still in use in most nations, are as follows:

i) The Doctrine of riparian rights, and its corrollary the natural flow theory.

The riparian doctrine recognises private property rights in water to those whose land abutts the river. The principle, evidently, does not see the river as a common property, hence there is no question of 'jointness'. It however, uses the principle of exclusion, in not recognizing the rights of others who stay at a distance from the river.

The determining principle, apparently, is that of geographical proximity, and not any notion of justice. The principle, it must be noted, relates itself to the rights of the human beings alone.

In India the Easement Act of 1882 recognizes customary riparian righ of the people. (Sections 15, 18). But even before the coming of the Easement Act the English Judges followed the authority of the precedents in Common Law, such as of Race v. Ward.[9] In the subsequent period there have been numerous judgments and statutes in India recognizing the riparian rights.[10]

The geographical proximity principle, is interesting to note, in also applied in the case of other common resources, such

as forests and grazing lands, notwithstanding the fact, of course, that the rights are often limited to usufructry rights. It is interesting because although many still favour the proximity principle relation to forests and fodder land, the riparian doctrine has almost been given up in the context of water. The thirteen Tribunals, which have sat so far in India, to award the distribution of water to various states, including various other international tribunals, have found the proximity principle grossly inadequate and have invoked other principles instead.

The natural flow theory, which is a corrollary to the riparian doctrine, asserts that the lower riparian is entitled to natural frow of the river unintercepted by the upper riparian.

ii) The Prior-Appropriation Theory

This is the 'first come first serve' rule. It violates the natural flow principle, since it allows the upper riparian to hold the water back from the lower riparians. As such the principle was rejected in India way back in 1906, in the Belbhadra Prasad v. Sheik Barkat [11] case. The principle, however was given an international status in 1922 in the Wyoming v. Colorado[12] and came to be known as the Colorado Doctrine. The doctrine was, however, given up in 1930 in the United States, in the Connecticut v. Massachussetts[13]

It should be interesting to note that the prior-appropriation doctrine is at the heart of 'aborginal rights' or 'rights of the indegenous people'. The rationale behind such rights in the fact of prior domicile or appropriation by a certain group of people. Rights of the aborginals on such grounds is a matter of serious international law concern. Many champions of the tribal rights also advocate the use of the Colorado principle. But when it comes to water, as a common resource, the use of the principle has been into deep waters, both nationally and internationally. The tribal or aborginal rights doctorine, it must be noted, is also invoking the proximity principle, which has not been successful in the management of water resources. The 'jointness' of the members holding rights, under the Colorado principle, whether in application to tribals, indegenous people or prior-appropriatons of water, is a ~~spatial~~ spatial and chronological jointness unlike the pure riparian theory which takes note of the spatial jointness alone.

The third traditional principle of water management as we shall see, adds the dimension of power to those of space and time.

iii) The Territorial Sovereignty Principle

This is the 'might is right' principle, otherwise known as the 'Harmo Doctorine', or the 'doctorine of absolute sovereignty, as proclaimed by the Attorney General of the United States of America in 1896, to deny sharing of the Rio Grande river water with Mexico.[14] United States was the upper riparian in this case. The doctrine was very willingly given up when United States became the lower riparian in the Columbia river case, in which Canada was the upper riparian.

Notwithstanding the Harmonian international politics, the territorial sovereignty principle has deeper roots in the Roman Law understanding of 'servitude' where all that is attached to one's property or territory in a 'slave' to it. The owner has absolute rights to use the resource in any way he or she pleases. In modern Law although this principle has been, by and large, given up in the case of surface water, it still holds true for ground water. Those owning land have full rights to exploit ground water. The principle has been a matter of serious concern since it has led to drastic denudation of ground water resources, causing hardship to all.

It should be interesting to note that although nationally the 'servitude' principle holds in relationship to groundwater, it has been totally rejected at the international level, on the grounds that the principle cannot generate any principle of distribution, because, on the contrary, it involves a denial of the obligation to share. The principle was rejected by India and Pakistan in the Indus Water Treaty of 1960, since India is the upper riparian to almost all the rivers flowing into Pakistan.[15] It has also been descredited in International Law, such as under the Helsinki Rules(commentary to Article IV) 16 when it comes to forest, coal, petroleum and other land based resources, however, international law tends to uphold the territorial sovereignty theory. A major problem confronted in the recent Rio de Jenario Earth Summit, in fact, involved precisely

around the question of soverignty rights over forest resources and 'sink'. The odd thing is that when it comes to food, as a common property resource, the Developed countries forget all about territorial sovereignty principle or autonomy and dignity of sovereign states principles, so vehemently proclaimed in the international conventions otherwise. They want no convention or international treaty here. Food is assumedly a free 'common access' resource. One of the major causes of bio-diversity depletion in the world is precisely this unchecked, and excessive and wasteful consumption of land and marine based resources by the Developed countries.[17]

Besides those three traditional principles used in the management of water resources, recent international law has come up with some significant doctrines which are not based on geographical(proximity) or sociological (group identify) foundations. They revolve round the notions of equity, equality and ecological concerns. We shall turn now to briefly review these principles and compare them with corresponding situations relating to other resources. Amongst the various doctrines, four of them are prominent, namely: the Equitable Apportionment Theory; the Equitable Utilization Theory; the Community of Interests Theory; and the Public Trust Theory.

i) The Equitable Apportionment Theory:

This is a need based theory, where the resource is to be distributed according to needs. The 'needs' by and large, as the

Water Dispute Tribunals in India have decided, are those of the individual states. The people, individuals, flora and fauna do not figure in this 'need' criteria. The equitable apportionment theory is also equally well established in American law through cases such as New Jersy v. New York[18] Nebraska v. Wyoming[19] and Arizond v. California[20]. In its simplified form the principle can be spelt out as follows: 'for all common resources threat all claimants as equal right holders and through fair legal means apportion the resource in accordance with their individual needs.[21]

Such a principle is evidently superior to the traditional riparian and other doctrines. There are, however, two sorts of problems confronted here, a minor one and the other major one. The minor one is that how does one determine 'needs' when individuals or smaller community or groups are concerned. There are ways to quantify this to some acceptable limits. The major problem is that courts and state agencies are as yet not prepared to apply the principle when it comes to national or inter-province level conflicts, amongst individuals, groups, villages or municipalities, specially with reference to forest, minerals,

fuel food and fodder needs.

ii) The Equitable Utilization Theory:

This principle has its roots in the intenational Helsinki Rules, 1966. It concerns itself with the optimization of the use of the resource and not the basic needs of the interested parties. It also allows for mediation between two parties, instead of adjudication and apportionment by a third party. As the name suggests, the theory has not concerned itself with ecological issues. But it can easily be applied when the resources under consideration are ~~questionable.~~ quantifyable.

iii) The Community of Interest Theory

The Theory has its roots in the Roman Law distinction between bonus vacans and public juris, that is between noone's property and everone's property. The principle found its explicit exposition in the Embrey v. Ownes[22] case in 1851. The major difference between this and the utilization theory is that it defines the parties in terms of specific social or ethinic communities who are the interested party. The principle has not found direct application in relation to other resources, such as forests on grass, but there is no reason why it cannot be so applied.

iv) The Public Trust Theory

The recent developments in the Public Trust law holds a promise for a radically different type of principle for resource management. The basis of this theory is not people's rights over the resources but their or the state's collective duty to

In the traditional English law authority for public ownership emanated from the crown. This doctrine could not be applied in the United States. Early American cases, such as Arnold v. Mundy[23] laid the foundation for the concept that the state held title of waters in land under navigable water ways subject to public trust. Subsequent development of the public trust doctrine led to the now well known National Audubon v. Superior Court of Alpine County 24 (Mono Lake case), which includes a whole range of ecological values to be upheld in public trust besides the traditional water approtionment rules.

It is important to note, however, that the notion of 'trust' involved here is not the one found in the traditional Indian Law, in which the State itself becomes the trustee of the public good, bound by certain duties towards the people and the resource. The Mono Lake case interprets 'trust' in terms of 'public property rights', such that although the individual rights of the members are not infringed, but there is a collective duty to safe gaurd the interest of the public which is not necessarily members of this group. Public interest is defined in terms of the ecological interests.[25]

A move from the rights of the inclusive members of the groups towards their duties to the excluded non-members is a welcome step in environmental law. This move, however, still deals with the interests of the people alone, those included and

a nd others excluded. It does not go beyond to the interest of other living things in the environment. The interest of other living beings is intended to be taken care of indirectly through serving the ecological interest of other human being.

Safe quarding ecology in terms of public property rights presupposses individual rights in the resource. As such the doctrine becomes limited in scope when the resource is vested in a community or the State, such as rivers, forests and grazing lands. What needs to be done to broaden the scope of a duty based legal regime is to further develop the notion of 'trust'. This notion need not be tied up with 'private public rights' over resources. Trusteeship is a more generic notion which can be applied to the community or the State as a whole, wherein such agencies are trustees and not owners of the natural resources. The 'trust' notion also holds the potentiality of liberating common resources from being defined as 'property', whether of the individual, public or the government. Rights and duties of the involved members can be defined without assigning or vesting the resource in anyone. As we have seen earlier, delimiting the common resource as 'property' of human agencies alone is an ecologically and metaphysically ill-founded doctrine. How public trust law developes from here, in its application not just to lakes but also rivers, forests and mountains, remains to be seen. An attempt to give it a particular direction and meaning has been outlined here.

Footnotes

1. Oakerson, Ronald J., "A model for the Analysis of Common Property Problems." in Proceedings of the Conference on Common Property Resources. National Academy Press Washington. 1986 pp.13.

2. Thomson, Fenny and Oakerson, "Institutional Dynamics : The Evolution and Dissolution of Common Property Resource Management" ibid pp. 391.
Easter, Palanisami, "Tank Irrigation in India : An Example of Common Property Resource Management." Ibid pp. 215.

3. Bromley, Daniel w., "Closing Comments at the Conference on Common Property Resources Management. " Ibid pp. 591.

4. Ostrom, Elinor, "Issues of Definition and Theory : some conclusions and Hypotheres." Ibid pp. 597.

5. Fenny, David H., "Conference on Common Property Resources : An Introduction." Ibid pp. 7.

6. For details see Chhatrapati Singh : Common Property and Common Poverty Oxford Univ. Press. Delhi 1985.

7. For details see : Carol M.Rose, "Rethinking Environmental Controls : Management Strategies for Common Resources, in Duke Law Journal. Vol. 1991 Feb. No. 1.

8. Locke, John., Two Treatise on Government ed. Peter Laslet. Cambridge: Univ. Press. 1960. pgs 124-127.

9. Race v. Ward (1855)4 E & B. 702.

10. For details see : Chhatrapati Singh, Water Rights and Principles of Water Resources Management. Indian Law Institute Publication. Delhi. 1991. pp. 32-44

11. Belbhadra Prasad v. Sheik Barkat Ali (1906) 11 C.W.N. 85.

12. Wyoming v. Colorado 259. us. 409 (1922).

13. Connecticut v. Massachussets. 282 us 660 (1930) pp. 393 ff.

14. Austin : "The Harmon Doctrine" 37 Can. B.R. (1959).

15. The Indus Treaty 1960. Government of India

16. Report of the Fifty Second Conference of the International Law Association, Helsinki. 1966.

17. For a detailed discussion see : Chhatrapati's Singh "International Environmental Law Agenda: The Indian Perspective." in Proceddings of the International Environmental Law Conference. Kathmandu. March 1990.

18. New Jersy v. New York 283. us. 331 (1931).

19. Nebraska v. Wyoming. 325. us. 89 (1945).

20. Arizona v. California. 373 us. 541. (1963).

21. For a detailed discussion see : Chhatrapati Singh : Water Rights and Principles of Water Resources Management. pp. 41 ff.

22. Embrey v. Owes (1851) 6. Ec. 35.

23. Arrold v. Mundy 6 NJL 1. (1952)

24. National Audubon v. Superior Court of Alpine County. 46 us. 977, 104 S.Cr. 419 (1983).

25. For a detailed discussion see : Alison Rieser, "Ecological Preservaton As a Public Property Right : An Emerging Doctrine in Search of a Theory" in Harvard Environmental Law Review Vol.15. 1991.