Chapter 2

REVIEW OF COMMUNITY FORESTRY DEVELOPMENT

Evolution of Indigenous Forest Management Systems (IFMS)

The basis of community forestry development in Nepal is undoubtedly the identification, understanding, and incorporation of the elements of indigenous forest management systems (IFMS) practised by the villagers throughout. Messerschmidt (1990a); Gilmour (1989); Fisher (1991); and Karki *et al.* (1993) have carried out extensive reviews of indigenous forest management systems (IFMS) in Nepal. Baral and Lamsal (1991) have discussed indigenous systems in Palpa. Some of their observations are quite relevant in terms of describing the genesis of user group (UG)-centred community forestry (CF) development in Nepal's mid-hills (Chhetri and Pandey 1992; Fisher 1991; Gilmour 1989).

- Most of the IFMSs have clear-cut user groups, although in an informal set-up rights are complex-consisting of primary, secondary, and tertiary ones - and they are not ambiguous. Disputes are common. However, user rights change and evolve. Lonely-net systems unable to regulate access are not good, indigenous management systems and such IFMSs have been weeded out.
- An element of consensus on forest management issues is the major strength of IFMSs. Sometimes, biologically unsound practices are also agreed upon through consensus if they are not perceived to affect the forest quality adversely (again according to their own definition). Flexibility is the key feature of IFMSs.
- Diversity in organisational forms is pervasive in IFMSs. They vary and change over time, making them dynamic.

All effective systems have an institutional sub-structure consisting of user rights and allocation rules at the first level and, at the second level, shared values, rules, and practices.

- An indigenous system with no institutional base is generally ineffective. Committees are characteristic of the formal system.

- Indigenous system descriptions are important only from two points of view: a) excluding outsiders and b) ensuring proper distribution of forest products. Biological goals are not well pronounced.

- The findings of several studies (Fisher 1991 and Karki 1991 tend to generally support Gilmour's (1987) scarcity theory of UG system evolution. However, this may be one of several factors.

- Effectiveness in forest management, as perceived by the people, relates to 1) effective protection and 2) acceptable distribution.

Outstanding Issues

- What is the contribution of indigenous systems to the effective management of common forest land even after the failure of a public resource policy such as that of the nationalisation of forests in 1957?

- Are IFMSs overly conservative and do they fail to make full and judicious use of biological resources?

- Is effective protection of community forests possible at the expense of other common and/or unprotected national forests?

- How important is grazing as a factor for achieving effective forest management?

- Maximisation of production - is it an indicator of effective forest management?

- Equity and gender issues - how important are they and how can they be included to achieve meaningful results?

- Unit and size of management - although the UG forests should be delinked from political boundaries, the unresolved issue is what level and size (of the UG forest) is the optimum for management?

Pattern of Variation

Molnar (1981) stated (as quoted by Fisher 1991) that in eastern
Nepal, IFMSs are less developed than in Central Nepal due to the
kipat (communal) system of land tenure. Several variables were
identified that could explain the pattern of variation among
IFMSs - 1) residence or lineage - which one defines user rights?;
2) exclusion or management - which is of prime concern to the
users?; 3) communal and community management - can they be
compared on the basis of ethnic homogeneity and how do they
differ?; 4) can one classify IFMSs based on the types of harvesting
practice?; 5) why are there no communal systems practised by
non-Hindu ethnic groups?; and 6) can topologies based on
geography be proposed?

Issues under Investigation

The following issues were identified for in-depth research and
analysis.

1.   The basis for defining user rights and composition of the
      user groups
2.   The effect of ethnic homogeneity and heterogeneity factors
      on user group function and effectiveness
3.   The harvesting practices and control measures used by the
      user groups
4.   The structural condition of the forests under UG
      management
5.   The nature of social arrangements (formal/informal and
      their features) of IFMSs
6.   Resource availability and accessibility and their influence
      on the effectiveness of management
7.   Goals of forest management in a subsistence economy
      dominated by agriculture

Learning from Past Experiences

It is generally recognised that the success of CF largely depends
upon successful motivation of the users, mutual cooperation
among the users, and productive involvement of the DOF staff.
Community forestry must meet the aspirations of the local
inhabitants as perceived by them. It should be emphasised that
CF must take clues from the indigenous/ traditional systems of

forest management in the form of the following attributes - 1) the presence of a strong leader; 2) user rights to harvest necessary forest products; 3) provision of incentives and benefits; 4) effective enforcement of socially sanctioned rules against uncontrolled grazing and illicit tree cutting; 5) incorporation of women's views in the management system; 6) encouragement of private tree ownership and cultivation; and 7) maintenance of good inter-community relationships. However, traditional systems do not provide a model *per se* for CF since they do not conform to a single type, pattern, and structure.

Based on the above factors, the effectiveness of any community forest management system may be influenced by - i) the extent of the forest resources; ii) the extent of private landholdings; iii) caste and ethnic composition; iv) the degree and nature of local factionalism; v) proximity to local markets; vi) unit of management; vii) inter-community relations; viii) system of livestock management; ix) mode of distribution of benefits; x) government funded and/or community sanctioned forest watchers; xi) extent of ownership of private trees; and xii) the role of local forestry staff.

Evolution of User Group Forestry in Nepal

Concepts and Practices

The evolutionary background of user group forestry is closely linked to the existence of indigenous forest management systems and development of community forestry[1] (CF) work in Nepal (Chhetri and Pandey 1992; Baral and Lamsal 1991). The official CF programme in Nepal began in 1978 when a legislation was enacted enabling the Department of Forests (DOF) to hand over public forest lands to local communities. Initially, the DOF line agencies were willing to hand over only barren and degraded forest lands to the local people in the form of *Panchayat*[2]

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[1]   The term refers to a broad range of tree or forest-related activities that rural landowners and community groups undertake to provide products for their own use and to generate local income.

[2]   The *Panchayat* System was Nepal's previous form of government. The lowest administrative level was the village *panchayat* or council. This system was replaced in 1991 with the introduction of a multi-party parliamentary system. The VDC (village development committee) is now responsible for village affairs.

Protected Forests. The reasons were two-fold - initially reforestation was the main CF programme and, secondly, the DFOs were hesitant to hand over natural forests to local communities. However, due to mounting public pressure, and as a result of their continuous failure in forest protection, natural forests were also handed over in selected districts such as Palpa. This otherwise bold CF strategy of the DOF did not go far enough in convincing the local communities to accept the responsibility of developing and managing forests to the anticipated extent. The major problem was the ambiguity of clauses regarding the security of traditional user rights, lack of freedom in decision-making, and absence of mechanisms to guarantee the anticipated benefits to investors. Moreover the implied politicisation of the process of community forestry, i.e., requiring the actual users to function under the umbrella of the *panchayat* structure, was not appreciated by the rural communities. For example, the forests could be handed over only to the *panchayat* officials within a politically defined geographical and demographical entity, e.g., a ward. However, the forest boundaries and the political boundaries did not usually coincide. Some forests were common to two *panchayats* (now Village Development Committees), others were jointly managed by two wards and/or villages. Therefore, sensitive issues related to forest ownership and recognition of actual user rights became major stumbling blocks in the speedy transfer of forest management to the user groups. In 1990, the policy was changed and forests could be handed over to forest user groups (FUGs). The current CF policies are heavily tilted in favour of managing the country's hill forests through FUGs and the following provisions are stipulated:

-       accessible forests can be handed over to FUGs, irrespective of the political boundary and opinion of political office holders;
-       an organised FUG can have some of its members trained in order to help it manage the forest as per the operational plan; and
-       the DOF staff should be trained to change their traditional roles from those of law enforcement agents to those of extension workers.

Based on the policy changes, requests for handing over the forests are increasing rapidly and the process of handing over is also picking up (Pokharel *et al.* 1993) (Figure 1). However, several

factors, which are still not well identified and analysed, seem to influence the speed of the transfer process. Responding to the communities' overwhelming demand, His Majesty's Government of Nepal (HMG/N) has recently enacted a new Forest Act, 1993 (HMG/Nepal Gazette 1993), which, among other objectives, aims at facilitating the handing over of community forests to the actual users. The major features of the Act, addressing the issues raised by the slow rate of progress in community forestry, are given below.

Number handed over

Years

Districts

■ Palpa   ▨ Kaski

Data Source: DFO, Palpa and Kaski
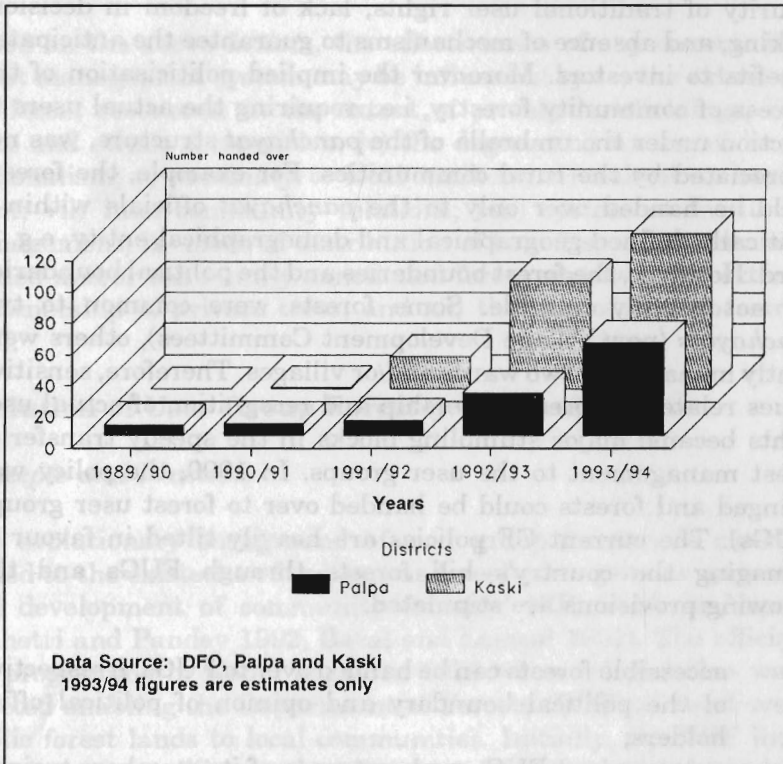1993/94 figures are estimates only

Figure 1:   Transfer of Authority Trend of User Group Forests
                   in the Palpa and Kaski Districts

- The District Forest Office can now hand over forests to the users (this used to be carried out at the Regional Director level only);
- the income earned by user groups can be used for purposes other than forest development work if so desired by the FUGs;

- the users have the freedom to make changes in the operational plans if democratic norms and procedures are followed;
- the users can fix the rate of forestry products irrespective of government royalty rates; and
- the FUG is an autonomous body with the status of a corporate agency.

However, since the bye-laws and rules required for implementing this Act have not yet been approved and, unless these rules are framed in line with the spirit of the Act, the otherwise bold legislative action may not serve its purpose.

User Group Concepts

The user group (UG) - centred approach in forestry is a relatively new concept in forestry development literature. However, the concept of the user group itself is well described in irrigation management (Ostrom 1992 and Tang 1992). Thompson (1992) provided a framework for analysing community forestry issues in an institutional context. The forest UG concept itself has gained a prominent place in community forestry literature, partly due to the ineffectiveness of what Cornea (1989) calls the wholesale community approach of the conventional CF. UG is an evolution of an alternative type of group which is more cohesive and purposeful than the loosely defined 'community'. Since the UGs are generally smaller than the 'communities' defined in the erstwhile *panchayat* or community forestry, a common necessity that links the members of the UG can be pursued more successfully. Such small groups can enforce rules through peer pressure and mutual control so as to minimise the 'free rider' behaviour of its members. Members of such small groups are in regular contact simultaneously as users, producers, and enforcers. The irrigation systems practised by Nepal's farmers through small UGs have been quite effective in managing the water resources (Shivakoti 1991). It is conceivable that such a small UG could also operate a village woodlot/ fodder lot more effectively without the conflicts that have arisen in community plantation management. The problem with the large group-centred or community forestry approach is the fact that the existence of rights for a large number of individuals to participate in the production and benefit-sharing system has increased the costs of resource management. Therefore, the major obstacles to the successful implementation

of community forestry are social (specifically institutional and organisational) rather than technical (silvicultural and managerial) in nature.

Definition of FUG

Although the Forest Act (Nepal Gazette 1993) defines a user group as a registered group of "concerned forest users desirous of developing and conserving the forest and using the products for collective benefits", a more practical definition can be forwarded as a "functional group of undisputed users of a community forest which is generally free from inner conflicts and generates synergy through its strong group cohesion and life-supporting purpose".

The UG as a Common Property Resource Institution (CPRI)

Improved planning and management of Nepal's forest resources, especially those managed by the community, are not possible without understanding the different property regimes. Currently most forests are being managed under the open access property regime (OAPR), i.e., user rights are ill-defined and, therefore, the situation can be compared to what Hardin (1968) called the "tragedy of the commons". Forest land under parks and reserves can be said to fall under the state property regime (SPR). Forests managed by local communities under indigenous systems fall under common property regimes (CPRs). It is conventional wisdom to equate OAPRs with CPRs and assume (Wallace 1981 and Mahat *et al.* 1986 and 1987) that forest resource degradation (deforestation) is inevitable unless the common property nature of forest lands is converted into private property or government regulations are forcefully instituted. This conventional wisdom, which often leads to unregulated use, has of late been successfully challenged. Many case studies in the irrigation, fishery, and forestry sectors have shown (Berkes *et al.* 1989) that successful resource management can be achieved by ways other than privatisation and government control. Communities dependent on common property resources have adopted various institutional arrangements to manage these resources - with varying degrees of success in achieving sustainable use. In forestry, therefore, a new branch of Common Property Research Management (CPRM) can be implemented, such as Common Forest Resource Management or CFRM. The successful examples of local level

forest resource management, however, often depend on timely legitimisation by the Government. It is also argued that sustainable forest resource management may not be intrinsically associated with any particular property rights' regime (Messerschmidt *et al*. 1993). Successes and failures are found in private, State, and common property systems alike, depending upon the suitability of the governing institutions.

Challenges Faced by the CPRI

In Nepal's context, the large-scale destruction of forest resources over the last 40 years was largely due to ever-changing and ill-defined property rights, flawed government policies, and lack of proper management. The solution, i.e., controlling unregulated use, should be oriented in either of two directions - a) one is to make the "common property" forest resources in question the private property of individuals or groups of resource users. Alternatively, the problem could be solved by government interventions through institutional mechanisms designed to balance private and social costs. Since, in a newly emerging democratic society constrained by lack of adequate funds, government intervention is neither desirable nor practical, the only course left, therefore, is to change the forest resources property rights' regime so that a number of users (owners) are made co-partners (equal) regarding their rights to use the forest resources. Based on this argument, the user group forestry (UGF) approach to community forestry development being implemented by the Government of Nepal is justifiable and appropriate.

With the change in the forest policy in favour of UGF, the handing over process has picked up remarkably in most parts of the country. Since the process is independent of the elected officials of Village Development Committees (VDCs) and does not follow political boundaries, traditional users have unquestionable rights to the forests. The FUGs are thus organised endogenously and are given legal status. The forests are handed over as per the needs of the community. The only authority exercised by the DFOs relates to the inclusion of provisions for including any users who were excluded when the FUG was first organised. The draft of a written operational plan is another prerequisite which users themselves are very keen on. They consider it not only as a reference manual for forest management but also prize it as a legal certificate of their ownership rights to the forest. At present,

the pace of the process is dependent on several factors - most important of all being the philosophy, style, attitude, actions, and efficiency of the District Forest Office (DFO). It is perhaps due to this reason that some districts are much ahead of others in handing over the forests to local users.

The major challenges faced by UGF in Nepal are as follows.

1)   Although 61 per cent of the forest land is potentially suitable for handing over to UGs, less than two per cent has been handed over so far. At the current pace, placing the management of all potential CF land under actual users might take another 400 years (Joshi 1993).

2)   As requests for handing over forests to the actual users increase, the responsibilities of the DFOs, AFOs, rangers, and Asst. rangers also increase proportionately. On the other hand, the Government has recently made a drastic cut in the manpower of the DOFs. This contradictory situation is not favourable to the progress of UGF.

3)   Perhaps because of an unannounced policy of the DOF, the performance of its staff is expected to be evaluated based on the number of forests handed over annually. This may create competition among the DFOs in handing over the maximum number of forests, and it may affect the handing over process itself with serious implications for sustainable forest management.

4)   The current increase in requests for handing over forests is mostly for natural forest plots where not much investment is required for resource development. This may de-emphasise the vast afforestation task which should be the first priority of CF.

FUG as a Common Property Resource (CPR) Institution

Institutions based on the concept of 'common property' have played a socially beneficial role in natural resource management in Nepal for a long time. The examples of successful management of small irrigation systems and grazing lands are cases in point (Shivakoti 1991 and Acharya 1989). The failure in the past, on the part of the Government, to recognise their potential and to allow the Department of Forests (DOF) to declare the ownership of forests over which it did not and could not have control, made many of the traditional institutions extinct or non-functional.

However, today there is a growing realisation that only the institutions with grassroots' support can solve the growing resource scarcity problem, especially in the mountains of Nepal. This premise has historic precedence and justification (Wallace 1989; Mahat *et al.* 1986; and Fisher 1988). Prior to the enactment of a series of legislations aimed at transferring the authority over forests from the people to the Government, most of the forests were managed under what are today known as CPRM regimes. However, often legislative measures were implemented and the Government Forest Department was expanded, community ownership was contested, and was legitimised. It is, therefore, appropriate to state that the property regime of Nepal's forest resources changed from a common property regime (CPR) to an open access regime (OAR) in the early sixties, primarily due to the unplanned enforcement of the so-called forest protection rules by the DOF (Mahat 1987 and Gilmour 1989)[3]. Although the consequent forest degradation may not be due to the open access property regime only, this factor, combined with the historical build-up of population pressure and other causal factors, such as malaria eradication, population shifts, democratisation of the society, and opening of road networks, accelerated the deterioration in forests and environmental balance.

It is, therefore, argued that the term common property has been used in the past in a way that is often at odds with the intended meaning of the concept. In Nepal's forestry sector, the term should be used to refer to the distribution of property rights over forest resources so that a number of owners are co-partners (equal) in terms of user rights. Transfer of these rights should not be allowed. This concept is well established in informal, institutional arrangements based on customs, traditions, kinship, and social mores. Common forest property, contrary to conventional wisdom, is not everybody's property. The concept implies that potential resource users who are not members of a group of co- or equal owners are excluded. However, under the UGF system of forest management, the State, through the DFOs, takes care of the interests of those excluded by making surplus forest products available to them at prices set by the FUGs.

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[3]   The theory of forest degradation in the Himalayas has been widely debated. The traditional view of linking the rise in population with reduced landholdings, increasing poverty, and massive deforestation (Eckholm 1976) has been termed a *myth* (Thompson *et al.* 1986; Griffin 1988; Fisher 1988; and Karki 1991)

CFRM Framework

In the forestry institutions currently operating in Nepal, three levels of hierarchical decision-making system exist - a) operational or the FUG and DFO level; b) institutional or the department level; and c) the policy or ministerial level. Performance can be analysed at all three levels but, for the purpose of analysis, the institutional level is the most crucial. Two important performance variables are used to determine institutional success. They are - a) equity and b) transaction costs. Figure 2 provides a schematic framework for FUG analysis, focussing on the situation, structure, and performance (Ostrom et al. 1988). Structure is a more static variable than performance and situation. The analysis aims at identifying and correlating variables representing situation and performance. While performance can be judged on the basis of the socioeconomic and physical attributes of the users and resource conditions, the situation variables are types of governance, transaction costs, and availability of alternative resources. Markets that might alleviate these problems are either imperfect or non-existent. The consequences of CPR problems are compounded by external effects, such as floods, soil erosion, fires, and road construction, which have accompanied overuse of forest resources. Common owners or user members are also likely to consume the wrong mixture of resources even if their total consumption level is efficient. Also, they may use inefficient methods to harvest resources. Externality aggravates CP-related problems since a host of external factors contributes to make resources a common property. Nepal's forests, therefore, face four problems - a) no or under-investment in the replenishment of forests (true in the case of UGFs); b) overuse due to the open access nature of the resources (national forests); c) no tradition of successful forest management at the Government level; and d) inefficient administrative and legal systems.

Forestry for Sustainable Development

Forestry-related problems in Nepal are not technical but are symptoms of social, political, and economic inequalities in a community. Therefore, new forest management strategies must be incorporated within the process of equitable redistribution of local resource ownership, management, and access rights. In other words, an effective CF programme should be part of the larger process of community development and change. Through the
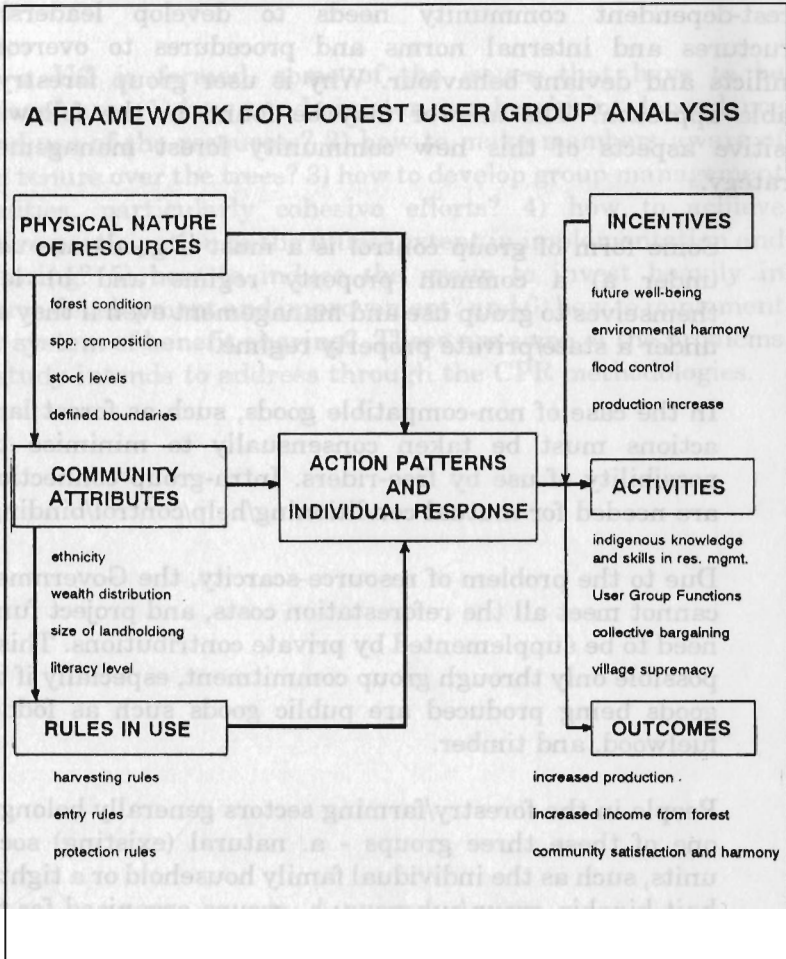
A FRAMEWORK FOR FOREST USER GROUP ANALYSIS

PHYSICAL NATURE OF RESOURCES

forest condition

spp. composition

stock levels

defined boundaries

COMMUNITY ATTRIBUTES

ethnicity

wealth distribution

size of landholdiong

literacy level

RULES IN USE

harvesting rules

entry rules

protection rules

ACTION PATTERNS AND INDIVIDUAL RESPONSE

INCENTIVES

future well-being

environmental harmony

flood control

production increase

ACTIVITIES

indigenous knowledge and skills in res. mgmt.

User Group Functions

collective bargaining

village supremacy

OUTCOMES

increased production .

increased income from forest

community satisfaction and harmony

Figure 2:   A Conceptual Framework for Institutional Analysis
of Forest User Groups

process of awareness-raising, UG formation, identification of
better CF management processes, and understanding the needs
and dynamics of UGs, the capacity for other sustainable
development work can be enhanced. In summary, the emerging
issue of socioeconomic requirement is that forest management
must promote sustainable development and vice-versa.

Case for User Group-based CF

Cornea (1989) analysed the merits of organising user groups as
producers, managers, and consumers of rural forest resources. A

forest-dependent community needs to develop leadership structures and internal norms and procedures to overcome conflicts and deviant behaviour. Why is user group forestry a viable approach? The answer may be found in the following positive aspects of this new community forest management strategy.

1.   Some form of group control is a must if goods are used under a) a common property regime and b) lend themselves to group use and management even if they are under a state/private property regime.

2.   In the case of non-compatible goods, such as forest land, actions must be taken consensually to minimise the possibility of use by free-riders. Intra-group connections are needed for mutual conditioning/help/control/binding.

3.   Due to the problem of resource-scarcity, the Government cannot meet all the reforestation costs, and project funds need to be supplemented by private contributions. This is possible only through group commitment, especially if the goods being produced are public goods such as fodder, fuelwood, and timber.

4.   People in the forestry/farming sectors generally belong to one of these three groups - a. natural (existing) social units, such as the individual family household or a tightly-knit kinship group/subgroup; b. groups organised for the purpose of planting, protecting, and cultivating trees; and c. groups established for purposes other than forestry but able to undertake forestry-related activities as well.

Fisher (1990) argued that the slow rate of progress in CF was partially due to the overemphasis on formal and politically-sanctioned institutions such as the *panchayat*-based protection committees. This approach was contrary to the indigenous system of decision-making by rural communities in which flexibility and face-to-face discussions are the norm. Moreover, political groups are conflict-ridden, whereas effective resource management must be based on at least a reasonable level of consensus. User groups are relatively small, face-to-face units and, as effective resource management is in the vested interest of users, achievement of consensus within a user group is not uncommon.

Issues

Once a UG is formed, some of the issues that have to be
addressed are - 1) how to administer members' joint dependence
on and use of the resources? 2) how to make members aware of
group tenure over the trees? 3) how to develop group management
modalities, particularly cohesive efforts? 4) how to achieve
effective participation to the fullest extent in implementation and
monitoring? 5) how to induce the group to invest heavily in
resource development and improvement? and 6) how to implement
a fair system of benefit-sharing? These are some of the problems
this study intends to address through the CPR methodologies.