

## 2 Human Resource Development

As a result of the various amendments to the Forest Acts and Regulations, community forestry is now the major programme in Nepal's forestry sector. Competent and motivated staff are needed for effective implementation of the programme. The forestry sector has focussed its efforts on the gradual expansion of the Forest Service and providing opportunities for the necessary human resource development and training.

Decentralized forestry started in 1983 with the establishment of District Forest Offices in all 75 districts, and Regional Directorates in the five development regions, of the country. The DOF was strengthened in 1988, and staff numbers increased to 8,294 (MPFS 1988). The Department was reorganized in 1993, with District Forest Offices in 74 districts only and the Regional Directorates placed under the Ministry of Forests and Soil Conservation (MFSC). The DOF currently has 8,109 members of staff (DOF 1996).

Quality training is recognised to provide the backbone of the competent professional manpower development needed for the successful implementation of community forestry. The type of training provided is described in the following. The training has been classified broadly into academic and in-service training.

### 2.1 Academic Training

At present, the Institute of Forestry (IOF) of Tribhuvan University provides all formal forestry training in Nepal. In earlier times, formal

forestry training was mainly obtained in India. In 1947, the Nepal Forestry Institute was established in Kathmandu. It was moved to Bhimphedi in 1957, and to Hetauda in 1965. The institute was run by the DOF until 1972. The Institute was incorporated into Tribhuvan University under the National Education System Plan of 1971, and was renamed the 'Institute of Forestry'. Until 1981, the IOF had a single campus at Hetauda. In 1981, it started to develop a second campus (the Central Campus) at Pokhara, with funding support from the World Bank and USAID.

The IOF offers Certificate and B.Sc. courses in forestry. The Certificate in Forestry course lasts two years. Fifty students are accepted annually at each of the two campuses for the certificate level course. Ten per cent of places are reserved for women, and five for students from remote areas. The B.Sc. in Forestry course lasts four years. The entry requirement is a Certificate in Forestry, Certificate in Science, or completion of a 10+2 level of schooling. The B.Sc. in Forestry is a general forestry course. The final paper can be written on forest management, wildlife management, or soil and watershed conservation. About 42 students are admitted to the B.Sc. course at the Pokhara campus annually. Ten places are allocated to students with a Certificate in Science. In 1997, the IOF started running a B.Sc. Forestry course at the Hetauda campus. Twenty students were admitted in the first year.

The curricula include subjects relevant to forest management. Courses on community for-

estry make up about 13 per cent of the curricula, an improvement on previous curricula with only nine per cent of the contents directly related to community forestry.

The six Subject Matter Committees (on silviculture, social forestry, watershed management, wildlife management, general science, and forest management and utilisation) recommend any changes in the curricula required to cope with changing needs. The committee makes recommendations to the Faculty Board. The Boards comprised of the Dean of the IOF; the Director General of the Department of Forests, Department of Soil Conservation and Watershed Management, and Department of National Parks and Wildlife Conservation; the Executive Director of the Forest Research and Survey Centre; a representative from Tribhuvan University; and the Subject Committee Chairperson. The Faculty Board makes a final recommendation to the Academic Council of Tribhuvan University for approval.

The major complaint about the IOF's academic training is the lack of faculty members with sufficient field experience. Lack of motivation among the faculty members is another serious hindrance in producing good quality students. Although the IOF has introduced elements of community forestry into its academic training, the courses do not fully prepare the students for work in the DOF. The courses lack adequate field-based work, and this results in limited understanding of the practical implications of the training.

A person with a Certificate in Forestry is qualified to enter the Forest Service as a Ranger. A holder of a B.Sc. in Forestry is eligible to join the Forest Service as a Gazetted Technical Officer Class III.

## **2.2 In-Service Training**

Training is one of the main supporting programmes in the Master Plan for the Forestry Sector. As elsewhere in the world, Nepali foresters are mainly trained according to a traditional curriculum that treats forestry as a technical-biological discipline and pays only mar-

ginal attention to social aspects. The social aspect of forestry is very important for community forestry, however, and an in-service training programme is needed to produce competent and appropriate staff capable of effective promotion and support of community forestry.

The key institutions responsible for conducting in-service training on community forestry in Nepal are the DOF Training Section and five Regional Forestry Training Centres. Their roles are discussed below.

### **2.2.1 The Training Section of the DOF**

Systematic in-service training in the forestry sector started in 1980 with the establishment of a Training Wing under the MFSC with support from USAID. The aim of the wing was to design and develop training programmes and activities that would maintain and upgrade the competence of forestry professionals and technical staff (Tuladhar and Rajbhandari 1987). This wing was upgraded to a Training Division of the Ministry in 1989.

The objectives of the Training Division were to conduct job-related courses and workshops for MFSC staff, to prepare guidelines and training materials, and to coordinate the field-level training conducted by various units and projects of the MFSC (Shrestha 1996). The Division was supported from 1990 to 1993 by the FINNIDA funded Forestry Sector Institutional Strengthening Programme, Component No. 2. Following reorganization of the MFSC and its Departments in 1993, the Training Division of the Ministry was transformed into a Training Section under the DOF, and the technical staff reduced by more than two-thirds. Although understaffed, the Training Section is still charged with conducting in-service training for other departments under the MFSC, not only for the DOF.

Between 1980 and 1988, the Training Wing trained about 450 professionals, 829 sub-professionals, 132 village women extension workers, and 73 volunteers in forestry-related fields. Prior to 1993, the Curriculum and Materials' Development Section of the Training Division

was responsible for the revision of the curricula of in-service training courses. After the reorganization in 1993, this responsibility was transferred to the DOF Training Section. In practice, a Working Committee with representatives from all Departments in the MFSC plans and coordinates training programmes under the Training Section. This committee is also responsible for curriculum revision.

The lack of sufficient professional trainers in the Training Section is a serious constraint. All staff are expected to act as competent trainers. No systematic training needs assessment is carried out before courses are designed as there are no personnel specifically trained to do this or to prepare, manage, and maintain updated training plans and materials.

Most of the training conducted for staff is theory-based rather than field-based, with few hands-on practical sessions. Thus understanding of the practical implications of such training is often limited. Hardly any follow-up has been done to assess the degree to which training is being translated into practice. Furthermore, training is rarely evaluated to check its quality. There is need for a coordination mechanism between different departments to carry out systematic training needs' assessments, curriculum development, and follow-up activities.

The Training Section is only one of the sections in the Planning and Training Division of the DOF. As a result, the administrative and financial actions necessary for effective management of training have not been carried out on time. Lack of adequate funding has also been a key constraint (Shrestha 1996). The capacity of the Training Section needs to be strengthened so that it can meet its objectives. A more structured training procedure should be developed together with standardised training packages and a cadre of skilled trainers.

### **2.2.2 Regional Forestry Training Centres**

At the regional level, the DOF operates five Regional Forestry Training Centres (RFTCs)

covering 38 hill districts of the country. Since 1989, the RFTCs have been supported by the DANIDA funded Community Forestry Training Project (CFTP) under the Community and Private Forestry Division of the DOF. The aim of the CFTP is to improve the technical and managerial capabilities of both DOF staff and forest users to undertake community forestry activities. There are three levels of training activity under the CFTP.

- Central-level Training - This is generally aimed at DFOs and covers community forestry, extension skills, and technical skills.
- Regional-level Training - The RFTCs provide regional level training and support and coordinate district-level training and extension activities. The training conducted at the RFTCs is intended to increase the skills of District Forest Office staff to implement district-level training courses.
- District-level Training - The courses conducted in the districts are of primary importance for reaching the intended beneficiaries of the programme: the forest users. Training activities for communities are conducted through the District Forest Offices, with technical and managerial back-up from the RFTCs.

Between 1989 and 1996, knowledge and skills on community forestry have been imparted through training, workshops, and study tours to about 615 staff at central level, more than 4,600 staff and 1,100 local people at regional level, and more than 5,500 staff and 23,000 local people at the district level. More than 2,800 women and 24,000 local users have benefitted from community forestry education and extension activities.

The CFTP has developed training packages for RFTCs to address the overall needs of community forestry in the country. The RFTCs may modify these to suit regional conditions. Similarly, the District Forest Offices may modify the district-level training packages to suit district conditions. The RFTCs carry out regular training needs assessments to make the packages more fruitful.

A major constraint of the RFTCs is the insufficient number of competent trainers. The position of Regional Training Officer is generally lower than that of a DFO in the official hierarchy, and this can sometimes hinder effective training. The RFTCs have been conducting in-service training in community forestry for 38 hill districts supported by a World Bank funded project. Efforts are under way to expand their services to the whole country, including other Departments of MFSC with support from the Government of Denmark.

### **2.2.3 Training by Community Forestry Projects**

In addition to the in-service training provided by the Training Section and the RFTCs, all the major community forestry projects have their own training programmes. These include the Nepal-Australia Community Resource Management Project, the Nepal-Swiss Community Forestry Project, the Nepal-UK Community Forestry Project, and the Environment and Forestry Enterprise Activity Project. The training programmes of some of these projects are discussed below.

In addition to the above, there are several integrated rural development projects and national and international Non-governmental Organizations (NGOs), like the United Mission to Nepal and CARE/Nepal, which also conduct training in community forestry. These are not described further here.

#### The Nepal-Australia Community Resource Management Project

Australian assistance to the forestry sector in Nepal started in 1966. Initially this assistance involved a technical advisor to guide 'The Kathmandu Valley Reforestation Project' (NACFP 1994). Since 1978, Australian assistance has supported various activities in the Kabhrepalanchok and Sindhupalchok districts of Nepal. In the early years, assistance was limited to establishment of plantations. Community forestry was introduced in Phase III of the assistance (1988-1992). The current Phase (V) of the project is called the Nepal-Australia Com-

munity Resource Management Project. It commenced in 1997 and will end in 2002.

Various phases of the project have conducted training, workshops, and study tours for DOF staff and local users. Between 1975 and 1997, over 1,300 staff were trained, about 62 were provided with in-country or long-term overseas' scholarships and several overseas' study tours and short-term training courses were also conducted. Over 10,000 local users have been trained in various aspects of community forestry.

#### Nepal-Swiss Community Forestry Project

Swiss assistance to community forestry in the Dolakha and Ramechhap districts of Nepal emerged out of the Integrated Hill Development Project (1975 to 1990). Phase II of the project ran from 1991 to 1996 (after a one-year bridging phase, mid 1990 to mid 1991), and the current Phase III will run from July 1996 to June 2000. The main objective of the project is to enable FUGs to implement community forestry related activities, leading to sustainable social, economic, and ecological conditions in the area.

The institutional capability of FUGs has been developed through workshops, study tours, and forest management training programmes. According to SDC (1996), nearly 8,000 person days of training and study tours (covering 74 different training events) have been conducted for FUG members. About 10 per cent of the trainees have been women. Over 2,500 person days of training have been imparted to project staff. Two scholarships for MSc. courses, 23 scholarships for Certificate in Forestry courses, and one scholarship for a BSc. course have been awarded.

#### Nepal-UK Community Forestry Project (NUKCFP)

UK assistance for community forestry activities developed from the Koshi Hills' Area Rural Development Programme (Phase I, 1977 to 1979 and Phase II, 1979 to 1986) and the Koshi Hills Community Forestry Project (1987-1993). This programme covered four districts in the east of Nepal. In August 1993, a project agree-

ment was signed for five years between the British and Nepali governments to implement project activities in three districts of the Western Development Region (Parbat, Baglung and Myagdi), and the four hill districts of Koshi Zone in the Eastern Development Region (Dhankuta, Tehrathum, Bhojpur, and Sankhuwasabha districts). The project conducts regular training at district level. Annually, 11 to 12 events are organized in villages for forest users, 14/15 events are held for DFO staff, and four to five events for organizations other than forest staff and users. Details can be found in the NUKCFP annual reports. Sixty-nine people have been sent on relevant courses overseas: 11 officers on postgraduate courses in the UK and Asia; 11 officers on short courses overseas; and 47 Ranger-level staff on short courses in south-east Asia. Twenty-five students have been sent on forestry courses in Nepal: 14 on BSc. forestry courses, and 11 students from disadvantaged backgrounds on courses at diploma level.

### **2.3 Strengths and Weaknesses in Human Resource Development in Nepal**

The strengths and weaknesses of human resource development activities for community forestry in Nepal are discussed in the following.

#### **2.3.1 Strengths**

Following the continuous training effort for community forestry since 1980, orientation of forestry staff, except those newly recruited, is complete. However, there is a lack of technical and management training for foresters and forest users on the proper management of community forests. The training needed includes the skills necessary for post hand-over back-up, including subjects such as thinning, pruning, harvesting, and logging.

The central and regional level organizational set-up for training on community forestry is a major strength. DANIDA's support for the Regional Forestry Training Centres since 1989, and the new long-term DANIDA support for community forestry under the Natural Resource

Management Sectoral Assistance Programme, provides an opportunity for strengthening the training component of community forestry. Various donors have been assisting Nepal in implementing community forestry projects, and training is a major part of all these projects.

#### **2.3.2 Weaknesses**

There is no pre-service training school for forest guards. At present, literate persons are recruited as Forest Guards and are gradually given Forest Guard Training by the RFTCs. However, some have to wait several years to be trained.

Although some projects have maintained records of training activities, there is a lack of systematic record-keeping with objectives, scope, information on participants, and duration of training courses. Consolidated record-keeping in one place is important for the effective implementation of a staff training programme. Some efforts are being made to develop this.

In general, training activities lack a systematic approach to their design, and the objectives to be met are not properly specified. In the past, formal training need assessments were not carried out before designing courses. Training programmes have rarely been evaluated for the quality or competence of the trainees.

Effective implementation of skills acquired in training depends a lot on the working environment and on the availability of the necessary support. Follow-up programmes are an integral part of the training cycle. However, these are often lacking, and it is difficult to say with any confidence that the skills and knowledge imparted by training programmes are being put into practice. Although the practical aspect of many training courses has improved, further attention is required to develop the confidence of trainees in implementing the skills learned.

Training can play a major role in the dissemination of new knowledge and skills obtained from research. At present there is no formal link between research and training, and this warrants serious attention.

The Human Resources' Development Plan of the Master Plan for the Forestry Sector has broadly projected the manpower, fellowships, and training required for the period 1989 to 2009 for Nepal's forestry sector. It is unfortunate that a training plan based on training need assessments has not been prepared. The Strategies for Policy Implementation of the Master Plan has emphasised the need for training sufficient numbers of motivated and competent people, but no clear working policy has been formulated for in-service training. The Training Wing drafted an in-service training policy for the Ministry of Forests and Soil Conservation, but it has not been adopted. The lack of a training policy and strategy are also reflected in the lack of training need assessments and training plans.

### **2.3.3 Recommendations**

The following issues require attention in order to improve the provision of quality training.

#### Development of Need-Based Training Plans

There is an urgent need to prepare training plans based on need assessments so that training is more effective. Training plans should aim to develop more structured training procedures and standardised training packages, and to deliver training accordingly. Training modules should be designed to fill identified gaps in knowledge and should be updated regularly.

#### Follow-up

Follow-up activities play a crucial role in developing skills among trained staff members. Follow-up activities need to be conducted regularly to evaluate and reinforce what has been learned. Each training activity should include a follow-up programme with a refresher course and an evaluation of the impact of the training on the participants' ability to function in their workplace.

#### Training of Trainers

Trainers' performances determine the effectiveness of training. Therefore, there is a need

to develop a cadre of skilled professional trainers. Opportunities for academic and refresher training should be provided in order that trainers' skills and capabilities continue to develop.

#### Organizational Upgrading

It is essential that the staff skills and facilities at the Training Section and the Regional Forestry Training Centres are upgraded to ensure effective implementation of training programmes to meet the ever-increasing training need in community forestry,

#### Site Catalogue

Study tours play a crucial role in upgrading skills and knowledge and in the exchange of technologies. A catalogue of major technological and institutional demonstration sites is essential for planning effective study tours. This site catalogue should include detailed information: objectives, history, achievements, institutional structure, technical focus, accessibility of the site, maps, photographs, and cost of visit.

#### Forest Guard Training

Forest guards make up the majority of forestry staff. These are the staff who work closely with local people. The need to provide technical back-up to FUGs has increased with the expansion in the number of community forests. Monitoring the implementation of FUGs' Operational Plans is also becoming essential. Forest guards could be extensively used in these activities and should be given appropriate training. A training school should be established for Forest Guards before they enter the Forest Service, it preferably should be associated with the Council for Technical Education and Vocational Training (CTEVT). As more forest areas come under FUG management, Forest Guards may not be able to provide all the technical support needed. Thus there is also a need to train young people with some schooling to be community forestry promoters. These could be employed by the FUGs themselves, perhaps with some initial support from the government.

## Institute of Forestry

The Institute of Forestry should run regular short courses for both professional and technical forestry personnel. Course curricula should incorporate more topics that have a direct bearing

on community forestry such as conflict resolution, participatory planning, monitoring and evaluation tools, and gender analysis. The IOF should also regularly invite professionals working in the field as guest speakers in order to expose students to recent developments.

## Other Issues

### 3.1 Indigenous Forest Management in Nepal

Management of forest resources by local communities is not a new concept in Nepal. *Kipat* can be considered as one of the most ancient types of land tenure representing common property resource management (Arnold and Campbell 1985, as quoted by Joshi 1990). *Kipat* was without any legal title and this system was common among the Limbu ethnic group of the eastern mountains of Nepal.

Another ancient, indigenous collective forest management system is the *shings namu* system of the Sherpas of Solukhumbu district (Fuer-Haimendorf 1994). The *shings namu* was be-

lieved to be significant in the discussion of local forest management in Nepal because many local practices and organizations are relatively recent in origin. Another reason for avoiding the term 'traditional' is that it does not necessarily indicate whether a system is a local initiative or imposed by outside agencies. For example, the forest management by *talukdars* during the Rana period can be described as traditional (because it is old), but it was not indigenous, since it was sponsored by the feudal State and not based on a local initiative.

Review of the literature show the existence of diverse kinds of IFMS in different parts of Nepal, mostly in the mountains. Despite this great number of systems, some generalizations can