

## Chapter 4

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### INSTITUTIONAL DEVELOPMENT OF FOREST USER GROUPS

#### A. Palpa District

Seven forest user groups (FUGs) were selected for detailed study. First the internal factors - both socioeconomic and biophysical, were analysed, i.e., for each group, its historical evolution, structural attributes, and functional variables were analysed. The analysis was carried out for each UG separately (Figure 3). Annex Table 1 lists the forest user groups formed by 1992 in Palpa and Pokhara.

##### *Mulgaira Forest User Group, Madanpokhara*

a. Location. The forest is located within the Madanpokhara Village Development Committee in the central part of Palpa district. The residents of Mulgaira Village (Ward. No. 9) have been the traditional users of this forest. The estimated area is eight hectares. The village is reachable by a fair weather road from the nearest bus stand.

b. History. Due to heavy population pressure, degradation of the forest began after 1958. By the year 1965, the forest condition became poor and soil erosion problems surfaced. Mainly due to the drying up of the drinking water spring in 1957, a forest protection drive was initiated under the leadership of Mr. Ghant Prasad Aryal (see Box 1). People were barred from using the forest and complete protection was enforced. Later, the Tinau Watershed Project (TWP) formalised the forest management committee in the form of a *Panchayat* forest protection committee in 1986. For the next four years, under a management plan jointly developed by the villagers and the Ranger, firewood was removed four times a year. The major tree species are *Shorea robusta*, *Schima wallichii*,

**Box 1: Ghant P. Aryal - A Model UGF Leader**

Mr. Aryal is a key figure who has played an important role in achieving successful forest protection and management in Mulgaira village. He was born in 1984 B.S. in Ward No. 9 of Shrawadi village where he says 16 past generations of his family had lived. He received informal education in Gulmi. He has two sons and three daughters, all of whom are educated and independently settled. In 1955, the age-old water source (spring) in his village suddenly dried up. Mr. Aryal contends that the reason for this was the cutting down and removal of forest vegetation around the spring by the villagers. Mr. Aryal, upon agreement with the other village leaders, started protecting the trees around the spring by camping there during the night. In a marriage ceremony the same year, where most of the villagers had gathered, he proposed that anyone caught cutting a tree should be fined Rs 10 by the village. During the first year of this arrangement, one person was caught cutting down a tree, but he refused to pay the fine. The villagers petitioned the then bada hakim, Mr. Digambar Jha, stationed in Butwal. The offender was caught and jailed and detained until he agreed to pay the fine of Rs 10 to the villagers. The money was donated to the village school. This system was thus sanctioned, both by the society and the Government, and has been enforced until this date with the same seriousness and authority. The only difference is that the fine has been increased from Rs 10 to Rs 50 per offence. The water spring re-emerged after the vegetation around it was restored and has not dried up ever since. It supplies water to all the eighty households in Ward No 9 of Madanpokhara. Throughout a period of over 30 years, Mr. Aryal has always led his community in fighting for different causes. He was elected *pradhan panch* unopposed in 1962. In 1964, when the forest was being destroyed due to the abolition of the *birta* system, Mr. Aryal once again mobilised popular support to protect the forest. In 1971, Mr. Aryal was again elected the *pradhan panch*. This time he inspired people in all the wards to start protecting their forests as in his own ward. The system refined in Mulgaira has been replicated in other villages with minor changes. Over time, the system has become so well-entrenched in the local sociocultural settings that even during the *laissez faire* period from 1980-1990 nobody dared to challenge the system. The people of Madanpokhara have always been vigilant and have protected the forests day and night even during periods of national turmoil. The reason for the stability of this system is the time-tested nature of institutional evolution and its acceptance by all the villagers.

*Castanopsis sp.* In 1989, the committee was converted into the Mulgaira forest user committee. Currently there are 79 user HHs for this forest which originally had 50 members. The user committee has 15 members, out of which four are women. The majority of the members are small landholders.

c. Protection and Management Practices. The official Operation Plan was developed in 1989. The District Forest Office (DFO) and the rangers concerned appraised the users belonging to Ward Nos 6, 7, and 9 with the new rules under which the forest could be handed over to them. A general meeting of all the users was called and discussions were held on the major provisions the operation plan was required to have. Through consultation with the DFO staff, the operational plan was finalised and the (FUGC) forest user group committee was also formed through a general meeting of all the users.

**Table 3: Major Activities Performed by the FUG**

| Activities | Year                               | Site                        |
|------------|------------------------------------|-----------------------------|
| Plantation | 1988                               | landslide area              |
| Training   | every year in the month of January | one compartment out of five |
| Grazing    | controlled grazing                 | throughout the forest       |

d. Management Objectives. The objectives of the forest management work carried out by the UG are as follows - 1) to supply firewood; 2) to improve soil conservation; 3) to protect water sources; 4) to supply timber needs in the future; 5) to achieve an improvement in the local environment; and 6) to protect the forests and wild animals.

e. Characteristics of the Current User Group. Under the initiatives taken by the UG committee, afforestation work in the landslide area and open spaces around water sources has been carried out. The meetings and other operating procedures are described as follows - 1) over 80 per cent of the users as well as FUG committee officials belonged to the upper *Brahmin* caste, thus creating an overall homogeneous ethnic composition; 2) the general meeting of all user group members is held at least once a year in order to evaluate the annual report and to make major

decisions; 3) a 15-member user group committee (UGC) has been formed to enforce and implement the rules and plans passed by the general body; and 4) the UGC is also responsible for establishing communications with the general users as well as for maintaining links with the District Forest Office; and visitors who request forest visits and briefing on the management system are charged Rs 100 per briefing, out of which Rs 50 is deposited in the general fund and Rs 50 is awarded to the briefer/s. Some of the other regulations are as follows.

1. All the users are supposed to participate in firewood cutting on the date and time fixed by the committee.
2. The forest is divided into six compartments and all the users are asked to collect and prepare one *bhari*\* (25kg) of firewood.
3. All the *bhari* are numbered and allocation is carried out through a lottery system so as to avoid cheating by the forest users.
4. Only one person per household is allowed to participate in firewood cutting.
5. Only dead, dying, and crooked trees are to be removed, no *Shorea robusta* branches are to be cut and no green trees/plants from erosion/landslide prone areas, or from around the water sources, are to be removed.
6. To cut a *Shorea robusta* tree, only a saw is to be used. The rights and responsibilities are as follows.
  - i) All the households permanently settled within the boundary established by the FUG are automatically included in the user group.
  - ii) Current members who regularly abide by the rules and regulations stipulated in the management plan automatically sustain the membership.
  - iii) Anyone violating the rules is to be fined Rs 50, out of which Rs 25 is awarded to the informer/cooperator.
  - iv) A second time offender is fined Rs 100 and the informer gets Rs 50.

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\* One *bhari* is the term usually used to denote a full load contained in traditional handwoven Nepalese baskets. The weight varies according to the size of the basket and type of wood.

- v) A third time offender is sent to the DFO for legal action.
- vi) All the damages are assessed and charged to the offenders by the user group committee (UGC) and endorsed by the general meeting of the FUG.
- vii) Fallen leaves and weeds can be removed free of charge by needy users, provided they do not leave the ground bare in the process.
- viii) Anyone found cutting down a live tree is charged Rs 100/tree.
- ix) Hunting of birds and other animals results in a fine of Rs 100/person, in addition to referring the case to the DFO for further legal action.
- x) Anyone causing fire in the forest is prosecuted if caught.
- xi) No grazing is allowed in the newly planted areas
- xii) Picnickers and other users are also charged nominally.

#### *Shikhardanda Forest User Group, Madanpokhara*

a. Location. The forest borders Mulgaira village in central Palpa and is located in the Madanpokhara VDC of Palpa district. Most of the trees are second growth *Pinus roxburghii* and *Shorea robusta* forests. The Pokhara highway passes along the western side of the forest.

b. History. The villagers reported that, prior to 1963, the forest was dense and of good quality. There was even one informal committee to protect the forest in 1962. However, forest destruction is said to have started after the opening of the road to Pokhara. Illegal cutting down of trees to sell fuelwood and timber in Butwal and Tansen were the major causes for forest destruction. People from adjoining villages also started using the forest for grazing, fodder and fuelwood harvesting, and farming, once outsiders moved in. By 1975, the forest was completely destroyed and the whole area had turned into barren slopes. In 1976, the people of Shikhardanda appointed one *heralo* by collecting *manapathi* (grain) contributions from every resident of Ward No 5. There was one formal committee, but this committee was not able to conduct its work properly. In 1978, another committee was formed to protect the local forest. This committee

was partially successful in conserving the local forest. It helped establish the plantation of pine seedlings in the year 1978/79. In 1985, through the initiative of the District Forest Office, Palpa (DFOP), the forest was placed into the *Panchayat* Protected Forest category. The forest was formally handed over to the *panchayat* in 1986, but a forest guard was kept on the payroll of the DOFP. The present users' committee was constituted in 1990 B.S. The committee has 11 executive members, nine of whom are male. The users number 140 HH, eighty per cent of which belong to the small and medium farmers' group.

c. Protection and Management Practices. A committee was formed before the forest was handed over to the FUG by the DFO, Palpa. The committee wrote the operational plan and negotiated with the DFO. Management operations, such as pruning, thinning, and singling, are carried out in January in each year. The users' group has a plan to replace *Pinus roxburghii* with *Shorea robusta* forest in due course of time as they feel a greater need for fuelwood and fodder than for timber.

No paid watchers exist now. The DOFP removed one they had during the last fiscal year (FY). Volunteers among the users have now been assigned to protection duty on a rotational basis. Fuelwood from the forest is sufficient only for five months. The rest of their supplies comes from their own farm sources. Fuelwood is distributed using a standard measuring rope and through a lottery system.

d. Management Objectives. The management objectives are as follows: 1) to develop the forest until it recovers its pristine beauty and ecology; 2) to gradually replace the *Pinus roxburghii* dominated section of the forest with *Shorea robusta* forest; 3) to meet the fuelwood, fodder, timber, and leaf litter needs of the villagers; and 4) to conserve soil and prevent damage to the farms and houses.

e. Characteristics of the Current User Group. To be a member of the user group, one must be a native or inheritant resident of the UG village. He/she needs to produce a legal document of property ownership (by inheritance) or ownership of newly-purchased land in the village. Secondary users are not entertained in this UG. Fuelwood collection is allowed once in a fortnight if approved by the UGC. Only dead and dying trees can be collected. Dry leaf

litter collection is allowed every Saturday during *Chaitra* (March-April) to *Ashad* (June-July). *Shorea robusta* leaf collection for home consumption is allowed. It is also permitted to collect tree fodder and cut grasses as per the directives of the committee.

The villagers also reported that elements of the operation plan were drawn from other collective schemes, such as irrigation canals, school buildings, and drinking water schemes, which were also found to be successfully running in the villages. This factor was considered to be one of the stronger variables that could be associated with the success or failure of a particular FUG.

#### *Bharkesh Forest User Group, Telgha*

a. Location. The forest is located on the southeast side of Tansen Bazaar in Telgha VDC. The Pokhara road forms a boundary between the Telgha and Madanpokhara VDCs. The forest is of a fairly large size and contains mainly *Shorea robusta* and *Pinus roxburghii* species.

b. History. The forest was densely stocked until 1962. Pine was the major tree species. Large-scale encroachment started in 1964/65. About 10 per cent of the local people still practice a variant of shifting cultivation in the forest. Most of the inhabitants belong to occupational castes, such as *Damai*, *Kami*, and *Sarki*, who have very little agricultural land and are, therefore, subsistence farmers. Accelerated deforestation started during and after the completion of the Pokhara road. Charcoal-making was also started by the blacksmiths residing in Ward No. 3. People from Tansen and other neighbouring villages also participated in the rapid destruction of the forest. By 1981/82, the forest was left with only young saplings of *Shorea robusta* trees. Conversion of forest land into agricultural land also continued. In 1982, locally-elected leaders and youth club members planned some measures to protect the forest. They initiated day- and night-time vigils to catch illegal forest users, including the charcoal-makers. In 1984, Tinau Watershed Project (TWP) hired two forest guards to protect the forest on two opposite ends of the boundary. These measures were of significant help in protecting the forest and the quality of the forest improved appreciably. However, the lucrative fuelwood market in Tansen contributed towards continued use of the Bharkesh forest for fuelwood

collection for regular marketing by both locals and outsiders. Even though the forest was handed over in 1989, as a result of the faulty and hasty handing over procedures adopted by the Project (PDP) Ranger in constituting the UGC, the group has remained non-functional. The general committee has 31 members and the executive committee 11 members, but both are in disarray. The total number of users identified is 331. Although the operational plan for this forest has been signed by the DFO, the forest has not been formally received by the committee due to land tenure disputes. The problems identified by this study team are largely related to the large size of the forest and its user group. Due to the traditional practice of fuelwood collection adopted by the local people, the natural forest has been a regular source of livelihood. This issue has not been addressed by either the DOF or by the UGC. However, the local people have expressed their interest in managing the forest. A temple trust (*guthi*) is understood to have recently registered a large portion of forest in its name. This religious organisation may have a better chance of saving this valuable forest.

c. Protection and Management Practices. According to the OP approved by the DFO, the forest is to be managed primarily for fuelwood, fodder, and leaf litter production. The forest has been divided into five compartments. It is supposed to be opened for fuelwood collection only during two Saturdays in a month. However, during these regular days only dead wood and fallen wood are to be collected. The committee fix a few days during the December-February period every year for thinning and pruning operations through which more fuelwood can be obtained by the members. Leaf litter is collected every Saturday. A representative of the DOF is present during major forest operations, if possible. In addition, the district office is to be informed well in advance of all the planned activities of the UGC.

The penalties fixed are similar to the ones fixed by the FUGs of the Madanpokhara VDC. However, due to the rather relaxed attitude of the UGC, illicit users are never caught and, even if caught, are let free due to social and political interference. For example, at one time the DOF officials caught some illegal fuelwood sellers on their way to Tansen Bazaar. This created shortages and/or a rise in the price of fuelwood at the district headquarters. In a few days, the local leaders pressurised the DOF officials to relax their activities.

d. Management Objectives. This UG has not been able to set any clear-cut objectives because of the organisational, structural, and inherent institutional weaknesses and failure to address equity and gender issues.

e. Characteristics of the Current User Group. The rules and procedures followed by the FUG are similar to the ones described for other FUGs above. This FUG is one of the most ineffective groups among the seven included in the current study. Based on Participatory Rapid Appraisal techniques, the Baseline Socioeconomic Sample Survey, and the Key-informant Survey, the following problems have been identified,

- \* The forest is too large and geographically disadvantaged by being located near the district headquarters of Tansen. The existence of a perennial fuelwood market around the forest, coupled with the traditional system of fuelwood collection adopted by a section of the FUG members, are key factors contributing towards lack of agreement on protection needs amongst the members.
- \* The FUG itself is quite large and unmanageable (331 members). More importantly, the group is ethnically and economically heterogeneous and divergent. The majority of members are small farmers and/or landless, as well as people belonging to occupational castes. The average landholding is only 0.55ha per HH and most of it is rainfed *bari*. Therefore, members' dependency on the forest is high.
- \* The number of educated persons is quite low - the percentage of college educated persons is less than one.

#### *Mahajir Salleri User Group, Dhyakuldanda*

a. Location. This UG forest is located in Bhairabsthan VDC of western Palpa. It is one of the first ever recognised UG forests and is regarded as one of the most successful as well. A fair weather road links Tansen to Bhairabsthan VDC and the forest is frequently used as a training and observation site by the District Forest Office.

b. History. This FUG manages the *Dhyakuldanda Mahajir Salleri Ban* located in Ward No 5 of Bhairabsthan VDC. This is the biggest of all the forests studied and has a history of traditional management spanning over 30 years. The villagers claim to have been managing the forest since 1960. Beginning in 1970, its protection included the forests around the water spring and surrounding forest patches. During the 1975/76 cadastral survey period, some land grabbers were successful in including a section of the forest as their private land on the topographic map. The villagers collectively filed a legal suit in the regional court, won the case against those individuals, and retrieved the forest. Plantation was carried out where necessary. They formulated rules to fine misusers of the forest. This is a predominantly pine forest and has an area of about 84 ha. The total number of FUG members is only 68. The executive committee consists of 19 members, out of which six are female. All are medium-scale farmers and most of them belong to the upper and middle caste *Chhetri* and *Newar* group. Prior to being formally handed over in 1990, this natural forest was becoming degraded.

c. Protection and Management Practices. The motivation process started in 1960 itself, but the formal handing over took place only in 1990. An informal committee was formed before the forest was handed over to the FUG by the DFO. The committee wrote the operational plan and negotiated with the DFO.

d. Forest Management Objectives. The major objectives of the forest management are as follows: 1) to protect the water sources and 2) to meet the needs for fodder, fuelwood, leaf litter, and timber. Fuelwood collection from dead trees and fallen branches is allowed throughout the year. The annual fuelwood harvesting schedules, beginning with the thinning and pruning operations, are fixed by the executive committee. The forest has been divided into five compartments and each year, in the month of February, one of the compartments is designated for silvicultural operations.

e. Characteristics of the Current User Group. While harvesting fuelwood, certain guidelines are to be followed. They are: 1) shrubs and dense saplings are to be removed first; 2) pine is to be removed in areas mixed with *Schima* and *Castanopsis*; 3) only one member from each HH is to be allowed to collect fuelwood; 4) all collection is to be pooled and equally divided; and 5) each *bhari* of fuelwood (1m x 1.5m) is to be deposited in the common fund. Ten

rupees is charged for each log (2.5' round and 1.5' long) used for timber purposes.

The penalties are similar to the ones described for the previous forests. However, this FUG is very dynamic and progressive in framing the rules and enforcing them (Box 2).

### **Box 2. User Group Dynamics, Mahajir Salleri User Group**

Mahajir Salleri forest user group (FUG) is one of the oldest and most active groups in Palpa. The Research Team observed the decision-making process adopted by the FUG at its general body meeting. The agenda set for the day was as follows: 1) raising the prices of forest products; 2) utilisation of cash funds; 3) fixing the dates for thinning and harvesting; 4) deciding on applications for full membership by associate members; 5) establishment of a furniture industry; and 6) appointing a Secretariat Committee. Out of these, raising the prices of logs and decisions on additional memberships received the highest and most critical response. For every issue under discussion, the whole group split into three separate interest blocks: 1) women's group, 2) senior citizens' group, and 3) youth group. The chairman, being a young man, was supported by the third group. It was observed that he attempted to force the mass to support the decisions of his group. The women were initially passive participants. However, when an issue in which they were interested was raised, women took over the discussion. They were highly reluctant to allow households from other villages to acquire full membership rights, chiefly because the applicants had not helped them in protecting the forest during the past. The applicants had also charged the womenfolk NRs five for each load of clay (domestic soil) from their locality. The older members were highly reluctant to raise the price of logs as most of them had recently retired and had plans to build houses. Therefore, they strongly opposed a proposal to raise the price of logs. However, the women supported the proposal since they perceived it to be a deterrent to forest destruction. The women's group also supported heavier penalties for violators of UGF rules. At the end, it was observed that the group generally attempted to arrive at decisions through consensus. However, on issues where two of the three groups had similar views, decisions were taken on the basis of the majority vote. On the whole, the group was found to be highly dynamic and had the potential to improve its decision-making process.

Self restraint and volunteerism are the measures adopted for protection. Grass collection is allowed, but open grazing is prohibited. Offenders are severely penalised and informants are given half of the fine charged as a reward.

### *Khumdanda Forest User Group, Chidipani*

a. Location. The *Khumdanda* forest is located in Chidipani VDC in eastern Palpa district. Out of the several FUG forests in the VDC, the *Khumdanda* forest is quite well managed. The forest is bordered on the north by the Pokhara road. A fair weather road links the forest to eastern Palpa. The forest is also bordered by the rapidly growing *Are Bhanjyang Bazaar* which has been adding additional pressure to and causing protection problems for the user group.

b. History. Although, during the Rana period, each household from this village was required to supply charcoal to the Rana administrator stationed in Tansen, until the opening of the Siddhartha Rajmarg (SRM), the forest was in good condition. Massive tree cutting was carried out for road construction work by Indian contractors. After the road opened, people became rather reckless and destruction accelerated. Only after most of the big trees had been cut down was protection initiated in 1983. A formal group has been in existence since then. The management committee was established in 1985, but the official FUG was registered during 1989. At first, this forest was used by the residents of ward No 2. Two types of committee are functioning currently; a main committee with 11 members and a secondary committee with 12 members. Altogether 133 households (90, 33, and 10 households from Ward Nos 2, 3, and 4 respectively) are general members of the forest group. No female members are included on the executive committee, but two females are included on the secondary committee. The majority of the executive committee members (7) belong to the small farmers' group and the rest are from the medium farmers' group. No rich farmers are included on the executive committee.

c. Protection and Management Practices. A committee was formed through consensus before the forest was handed over in *Mangsir*, 1989, to the users' group. The management plan was developed with the full participation of the users. Suggestions

were collected from different wards and presented in the general meeting for approval. The plan was developed with the active involvement of the Ranger. The secondary committee was formed to improve communications between the FUG and the UGC. It was also to advise the UGC in resolving disputes. Seven executive meetings and one general meeting have been held during 1989/90. The committee has now decided to meet twice a month to discuss problems and improve planning.

d. Characteristics of the Users. The criteria for entry are as follows: 1. inheritant/permanent resident of the village; 2. migrants who own land in the village; and 3. temporary residents with low economic status are considered to be secondary users and are allowed to collect only 50 per cent of the forest products collected by primary users.

In order to implement the policies, rules, and regulations passed by the FUG, an executive committee has been formed. The committee functions based on the democratic basis of a majority vote, but the presence of three officials - Chairman, Vice-chairman, and Secretary - is a must for making major decisions. This is a small committee which facilitates the work to be carried out by the UGC. It also helps carry out forest development work.

The functions of this committee are to oversee the work performed by the above two committees and to investigate any problems and difficulties faced by general users and suggest remedies for them. The duration of all committees has been fixed at three years.

All officials can be relieved of their posts if a) they tender their resignations or b) the majority of the members are not satisfied with their work.

Plantation was carried out on 0.8ha of degraded forest area by the villagers during 1986. The planted species were pine (mostly *Pinus roxburghii*) and a 100 per cent survival rate was achieved. A second plantation was carried out during 1990 on an open patch of forest land. The survival rate was only 15 per cent. Plantation was carried out mainly to protect the degraded forest areas from erosion as well as to create more wood lots to meet future needs. Presently there is no forest guard. The DOF removed the official forest guard last year due to a budget shortage. Since then, the FUG members have introduced a rotational guarding system.

Each day the scheduled members report to a central location where an attendance register is maintained, and they note down the time of entry and exit to and from the forest.

Fallen leaves and weeds can be removed free of charge according to need, provided the ground is not left bare in the process. Controlled grazing is allowed in such areas where trees are out of reach of animals. But in the plantation areas, grazing is strictly prohibited. Ropes approximately 2.5' (width) and 4' (length) long are used to measure the firewood. Users are allowed to enter the forest for fuelwood collection for a month during the January-February period. No specific rules have been framed by the committee to ensure the equal distribution of fuelwood. Members can enter the forest with their family members and are allowed to collect one headload of firewood according to the measuring rope. All silvicultural and other operations are carried out during the winter season as well.

#### *Ramche Forest User Group, Rampur*

a. Location. The forest is located near the valley of Rampur in the eastern part of Palpa. Residents of the Rampur VDC, Ward No. 4, are the users of this forest. A fair-weather road links Pokhara highway to the nearby VDC from where the forest can be reached after a day's walk. The forest is completely hilly and is dominated by mixed *Shorea robusta* dominated trees on the east and south slopes and by *Schima/Castanopsis* trees on the west and north slopes. Some *Pinus roxburghii* trees can also be found.

b. History. Based on the PRA study conducted by the research team, it was revealed that, until 1970, the forest was in good condition. However, by 1973 almost all the mature trees had been cut down. The main reason stated was the abolition of the *birta* system of land tenure. Prior to this, the forests were protected by a *lalmohariya* (or empowered) family belonging to the Bhattarai clan. Partly due to the authoritarian system of government and partly due to the strict control the Bhattarais imposed on the forest, the use was strictly regulated prior to 1970. However, by 1980, the natural forest vegetation was completely destroyed and, according to the villagers, they could "literally see birds walking on the denuded terrain". In 1981, the local *panchayat* appointed one Mr. Hark Bahadur Nepali (see Box 3) as the forest guard and as an incentive instituted an annual award of Rs 300 for good

protection work. In 1983, a Range Office was established in the Ward and the Palpa Development Project (PDP) started to support one *heralo* (forest guard) in that year as well. In 1990, the DFO office informed the FUG committee that, beginning in the FY 1992/93, this support would be discontinued. Therefore, once again the *heralo* is being supported by the FUGC. The same *heralo* has been retained, although the salary given by the committee is half that paid by the DFO.

c. Protection and Management Practices. The protection of the forest is carried out by a very devoted *heralo* (see Box 3) who is actively supported by his wife, an equally dedicated lady. The *heralo* has been empowered by the committee to regulate access to the forest, to check the products removed, and to apprehend illegal users and submit them to the committee. This old couple maintains a 24 hour vigil on the forest and is actively supported by the UG committee. They, in fact, have lived inside the forest throughout their lives.

Management of the forest is carried out by dividing the forest into five compartments, and fuelwood removal is carried out every winter through a 'lottery system' of distribution. Committee members supervise the harvesting and are therefore given 18 *bhari* of fuelwood free. The UGC also collects fuelwood from its members as a management fee and sells the same to meet protection expenses. No poles or sawn timber have been removed so far, as the forest is still not mature enough. The future plans are to sell roundwood and sawn wood to the local market, and this appears to have good potential.

e. Characteristics of the Current User Group. The FUG consists of 212 members and has an executive committee of 13 working as its permanent committee. The FUG was established by an erstwhile *panchayat* leader with the active support of a Ranger. Since the informal group was formed during the *Panchayat* system, all the households belonging to Ward No. 4, where the forest is located, were automatically included in the FUG membership list. The main reason was that, under the old rules of *Panchayat* Forestry, forests could be handed over only to the *panchayats*, which in turn could authorise a Ward to manage the forest through an informal UG. Due to this provision, a few traditional users and claimers were excluded from membership, although they were never denied partial access to the forest. Since

**Box 3: Hark B. Nepali - A *Ban Heralo***

Hark is over 50 years old. He has two wives, three sons, and one daughter. According to him, the *Ramche Ban* originally belonged to the clan of Mr. Tirth Raj Bhattarai who claimed that the forest was gifted to his ancestors by the then *jimual/talukdar* during the Rana regime. After Mr. Tirth Raj's death, his son, Dibakar Bhattarai, controlled the forest. The Bhattarais were very strict in enforcing the communal forest rules. Without the permission of the Bhattarai brothers, nobody could enter into the forest. Felling of big trees was allowed only in cases of dire need such as fire damage to homes and other destruction wrought by natural calamities. When news of the nationalisation of forests, abolition of the *talukdari* system, and introduction of a cadastral mapping system reached this village, the Bhattarai family lost control of the forests. All the people of Rampur and the adjoining villages started encroaching upon the forest. By 1969, the original forest cover was completely destroyed. Some settlers also moved inside the forest area. The whole landscape looked deserted and only undesirable shrubs were left to grow. The naturally regenerating vegetation was also harvested quickly. By 1982, one could see birds walking on the terrain, as Hark puts it.

During the time when Mr. Dev Raj Dhakal was the *pradhan panch*, he raised the issue of deforestation in *panchayat* meetings. Mr. Hark Bahadur Nepali, who was the peon of Ward No 3, was given the assignment of protecting the forest. A salary of Rs 300 per month was fixed if he was successful in controlling illegal cutting. Hark really took the job to heart. He strictly checked all encroachment. He was warned, he was threatened, and even manhandled by many poachers but he did not waver in his resolve to check forest destruction. So much so that, in order to maintain round-the-clock vigilance, he hired bullock pairs and labourers to carry out his own farm work. However, the salary of merely Rs 300 was not paid regularly. He worked without pay also for some time. In the early 80s, the Palpa Development Project put Hark on its regular payroll at Rs 540 per month. However, this was also withdrawn last year. Hark is back again to his original salary of Rs 300 per month, but he is not ready to quit the job of protecting the *Ramche Ban* because the forest is Hark's life as his wife likes to say and she herself is no less a devoted *heralo*.

Questioned about the problems and nature of this work Hark says that women, children, and small and landless farmers are the most frequent users of the forest. Women usually hide firewood and timber inside their fodder load. Any women tending to violate the rules and regulations, or those trying to override the guards, are referred to the committee. Hark is also invited to every meeting and contributes towards the decision-making process of the committee which supports his efforts.

1989 when the FUG system was legalised, the HHs belonging to Ward No 3 have been demanding inclusion in the FUG. However, the FUG has not been able to make any decision as there is no agreement among the members on the amount of entry fee or equivalent contribution for forest protection that the new members ought to pay. This has even precluded the inclusion of HHs within Ward No 4 who should automatically be included.

The executive committee is made up of eight *Brahmin*, five *Chhetri*, and one *Newar* - almost in proportion to the membership structure of the FUG. The operational plan was developed by a provisional committee, which was later converted into the executive committee. All the members of the FUG were involved in framing the rules, and this may be the reason why there is almost a 100 per cent compliance with these rules.

This FUG is currently confronting a very atypical problem. The ex-chairman (Mr. Bholu Nath Regmi) of the executive committee, who also happens to be the *ex-pradhan panch*, was found stealing a live *Shorea robusta* pole (locally called *linga* and used for religious ceremonies). The *linga* has been confiscated and kept at the Range Office to show the ex-chairman's defiance. He was fined Rs 50 for the offence. In addition, this person had used Rs 5,000 from the common fund to meet personal expenses and had not paid it back in full. The current Chairman, Mr. Hari Prasad Regmi, who used to be the deputy, is having a hard time collecting the dues from the ex-chairman as he seems to be related to him and still has some regard for his former boss. However, the majority of the members are quite agitated over the issue and are ready to use force or to take legal action.

#### *Hungi User Group Forest, Majuwa*

a. Location. The forest is located in the northwestern part of Palpa in Hungi VDC. It is bordered on the north by the Kali Gandaki River. The forest is generally slopy and northeast facing. The vegetation is dominated by mixed *Shorea robusta*/*Michelia* sp/*Castanopsis* sp forest. The forest can be reached in a day's walk from the nearest point on the Pokhara highway.

b. History. The Hungi user group forest has a special topographic feature as most of the forest area lies on steep, north-facing slopes

along the bank of the Kali Gandaki River. The forest is located above the Majuwa village on sloped terrain. Most of the flat and gently sloping lands are under agricultural use. The forest is very scenic due to the several waterfalls scattered throughout it. *Simal Chhango* is the most well-known waterfall. The forest is quite lush and rich in vegetation.

Forest destruction started after the opening of the Siddhartha Rajmarg highway in the early seventies. Purely for quick economic gains, people started to cut down the trees for sale to markets in Pokhara, and Butwal.

The total area of the forest is 35 hectares. The major tree species found in the forest are: *Shorea robusta*, *Terminalia alata*, *Bauhinia variegata*, *Syzygium cuminii*, and *Schima wallichii*.

c. Protection and Management Practices. The FUG has the following provisions in their forest management plan - 1) dry fuelwood collections allowed twice a year - for 15 days in the month of October and for a month in February- and allowances are based on family size. The entry fees per season are: family size (1-5): Rs 4; family size (6-10): Rs 8; and family size (>10): Rs 10 (during the month of September/October only half of the above fees are charged); 2) anyone caught illegally collecting fuelwood during off-season is charged Rs 20 the first time and Rs 40 the second time (if caught a third time for the same offence, he/she is referred to the District Forest Office); 3) anyone found cutting down trees for timber, receives first and second fines of Rs 50 and 100 respectively; and 4) if the violators are not members of the user group, the fines are doubled.

Thinning, singling, and opening operations are carried out during the month of December-January. The forest has been divided into five compartments and each year one of the compartments is thinned of crooked, stunted, and deformed trees. Even during thinning operations, if some members intentionally cut pole-sized trees, they are fined Rs 5, 10, and 15 for first second, and third offences. Leaf litter is free except for *Castanopsis* leaves for which there is a charge. Grass cutting is allowed any time, except during July and August. Poles and timber can be cut if permitted by the committee (which happens in the event of house destruction due to natural and/or man-made calamities). However, some species, such as *Shorea robusta*, *Terminalia* sp, and fodder

trees, are banned for logging purposes. Charcoal-making is permitted if approved by the committee and if only dead and dying logs are used. Wood cutting is prohibited during the months from May to September.

Grazing is prohibited in the forest. Wood for agricultural operations is made available on payment of a small fee. Anyone causing fire damage is punished as per the government regulations. All the users are responsible for putting out a fire if one occurs. Up to two *ban heralo* can be hired by the UG executive committee as per the salaries fixed by the UG meeting. The current salary is fixed at Rs 100 per month, which is paid through raising a HH tax of Rs 3 each and through the revenue earned from the forest.

The users have planned to plant valuable species such as *Acacia catechu*, *Michelia* sp, *Dalbergia sissoo*, and *Pinus roxburghii*. Thinning, singling, pruning, and harvesting operation schedules are decided by the general body meeting of the users, and this is also an occasion for modifying and/or establishing new rules and regulations. However, in changing the rules, the basic tenets of the operational plan and the state of the forest will not be changed.

d. Forest Management Objectives. 1. To meet the supply needs for fuel-wood, fodder, bedding materials, and timber; 2) to control floods, landslides, and soil erosion; 3) to check the illegal conversion of forest land into agri-cultural land; and 4) to conserve wildlife and improve forest productivity.

e. Characteristics of the Current User Group. One of the key features of this FUG is its role in spreading the message of forest conservation to neighbouring villages. Due to a chain reaction generated by the activities of this FUG, several successful FUGs are emerging in the area with little effort on the part of the DOFP. This experience is valuable for purposes of replication.

#### *The Role of the District Forest Office*

1. To monitor the activities of FUGs as per their operational plans; 2. to provide technical assistance and supervision; and 3. to organise training/visits and other support for forest users.

*The Ethnic Composition of the Users*

As shown in Table 4, *Brahmin* and *Chhetri* constitute the largest ethnic group (54%) among the users in the seven FUGs evaluated in Palpa. They are followed by the *Magar* (23%).

**Table 4: Ethnic Composition of Members in the Sampled User Group Villages in Numbers and Percentages**

| Village      | Ethnic Group/Caste |                |              |              |             |              |               |           |              |
|--------------|--------------------|----------------|--------------|--------------|-------------|--------------|---------------|-----------|--------------|
|              | <i>Brahmin</i>     | <i>Chhetri</i> | <i>Magar</i> | <i>Sarki</i> | <i>Kami</i> | <i>Newar</i> | <i>Gharti</i> | Others    | Total        |
| <b>PALPA</b> |                    |                |              |              |             |              |               |           |              |
| Mulgaira     | 52<br>(79)         | 5<br>(6)       | -            | -            | -           | -            | 4<br>(5)      | 8<br>(10) | 69<br>(100)  |
| Shikar       | 58<br>(45)         | 32<br>(25)     | 30<br>(23)   | -            | 1<br>(1)    | -            | 3<br>(2)      | 6<br>(5)  | 130<br>(100) |
| Bharkesh     | 110<br>(33)        | 76<br>(23)     | 68<br>(21)   | 34<br>(10)   | 31<br>(9)   | 2<br>(91)    | 5<br>(2)      | 6<br>(2)  | 332<br>(100) |
| Majihar      | 9<br>(13)          | 32<br>(47)     | 10<br>(15)   | -            | 2<br>(3)    | 4<br>(6)     | 7<br>(10)     | 4<br>(6)  | 68<br>(100)  |
| Khumdanda    | 9<br>(8)           | 1<br>(1)       | 96<br>(81)   | -            | 4<br>(3)    | 1<br>(1)     | 1<br>(1)      | 6<br>(5)  | 118<br>(100) |
| Ramche       | 90<br>(43)         | 12<br>(6)      | 17<br>(8)    | 14<br>(7)    | 9<br>(4)    | 58<br>(27)   | 1<br>(1)      | 11<br>(5) | 212<br>(100) |
| Majuwa       | 26<br>(49)         | 11<br>(21)     | 9<br>(17)    | -            | 3<br>(6)    | 1<br>(2)     | 2<br>(4)      | 1<br>(2)  | 53<br>(100)  |
| All Sites    | 354                | 169            | 230          | 48           | 50          | 66           | 23            | 42        | 982          |

Figures in parentheses denote percentages

## B. Phewa Tal Watershed

### *Turung User Group Forest*

a. Location. Turung forest is located in Sarangkot VDC, Ward Nos 7 and 8, within the Phewa Tal Watershed. It lies on the south-facing slope of the watershed and extends from the base of the Phewa Lake to the middle of the Sarangkot Ridge. The total area of the forest is 30 hectares. The total number of current UG members is 122.

The largely second-growth natural forest area covers 30ha and is dominated by *Schima wallichii*, *Castanopsis indica*, *Bombax ceiba*, *Lyonia ovalifolia*, and *Alnus nepalensis*. The forest area has steep slopes, a narrower shape towards the east, and gradually broadens towards the south. This forest has been under user group management since 1983. However, the formal handing over based on an operational plan was carried out only during the FY 1990/91.

b. History. According to the user group chairman - Mr. Raman Bahadur Thapa, about 300 years ago the present forest was put under a trust of the goddess Bhumikali by the *Magar* community of Turung village, which currently falls in Ward No 7. This forest was strictly kept for collecting firewood (*charu*) for *Hom Puja* and for other religious purposes, and no other use of the fuelwood and timber was allowed by the trustees. The forest protection task was mainly handled by the *Magar* community, especially by two brothers, Tamare and Harke, who made the forest their permanent home until their death. Because of it being a trust land, the forest was in good condition. But, after the death of the two brothers, nobody took the same interest or showed equal devotion to guarding this valuable forest. Ultimately, due to heavy population pressure, immigration, and encroachment by local as well as outside users, the forest started to degrade. Nationalisation of forest land in 1957 and the cadastral survey in the late sixties accelerated forest destruction. Ultimately, the *Magar* communities alone were left with the sole responsibility of forest protection, while other communities kept on destroying it. In 1979, a gathering of concerned social leaders formed a new committee and, after mutual agreement, one guard was appointed by the committee at a salary of Rs 150 per month. The salary was to be borne through the *manapathi* system and was to be shared by all the households of the villages who claimed usufruct rights to the forest.

c. Protection and Management Practices. The initiative to protect the forest was taken in connection with the need to support a primary school which had also started in 1979. The chairman, Mr. Thapa, was the key figure in organising the drive to protect the forest and fortunately still fulfills that role. The school board also took up the task of protecting the forest to earn revenue for the school. The committee subsequently applied for recognition and authority to the Phewa Tal Watershed Development Project

(PTWDP). The Project, after holding several discussions with the villagers, agreed to assign an additional forest guard at a salary of Rs 150 per month. The newly-formed school committee realised that the control of the forest was not possible merely by appointing additional guards. With this in mind, they made another request to the PTWDP to demarcate and fence off the forest to protect it from outsiders; mainly from fuelwood collectors from the nearby Baidam area of Pokhara. The PTWDP made a survey and appointed one more guard for the forest. During the FY 1983/84, the forest area was fenced and several checkdams were constructed to contain the heavy siltation which was sedimenting the lake system. When the new approach to community forestry was implemented by the Government in 1989, whereby forests could be handed over to user groups, the people of Sarangkot VDC, Ward Nos 7 and 8 called a general meeting and formed a user committee with the encouragement of the PTWDP. Finally, the official user group (UG) was formed in 1990 and, with the help of these UG members, an operational plan was formulated. Of the total income generated through the sale of grasses and fuelwood from the forest, it has been decided that 75 per cent will be spent on development work, such as school maintenance, and 25 per cent on protecting, developing, and managing the forest. At present, there are 12 members on the user group committee (UGC). All the members are male, no female members were selected for this committee, apparently due to lack of initiative on the part of the male members, as well as the non-availability of women volunteers. All the members are medium-class farmers.

d. Management Objectives. The villagers are quite aware of the consequences of forest destruction and have been planning and managing the forest systematically with the following objectives: 1) to restore the forest to its pristine productivity and ecology; 2) to fulfill the growing demands of fuelwood, fodder, timber, and leaf litter; 3) to protect farms and property from landslides and flood havoc; and 4) to earn, if possible, cash income to meet other village level development needs.

e. Characteristics of the Current User Group

i. **Management Prescriptions:** The following directives are included in the operational plan being followed by the Turung FUG.

- Carry out thinning, singling, improvement cuttings, and enrichment plantations as per the technical and scientific needs of the forest. Prior consultation with the PTWDP is recommended.
  
- Forest products can be marketed as per the following rules: a. thatch and fodder grass @ Rs 1/*bhari*; dry branches @ Rs 2/*bhari*; firewood @ Rs 5/*bhari*, and dead and fallen tree trunks and limbs @ Rs 20-50/*bhari*, depending on the tree size.
  
- Floor grasses and animal bedding materials can be collected during the time period fixed by the UGC.
  
- In case of an emergency event, such as death in a family, natural calamities, and fire, the UGC can approve up to 10 *bhari* of firewood as indicated by a user group member.
  
- Social and religious organisations, such as schools, temples, community shelters, and others, can be given wood and firewood without harming the health of the forest, i.e., collection of dead and dying trees can be sanctioned by the committee in such instances.

## **ii. Forest Management Rules:**

- Cutting and removal of timber and firewood without following the rules stipulated in the operational plan are strictly prohibited.
  
- Grazing is completely restricted in the demarcated forest.
  
- No acts contributing to fire hazards are allowed in the forest.
  
- Hunting of wild animals and birds is not allowed in the forest.

- No stone and soil mining is allowed in the demarcated forest.

**iii. Penalties:** Any person/s carrying out an act or acts which are against the rules agreed and stipulated in the operation plan will be first reprimanded; if the same person repeats the offence and the damage is under Rs 100, the products will be impounded and penalties levied as per the rules. Should the damage be more than Rs 100, he/she will be referred to the District Forest Office in consultation with the PTWDP office. The UC is authorised to determine the extent of the damage as well as the process for disposing of the impounded products.

**iv. Creation of a Common Fund:** All the earnings acquired by the user committee are to be deposited in a Bank Account. Two persons selected by the general body of the FUG (generally the Chairman and the Secretary) are authorised to withdraw the money from the bank as per the guidelines set by the general FUG body.

**v. Current Condition of the Forest:** At present the quality of the forest is quite good in that both the tree size and density are growing satisfactorily. The user group has decided to permit grass removal two to three times a year. However, the forest suffers from lack of timely application of scientific management prescriptions. For example, the regeneration and plant density are considered high but, due to non-practise of timely management prescriptions, optimal tree growth and development are lacking.

The total recorded number of registered users is 112, but presently 122 HHs are actually using the forest. The new members applied for membership in the Users' Group after the current operational plan was approved. Tables 3, 4, and 5 detail the inventory and management information of the forest as well as the ethnic composition of the FUG members.

#### *Dopahare User Group Forest, Sarangkot*

a. Location. The forest is located in the Sarangkot VDC in Kaski district. The entire forest falls within the boundary of the Phewa Tal Watershed. The forest can be reached from Pokhara in a two-hour trek. An all-weather road from Pokhara is also under construction.

b. History. This forest is a 15-year old plantation forest. The forest was developed on overgrazed and highly erodible hill slopes with the active cooperation of the people of Ward Nos three and five under the Sarangkot Village Development Committee (VDC). The major species planted are *Prunus cerosoides* and *Alnus nepalensis*. The total area of the forest is 15 hectares and 106 users have been registered so far. Prior to the reforestation work, the site had been used as open access grazing land for a long period of time. However, the natural vegetation of the village is believed to be deciduous forest. The immediate effect of the forest clearance was increasing siltation, which started damaging valuable farmland. During 1974/75, under the PTWDP, checkdams and fencing were constructed, after which plantation work commenced. Although one forest guard was employed by the project to protect the new plantation, all the villagers cooperated in safeguarding the project. They formed one informal users' committee to carry out this task effectively. Under the *Panchayat* system the forest was being managed as *Panchayat* Protected Forests (PPF).

c. Protection and Management Practices. One of the reasons for the successful maintenance of the forest was the existence of a system of creating awareness among all the users as well as of the equitable distribution of forage grasses from the plantations. Since the initial goal was simply to develop dense vegetative cover in the area, no forest management plans were implemented until recently. As a result of effective protection, natural regeneration also took place and, apart from the planted species, other tree species also flourished. The main tree species that have been planted and which have regenerated are: 1. *Alnus nepalensis*; 2. *Prunus cerosoides*; 3. *Schima wallichii*; 4. *Litsea monopetala*; 5. *Litsea cubeba*; and 6. *Ficus glaberrima*.

Marketing of forest products is still poor in both Palpa and Phewa, primarily because of the lack of adequate supply. All the UGFs studied were being managed mainly for fuelwood, fodder, and composting litter. However, one of the strongest incentives for protecting the forest, according to the majority of users, was the scope for market surplus in future. Already two user groups - Telgha in Palpa and Turung in Phewa were reporting the existence of an insatiable demand for fuelwood in nearby Tansen (Palpa) and Pokhara (Phewa). Mahajir FUG in Palpa was also planning to set up a furniture factory to sell furniture in Tansen. Similarly, the remaining FUGs were also planning to sell both

timber and non-timber products after the maturity of the full secondary growth forest. Mulgaira forest was also selling recreational services (picnic spots, nature treks, etc) to adventure tourists and others. There is, however, a need to develop marketing institutions for the benefit of all the FUGs. The DFO should develop a cost effective and efficient market system for each district.

d. Management Objectives. The current operational plan stipulates the following management objectives.

1. To increase the affinity of the local people to the forests by supplying an optimum amount of forest products.
2. To discourage the poaching and stealing of forestry products through locally designed rules and peer pressures.
3. To help protect Phewa Lake conservation through effective protection of the forest.
4. To improve forest conditions and forest productivity.
5. To improve the quality of arable land as well as its productivity through forest development efforts.
6. To begin a system of local level management of forest resources.

e. Characteristics of the Current User Group. The executive committee (EC) of the FUG represents the desires and opinions of the entire user community. The general body of the users can dissolve the EC any time if it so desires. The table below indicates the ethnic composition of the FUG and the UGC.

**Table 5: Ethnic Composition of the Forestry Users and Executive Committee Members in Selected FUGs in the Phewa Watershed**

| Caste          | TURUNG         |     |                     |     | DOPAHARE       |     |                     |     |
|----------------|----------------|-----|---------------------|-----|----------------|-----|---------------------|-----|
|                | General Users' |     | Executive Committee |     | General Users' |     | Executive Committee |     |
|                | Number         | %   | Number              | %   | Number         | %   | Number              | %   |
| <i>Brahmin</i> | 14             | 13  | 3                   | 25  | 77             | 72  | 7                   | 78  |
| <i>Chhetri</i> | 80             | 71  | 8                   | 67  | 23             | 22  | 2                   | 22  |
| <i>Newar</i>   | 13             | 12  | 1                   | 8   | 6              | 6   | -                   | -   |
| <i>Sarki</i>   | 5              | 4   | -                   | -   | -              | -   | -                   | -   |
|                | 112            | 100 | 12                  | 100 | 106            | 100 | 9                   | 100 |

Apart from organising regular meetings, the EC is also responsible for preventing any actions that harm the forests. By agreement with the DFO, the EC is empowered to market forest products through consultation with the PTWDP office. It is also required to carry out improvements and development work related to the forest resources of user-managed forests.

Any defaulters to the community-enforced rules are first fined nominally. However, repeated offenders are referred to the District Forest Office. The EC has full authority to levy fines and to award other punishments to the offenders, depending upon the nature of the offences.

The PTWDP has retained the role of facilitator and supervisor. It has been given authority to oversee the implementation of the operational plans. If unsatisfied with the functioning of the UGs, it can recommend that the DFO dissolve the UG. It is also responsible for providing assistance to the user groups if the latter request the same in writing.