

Chapter 8

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The findings from this study can be summarised under five different headings in the form of lessons learned. They are 1) policy lessons; 2) institutional lessons; 3) social lessons; 4) technological lessons; and 5) economic lessons. In addition, some of the emerging issues are also discussed in this section.

Policy Lessons

1. The Government still lacks clear policies regarding appropriate allocation of land resources for different forest uses (e.g., protection forestry, conservation forestry, production forestry, and community forestry). This has resulted in poor implementation of the forest development programmes, misallocation of scarce resources, and unsustainable management of forests at the national level. According to this study, despite the overall successful functioning of UGFs, the users are dictating the pace and nature of forest management and not the Government. The concerned agencies must formulate a long-term policy and be committed to it.
2. The DOF staff generally still have the 'foresters know best' attitude and 'dictate' to rather than 'consult' with the users. Some of the prescriptions and rules included in the operational plans by the rangers were found to be based on what they perceived as good for the members rather than on shared ideas and opportunities for equal partnerships in collaborative forest management.

3. Secure tree tenure, unhindered access to markets, uncontrolled pricing policies, and unrestricted movement of forest products within the country are necessary elements for full and fair participation by the users. This will also create synergy in the groups, thereby making them more effective than the sum total of their members.
4. Although the Government has the stated policy of 'handing over' the forests to the people, the question of tenurial rights is not yet settled. The users have usufruct rights over the trees but no ownership rights over the land. Since the DOF still retains a considerable amount of discretionary authority over the forests, actual 'handing over' of forest properties to and acceptance of management responsibility by the people may still not take place. This factor may not be critical at present, as the users are more concerned with acquiring whatever rights are available, but, once the value of the forests increases, the tenurial problem may affect sustainable management.

Institutional Issues

1. The DOF staff still do not and/or poorly understand how local communities interact internally and externally. Perhaps, because of this reason, they do not develop and implement programmes that are responsive to the communities' social and resource environments. The pace of handing over the forests can be hastened by staff who are better trained in group organisation and forest planning.
2. Government institutions entrusted with promoting community forestry often ignore indigenous management capabilities. Their authoritarian and unaccommodating behaviour further alienates and undermines local communities. Non-government organisations (NGOs) are sometimes effective in interfacing these two groups.
3. Bureaucrats and technicians are not encouraged to take risky decisions and are often unwilling to take innovative steps, because traditional institutions expect conformity to the *status quo* and do not reward innovations. The system

more often is concentrated on penalising failures than rewarding successes.

4. Although the Forest Act of 1993 provides both a solid legal foundation and a badly needed legitimacy to user group forestry, due to the lack of necessary bye-laws, it is not as yet effective. The concept of decentralisation and provisions of the Act should be implemented by the DOF line agencies at the operational level.

Social Lessons

1. Because the local people have been traditionally relying on the surrounding natural resources for their survival, they have a strong incentive to manage these resources sustainably. Hence, success in community forestry may depend on foresters recognising the fact that, given proper opportunities and training, the local people have the knowledge and capacity to manage the forest resources.
2. The function of the DOF staff should be to facilitate rather than merely implement. The operational staff should provide the opportunities and create mechanisms for institution building. Suitably designed organisations can develop the community management potential, thereby leading to not only sustainable management of the forest resources but also to achievement of success in other development activities.
3. To be fair and equitable, due recognition of the place and role of all the community members, including marginal farmers, women, occupational castes, and the poor, is required. In particular, the distribution and utilisation of forest products should be carried out as per the needs and wishes of all the members of the group, especially the women. To achieve this, the operational plan must be prepared with the full participation of the concerned users.
4. Although indigenous social groups can be used as a basis for 'social engineering' and for sustainable community forestry, more innovative approaches are necessary to make these groups more sustainable. For example, according to the Master Plan guidelines, "at least one half

of the members of the users' committees should be women". However, it was found that a fixed quota system led to passive and ineffective participation.

5. Both internal and external socioeconomic and political factors influence the success of UGF. A successful FUG was found to manage both these factors to its best advantage. Early detection of issues that could lead to conflicts was facilitated by increased discussions and regular contacts. Similarly, some FUGs in Palpa were already planning to exploit the market for furniture in the nearby town.

Technological Lessons

1. Since forests have multiple uses for multiple users, appropriate silvicultural and management technologies must be developed to promote integrated management. In particular, the users must understand the biophysical conditions of the forest, tradeoffs between different products, and their preference and needs. The management prescriptions should be detailed so that the users can implement them successfully with minimum training.
2. Forestry activities must be planned as an integral component of the total agro-ecosystem. Both the socioeconomic and environmental needs must be identified and solutions should be planned to improve linkages between forestry and other components of the system, with the major objective of enhancing the system's productivity.
3. Community resource problems demand multi-disciplinary solutions. However, forestry professionals often provide single sector solutions and/or single-objective technology. The DOF must plan CF activities based on the principle of integrated resource management. 'Food chain' forestry is one example in which trees are integrated with aquaculture, pisciculture, and pig farming.
4. The silvicultural prescriptions included in the operational plans are often incompatible with the expertise and

understanding of the UGC members. User group forestry should address this issue carefully. Rangers have an important role to play in providing technical support.

Economic Lessons

1. While a full-scale, cost-benefit analysis of the UGF projects in the study area was beyond the scope of this study, preliminary assessment indicates that the activities are efficient and cost-effective. One of the best indicators of the economic condition is 'user satisfaction'. Since the majority of the user members consulted were satisfied with the tangible and intangible returns they were receiving from the investment of their human resources, it can be concluded that the cost of mobilising the otherwise idle manpower is far less than the benefits.
2. In terms of quantitative analysis also, the community-planned, implemented, and managed reforestation projects were reported to cost ten times less than the centrally-managed plantations. The figures given by Baral (1993) were Rs 14,159.4/ha and Rs 1,490.6/ha for traditional and community-managed plantations respectively.

Emerging Issues

1. Although rural communities are undergoing rapid transformation in their attitudes and perceptions, there is still a need to recognise and remove sociocultural and religious inhibitions that hinder the development of improved technologies and quick adoption of new technologies. Some examples that are directly relevant to alternative energy use and forest protection are use of human waste to produce biogas, keeping small herds of livestock, switching to pork meat from goat, etc.
2. Forestry institutions, apart from investing in forest resource development, should also invest in human resource improvement and management. Part of the capital from forest resources should be re-invested in education and training of the rural population. Non-

government organisations (NGOs), including international NGOs, have to play a greater role in the sustainable development and management of both human and natural resources.

3. Forest resources have been consistently undervalued and forest products have been priced in an inappropriate manner. In particular, non-timber products, such as herbs, mushrooms, fodder, and recreational services, are grossly underpriced or not priced at all. Even fuelwood and poles in the community-managed forests are not valued properly. This creates distortions in the system and resource degradation continues. Improved valuation techniques or non-market valuation methods should be developed and/or refined to suit the existing needs. Undervaluation of forest resources leads to misallocation and inefficiency.
4. The lessons learned from Palpa and Phewa can be treated as windows through which the future of UGF in Nepal can be looked at critically. While the picture may appear somewhat rosy, this should by no means mask the great challenges that lie ahead in order to develop a truly sustainable community forestry system. An indisputable criterion for the success of UGF is the availability of a minimum proportion of resources in the resource base. This figure, in our judgement, is between two to three ha of forest for each HH.
5. Social variables continue to play a major role. But since rural society is transforming rapidly, the attributes of sustainable resource management may also change. Proper cognisance of this 'social dynamism' is critical.

Recommendations

Future Direction of CF

1. The central message that emerges from this study is that the lessons learned from UG forestry in Nepal provide the potential to build a strong foundation for sustainable

management of community forests in the region. It is not that the people have finally realised that the forests provide multiple benefits for them, and, therefore, they need to be used rationally. It is the government bureaucracy as well as the policy-makers who have come to the conclusion that their attempts to own resources beyond their control were basically flawed. It is in this context that the new approach to community forestry activities in Palpa and watershed management (WM) programmes in Phewa, that are primarily based on the 'multiple use and multiple user' concepts, should be sustained through greater support from the donor agencies and HMG/N. It is recommended that the resource management, information gathering, and planning capacities of the district-level staff should be improved through training and workshops. The sustainable programmes on productive forestry activities should be continued in the study region.

2. The study confirmed earlier reports regarding the people's preference for broad-leaved multipurpose tree species over pine and other timber species. Highly productive agroforestry species should be planted both on private farms and in forests. In order to make UGF truly people-oriented, UGF programmes should be primarily focussed on satisfying the people's preferences and needs. It is recommended that high-yielding fodder, fuelwood, and fruit trees should be distributed for plantation on private lands and multipurpose tree species (MPTS) should be planted on common lands. Secondary forest growth should be promoted in the natural forests by combining natural regeneration and enrichment plantations.
3. The study also revealed that perhaps the most important, but hitherto unrecognised benefit, of community forestry and watershed projects is improving the local people's knowledge, perceptions, and attitudes. It is recommended that UGF should continue to implement programmes in which both biophysical and socioeconomic activities are included. Specifically, the projects should strengthen the existing institutions and build new organisations that are more effective in mobilising the human resources for improved forest management.

Training of User Members

4. Training was found to be the most effective CF component in increasing awareness, knowledge, participation, and improving the perceptions of the people. However, the existing training programmes were disorganised, centrally-planned, and poorly-programmed. It is recommended that the training and cross-visit components of CF should be strengthened by improving the planning and evaluation capacities of the District Forest offices.
5. It was also found that the selection criteria for training participants could be improved if some need- and job-based criteria were established. Some of the proposed criteria are leadership potential, willingness to train other members, past history of regularly participating in UGF activities, and motivation to work for the community. It is recommended that need- and job-based criteria should be employed in selecting training participants. It was also concluded that training should be conducted more intensively and on aspects most relevant to the problems faced by users. The objective of the training should be to train local manpower in production, processing, utilisation, and marketing of forest products.
6. Training activities carried out by the DFO in Palpa and the PTWDP in Phewa were limited both in number and frequency. Most of the training programmes for the project beneficiaries were conducted on a one-time basis. In order to ensure that the active members of the user groups gain a better understanding of the forestry concepts, as well as ensuring that they develop appropriate skills, training programmes should be conducted on a periodic basis. It is recommended that well-planned and organised training programmes on skill development should be conducted for UGF committee members as well as for motivated users. In order to make the training programmes more effective, on-the-spot training classes, as well as the use of training kits, are required.
7. Out of the most commonly-practised training methods, such as field visits, lectures, discussions, and workshops,

practical field work was evaluated as the most effective method of learning forestry techniques. Audiovisuals and result demonstrations were found to be equally effective training aids. It is recommended that practical exercises should be given more emphasis while training forest farmers. More audio-visual materials should be produced to reinforce lectures and discussions.

8. The FUG members in both Palpa and Phewa reported that they lacked information on recent CF legislation; thinning; multiple shoot cutting or singling; plant diseases and their prevention; improving forest productivity; and vegetative propagation techniques. It is recommended that information, extension, and training materials on these topics should be provided and widely distributed to the people in Palpa and Phewa.
9. Husband's advice; radio programme; and professional staff were the most common sources of information for women. It is recommended that selected spouses, village elders, and field staff from the Forest Department should be trained to become more efficient and effective sources of information for women users.

Policy and Legislation

10. The recent enactment of UGF legislation (Nepal Gazette 1993) is a welcome step and augers well for community forestry development in Nepal. However, the Bill has not yet become effective in the absence of relevant bye-laws. It is recommended that the bye-laws should be framed and the Act implemented at the earliest.
11. The current incentive structure related to the handing over process of common forest land management to the UGs promotes management of natural and/or secondary growth. However, for sustainable forest management, reforestation and forest conservation are vital elements. Different incentive schemes, such as free distribution of seeds and seedlings, purchase guarantee of seedlings from private nurseries, and guarantee of 100 per cent revenue from the forests so developed are highly appreciated by the

people. It is recommended that the current incentive scheme launched by the DOF should be continued and institutionalisation planned on the basis of self-reliance and the socioenvironmental sustainability of the users.

12. The major factors that account for passive participation, or even discourage participation, according to the people, are inherent apprehension of the DOF's activities; politicisation of the programme; delayed delivery of assistance; and administrative mismanagement by some of the DOF staff. However, the reasons given by the staff for poor participation are lack of awareness; unfavourable attitude; and high expectations. It is recommended that the DOF staff should be given reorientation training in awareness-raising, extension methods, and communication skills.
13. The benefit-sharing system adopted by the majority of the FUGs is efficient, equitable, and tends to discourage 'free riders'. However, the system appears to have been devised for low-value, bulky products such as fodder and fuelwood. There is a need to modify and improve this system to ensure fair distribution of forest products, such as timber, recreation, high-value herbs, and water, as well in the future. It is recommended that the benefit-sharing system adopted by the FUGs in Palpa and Pokhara should be refined and modified to ensure equitable distribution of all the anticipated forest products.
14. The empowerment of FUGs reflects the recognition by the Government of indigenous management of resources by small but locally-evolved institutions. The structure, as such, is still new and evolving. The functions are leadership- and situation-specific. The performance can be termed to be more accidental and irregular, both spatially and temporally, than probable and predictable. It is recommended that the institutional design and development of FUGs should be refined and modified continuously, based on Common Property Forest Resource Management (CPFRM) principles and practices.
15. The study revealed that the ethnic composition, population density, forest location in relation to community

settlement, and forest conditions influenced the participation level and benefit flow. It is recommended that, while forming UGs, these variables should be considered carefully.

16. The study also found that protection systems requiring volunteers rather than paid guards were more effective in controlling free riders. Social fencing and 'self-restraint' by the users were found to enhance commitment at the local level in protecting common forest resources. It is recommended that more and more FUGs should be encouraged to institute indigenous systems of forest protection such as 'rotation duty' and the '*manapathi* payment' system.

Gender and Tenure Issues

17. In general, the women respondents were found to be motivated to participate in FUG activities. In particular, they demonstrated their strengths in recognising valuable plant species, drawing boundaries, providing historical information, protecting the forests, facilitating community agreements regarding allocation and boundary rules, and representing the weaker section's agenda. It was also found that women as well as men represented the composite household, contrary to the 'conventional wisdom' of women's goals and perceptions being different from those of male members of the HH. It is recommended that the CF programmes should be gender-sensitive, but implementation should be oriented towards addressing the combined HH needs as opposed to 'women's needs' alone.
18. Under the current constitutional laws, the recognised users have tenural rights over the trees only, not over the land they grow on. However, the customary or 'extra-legal' codes ensure both tree and land tenure to the users. For sustainable community forest management, both the constitutional and customary rights regarding usufruct should be well established. It is recommended that the tree and land rights should be guaranteed to the recognised users on a perpetual basis.

Monitoring and Evaluation

19. A carefully designed and implemented monitoring and evaluation system is crucial for the efficient and effective operation of UGF projects. The system should provide continuous feedback to the district/watershed level office on the different activities of the staff. The sub-district/sub-watershed staff should receive and give feedback to and from the FUG committee. It is recommended that a simple but efficient monitoring and evaluation system should be installed or strengthened for both the projects.

Strengthening the District Level Capability

20. It was found that the main prerequisites for the success of CF/UGF were improving awareness and knowledge; training the users as well as the field staff; and increasing participation. The major constraints were ignorance of the CF provisions; limited land for tree plantation; socioeconomic disparity among the users; and the lack of supply of suitable types and sizes of seedling. These prerequisites for and constraints to the success of CF require well-trained field staff and innovative human resource managers. It is recommended that the field staff should be trained in planning, training methods, development and use of training materials, extension programmes, and M&E of all these activities.
21. The future of community forestry in the mid-hills of Nepal depends not only on how quickly secondary growth is established in the natural forests, but, more importantly, on how plantation forests are developed on degraded lands. It is recommended that, apart from promoting successful regeneration of natural forests, innovative and cost-effective reforestation methods and strategies should be developed so that more and more communities are encouraged to participate in reforesting degraded hilly slopes.