

Governing Nepal's Forests: The Peasant's Dilemma
Consequences of Central Regulation

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Fall 1990

Paper prepared for presentation at the Mini-Conference, Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington, Indiana, December 14 and 16, 1991.

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Nearly everywhere common-pool resources (CPRs) have been steadily reduced in extent and importance in modern times. Encroachment, privatization and government appropriation have been the main processes taking resources out of communal control and use. Increasing pressures on what is left have generally led to its progressive degradation, encouraging further expropriation. This sequence of events is now so heavily entrenched in policy and practice in many parts of the world as to make continued privatization or nationalization seem either inevitable or desirable, or both (Arnold and Stewart, 1991:1).

This paper discusses the "management" of common-pool resources in Nepal, with particular reference to forest resources and forest products. The emphasis will be on describing some of the consequences that emerged as a result of the government's "corrective" intervention in the form of nationalization of forests and subsequent legislations. I shall try to show how the political structure of the state of Nepal manifested by a centrally regulated top-down approach to policy-making disrupted the forest resource, its management, and its relationship to the people most dependent on it for survival – the peasants.

Defining Common-Pool Resources and CPR Management

A CPR is subject to individual use, but not to individual possession. Furthermore it is used by a number of users, each of whom has independent rights of use. These two characteristics distinguish it from a private good, which is subject to exclusive use and possession by individuals. Use of a CPR by an individual subtracts from what is available to other users. This distinguishes it from a public good, consumption of which is independent of the number of users – e.g. the light provided by a street lamp (Blaikie and Brookfield, 1987).

A common resource (such as a forest) can be said to be communally managed if its users constitute a group that operates a set of institutional arrangements regulating its use, and have the right to exclude others who are not members of that group. It is important to maintain *this distinction between the common resource resource and common-pool resource management*. Not all commons are managed in any

meaningful sense of that term by those who use them. Much usage is of an "open access" nature, characterized by unrestricted entry and unregulated use (Ostrom, 1986). Much of what has been written about common property has confused open-access situations with common property management arrangements. Verdicts of breakdown in CPR management have all too often been mistakenly passed on situations in which the deterioration actually came about due to unregulated use under an open access regime. This misunderstanding has contributed to the strong thrust in both research and practice towards bringing use of common resources under either private or government control. I will discuss the consequences of bringing the forests of Nepal under government control in a subsequent section. I will also briefly discuss the merits and demerits of privatization of forests and finally attempt to make the case for a bottom-up approach that incorporates indigenous systems of management.

The Peasant

Approximately 95% of Nepalese are subsistence farmers. Nepal's agricultural economy has always depended upon the farmers' use of several complex economic strategies to exploit the available natural resources. Although crop production from arable land has been the principal source of income and means of livelihood, the subsistence farmer has always resorted to raising livestock and selling forest products and livestock products as supplementary means of income. Subsistence farming in Nepal is based on a man-land-cattle-forest relationship (Fox, 1983:3). Forest and grazing land are essential to this system because they provide tree and grass fodder for livestock feed, leaf litter for roofing and composting, wood for fuel, timber and poles, and various medicinal and food plants. At present, the overwhelming use of the land is still for subsistence living, with the forested land almost entirely included as an integral part of the primary production system and of peasant life (Mahat et al., 1987a, 1987b). The peasant is locked into a subsistence agricultural system which depends heavily on the continued use of the forest.

Owing to the extreme annual variation in rainfall, the pattern of

agricultural activities necessarily follows the arrival of the monsoons. This means that, for most peasants, cultivation activities are constrained to certain seasons and months of the year. Many peasant households face the uncertainty of having adequate production of foodcrops for household consumption, and scarcity of food during certain months of the year is a familiar spectre. It is during these months of scarcity that the members of the peasant household go foraging in the forests in and around their locale. It is also during the cultivation-free periods and dry seasons of the year that villagers go for gathering firewood and other forest products. Often, these sorts of activities are also organized by entire villages so that there is a collective effort put forth in obtaining fuel-food-fodder supplies.

What incentives does the Nepalese peasant have in the context of forest management? These can vary according to who we define as a peasant. There are a number of theories that define peasants and the mere fact that the peasant is a farmer does not presume a subsistence level of existence. For the purpose of this paper, I would like to suggest that the Nepalese peasant is a subsistence farmer whose objective is to survive in a subsistence agriculture economy. Thus, this farmer's relationship to the forest is different from a relationship that exists, for example, in a market driven economy where the incentives to manage forests would include outcomes such as cash profits.

The subsistence farmer does not exist in isolation nor does he alone use the forests. The peasant exists in a collectivity of like individuals, other peasants. Thus, the preferred outcomes of the individual peasant may not necessarily coincide with preferred outcomes of the collectivity. There exists a complex network of inter-relationships among and between individual peasants, the peasant communities, the economy, the government, and the forest resource.

The Government

Before 1951, the administrative objective of the government was the maintenance of law and order and collection of revenue. This centralized administrative system remained the mode of operation for a period of time. After

1951, with the overthrow of the Rana family prime ministership of Nepal, changes in the overall objectives of the government took place. Social, political, and economic development of the country became the guiding principles for the government in the following years. Accordingly, a number of institutional arrangements for enlisting the participation of the people were made (Pradhan, 1985:226).

The Village Panchayat Act of 1962 and the Decentralization Act of 1982 are particularly relevant in their impact upon the history of resource management in Nepal. Introduction of the panchayat system was part of an attempt to unify the Kingdom of Nepal under one multi-layered form of representative government. The panchayat is based on earlier concepts of leadership by caste councils dating far back in the history of South Asia. The panchayat system operates on three levels – village, district, and national. The village panchayat, the lowest unit of political and administrative organization, comprises nine wards, usually encompassing several villages with a total population of 2,000 to 4,000 persons. The elected representatives from the constituent wards in turn elect a chairman, the pradhan panch. The panchayat system is the focal point of development planning and administration.¹

The 1982 decentralization legislation was built on the existing panchayat system, while attempting to relocate some administrative responsibility at the local district and village panchayat levels. While much can be said of the impacts of the panchayat system over two decades, an assessment of decentralization reveals severe shortcomings however well-intentioned the original thinking was. The subsequent discussion of forest legislation will show, to some extent, that the reality does not quite match the rhetoric – that decentralization de jure turned out to be centralization de facto.

In the 1960s, one immediate result of the new panchayat system on the ethnic populations of the hills was the superimposition of a new and essentially

¹The contents of this paper are based on literature dated prior to the political events of 1990. The partyless panchayat system is now officially defunct, instead a multiparty system is in place.

alien political system over pre-existing forms of local and ethnic (i.e., non-caste) communal governance. It was especially disruptive in traditional non-caste oriented communities where other modes of village leadership existed. In some, for example, leadership was traditionally based on the hereditary principle of primogeniture (as among the Magar) or on acquired respect, wisdom, influence, and consensus (as among Thakali and Bhotia).

Simultaneous with the introduction of the new panchayat system, the Nepal government (with international donor assistance) began investing its modernization efforts in rural development – focusing first on the agriculture sector and then, by the 1970s, on the forestry sector.

Forest Legislation

Before the unification of Nepal in 1768, all lands were state owned. The peasants had to pay one-half of the products to the states as rent (Regmi, 1971). Due to lack of other natural resources, Prithvi Narayan Shah (1743-1775), the first king of unified Nepal, started a system of distributing lands in the form of Jagir and Birta² grants to maintain the army officials and other government officials for services rendered (Mahat et al., 1986a, 1986b). The Birta system was common practice in the hills, but it also became common in the terai during the Rana period (before 1951). In order to maintain these officials in increasing numbers, more and more forested and common pasture lands were converted into cultivated agricultural lands. The Rana rulers continued this practice of exploitation of forests and extended it widely into the terai as well. As a result, by 1950, about one-third of the total forests and cultivated lands were under Birta tenure and of that 75 percent belonged to the members of the Rana family (Regmi 1978). The rest of the land was officially state owned

²Birta is an assignment of income from state owned (Raikar) lands to an individual such as a priest, soldier, member of the nobility or royal family. While this income was inheritable its ownership was not assured. Jagir is an assignment of income from state owned lands to government officials, military officers and men, etc. in exchange for their services.

although the de facto owners were the communities of users.

Thus, prior to 1957 the official right to forest products, especially those of economic value, was reserved for the government and its designated representatives (Birta, Jagir, Guthi, and Kipat tenure holders).³ Villagers, with the exception of Kipat tenure holders had no legal rights to collect forest products. Access to forest resources for such domestic needs as firewood, fodder and grazing, however, was less restricted than a legalistic interpretation of the state's ownership rights would suggest. Throughout the country, villagers enjoyed an unofficial right to collect forest products for domestic needs, but not for economic exploitation.

In 1957, all forests that had been alienated from the state by Birta, Jagir, Guthi, and Kipat grants were nationalized by the Private Forests Nationalization Act. This act abolished private and community control of public lands. But since, with the exception of Kipat villages, most villagers had never had any official right to collect forest products, their legal standing with respect to forests was not changed. They continued unofficially or "illegally," to collect the forest products they needed to survive (Fox, 1983:5).

From about 1957 till 1976, there was a trend in policy making toward more national control of resources, or centralization. Centralization is evidenced in an increased level of control over decision-making by the national government. The nationalization legislation of 1957 is the prime example of central level policy planning. It changed the ownership of forest land from de facto and private owners to the government. While this law was designed ostensibly "to protect, manage and conserve the forest for the benefit of the entire country" it became, in fact, a highly disruptive factor in the overall well-being of the hill forests and related resources (Bajracharya 1983:233).⁴ Partly because of

³See footnote 1 for Birta and Jagir. Guthi is a permanent form of Birta given to institutions such as temples, monasteries, schools, hospitals, etc. Kipat is a traditional form of communal land tenure. On Kipat lands, communal authority superseded any claim of the state on the basis of sovereignty.

⁴as quoted by Messerschmidt (1986:458).

this law, pre-existing and traditional practices of communal resource management in the form of group control over local forests was upset and existing local political structures in which communal control was embedded, with their customary rights and duties, became irrelevant (Bromley and Chapagain, 1984; Chapagain, 1984). In terms of both forestry and irrigation, the imposition of the panchayat system of local government provided a centrally defined new structure of local government, one that effectively undermined customary structures and made them irrelevant.

Nationalizing the ownership of forests had been advocated on the grounds that local villagers cannot manage forests so as to sustain their productivity and their value in reducing soil erosion. After nationalization, however, individuals and communities that had managed forest lands no longer had any right or incentives for continuing to manage these lands, and the government, while now controlling these lands in name, did not have sufficient manpower or resources to manage them. In Nepal there are many instances where prior to nationalization villagers had exercised considerable restraint over the rate and manner of harvesting forest products. The consequence was that nationalization created *open-access resources* where *limited-access common-property resources* had previously existed (Ostrom 1990, 23). Subsistence farmers were able to expand their use of the forests to areas previously closed to them by individuals or communities. This increased usage coupled with inadequate forest productivity contributed to deforestation, soil erosion, and land degradation in a very significant way.

In response to this problem, the government first attempted to outlaw destructive land use practices (1961 Forest Act).. Under this act, the definition of forest land was extended to include all land adjoining forest areas and left fallow for two years (Manandhar, 1982). But since the government still lacked the manpower and resources needed to enforce the law, the unofficial right of villagers to collect forest products was not affected. Effective government supervision of thousands of patches of forests scattered through remote hilly terrain, accessible only with great difficulty, proved impossible. One

regulation required people to obtain permits from forest rangers to collect each load of firewood. Another required written permission from a distant forest office (at times, more than a day's walk) for house timber. Obviously, these were difficult for households to obey and nearly impossible for the authorities to enforce. Consequently, people in most places unavoidably resorted to illegal collection of forest produce.

Nationalization also had the unforeseen effect of further weakening existing forest conservation and management. Whereas communities previously sought to protect local forest resources against exploitation by outsiders through their traditional management systems, they now had no legal authority to do so. Furthermore, they now tended to view the forests as government property rather than their own, an attitude that seriously eroded their motivation to protect local forest resources (Arnold and Campbell, 1986:430).

This legislation also revealed a lack of understanding of hill forestry as a component of hill agricultural systems. A regulation that specified that any land left fallow for two years could be appropriated by the state had the effect of discouraging fallow.

It took almost twenty years for the government of Nepal to realize the shortcomings and negative consequences of the nationalization legislation and enact the National Forest Act of 1976 in which the the involvement of the community was mentioned for the first time. It was only in subsequent amendments (1977 and 1978 Forest Amendments) that the government recognized that local participation is necessary for solving forest lands management problems. Under these amendments, the forest department could enter into agreements to transfer forests to village panchayats. These rules and amendments encouraged panchayat-based forestry, ostensibly designed to return some forms of communal management over forests and related resources to the local people. This was done by defining four categories of forests to be managed by panchayats, religious institutions, or individuals. The 1977 and 1978 amendments made it theoretically possible for 2.2 million hectares, over half the nation's forests, to be managed at the local level (Fox, 1983:6).

The four new categories of forests are: Panchayat Forests (PFs), Panchayat Protected Forests (PPFs), Religious Forests, and Lease-Holder or Contract Forests. PFs are degraded forests given to village panchayats for reforestation and management. PPFs are government forests given to village panchayats for protection and management. Religious forests are of religious significance and are given to religious organizations (temple trusts) for management. Lease-Holder or Contract Forests are waste lands leased to individuals and communities for reforestation.

In the 1980s, decentralization of decision-making authority had become an important goal of the government, particularly as it relates to the development and maintenance of communal resources. On the one hand there was a trend toward strengthening local authority and accountability in communities that had reasserted or had held tenaciously to "ownership" (in the sense of management control) over local resources despite nationalization. On the other hand, both recent reform legislation in forestry and national development policy indicated a trend toward more formal control of some resources (both natural and political). The National Forest Act of 1976 (and amendments that provide the mechanisms for panchayat-based community forestry), and the Decentralization Act of 1982 (ostensibly giving more governing jurisdiction to local district and village panchayats) were the two principal actions of the national government toward decentralization (Messerschmidt, 1986:471).

The process of decentralization in Nepal implied returning administrative control to local jurisdiction with, perhaps, tacit allowance for reinstating some forms of customary resource management. The difference is that under centralization, formal national law is brought downward from the center to the village where it substitutes, in full or part, for traditional customary law. The formal law is translated and transmitted into the rural areas through government offices in district headquarters towns. Ostensibly, under the new legal structure of forest management, formal law and centralized authority would remain, but with some aspects of customary law, and local participation would be encouraged by a process of selectively melding them with the formal system

(Messerschmidt, 1986:472). Although at the time this was thought to have had some merit as a development plan, subsequent observations have shown that decentralization (as legislated) turned out to be centralization de facto as implemented.

The Decentralization Act (1982) and Operational Guidelines (1984) provides for the management of PF programs and PPF programs through User Committees which represent all segments of the user group and are formed by popular decision. There are a number of problems and ambiguities arising out of the PF and PPF rules.

The seven member Users Committee is formed under the Chairmanship of the concerned Ward Chairman. The Chairman is a political appointee, part of the panchayat hierarchy, a local politician who has the government's interests at heart and not the users'. The compulsory nomination of the ward chairman as the committee chairman is inappropriate because more often than not he is a non-user. These two factors will render the committee ineffective.

The ownership of PFs is debatable because as provided by the Forest Act (1961) PF is in reality owned by the government and not the panchayat. However, the Village Panchayat Act (1962) provides that the concerned village panchayat shall have absolute right over such forests as have been designated PF by the government. These provisions create considerable confusion. Who owns the PF?

The whole process of handing over government land to villages as PFs and PPFs is a complicated, drawn out, time-consuming process involving detailed survey and demarcation with reinforced concrete pillars. This really slows down the creation of PFs and PPFs. At the present rate of transferral it would take 159 years to have half of the forest and shrubland handed over to the villages (Gilmour, 1988:17).

The government, under the provisions of the 1961 Forest Act possesses absolute power to reclaim the forest it handed over, and is not bound to give any reasons for reclamation. This would result in a great deal of insecurity for the Users Committees. Why invest the time and effort attempting to manage a resource if there is insecurity of the future? Furthermore, there is no provision for

compensation upon reclamation of the forest. This creates reluctance on the part of the concerned parties to get actively involved and thereby results in the ineffective implementation of government policy (especially those aimed at increasing people's participation in forest management).

The operational plan as stated in the Operational Guidelines are issued by the Ministry of Forests and Soil Conservation. This plan needs to come from the users themselves rather than the panchayat as is the provision in existing legislation. As a result, the guidelines are inadequate and difficult for the common peasant to understand.

The users committee does not have a legal personality under the provisions of present legislation. This prevents it from being able to prosecute rule-breakers on its own. Furthermore, there is no comprehensive legislation for dispute settlement procedures.

Cash benefits accruing to the user group or panchayat have presented a special problem because of the difficulties arising from the legislation. The 1978 Panchayat Protected Forest Rules are still subject to the provisions of the underlying Forest Act of 1960. The latter requires that harvesting of timber be authorized in advance by the district forest controller. The practical difficulties and delays entailed in trying to observe this requirement discourage local groups from including significant timber production in the management prescriptions (Arnold and Campbell, 1986:450-51).

More important, the Panchayat Protected Forest regulations themselves mandate that income from the sale of timber be shared between government and users, and specify a mechanism for handling the funds. This system is proving cumbersome and slow, and is impeding progress at the panchayat level. Twenty-five percent of the income from sales goes to the government and thirty-five percent to the panchayat. Initially, however, the full proceeds of the sales accrue to the government, and the panchayat's share is supposed to be returned in due course. Often, a great deal of time elapses before the panchayats receive their repayments, which discourages panchayats and engenders suspicion that the process of PPFs and management plans is intended to generate income for the

government, not the user group members.

As a consequence of these difficulties, most established management systems have attempted to avoid cash income from forest products (such as timber) that fall under the Forest Products Sales Act and for which the income should go directly to the forest department before being returned. In addition, ambiguities regarding whether or not permits for these products should still be issued by the forest department after a plan has been approved have also inhibited the distribution of these products (Arnold and Campbell, 1986:450).

These are some of the difficulties, ambiguities, and consequences emergent from legislation designed to foster local participation in the management of forests. Here again it becomes evident that this sort of regulatory activity orchestrated by the central authority proves quite ineffectual at the implementation stage, primarily because of the lack of input from the users themselves.

Indigenous Systems of Forest Management

There are many places in the hills of Nepal where local people have, without outside guidance or intervention, made arrangements to protect and regulate access to forest resources for which there is no single owner. Systems of protection, regulated access, utilization and distribution of forest products, can be described as indigenous forest management systems (Fisher, 1988:24). The term indigenous system refers to a system developed as a result of local initiative as opposed to a sponsored system which is imposed or supported by outside agencies (including the government). Indigenous systems may be traditional as well as more recent. Fisher considers the indigenous systems and sponsored systems to be at either ends of a continuum and suggests that, in practice, most local forest management systems fall somewhere along this continuum (1988:30). In the case of Nala-ko-Thulo Ban described below, the earlier committees reported wrong-doers to the Forest Department. Thus, while the initiative was local, the activity was supported, to some extent, by outside agencies.

Nala-ko-Thulo Ban is a patch of about 100 hectares of mixed broad leaf forest located in Nala Panchayat just outside Kathmandu Valley. A local forest development committee consisting of 14 members was formed in 1953. Forest watchers (called Chittaidars) were appointed and paid on the mana-pathi system (i.e. by a collection of grain from households in the user group). The forest is now quite dense, although before 1953 vegetation was limited to degraded shrubland (Fisher, 1988:25).

Mahankal Ban is located in Thulo Sirubari Panchayat. The users started protecting this degraded forest since 1963 and a committee was formed in 1971-72. Initially, the users took turns watching the forest but later in 1977 they hired a watcher with funds collected from the all the users. They use a set of locally recognised rules.

Choprak Panchayat in Gorkha District has a patch of deciduous forest managed by 46 households. Users themselves watch the forest by the rotation system, two watchers at a time on a daily basis. The users have access to fuel, fodder, and construction wood according to the rules they have fixed. Even non-users are allowed to collect dead or broken twigs and grass free of cost. Although the nationalization of forests went unnoticed by them, when the forests got converted into PPF, the local participation in management declined due to government intervention (Messerschmidt, 1987, 1988).

An extensive survey of 47 panchayats in four hill districts (Campbell et al., 1987) found that forest committees had been established in 68% of the panchayats. Of these committees 80% operated at the level of a user group. These systems exist regardless of whether the forest is legally government owned forest or PPF. Thus, villagers often take responsibility for forests even when they have no legal right to use forest resources.

Indigenous forest management is a dynamic response to a changing situation. Gilmour (1987) shows that the likelihood of communities becoming actively interested in forest development, and the probability of the existence of indigenous forest management systems, are directly related to the difficulty in obtaining forest products. Where products are relatively accessible, it is

unlikely that people will actively participate in forest development activities and it is unlikely that they will form organizations to protect or manage forests. Where there is a perceived need, villagers have proved themselves to be quite capable of positive response (Fisher 1988:32).

Privatization as an Alternative

Privatization of forests is basically argued on the grounds that sole ownership of a forest resource can internalize the externalities associated with "open-access" exploitation and thereby bring about an efficient management program. It is argued that private agents have a vested interest in enforcing property rights and will do so more efficiently than the state (Clarke and Shrestha, 1989:53). There are several reservations that should be understood with respect to this viewpoint.

Privatization as an alternative to communal management may not be sustainable. Because exclusion from a CPR is difficult, it may not be feasible to privatize it. Private use can also lead to overuse and degradation. Equally, the state may not be able to control, manage or prevent degradation to a resource that it has "privatized" (Berkes et al., 1989). The definition and enforcement of property rights may be so costly as to offset whatever gains might have been realized by their establishment. As Anderson and Hill (1983) argue: "...while private property are [sic] a necessary condition for efficient market allocation, they are not a sufficient condition. The definition and enforcement process can simply shift the inefficient allocation of resources from the resource commons to the property rights commons and on net, society may be no better off with private property rights" (p441). Privatization tends to shift control to others than CPR users, so that it does not improve the efficiency with which the needs of the latter are met. Privatization, by transferring control of the resource to a limited number of individuals who thereby acquire the social and legal sanction to exclude others, in fact is likely to exacerbate the problems of the excess of population without access to private property (Bromley and Cernea 1989).

The distributional impact of CPRs is a major consideration against privatization. The poor are heavily dependent on CPRs, generally lack access to the resources necessary to develop privatized common land, and benefit considerably from the employment created by CPR management activities. In addition, CPRs such as forests, are best suited to uses which benefit from, or require, the economies of scale that are only possible with group rather than individual management.

Privatization of forests will increase income inequities if, forest resources currently exploited by the peasant under conditions of open-access, become the property of advantaged groups. Equity issues emerge as crucial factors influencing the evaluation of this option for forest management.

An important factor arguing against total privatization is the finding by Jodha (1986) that the poor tend not to be able to retain control of the land allocated to them under privatization programmes. Lack of complementary resources to develop and cultivate the land, or immediate needs of cash for other purposes, compel a large proportion of the poor to sell, mortgage or lease the land. They therefore end up deprived of access to CPRs, and without control over an offsetting private resource.

Forests provide not only private goods such as fuelwood, fodder and timber products but also numerous socially beneficial externalities. Private ownership may result in more private goods and less beneficial externalities than public ownership. In extreme cases, private owners may find it attractive to clear-cut forests and convert them to farmland, even though this may be undesirable from the viewpoint of society's good. This can be very possible in Nepal where burgeoning population growth is putting tremendous pressure on food availability. In such cases what can prevent a private owner from trying to make a quick buck? There is no guarantee that a private owner will manage a forest in a socially optimal manner. Thus, private ownership goals need to be supplemented by social objectives. This inevitably implies some type of compromise with public ownership ideals. In fact public ownership, with effective enforcement of property rights, may prove superior to pure private management of forest

resources.

Can there be intermediate alternatives which are mixtures of public and private instrumentalities? Tree Pattas and Joint Management of Forests (West Bengal) in India are examples of successful alternatives to forest management.

Plantations: Commercially leased monoculture plantations could be a possibility. The government could grant concessions for plantations of certain export-oriented tree crops. This would be dependent upon issues of local institutional participation, amount of government intervention and control, impact on communal rights, inducement of labor migration, price setting powers and social benefits. Sawyer describes, in detail, the adverse consequences of excessive government intervention and control as well as socio-economic changes that could result (1990:403).

Small-holder enterprises: This, as an alternative to plantations, may be commercially more viable in Nepal. As suggested by Sawyer (1990:427), rural households could benefit from small-holder enterprises because aside from income from cash crops, there is a sense of ownership, participation, and control as well as achieving more intensive food cultivation and thus conservation of forest resources (reduced conversion rate of forested land to agriculture).

Conclusion

Nationalization and other related government actions leading to increased centralization of authority in Nepal, led quickly to the decline or collapse of local initiatives for resource management in many communities. Nonetheless, traditional structures do continue to exist, and in some cases thrive, in communities across the country. As Molnar has noted (based on a sample of forest management systems throughout the middle hills of Nepal): "Traditional management systems do exist. Where they do ..., they should be incorporated in the management plans and built upon where it is feasible" (1981:24).⁵ Success in addressing forest resource management and development depends upon efforts

⁵as quoted by Messerschmidt (1986:471).

that reflect continuity with and are guided by pre-existing forms of management, local cooperation, and popular participation.

Existing forest management systems, varying as widely as they do in their form and effectiveness, are not in themselves adapted to the more intensive management now needed. However, they can provide important information about needs and particular constraints that should be accommodated. Any institution that is to be designed for the management of the forest resource, and other like resources, must incorporate the principles of social control and product distribution encoded in these traditional systems.

Governments can help indigenous systems by providing a legal framework, funds to defray some of the infrastructure costs, and perhaps technical assistance. The legal framework should make it possible for indigenous systems to obtain legally enforceable recognition of their identity and rights within the society, and to call upon the state as an enforcer of last resort. If governments could move in this direction, their efforts should widen the range of situations in which indigenous forest management regimes can be expected to work.

In the case of modern industrial forestry utilizing plantations (for the purpose of harvesting timber), traditional methods of regulating resource use may be useful in providing the initial basis. The government may have to be involved in the planning of any commercial operation. In some cases, the government role may be simply to legitimize and enforce the traditional rules. In other cases, it may be to work with different groups to develop new rules. One of the difficulties lies in persuading government officials to regard local communities as being partners in the venture rather than merely an extension of the government agency in charge. In many cases, government agencies have a vested interest in understating the capacity of local organizations in order to protect their own authority. But local groups are unlikely to be able to maintain and reinforce their own ability to regulate and manage unless they can be seen to command the respect of the state agencies (Korten, 1987). The issue is difficult to resolve but not intractable as such joint management arrangements are

beginning to be developed in the case of fisheries, another common property resource (Rettig et al., 1989).

The consequences of central regulation have been discussed in some detail illustrating the fact that a top-down approach cannot work as a sustainable, economically viable arrangement. The reverse has to happen, a bottom-up approach has to be adopted. In the governance of forests the communities of individuals that depend on the resource must be major participants in the formation of any institution that will order their relationship with local, state, or national authorities, and the forests.

Given the political activities of 1990 in Nepal, the dismantling of the panchayat system, the introduction of a multiparty system, and much trumpeting of true democracy, it remains to be seen what consequences will emerge for the subsistence farmer and the resources so critical to his survival.

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