

# GREENING HILLS

## Seeing the forest and the trees

Nepal's quiet success with community forestry brings back water, biodiversity and better living standards for Himalayan villages. But what if it becomes too successful?

**By Madhukar Upadhaya**

**D**adeldhura in far-west Nepal has more in common with the Garhwal and Kumaon hills across the border in India than with

the rest of Nepal. The people on the two sides dress similarly and share a common dialect. The terrain along the rugged Himalayan foothills is also



*Steep slopes, degraded forests on the Mahabharat range.*

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similar: folds upon folds of brown and barren mountains disappearing into the haze. Water is scarce during the long dry season. Natural springs have dried up, and most of the terraced farms have remained dry and fallow.

But things are changing, and the transformation of some of these hills is remarkable. Thanks to a community forestry effort that is spreading across Nepal, the hills around Dadeldhura have tufts of green again despite the severe drought that affected the region in 1999. There is more water for drinking and irrigation. Says Govind Rokaya, a village elder: "After community forests brought back the trees in the catchments, the springs have gradually started to flow again."

Further east, in Badikhel below the

awesome Annapurna range in central Nepal, Amar Bahadur Pahari sells fodder to goat herders who take livestock to Kathmandu. Amar Bahadur is the Chairman of the Forest Users' Group, and fodder comes from the forest that his community protects and manages. The user group earns 10,000 Nepali Rupees (USD 145) a year just from selling leaves and grass.

In nearby Gorkha district, women sell firewood from their community forests, and have used the extra income to build a small water supply system that has brought drinking water to the village. Before the pipeline was installed, women spent hours fetching water from the spring every day.

On the outskirts of Kathmandu,



*Fodder trees dot homesteads in central Nepal.*

ICIMOD/Daniel Miller

Kul Bahadur leads another Users Group at Patle Community Forest that covers 400 hectares. Ten years ago, Patle used to be a degraded forest with no undergrowth. Today it is a lush jungle that yields wood and fodder. The nearby springs have water once again and provide drinking and irrigation water for 140 households.

There are many examples like Dadeldhura, Badikhel, Gorkha and Patle all over Nepal. In the past 20 years, village communities have taken control over the commons, letting forests regenerate. Today, more than 600,000 hectares of forests are protected by local communities and managed by more than 5,000 user groups like the one run by Kul Bahadur.

To arrive at this stage of forest development, Nepal has gone through many twists and turns. It has tried different donor-driven models of protection and conservation. For centuries, forests were used mainly for grazing livestock. Timber felling was free, but the forest had a chance to regenerate since demand for wood by subsistence farmers was small.

## **Nationalisation**

After the nationalisation of forests in 1956, all wooded areas in Nepal became State property. The purpose of nationalisation was ostensibly to protect forest resources, and steps like the Forest Act of 1967 were taken to enforce government control. As it turned out, the effect was just the opposite.

Private citizens needed government permission even to cut down their own forests or individual trees

grown on private land. People were disenfranchised and unable to follow traditional conservation and rotational grazing practices. The District Forest Officer (DFO) had complete authority to sell timber permits to anyone without the consent of local forest users. Villagers lost interest in forest protection and management. This led to huge loss of forest cover all over the country in the 1950s and 1960s.

Tulsi Bahadur Thapa, a resident of Sankhu village in the Kathmandu valley, recalls how difficult it used to be to get a simple walking stick from the Salambu forest situated in the middle of his village. Ten years after nationalisation, Salambu was so degraded that villagers were reduced to collecting roots of old trees for use as fuel.

For centuries, Nepali villagers have developed their own methods and traditional ways of forest management. Worshipping the forest goddess, planting *pipal* trees at rest stops along trails, lopping trees for fodder in such a way that the next foliage comes along with vigour, collecting forest litter for animal bedding which provides good compost and also reduces forest fire hazards. All these activities were performed at particular times, often with ceremony. Nationalisation made many of these practices extinct.

In the 1970s, public awareness grew regarding deforestation and its side-effects in developing countries. This received publicity in the Nepali media as well. Eric Eckholm, in his book *Losing Ground*, painted an alarming picture of the degradation of the mountain environment in Asia, Africa,



**Community forestry brings back the woods in Nepal.**

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and Latin America. In South Asia, for instance, increasing flood damage in Bangladesh was thought to be a direct consequence of the deforestation in the Nepal-Himalaya. This relationship later gave birth to the theory of Himalayan Environmental Degradation.

This simplistic cause and effect theory attracted a great deal of academic and media followers and generated international investment interest in afforestation. Massive plantation programmes were started in Nepal too, but except for some pine forests other saplings just withered away or were munched off by cattle and goats. Pine itself was not the appropriate species to meet fodder demand, and uncontrolled grazing continued. Many areas had to be replanted over and

over again. Expensive "watchers" were hired for periods as long as 10-15 years by the government. This became an added budgetary burden and increased programme costs. By 1977, a third of the forestry budget was spent on erecting fences and hiring watchers.

Global concerns about poverty and the environment also increased during the 1970s. These broader aims were of particular relevance to Nepal, then under an autocratic partyless *Panchayat* political system. A key feature of the *Panchayat* system was peoples' participation at the village level. One means of achieving this participation was by involving local people in development works that benefitted their community. Since villagers depended on forest resources, the government

decided to empower village Panchayat leaders by delegating to them the authority of controlling and developing forest resources. As a result, the Panchayat Forest Rules (PFR) and Panchayat Protected Forest Rules (PPFR) were proclaimed in 1978.

Newly planted areas and degraded forests were handed over to the Panchayats for protection and management. They were also encouraged to plant trees with government funds. Panchayats were authorised to sell forest products including fuelwood and timber within the village boundaries. They deposited 25 percent of the income in the national treasury and kept the remaining 75 percent for themselves as an incentive to invest in other development activities of their choosing. However, the Panchayats were political units and too removed to properly supervise scattered forests. Moreover, political leaders were more interested in revenue collection than in getting local people involved in conservation efforts and in managing forest resources.

### **Community forests**

Under the Forest Act of 1967 villagers had little control over what to plant in their forests. They had very little say in decision-making. A wide gap existed between users and local leaders. Forests were degrading fast. It was soon realised that the key to conservation lay in giving people the benefits of the forests and transferring management responsibilities to them.

In 1982, the government proclaimed the Decentralisation Act

which required mobilisation of "Consumers' Groups" for all development works carried out using government funds. Consumers' Groups were expected to contribute to the cost of development in their areas – mainly in the form of voluntary labour. It was hoped that their participation and effort would lead to a sense of ownership and commitment. It was then that the concept of Users' Groups came into use in forestry, and plantation areas and degraded forests came to be regarded as community forests.

Nepal's forestry masterplan prepared in 1989 promoted peoples' participation in development, management and conservation of forests. The plan also developed the legal framework to enhance the contribution of its stakeholders, and strengthened the institutional set-up in the forestry sector. This was done to achieve the long-term objectives of meeting peoples' basic needs for forest products, contributing to agricultural production, reducing environmental degradation, and conserving genetic resources and helping the economy, both at local and national levels.

The plan recommended de-nationalisation and handing over of all accessible forests to Forest Users' Groups (FUGs) for protection, management and utilisation as community forests. Existing laws were amended to provide greater flexibility, legalise User Groups and give them authority over community forests. After the restoration of democracy in 1990, a new constitution a year later laid the ground for a fresh Forest Act 1993.



*FUG-managed community forest in Dolakha District.*

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The provisions are radical: the District Forest Officer has the authority to hand over any part of a national forest to a User Group in the form of a community forest. The group is entitled to develop, protect, use, and manage such a forest, and to sell and distribute products from the forest by independently fixing prices.

The success of Nepal's community forestry programme lies in the fact that it gives priority to people who use the forest directly for their livelihoods. Also, it allocates an unlimited area, and the freedom to use or sell forest products without any tax liability. About 3.5 million hectares of national forests are potential community for-

ests. As of November 1998, about 13 percent of these forests had been handed over to local community groups.

The transfer of these forests from the State to communities has been achieved through national, regional, and international efforts. It took the government a while to commit itself to implementing policies that have since made community forestry a success. According to Egbert Pelinck, the Director General of the Kathmandu-based International Centre for Integrated Mountain Development (ICIMOD) who also served as the Chief Technical Adviser of the Community Forest Development Project in

the early 1980s, it was only after 1990 that the government indicated its resolve.

Today, with the assistance of ICIMOD, community forestry is gaining momentum, especially in establishing institutions and mechanisms to empower the users to act. A notable achievement of these efforts was the formation of the Federation of Community Forest Users (FECOFUN). ICIMOD has also set up the Himalayan Forum for Community Forestry (HIFCOF), a forum for dialogue among senior officials of the forestry sector in the Hindu Kush and Himalayan region.

The spread of community forests has shown very positive trends in the past decade: increase in biomass production, reports of gradually increasing forest cover, and increased peoples' participation. The severe drought in the Himalaya in 1999 passed on some very clear messages. Firstly, there were more forest fires primarily because there is greater forest cover in the mid-hills. The entire Himalayan belt from Nepal to Assam was covered in a blue haze of fires burning out of control. Secondly, reports indicate that although fires devastated government-owned forests in Nepal, most community forests were saved through precautionary measures taken by villagers.

### **Emerging problems**

Despite the successes, there are several problems emerging that need to be addressed. In the last three decades, the living conditions of hill

populations in Nepal have not improved as projected. Changes that have occurred are largely superficial, though reports do suggest that literacy and life expectancy among the rural population have increased. But almost half of all hill farmers still report food shortages for nearly half the year.

These shortages force hill people to migrate to other places to seek temporary employment. This migration is not only to towns and cities within Nepal, to other rural communities, and to the mountains and the *Terai* (plains), but also, to India. Migration helps resolve the problem of local food scarcity on the one hand, but it also drains the community of able-bodied manpower.

Community forests have also increased pressure on national forests. Degraded land in the vicinity of villages are more productive after being taken over and protected as community forests, but users still go to government-owned forests located on the ridges for fuel and fodder. Recent surveys in two districts, Sindhu Palchowk and Kavre in central Nepal, where a much-acclaimed Australian-funded forestry programme is involved, have shown remarkable results. While forests near villages are showing vigorous growth, there has been a rapid decline of government-owned forests on the higher mountains where the ecology is even more fragile and regeneration slower. If this trend continues and spreads to other parts of Nepal, high mountain forests could be in serious jeopardy.

Another concern relates to shrink-

ing common pastureland following introduction of community forests. In high altitude areas, sheep are commonly used as a means of transport. The conversion of traditional grazing strips along the route into community forests has introduced a new set of problems. Recently, shepherds from the Humla area in far-western Nepal who transport goods on sheep-back were forced to abandon their trade because their pack animals could not graze en route. Due to the reduction in the number of sheep, remote areas have begun to face food shortages because these animals were their main means of transport.

In some villages, community forests have become so dense that wildlife has staged a comeback. Incidents of leopards killing goats, and monkeys and wild boars devouring crops have become commonplace. In some instances, this has discouraged users from protecting dense forests close to their villages. There are also reports of community forests being destroyed in some places by security forces to prevent ambushes by Maoist insurgents.

Another potentially serious problem in community forestry is the conflict among and between users. These conflicts can occur between individual users within a forestry user group or even between institutions. Conflicts usually arise when users have not been properly identified. Some families need more forest products than others, yet all families are required to put in the same amount of hours to protect the forest. Disadvantaged families have less of a voice, and tend to be left

out while forming a group.

Secondary users who live far from the forest may not be as effective in managing and protecting the forest. Some users who live closer to the forest than others may be expected to be more vigilant in guarding the forest. Such conflicts regarding resources and effort, within and between user groups need to be properly addressed. Carefully investigating the number and type of users, and the demand for forest products, could help resolve many of the disputes.

### **Lessons from Nepal**

The success of peoples' participation in forest development has underscored the folly of nationalisation of Nepal's forests back in 1956. Whether or not community forestry is the way ahead, it will be difficult now to reverse the process. Villagers who saw their livelihoods suffer with declining forest cover now have created forest wealth with their own hard work. They have acquired the power to use forest products for their daily use and want to be able to use the forests to improve their living standards.

How are these steadily maturing forests and their wealth of timber, fodder and biodiversity to be used and shared? Users are entitled only to the annual yield. They may not extract sand or stones. Nor can they make commercial use of the forest since the community forest must serve the interest of all its users. In due course, the needs and aspirations of the people are going to rise above mere fuel and fodder. Income generation has already

become a priority activity within many community forests, for example the planting of cardamom, a high-value cash crop. They will want to use the forests in other ways as well. Monitoring the state of community forests and evaluation of uses, demands and extraction rates is crucial to keeping unsustainable activities under control. If users begin to exploit the forest beyond sustainable rates, it will result in reversals with far-reaching consequences.

The government must now, therefore, focus on training users in the management of forests. The partial ownership of biomass that users have gained through community forestry has yielded collective dividends. Partial ownership on an individual basis may now be considered so that every individual participant will have an incentive to put in extra effort towards developing forests.

It is possible that in the years ahead some community forests may be developed into private forests. Already there is a trend towards users unofficially dividing community forests into individual plots so that each member

of the FUG can protect his or her own plot and see output for input more clearly than is possible in a group situation. This helps mitigate the problem of benefit sharing, where everyone demands a larger piece of the pie. Privatisation of plantation forests is possible, and may even be profitable. But a community forest established from a natural, national forest cannot be privatised because it is common property and belongs to the community, the society, and the nation.

The lessons from Nepal's community forestry saga are clear: forest resources can only be protected and conserved through participation of the communities that depend on these resources for survival. But pressure has begun to shift from lower forests to higher, more inaccessible forests. This problem can be expected to abate gradually when community forests start to produce enough products under proper management. Alternatives for timber and fuelwood also need to be found and integrated with agro-forestry and alternative energy initiatives to reduce future pressure on Himalayan forests.