



Institutional pluralism in forestry: considerations of analytical and operational tools

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Looking for the tools to put pluralism into practice.

[A meeting between forester and village officials. Identifying resource interests \(stakeholders\) is a crucial step in determining management systems](#)

In the current forestry context a wide variety of individuals and organizations have an interest in resource management. A range of new approaches in forestry planning and management have emerged, especially over the past two decades, developed in collaboration with interests and stakeholders which were either historically excluded or failed to find political support for their demands. Objectives in the forestry sector have also multiplied and forest management is considerably more complex than it was during the early period of this century. In particular, there is a widespread recognition that exclusive management of forest resources for single objectives is no longer feasible as a long-term strategy, except in the case of very limited, well-delineated areas.

Pluralism describes the interplay of this multiplicity of ideologies, interests, actors and organizations, which have combined to create the current scenario and which can contribute to future development.

Analytical background

Identifying resource interests stakeholders in the forest sector Grimble *et al.* (1995) define stakeholders as "all those who affect, and/or are affected by, the policies, decisions, and actions of the system; they can be individuals, communities, social groups or institutions of any size, aggregation or level in society. The term thus includes policy-makers, planners and administrators in government and other organizations, as well as commercial and subsistence user groups." Identification of the principal stakeholders in the forest sector allows us to create a mental map of the range of interests involved in resource management situations. However, this definition is so broad as potentially to include the entire population. Clearly, not all stakeholders are in a position to participate directly in the management of

forests, even though they may affect or be affected by activity in this sector. Four sets of stakeholders have a direct interest in forests:

- individuals (private households);
- communities and other collective groups;
- corporate bodies (commercial enterprises, as well as non-governmental organizations); and
- the government.

Other groups may also have an interest in forest management systems, either because they are directly affected by outcomes in this sector, or because they have a less narrowly self-interested concern for forest resources. These groups may be found at the local, regional, national and international levels, and their principal interests include access to forest products, protection of soil, water and climate regimes, tourism development and conservation of biological diversity. They have a less direct role to play, but influence outcomes by altering policy and legislation, changing the nature of market opportunities, influencing development priorities and by using control over funding and credit to promote or inhibit particular types of resource use practices. Intellectuals, environmental and other special interest groups, donors and multilateral agencies also have an important influence on the policy environment and generate support for specific modes of implementation which have implications for the choice of forest management strategy.

Simple and shared production regimes

In traditional forestry administration, production and management are either directly undertaken by a principal entity, or are contracted to others under its control. This principal entity organizes and combines resources in a manner that optimizes its own objectives. The principal entity has legitimate claim to all profits after costs are covered and this provides it with incentives for undertaking supervisory tasks, such as monitoring and assessing performance. Since these tasks are concentrated in the hands of a single entity, such resource management regimes are deemed here as "simple".

In contrast to simple regimes, shared production regimes are those which produce goods or services by utilizing inputs from (at least two) individuals or legal entities who are not part of the same organization, and are not under the control of a single principal. Each partner independently decides the level of input to contribute to the shared production process and the overall goal or goals are jointly determined. Responsibility for bearing the cost of inputs is negotiated between the partners, as is the share of any eventual profits, and no single entity has the right to modify these terms unilaterally. Shared regimes are frequently "intersectoral", in the sense that the collaborating partners belong to different "levels" of social organization, individual, corporate, collective or state.

Shared production regimes are becoming increasingly common in the context of natural resource management and for the delivery of public services, which have traditionally been provided by the government. This suggests that the government has been less than perfect in its stewardship of natural resources, as well as in the provision of public services. Furthermore, there is a recognition that other groups have both the interest and the capacity to work in these sectors, and are willing and able to contribute to these activities, either independently or in conjunction with agencies of the state. The forestry context is forcing a considerable rethinking of the traditional dichotomy between the public and private sectors, and there is an emergent discourse which describes a complex new institutional mosaic, consisting of a multiplicity of ideologies, interests, actors, organizations, legal frameworks and informal arrangements, all collaborating to pursue a range of objectives.

Some initiatives which have been introduced in the last two decades have been explicit about

their collaborative intentions, while others have implicitly embraced this perspective without recognizing it as a central feature. [*Ed note*: There are also examples of lip-service to shared production regimes see article by Hildyard *et al.* on p. 26 of this issue of *Unasylva*.] There have been innovations in resource management techniques on private lands as well as on state lands. On private lands, the state has supported and collaborated with initiatives for farm forestry on individual lands, woodlots on community lands, and industrial forestry on corporate lands. On state lands, there has been evidence of individual involvement through tree tenure schemes, community participation and joint forest management, as well as corporate forestry. Two characteristics of such collaborative regimes are of particular interest from an operational perspective: first, the nature of the production process, which determines the technical scope for shared regimes; and, second, the extent of transaction costs, which affects the economic viability of such regimes.

Production functions and the potential for synergy. The production function is fulfilled through the range of technological options available for the delivery of a good or a service. What is being "produced" in the present context is not a pure private good, but a (quasi-) public good or service, which economic theory suggests is likely to be undersupplied by the private sector. The production function is typically "intersectoral", referring to the potential for inputs from the state (public) sector to combine with inputs from the private sector (individuals, communities or corporations; more generally, civil society) for the production of public goods which have traditionally either been exclusively provided for by government, or not provided at all. The production possibilities and the technical scope for specialization and cooperation are likely to be related to the nature of the good or service which is being produced, as well as the social and political dynamic between state agencies and a range of stakeholders in civil society.

Determining responsibilities to shared production regime in India

For shared production to be a viable strategy, there should be synergy between the inputs of different stakeholders: if they were to compete with one another, shared production would result in a lower output than the sum of separate production under pure regimes. Furthermore, these inputs must not be perfect substitutes for each other since, in such a situation, shared production would not be a least-cost strategy - it would be economical for the more efficient sector to specialize in production, and for the others to contract with it to ensure an adequate overall supply of the relevant public good or service. Output under a shared regime is not simply the aggregate of separable production by the public and private sectors, but rather a process through which the contributions of each stakeholder are structured to complement one another so as to yield a higher overall level of productivity, assuming the costs of organizing separate production in each sector are lower than the costs of organizing the more complicated process of shared production. Thus, if intersectoral shared production regimes incur higher transaction costs than separable pure production in each of the sectors, then they must yield significant productivity gains in order to be economically viable.

Preconditions for shared management in forestry

Transaction costs under shared production regimes. Transaction costs refer to the costs of arranging, monitoring and enforcing economic relations among partners, and include searching for potential partners, bargaining, making contracts, monitoring behaviour, enforcement of contracts and protection of property rights. Such costs would be incurred in the context of establishing collaborative regimes for forest management because of negotiations relating to the following activities: i) establishment of common interests, or the negotiation of a common purpose for the shared production regime; ii) determination of each partner's contribution to the regime, and monitoring and enforcement of this effort; and iii) determination of returns (payment) to potential partners and the basis for profit-sharing.

Establishing common interests. While the maintenance and management of forest resources is presumed to be of mutual interest to potential partners, thereby providing a minimal basis for cooperation, this may not be sufficient to resolve all conflicts of interest. Potential partners may have different views regarding what the forest should be managed for (preservation for future uses, conservation for ecological values and other non-use values, harvesting of timber or non-timber products for present use, even permanent conversion of the forest to some other form of land use). Furthermore, if the costs of establishing common interests are a function of the number of stakeholders, then these costs would be higher under shared production than under the alternative pure production systems.

Determining each partner's role in the regime, monitoring and enforcement. Once a common production plan is negotiated, partners must then agree on their individual roles in implementing it. This agreement can be achieved through formal or informal mechanisms. Formal mechanisms involve detailed contractual agreements setting out each partner's obligations, and they also assume the existence of some acceptable third-party mechanism for monitoring performance as well as for resolving disputes. The cost of institutionalizing such mechanisms is likely to be significant. Informal mechanisms promote collective-oriented behaviour by individuals, even if this appears to be privately costly. Results from the literature demonstrate that it may be rational for individuals not to defect from cooperative strategies in the context of long-term and repeated group interaction. Furthermore, individuals may not only be motivated by self-interest, and there is support for the proposition that socially oriented behaviour may dominate some group situations (Elster, 1989). Incentives for opportunism may be lower if partners "trust" each other not to exploit the dependent relationship. If there is an existing stock of 'social capital', possibly because of a history of cooperative activity, there would be incentives for individuals to promote group interests (Seabright, 1997). In addition, social capital can be created (and destroyed) by changes in legal structures, formal institutions, and the active mobilization of political support for particular objectives [Ed note: See the article by Bebbington and Kopp on this issue of *Unasyilva*.]

[Identifying the type and magnitude of returns that will accrue to each partner in shared management is essential For example, in West Bengal, women tend eucalypts but only men benefit from sales of the wood produced by these trees](#)

Determining returns to potential partners. The third area of potential conflict concerns "payment" to each of the partners and the manner in which final "profit" is to be shared. In theory, returns should be related to the marginal productivity of each of the partners, but this is difficult to determine under shared production because of the complementarily displayed in the production function. In practice, responsibility for costs and claims to profits are likely emerge as the outcome of bargaining among the partners. The possibility of deriving multiple products and benefits from forests (at the same time and in the same place) suggests that potential conflicts can be resolved amicably if there is goodwill among the partners.

Establishing a shared production regime and determining the partners for such a regime is not likely to be a straightforward task. Since transaction costs are likely to rise with an increase in complexity, it is necessary to justify the adoption of specific strategies, and to demonstrate the potential gains which may be realized from such arrangements. Two general design principles which emerge from the present analysis are that it must be possible to identify complementarily and synergy between the desires and needs of the partners to the regime; and that the scale of transaction costs associated with establishing and enforcing a collaborative regime must not be so large as to outweigh any potential gains associated with shared production arrangements.

Operational tools

To give a more operational connotation to the concept of forest stakeholders' roles, one can

define them by the respective rights, responsibilities, returns from the resource, and relationships (the "4Rs"). The use of the "4Rs" approach reveals interesting global trends in the roles of the main stakeholders involved in forest use and management.

Rights to land and forest resources. A growing body of evidence shows that the relationship between tenure security and a more efficient and sustainable use of the resources is not always straightforward (Dubois, 1994; Platteau, 1996). In fact, many observers agree that usufruct or management rights may often be more important than ownership, so long as confidence in future access and mutual recognition exist. Indeed, granting property or other rights to individuals or groups that lack the means and knowledge to manage and defend them can be counterproductive. There is a strong argument for a flexible approach to rights to land and natural resources and that rather than a fixed set of rules, rights should be defined on a more ad hoc basis, through a process of continued negotiation as ecological, social and economic conditions change (McLain and Sankarè, 1993). This is in line with Karsenty's (1996) idea of envisaging natural resource management in terms of possible coexistence of different resource uses within the same area rather than just according to space, contrary to most formal law which is based on the exclusive notion of zones, i.e. use is the first consideration, not geographical area. In other words, definition of clear rights and duties - over the resource could prove more important than area ownership issues, especially in the context of collaborative management. The approach to tenure issues should therefore take into account not only rights but also modes of control of resources.

Responsibilities. Decentralization is often seen as a panacea for management of environmental resources because of microlevel ownership and decision-making. However, decentralization may not be very cost-effective in addressing broad economic and environmental issues. Moreover, experience shows that decentralization does not constitute a prerequisite, nor a guarantee for sound development and environmental management (Dubois, 1997).

Strategies and modalities to improve the quality of development and environmental management at the forest level have to be envisaged at three levels, i.e. the community, local governance and the state. Community involvement in the management of resources requires real power and rights; the necessary competence; the economic interest; and the wish to play this responsible role, which to a great extent depends on the previous three factors. This needs to be accompanied by adequate representation in decision-making bodies and empowerment. Both are necessary to ensure enough bargaining power of local communities in the negotiation over resources and the establishment of partnerships. At the level of local government, institutions must have legitimacy; sufficient autonomy to undertake development activities and modify local rules and institutions; greater accountability, of civil servants towards decision-making bodies, and of these towards citizens; citizens should have the possibility of recourse against arbitrary allocation of resources; and, the level of decision-making should be that at which stakeholders know each other sufficiently to be able to control each other in a cost-effective way. Finally, the state may play a facilitating role concerning local initiatives in forest management, including providing: assistance and guidance to local groups, especially financial assistance for monitoring activities; protection against broader forces and/or other economic sectors; a clear legal framework which clarifies group rights and benefits, as well as rules for conflict resolution; direct economic incentives, especially where communities are seeking to meet their basic needs; and mechanisms to disseminate information.

Returns. Returns constitute an important element of choice among different options to use the forest. They must be sufficiently important to motivate stakeholders to embark on the process of collaborative forest management, in order to offset the (sometimes high) transaction costs associated with this strategy. Benefits that can be obtained from forest resources can be both

monetary and non-monetary and are influenced by three types of factor, i.e. values assigned to forest resources by the different actors; tangible incentives that influence the way these resources are managed; and the institutional and legal framework that regulates access to these benefits. Values include direct use values, such as for consumption and sale; indirect use values, such as environmental functions; and non-use values, such as cultural, religious and existence values. A high total value of the resource as perceived by the various interest groups can be a major factor of success of natural resource management initiatives based on shared responsibilities. But, high value can also be problematic and can lead to a reluctance to share power and benefits on the part of the nominal dominant partner (often the state). High value could even lead one or more of the partners to propose changing the land use from forest to another higher value, such as recreation (e.g. a golf course).

Relationships. Incorporating pluralism in forest resource management obviously depends on the quality of the relationships between the main stakeholders. Given imbalances in the "4Rs" as well as often divergent interests, relationships can be characterized by mutual distrust, anathema to constructive partnership for sustainable management. Managing pluralism and preparing effective collaboration requires, in a first stage, an understanding of the nature of relationships. GTZ (1996) suggests a six faceted categorization of relationships among actors: service; legal/contractual; market (determined by demand and supply of goods and services); information exchange; interpersonal; and power.

Special attention should be paid to the nature of the power relationship. Three key questions must be answered (GTZ, 1996): on what basis is power built?; how does power affect the relationship?; when and how do power relations change? As regards the first question, power often results from some type of dependency economic (e.g. financial dependency), social (e.g. hierarchical dependency, expertise) or personal (e.g. dependency because of nepotism, cronyism, etc.). Dimensions of the relationship must be assessed to determine the source of power. Power can affect relationships in three ways -- physically, materially or in terms of social status. The third question helps us understand how best to induce changes in an attempt to rectify the imbalance in stakeholders' "4Rs". For instance, one of the key limiting factors to improving relationships in forest management lies in the difficulty for forestry staff to change their attitude towards local communities. Even if the staff genuinely wish to change, they have difficulties in putting into practice such wishes owing to lack of time and often because of their negative perception on the part of local people, given past experience.

Collaborative approaches

Once the analysis of a particular situation has revealed a high potential for "shared production", very practical and concrete questions on how to go about it arise. Collaboration is a process in which interdependent parties work together to affect the future of an issue of shared interests (Gray, 1989). More specifically, Gray (1985) defines collaboration as "the pooling of appreciations and/or tangible concerns, e.g. information, money, labour, etc., by two or more stakeholders to solve a set of problems which neither can solve individually". Drawing on Gray's ideas, Selin and Chavez (1995) assert that "collaboration implies a joint decision-making approach to problem resolution where power is shared, and stakeholders take collective responsibility for their actions and subsequent outcomes from those actions". In collaborative conflict management and decision-making activities, people have meaningful opportunities for "voice", that is, to communicate as participants in significant ways. Their ideas and interactions matter in both the process and outcome of the situation.

As an agency interacts with citizens and stakeholder groups (its public), collaboration differs considerably from the traditional public participation model. There are seven significant aspects to these differences:

- It is less competitive and more accepting of additional parties in the process because they are viewed as potential contributors more than as potential competitors.
- It is based on joint learning and fact finding; information is not used in a competitively strategic manner.
- It allows underlying value differences to be explored, and there is the potential for joint values to emerge.
- It resembles principled negotiation, since the focus is on interests rather than positions.
- It allocates the responsibility for implementation across as many participants in the process as the situation warrants.
- Its conclusions are generated by participants through an interactive, iterative and reflexive process. Consequently, the process is less deterministic and linear.
- It is an ongoing process; the participants do not just meet once to discuss a difference and then disperse. However, collaborations may have a limited life span if the issues that brought the participants together are resolved.

There are two additional distinctions between pluralistic collaboration and traditional public participation. First, a natural resource or environmental management agency cannot adequately address the issues at hand by working independently. Other stakeholders may be able to bring to the process a number of additional resources that the agency needs: different perspectives on both the problem at hand and potential solutions, understanding of rapidly changing social values, scientific data, indigenous knowledge, political clout, agreement and coordination of other agencies and private landowners, finances, volunteer labour, and so on. For example, since the focus of land management is changing from specific resources (stands of trees, herds of big game, grazing area) to ecosystems, collaboration appears better suited to planning and implementation tasks than traditional public involvement. Collaboration arranges the relationships between the stakeholders in a manner that more closely matches the resources and responsibilities that each brings to the process. Just as rural development and sustainable agriculture emphasize "system" relationships in the natural world, collaborative processes can illuminate "system" relationships in the social world.

Second, collaboration does not demand that participants set their self-interest aside, nor does the success of collaboration hinge on their doing so. Quite the contrary: participants are expected to voice their interests clearly and work energetically to achieve them. The key is that their efforts are oriented not in opposition to those of their fellow participants, but in concert. An environment needs to be created in which exploring differences is encouraged rather than hindered.

There are two general principles which are useful in shifting the relationships in natural resource management and rural development away from competition and towards collaboration: correctly select those situations where collaboration is an appropriate strategy; and structure the process to encourage and reward cooperation rather than competition. Not all situations are amenable to collaboration, as has been shown. It is also unrealistic merely to announce that collaboration is beginning and expect the current relationships and patterns of behaviour to change. Collaboration requires innovative kinds of decision-building structures that will have to be designed with considerable attention to the incentives they create. If they do not establish clear rewards for collaboration and disincentives for competition, there is no reason to expect much change.

A number of methods have emerged for the promotion of collaborative public participation in environmental conflict and decision-making situations. These include Transactive Planning (Friedmann, 1973; 1992); Communities of Interest and Open Decision-making (Sirmon, Shands and Liggett, 1993); Search Conferencing and the Participative Design Workshop

(Diemer and Alvarez, 1995); Constructive Confrontation (Burgess and Burgess, 1996); Collaborative Learning (Daniels and Walker, 1996); Mutual Gains Approach (Susskind and Field, 1996); Area-Wide Collaborative Planning (Salvesen and Porter, 1995); Habitat Conservation Planning (Beatley, 1995); and, Policy Dialogues (Gray, 1989). The selection of an appropriate approach and its specific adaptation should be based on the features of the particular method and its "fit" with the collaborative potential of the conflict situation.

Conclusions

This article has presented an overview of some emergent analytical tools for the study of institutional pluralism in the context of forestry and rural development. Dubois' development of the "4Rs" approach helps to identify potential obstacles to collaboration among stakeholders, and allows policymakers to begin the process of relaxing some of these constraints. Work on collaborative approaches and shared production analysis not only highlight the importance of synergy and joint decision-making, but also warn that such techniques are potentially costly and should not be expected to work in all empirical circumstances.

These general principles provide a preliminary framework for the analysis of pluralism, but testing of these ideas needs to be continued rigorously in the light of empirical evidence to improve our understanding of the working of collaborative forest management regimes. We must remember, furthermore, that pluralism is not only about the mechanics of regimes for collaborative management. It also refers to a multiplicity of ethical and ideological positions which define the context for forestry practice and provide criteria by which we can evaluate the performance of forest management regimes. There is conflict as well as potential synergy between objectives such as ecosystem restoration, biodiversity preservation, poverty alleviation and empowerment of the weak. What remains to be seen is whether such values can be integrated sufficiently to provide workable indicators for assessing performance, or whether some degree of "higher level" conflict is the inevitable price of pluralism.

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