

Dynamics of forestry extension : experiences of implementing community forestry in Nepal

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The value of forestry extension was more recognised in Nepal after the commencement of community forestry programme. Although, the components and approaches of forestry extension vary with the changes of socio-economic conditions, they are dynamic depending upon the evolution of forestry programmes.

The dimension of forestry extension has changed drastically after the forest users started implementing community forestry operation plan. These days, a sort of peoples' pressure such as by the users of the same village, adjoining villagers, and the field staff is being created for the implementation of operational plans. It seems therefore, it is not the stage of motivating villagers towards forest management, but supply them appropriate systems so as to enhance their capability of managing their own forests.

The paper sketches evolution of forestry extension giving account of the cases of Sindhupalchok, a hill district of Nepal, where forest management approach in the last two decades is community-based.

Keywords : Forestry extension, community forestry, forest user group, Nepal.

The philosophy of extension emerged with the felt need of empowering rural people to bring about their meaningful participation in the rural development. Initially, the extension meant motivating them (or target clientele) to follow instructions that focussed mainly on the activities of the individual people such as selection of agricultural crop, application of fertilisers, insecticide, cropping technology, etc. Extension was assumed to encourage peoples' participation for the improvement, management and development of such privately-owned resources, whereas the value of extension was not considered crucial to tackle any matters related to manage public resources. Only the implementation of government's decision through government staff was felt sufficiently enough and effective to do so, and therefore, strengthening of the government's force was always followed after any problems relating to the management of common resources appeared. The participation of local people was neither expected nor appreciated in

such cases. Forestry is the example of such resources which was until recently governed only by the central authority.

Forestry extension is recently employed approach of forest management. In the recent years number of terms have been coined to describe the basic activities of forestry extension (FAO, 1987). In the present paper, forestry extension is defined as a continuous interactions between forestry staff and local forest users (community users) by which they are motivated to participate in managing their forestry resources. Following the global concern of deforestation in the Himalaya, forestry extension in Nepal, was felt necessary. It started as a tree plantation campaign which was rather a failure. It was only after the initiation of community forestry programme in Nepal, in the late seventies, the role of extension in plantation and protection activities, and make the local people aware of the importance of forest, was felt crucial. These days, forestry extension is popular especially in those countries

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where peoples participation in forest mangement such as community forestry of Nepal, is gaining momentum.

In the beginning, extension programme included production and distribution of flipcharts, booklets, information leaflets, school wallcharts, school posters, signboards, stickers, T-shirts, logos buttons, documentary films, filmstrips and radio programme (Pelinck *et al* 1984). In many projects trainings, seminars and workshops also became a part of forestry extension. Forestry extension in Nepal (Gautam 1988; Shrestha 1988; Malla *et al* 1988) and elsewhere (Karim 1988; Doo and Htun 1988; Shingi 1988; Qazi 1988; Kariyawasam 1988; Pragtong 1988) were mainly focussed on the dissemination of information on distribution of seedlings and a few silvicultural practices.

The Department of Forests (DoF) of the respective governments was the executing agency where the major constraints of extention were the shortage of fund and trained manpower. Forestry extension being thought to be a separate task, additional rangers, as community forestry assistants, were employed. The extension system focussed to motivate the people towards forest development, was restricted only within the leaders/politicians/teachers/students, assuming that the forestry staff are fully motivated and competent to respond to the need of the community. It could hardly motivate the community people who, in fact, are the most needy in so far as the forest management is concerned. The use of mass media such as radio, television, newspapers, etc. non of which they could afford, were the only extention services given to the community people.

Some efforts to design forestry extension by reorienting forestry field staff, and developing extension programme as the requirement of their field area, have been done (Gautam 1988; Gautam and Roche 1987; Malla *et al.* 1988). As a result the system of extension is changing, and the emphasis is on training the members of forest users groups by reoriented forestry workers. The main focus is on introduction of community forestry, management of community forestry, nursery, foreman training, study tour, seminar, workshop, etc. However audio-visual programmes based on the evolution of community forestry are also developed.

The indication that forestry extension that meets users' requirements, can be initiated by themselves (Gautam and Gnarl 1994) and will, therefore, be necessary to adapt general experiences and techniques to the specific aspect of community forestry necessitates to review the status of forestry

extension currently existing in the fields. Present study, therefore, attempts to collect experiences on the various stages of forestry extension while implementing community based forestry programmes such as community forestry and leasehold forestry in Sindhupalchok District. The study aims to:

- study the elements of forestry extention and their validity in the field, and
- suggest for institutionalising the new approach.

Methods

Recording and documenting the number of extention activities carried in Sindhupalchok District over a period of one fiscal year (16 July, 1994 to 15 July 1995) were done. Records were mentained in each Range post/district forest office/range office regarding the process of handing over and document reasons for the initiation of such process. Discussion on such information were held at the district level forestry staff meeting.

The reasons for approaching to forestry office by users were studied and verified by each Ranger in Range post level workshops/ seminars/ trainings.

Study area

Sindhupalchok district which lies at the central mid-hill, has 79 village development committees. One Range Office (RO), and eight Range Posts (RP) are functioning under the district forest office (DFO).

Over 95 per cent of the district population (360000), majority of which are Brahman/Chhetri and Tamang followed by Newar and Sherpa, live on subsistence farming which is linked with livestock rearing, and forestry. Forest is source of fuelwood, fodder, timber, leaf-litter and other agricultural implements.

Forestry

The district has relatively a longer history of forestry in compare to other hill districts of Nepal. The forestry in Sindhupalchok is community-based. With the promotion of community and leasehold forestry, the area of government forest is decreasing. Presented below are the different categories of forests of the district:

Community forestry in Sindhupalchok has contributed significantly in the introduction and evolution of community forestry in Nepal. By the

end of last fiscal year i.e. 16 July 1995, one hundred eighty-nine community forest users group (FUGs) are implementing operational plans that cover 11000 hectares of forest as community forest. Harvesting and distribution of 506 cu m of timber and 1740 mt of fuelwood were also done. The community forests have also become the sources for the integrated community development in the district. In 1994/95 FUGs were also able to raise 1.2 million rupees (equivalent to US\$ 24000) through the internal distribution of forest products. Fifty percent of such income have been used for other developmental activities such as improvement of water supply system, school and temple building, trial improvement, etc.

Although, policy relating to leasehold forestry was introduced in late 1970s, there is very scarce evidence of its implementation. Only after the implementation of Hills Leasehold Forestry and Forage Development Project (HMG/IFAD/FAO), activities to lease forests are initiated. The Project leases degraded forest land located around the village to the rural people who are below poverty line. This is also a community based activity. Participation of the whole community is necessary either involving themselves as lessee or supporting by their consent to lease the particular forest land to the particular group of people. At present there are forty leasehold forest groups which involve 325 families in 180 ha of degraded hill forests. This programme has been very popular among the rural poor as the lessee farmer were able to reap immediately the benefit particularly forage from the leased land.

Huge number of seedlings have been distributed for the last nearly two decades in the district, but because of free availability they lay waste, suggesting the authorities to put a little cost and stop free distribution (Gautam, 1995).

Findings

New approach in forestry extension

The limited number of field staff became insufficient to deliver extension services to implementing community-based forestry programmes in the

forests spread all over the district. Although operational plans were made and approved, there used to be some degree of reluctance while implementing its utilisation aspect. As a result users had either not to go to the forests for their need or to use the illegal means for fulfilling their need. In this situation people working as executive members of the FUG had to face several challenges from the users of the same user's group. Examples of resigning by various users committee (FUC) are there, owing to such pressure. The FUCs are exposed of their ineffectiveness when they had no authority to provide forest products to the users when they were in need. The situation becomes more worse especially after the users were protecting forest since the last 10 -15 years, and despite the written provision of using forestry products, FUCs were not allowing to take such products to the people simply because of no instruction from the forestry office. And above all, the members of FUCs were threatened of physical violence.

People take part in a community programme if they are convinced that they will eventually get something out of it (FAO, 1986). So when several FUGs complained the afore-mentioned situations in the beginning of 1994, DFO advised them for the implementation of operational plans. Users responded overwhelmingly and stepped towards implementing operational plans. Their activities were later evaluated by developing a simple system of monitoring and evaluation of the implementation of operational plans (Gautam, 1995), and no evidences of activities against operational plans were noticed, except one or two minor and unintentional cases. On presentation and discussion of previous year's experience in a district level community forest users group workshop, encouraging results of the implementation of operational plan, particularly the utilisation aspect were found encouraging. Eventually, the workshop concluded that the implementation of operation plan in order to expand the community-based forestry in the district.

The effectiveness of this new approach can be judged on the basis of number of operational plans approved whether it is because of the FUGs' pressure, or even because of the adjoining villager's

Table 1: Approved operation plans for each range post

	Sukute	Jalbire	Nawal pur	Barabise	Bans kharka	Dada pakhar	Chautara	Bans bari	Total
FUG's pressure	5	5	5	6	5	5	9	7	47
Adjoining FUG's pressure			1	1	0	1	1		4
Ranger's interest	1	2	1	0	3	0	0	0	7
Total	6	7	7	7	8	6	10	7	58

Table 2: Distance of new FUG from the closest old FUG

FUG	Distance from nearest old FUG in walking time hour			
	0	>0<1	>1<2	>2<3
Number	17	34	4	3
Percent	29	59	7	5
Cummulative %	29	88	95	100

Table 3: Distance of new FUG nearest forest office

FUG	Distance from nearest forest office in walking hour						Total
	<1	1-2	2-3	3-4	4-5	>5	
Number	16	8	14	10	4	6	58
Percent	27	13	24	18	7	11	100
Cummulative %	27	40	64	82	89	100	

pressure (Table 1), the distance of newly formed forest users group from old FUG (Table 2) and forest office (Table 3).

The implementation of leasehold forestry programme also showed the similar experience. Although difficulties were experienced in the beginning, enormous pressure to implement operational plans was felt from the area.

Expansion of the community-based forestry programme

Despite doubling of field staff since July 1993, only 83 operation plans could be prepared and approved in five years. Nonetheless, community forestry is expanding throughout the district. The speed of preparing operation plans have increased once the implementation of such plans were effectively done. The number increased even after 50% reduction of forestry field staff. Table 1 has given the reason of such expansion.

Factors resulting pressure from FUG

Over 81% of the newly handed over forests are in response to the respective forest users group, and this pressure existed in all 8 range posts indicating that the spread of the approach throughout the district. The main reasons why users gave pressure are listed below:

- Demonstration effect of implementation of operation plan in the adjoining forests (Box 1)
- Legitimising the existing practice
- Utilisation of unused forest products particularly at higher altitudes

- Protection of forests (Box 2)
- Increasing revenue through use of wood and non-wood forest products
- Reserving forest area
- Observation tours, trainings, seminars
- Social recognition, etc.

Box 1: *Once a Damai who was provided timber to reconstruct his burnt house in the Sangachok Bazaar was stopped by the DFO. Upon proper enquiry and for the genuine reason, he was permitted to take the timbers demonstrated that FUG is meant not only for protection but also for distributing the forest product to users. This convinced the local people to involve in the management of community forests. As a result another three forests of the same VDC were handed over within a month.*

Box 2: *In a village meeting, one participant suggested to improve the degraded land of the village through intensive management involving a group of people, which was appreciated by all others. After the joint effort, when the land was turned productive, it was realised that leasing such patches to a group of people below poverty line is one way to reclaim the degraded lands.*

Reasons of pressure from adjoining FUG

About seven percent of the newly prepared operational plans were due to the pressure from adjoining FUGs (Table 1). This is because the neighbouring users groups want to reduce outsiders' pressure in their own forests (Box 3). It seems very interesting that the user groups who have nothing to do with the products of others' forest are also

concerned to see a proper management of those forests.

Box 3: The opinion of a participants of a Range Post level users workshop in Dandapakhar: *The villagers can be kept as the member of forestry extension team so that their expression would carry more value and weight amongst the villagers rather than that of the outsiders. Also talking to rural women would become easy.*

Ranger's interest

Operational plans prepared during one fiscal year constitute less than 12% due to forestry staff interest (Table 1), which used to be 100 % in previous years. Rangers effort are concentrated in the ground that there exist problem of forest protection, and where formation of forest users group in the near future is not possible, if left on themselves. Whenever there are frequent forest offences, rangers are pushing in such cases to proceed for community forestry.

Location of the new community forest users group

Location of new FUG is observed on the basis of distance from nearest old (approved by the end of previous fiscal year) forest users group, distance from nearest forest office. Out of the forest users group formed in the study period, 69% are located in those VDCs where FUGs existed, and only 31 percent were initiated in the new VDCs.

Majority (88%) of the newly formed FUGs are within one hour walking distance, and almost all are within three hours walking distance. It clearly indicates, that FUGs are formed close to the existing FUGs. Whereas distances from nearest forestry office do not indicate the distinctive trend (Table 3). Thus smooth functioning FUG is more motivating factor than the forestry office or their staff.

From the findings and the discussions it is clear that new approach in the forestry extension is evolved with implementation of operational plans in Sindhupalchok. Eventually elements, such as approaches, methods, messages, material, actors, and audiences, etc. are different from the elements of conventional forestry extension. Instead of conventional approaches, communities (users and adjoining users) are approaching forestry authority to develop the community forestry programme and perhaps helping them unknowingly, in extension activities.

Enhancing management skill of FUGs would further accelerate community forestry activities. Therefore, empowering FUGs with the organisational and technical aspects of forest management would be the

better way of forestry extension, which is different from the conventional one that used to focus mainly on the motivation. The smoothly functioning FUG under properly implemented operational plan demonstrated to be a material of forestry extension. The actors and audiences of which are non other than forest users, which is justified.

Conclusion and recommendations

Forestry extension through seminar/meeting, workshop was only effective in so far as conveying messages to participant are concerned. Neither it was possible to involve all people in such meetings and seminars nor the participants alone could convey message to the general people. So there was a need of forestry extension where every member of the target group would play a role. In the new approach, the users, adjoining neighbouring users, and forestry worker (professionals and others) are responsible for expanding community forestry and the users are the best extension workers.

Implementing a community development project is accelerated once a community trusts the development staff, and one way of doing this is to fulfil commitments made to the people (Diokno, 1988). In the present study it is clearly noticed that the encouragement in the implementation of operation plan help fulfil the commitment made to the people by policy and programme.

At present there is no need of forestry extension in Sindhupalchok to attract people in forest management. People themselves approach the concerned authorities to prepare and implement operation plans. Those already implementation are seeking the advice of ranger in the technical issues of forest management. Thus, there is need of community capability-building approach. Extension efforts must include creation of local institutions that will be capable of managing forest resources, over sustained period of time (Thacker and Gautam, 1994)

On the basis of the present study, the new approach of forestry extension are:

- effective implementation of operation plan.
- facilitate to prioritise the management need of community based forestry.
- more supports on technical and organisational aspects.

- market opportunity
- mobilisation of the funds received from forestry resources, etc.

Present experience from Sindhupalchok district indicates that the local users could play a role of forestry extensionist; even less number of which could cover a larger area.

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References

- Diokno, G. R. 1988. The Community-based forest research and development project: Extension through action research. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Doo, S. C. and Htun, M. M. 1988. Forestry extension in Burma. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- FAO 1986. Forestry extension organization, FAO Forestry paper 66. Food and Agriculture Organization of the United Nations, Rome,
- FAO 1988. Forestry extension methods, FAO Forestry paper 80. Food and Agriculture Organization of the United Nations, Rome, 1986
- Gautam, K.H. 1988. Community forestry extension: A perspective from the Dolakha district of Nepal
- Gautam, K. H. 1995. No more free seedlings: A step toward sustainable forestry. Discussion paper. District forest Office, Sindhupalchok, Chautara, Nepal
- Gautam, K. H. 1995 Rewarding forest users group: Towards developing an effective monitoring and evaluation system for the implementation of operational plan.
- Gautam, K. H. and N. H. Roche 1987. The community forestry experience in Dolakha district. Banko Janakari 1(4).
- Gautam, K. H. and S. K. Nirala 1994 Report on district level community forest users group workshop (in Nepali). District Forest Office Sindhupalchok, Chautara, Nepal.
- Karim, A. H. M. M. 1988. Forestry extension in Bangladesh, Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Kariyawasam, D. 1988. Forestry extension in Sri Lanka. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Malla, Y.B.; R.J. Fisher; and D. A. Gilmour 1988. Extension for Community Management of forest resources. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Pelinck, E.; R. Shrestha and C. H. de Pater 1984. Guidelines for the use of material in support of extension training and administration of community forestry at district and village level in Nepal. HMG/UNDP/FAO Community Forestry Development project Nepal.
- Pragtong, K. 1988. Forestry extension in Thailand. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok..
- Qazi, I. A. 1988. Forestry extension in Pakistan. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Shingi, P. M. 1988. Forestry extension in India. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Shrestha, N. B. 1988. Forestry extension in Nepal. Planning Forestry Extension Programmes. Regional Wood energy Development programme in Asia, Food and Agriculture Organization of the United Nations, Bangkok.
- Thacker, P. and K. H. Gautam 1994. A socio-economic study of participatory issues in forest management in the Terai. Forest Management and Utilization Development Project HMG/ FINNIDA, Kathmandu.