Managing forests in community forestry in Nepal

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Community Forestry is the main strategy in Nepal's forestry sector policy since it's inception in 1978 with the promulgation of *Pachayat* Forest Rules and *Panchayat* Protected Forest Rules. Over the past 24 years marvellous shift in policy and legislation had occurred to empower users as the managers of forest resources. Evidences suggest that the main forest management approach in community forestry is protection-oriented resulting in fewer benefits than otherwise could have been. On the other hand well-managed community forests can provide a range of forest products, which are essential to the rural communities. There is now growing voiced concerns to introduce active forest management in community forestry. This paper presents the consequences of existing practices and argues for active forest management in community forestry. Such active management will provide direct benefits to people and subsequently improved people's participation. Recommendations have been made to promote active forest management in Nepal's community forestry.

Keywords: Nepal, Community Forestry, Active Management, People's Participation and Forest User Groups.

n the late 1970's the theory of "Himalayan Environmental Degradation" greatly influenced the forestry development programme of Nepal (Bartlett 1992). The increasing demands for the forestry products and increasing pressure for the extension of agriculture area to meet the increasing demand created by Nepal's rapid population growth was equated with deforestation, landslides and flooding. The disastrous flooding in Bangladesh and massive soil erosion in Nepal in 1970's were blamed for being a result of deforestation in the hills of Nepal (Hausler 1993). In the late 1970's the Government realised that without the peoples involvement it was not possible to restore the balance between forest resources and the everincreasing demand for forestry products. This led to the development of a new forest management paradigm known as community forestry.

The heart of community forestry in Nepal is the development of partnership between the local communities and the government. The social unit representing the users of a particular forest in the development of this partnership is a Community Forest User Group (CFUG) (Bartlett 1992).

The original envision of community forestry was to protect soil erosion; prevent environmental degradation and provide basic needs of forestry products to the rural people. The community forestry was recognized as afforestation programme. These policy objectives were reflected in sixth Five-year plan (1980- 1985) by defining the target of community forestry by protection and improvement of 82,189 ha of forestland. Similarly, the seventh Five-year plan (1985-90) included handing over of the national forest to fulfill the basic needs of forestry products to villagers. The Master Plan for the Forestry Sector (MPFS), 1989 defines the objectives of

community forestry as conservation of the forest resources through the active participation for meeting the basic needs of forestry users in the hills of Nepal.

Understanding forest management system in community forestry

It is frequently reported that CFUGs are reluctant to manage forest effectively and are managing the forest resources passively. Many authors believe that such type of forest management strategy of CFUGs is protectionoriented (NPC, 2001; Baral, 1998; C, Branney 1996, 1994; Karki et al. 1994; Sowerine 1994; Chhetri and Pandey 1992). The term "protection-oriented" refers to the forest management system allowing only for the collection of dry wood and twigs as well as certain nonwood products such as leaf litter for animal bedding and compost (Branney 1996). Protection of the community forest results overstocking of trees and is equated with the successful and well-managed forests. Contrary to protection-oriented forest management system, production-oriented forest management system involves carrying out of silvicultural and harvesting operations as demanded by the forest condition. One of most important divergences from management is the cutting of green trees, as demanded by certain silvicultural and harvesting operations to achieve stated management objectives (Acharya, 1997). The blocking of the forests, harvesting methods and silvicultural operations to realize yield and plantation provision in open and degraded areas is important consideration in production-oriented system. community forestry the management approach aiming to produce multiple products to meet the requirements of local people is active forest management. The nature and priority of active management should vary according to

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different agro-ecological regions of Nepal such as production of firewood and fodder products in the hills and the terai and Non-Timber Forest Products (NTFPs) in the high mountains.

Why active forest management?

The reports on community forest management suggest improving forest condition in the hills and need of active forest management (Malla, 2001; Baral, 1998; Branney, 1996; Hobley, 1996; Karki et al. 1994; Bartlett, 1992). Evidences suggest no serious attention have been paid on this issue. This attitude creates a challenge for foresters and users to ensure the appropriate application of silvicultural regimes to achieve management objectives.

The widespread protection-oriented management system in Community Forestry (CF) has many negative impacts. The most important is the possibility of declining people's participation in community forestry activities. The participation in community forestry is a voluntary activity; unless it is attractive to participate the withdrawal of membership is possible (Maharjan, 1998). When people are not able to realize forests as their own forest, it is hard to believe that community forestry is for them. The feeling of "own forest" was described as a key factor for the active participation of local people (Kanel et al. 1999; Acharya, 1997). This feeling was developed after receiving forestry products and among the members of the community only. As more and more forests are handed over as CF, less national forest area is available to local people who require more walking to collect forestry products. Moreover, protection system in CF puts more pressure on national forest as it would result into degradation of national forest, deterioration of environmental condition and forest coverage loss. The latest data reveals that forest area has decreased at an annual rate of 1.7 % during 1978/79 to 1994 and in the hilly area at the rate of 2.3 % during the same period (HMG, 1999). This is the period from when CF was started in Nepal. A recent estimate shows that the annual loss due to deforestation and degradation of hill forest in Nepal is about 7401 million NRs (1 US \$ = NRs 76) (Kanel cited in NBAP, 2000). The active community forest management will reduce the pressure of deforestation and degradation on national forest.

Protection-oriented system undermines the fact that forests are renewal natural resources and sustainable management of such resources will never diminish the stock but will increase their productivity. The protection-oriented system lowers supply of forest products and consequently the forest productivity. The overstocking of the forest in CF is unfavorable for sustainable forest management concept. The cost of not

applying active management to community forestry in Nepal is estimated to be NRs 560 per household per year (1 US \$ = NRs 75) (Hill 1999). Similarly, Sowerine (1994) estimated that the application of passive management in CF is costing Nepal NRs 8.5 million per day. Recently, David and Richards (1998) claimed that the Net Present Value (NPV) of managed forests is three times higher than that of the forests without silvicultural treatment. On the other hand, active management in CF often is equated with silvicultural activities mainly with singling and thinning but it goes beyond much more in participatory forestry (Campbell and Rathore, 1996).

Causes for passive management in CF

"Why CFUGs are managing the forest passively?" The answer to this question is multifaceted and complex. The first and most important issue is that CF was envisaged to conserve the degraded hills of the country. Therefore the main focus was given for the protection activities and for the afforestation programmes. Secondly, the users lack knowledge on active forest management. Most of the CFUGs formed so far were involved in indigenous forest management system before being handed over as CF. Strict protection and overstocking was regarded as successful indigenous forest management system and is inherited in CF also. In addition, the professional foresters lack experiences and have had no confidence on active forest management. It is because there is no existence of scientific forest management system so far in the country (Acharya, 2000). The practices of preparing passive operational plan are continued in "photocopy style". There is a lack of good extension services, appropriate number of field staff, appropriate technical guidelines and manuals for field workers. These situations are due to the absence of commitment and responsibility in the policy makers due to non-existence of good governance in the country. Lastly, the local elites and resource-rich members of the community, who control most of the CFUGs and whose objective is produce intermediate and long-term timber production encourages passive forest management.

What determines active forest management?

The active forest management on the CF is the synthesis of four different factors. They are existence of supportive policy and legal environment, forest management objectives of the users, the capacity of the users and District Forest Office (DFO) staff and the condition of forest resources. Table 1 illustrates the role of these factors in determining active forest management in CF.

Table 1: Factors responsible for active forest management in Community Forestry

| Factors | Indicators | Status |
|--|--|---------------|
| Policy and legal environment | Provision for active forest management such as silvicultural activities, marketing and transportation, policy priority, effective and quality extension and support mechanism. | Supportive |
| Forest management objectives and users needs | Management objectives, demand - supply situation, leadership and participation | Positive |
| Capacity of the users and DFO staff | Technical knowledge and information, confidence among users and DFO staff, awareness among users | Limited |
| Forest resources condition | Forest origin, type and development stages, forest productivity and environmental sensitivity | Site-specific |

Discussion

Historically community forestry in Nepal was evolved to prevent massive soil erosion and prevent environmental degradation and at the same time fulfilling the basic needs of forestry products. Being the most important and largest land use categories of the country, it must produce goods and services in acceptable quantity. Available evidences suggest that community forestry; major forestry programme of the country is not able to produce forestry products as required to the nation. The main reason behind it is the adoption of protection-oriented forest management system by the CFUGs who are the managers of the community forestry.

The first and principal issue to shift towards active management is redefining policy objectives of community forestry from basic needs approach to poverty alleviation approach. Although, the Forest Act 1993 sets no geographical or basic need limitations on CF. Similarly, the Ninth Five-year plan (1997-2002) emphasizes for a dynamic role of community forestry in poverty alleviation. These policy objectives need to be encompassed in formulating forestry sector policy documents such as the Master Plan for Forestry sector (MPFS).

The present target-oriented approach in formation process of CFUGs promotes continuation of passive forest management strategy of CFUGs and field workers. This approach should be reviewed. Moreover, the mechanisms for involving rural poor and disadvantaged group should be looked for. The lack of appropriate technical advice and support to the CFUGs, unavailability of appropriate guidelines to facilitate active management encourages passive management. The preparation of guidelines and manuals, establishment of demonstration plots will assist preparation of production-oriented Operational Plans (OP) and their implementation. The state should encourage self-reliant CFUGs to employ forestry professional in order to activate CFUGs towards active management.

CFUGs are more concerned with managing their forests to maintain a wide ranges of outputs such as grasses, fodder, leaf litter, medicinal and aromatic plants, fruits, ecotourism besides timber and firewood against the traditional approach of producing single or limited range of forest products. The production of varieties of products means management of a number of plant species that eventually leads towards more active forest management systems. Such opportunities in community forestry can only be realized from diversification of management system and consequently active forest management. The issue of utilizing surplus produces after active management needs to be addressed and provision for surplus sales by individuals in the CFUGs should carefully be defined.

Nepal is provided with unique climatic variation within a small area. The community forestry approach must be based on this natural diversity. The high altitude region of the country should be prioritized for NTFPs management, lower Terai plains for timber and firewood while the central hill part can be best utilized by combining NTFPs with other production of as fodder, leaflitter, and timber.

It is usual to overwrite policy and legal provisions by ordering through the circulars in the past. For example, recently issued circular on benefit sharing and price fixing are against the existing policy and legal documents. Similarly, recent approval for banning the harvest of green trees for five years has made confusion among stakeholders and is promoting passive management. This circular and decisions are reflection of lack of good governance and responsibilities. Similarly, the administrative functioning of the ministry in transfer, promotion, incentives and career developments of staff are suffering from the absence of good governance.

The number of CFUGs is ever increasing since 1993, however the number of field staff and District Forest Office structure remains the same. It would not wise to anticipate more changes and consequently the effective extension services and post-formation support. It is observed that the number of CFUGs per ranger is increasing (Table 2) and in some rangepost the number of CFUGs per ranger has reached upto 50.

Table 2: Change in FUGs number and workload to forest rangers in Nepal

| Year | No of FUG | No of Forest Rangers | No of FUG/Ranger | Workload increased |
|------|-----------|----------------------|------------------|--------------------|
| 1993 | 4000 | 1174 | 3.4 | |
| 2001 | 11,000 | 1174 | 9.4 | 275 % |

The forest management systems in community forestry are inherited from indigenous management system. These systems are widely reported from western part of the country and are well known for protecting the forest and managing passively. The passive management is inherited to community forestry.

With the revolutionary concept of people's participation in development sector in Nepal, the number of community based user groups such as water users, soil conservation, irrigation, forestry, buffer zone etc has increased sharply. The priority and time required to participate in these committee varies from place to place and people to people. The incentives or advantages obtained in participating could be crucial factors to decide degree of participation. There should be some coordinated effort to integrate such users concept. Otherwise each component has to compete with the priority with the local people and the one with least priority has chances of failure. Fortunately forestry being integral part of farming system in hills of Nepal is receiving participation. But with the development of market and employment opportunities, there could be low participation especially from poor people because they are receiving fewer benefits from forests and their strategy for food security demands for several opportunities at a time.

Conclusion

The original envision of community forestry was to protect soil erosion; prevent environmental degradation and provide basic needs of forestry products to the rural people. In the present context community forestry management is a complex situation often meeting conflicting objectives and dynamic process than traditional forest management system. As recently been reported, landowners and wealthier households are interested in long term of intermediate produces while landless and poor families are interested for cash income produces. Gaining experiences and learning process will greatly help to develop the system. However, effective learning to shift protection-oriented forest management approach of the CFUGs to active approach have not been seen in the past. To maximize the benefits and to make successful community forestry programme there is an urgent need to shift for active forest management. To address the livelihoods issues in community forestry, there is a need of leasing part of community forests area to poorer section of community so that forest area will be used for more productively and poorer will get more benefits from CF.

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