

# Chapter 4

## Forestry

### History of Forestry Policy-making

Land and forest policies in the past were simply used for generating revenue for governments and bestowing political favours. In both upland and lowland areas of India, the traditional rights of rural people were, in a considerable measure, 'nationalised' by colonial governments, which introduced top-down, centralized, uniform policies and programmes. Forests were declared public lands. Indigenous cultures were viewed as inferior; local knowledge and experience undervalued.

In 1894, the first national-level forest policy was enunciated. It outlined forest use for public benefit and regulated users' rights. It offered a four-fold classification: preserved forests, timber-supply forests, minor forests, and pasture lands. Forests on hilltops were to be protected on climatic and physical grounds. Where demand for cultivable land within forests existed, areas were to be relinquished without honeycombing or reducing the minimum required forest area. Timber forests were to be managed commercially or as sources of revenue for the state.

Forests yielding fuel/fodder/inferior timber or being used for grazing were to be managed in the interests of the people.

In 1928, the Royal Commission of Agriculture proposed reclassification of forests on the basis of suitability for timber, fuelwood, and fodder. It suggested that forests should be given up for agricultural use. It recommended grass-cutting instead of grazing, raising of grazing fees, and determination of optimum grazing capacities. It also added that Forest Departments should manage only timber forests while the other two categories should be managed by village *panchayat(s)*. It also emphasised friendly relations between people and foresters. Under the Government of India Act 1935, forest as a subject was transferred from the centre to the states.

In 1952, national forest policy was revised. Classification was now defined as protection forests, national forests, village forests, and treelands. The policy urged balanced and complementary land use, increase in supply of fuelwood and grazing needs,

discouragement of diversion of forest lands for cultivation, improvements in treelands, regulation of grazing, and mobilisation of people for tree-planting. Importantly, the policy laid down for the first time that 33 per cent of land in the country should be under forest cover (66 per cent in the hills and 20 per cent in the plains).

The National Agricultural Commission of 1976, surprisingly, advocated a distinct departure from conservation to production forestry. Of the two major points it made, the first was to meet existing and future requirements of industrial wood from production forests. The second was to ensure that present and future demands for protective and recreative functions of forests were met. Felling in protected forest was not allowed. Social forests would cover village commons, wastelands, land on rail- and roadsides, canal banks, etc. Free supply of forest produce was not a sustainable practice and needed to be reversed. Forest grazing should be allowed in a regulated and controlled manner. The essential aim of the policy should be to check denudation and erosion, and maximise forest productivity to meet demands for industrial wood, fuelwood, and grazing.

Following amendment of the Indian Constitution, forestry was made a concurrent subject; the centre could now enact forestry laws. The Forest Conservation Act 1980 was promulgated to check deforestation. The law made the prior approval of the government obligatory for dereservation of forests or for use of forest land for non-forest purposes. It also banned green felling above 1,000 m in the Uttar Pradesh hills.

Environmental awareness increased in the 1970s and 1980s. Sustainability was the new watchword. A comprehensive environmental law was enacted nationally in 1986 and, in 1988, a new forest policy was formulated. The new policy assigned top pri-

ority to the environmental role of forests. The basic objectives enunciated were:

- maintenance of environmental stability through preservation and restoration of forests,
- conservation of natural heritage by preserving natural forests and checking soil erosion,
- increasing of forest cover through afforestation and social forestry programmes and increased productivity,
- meeting of requirements for fuel/fodder/non-timber forest products/small timber of rural and tribal populations,
- creation of a people's movement for achieving the above objectives, and
- involvement of women in forest resource management.

The policy proposed that one-third of the country should be under forest cover; in hill areas the cover should be two-thirds. Rights and concessions should remain related to carrying capacity. Domestic requirements of tribals and poor people living near forests 'should be the first charge on forest production'. Monocultures were discouraged and mixed forestry stressed. Industry's needs were to be met from farm forestry and not natural forests. Stall-feeding was encouraged, wildlife preserved, the contractor system ended, and shifting cultivation was discouraged. Research, education, creation of employment, and forest protection were all emphasised.

This marked change in approach to forestry provides insights into how social, economic, and political construction of public policies affects stakeholders and into how governments respond to articulation of dissatisfaction by policy shifts. The idea grew that local people can and should be partners in the management of forests and common property land resources. A new initiative

was taken in 1990 when the government supplemented the 1988 policy directive with a memorandum to all states asking them to adopt joint forest management of degraded state-owned forest lands.

### ***Joint Forest Management***

The intention of joint forest management is for management of public forest lands to be shared by village communities and State Forest Departments to ensure soil and water conservation, improve land productivity, and create opportunities for additional employment and incomes for villagers. The objective is to strengthen villagers' control over their livelihoods through helpful partnerships, better access to forest lands, and a greater voice in resource management. Access and rights will benefit local communities and persuade them to think in longer time-frames and use resources accordingly. Lastly, it will promote people's autonomy and decision-making power in line with amendments made in the Indian Constitution aimed at decentralization. In Jammu and Kashmir, the Rehabilitation of Degraded Forests and Village Plantation Rules were promulgated in 1992, giving legal status to village forest committees; Himachal Pradesh issued a notification about Participatory Forest Management in 1993; in Uttar Pradesh, joint forest management rules were promulgated in 1997.

While the three states in the NWHRI have begun to set up village forest committees, many issues remain to be addressed before policy intentions become ground realities. Village-level institutions responsible for joint forest management have to be brought into consonance with local government bodies. Many joint forest management arrangements have become linked to specific projects funded by external agencies or the central government. When such projects are completed and support is withdrawn, it becomes difficult to sustain the gains

achieved during the project. Attitudes and orientation of government officials, particularly forest officials, have to undergo basic transformation to become people and resource-friendly. Another issue of critical importance is the problems created by establishing protected areas within forests (sanctuaries, national parks, biospheres). Present practice is to exclude people from such areas, although this can be unsatisfactory. Research and training are two other areas that demand attention.

### ***Gender and Equity Issues***

The 1988 national forest policy clearly states that a 'massive people's movement with involvement of women' be generated to achieve objectives in the development, management, and use of forest resources. In mountainous regions, women have been major gatherers and users of forest produce. Yet their access to membership of joint forest management institutions and to decision-making or benefit-sharing is still in many ways inadequate or limited (Table 8).

Other equity issues remain to be solved. Although joint forest management programmes aim to ensure that the needs of the village poor for fodder, fuel, and small timber are met, it is often timber plantation that initially interests management committees. Timber benefits take years to mature and then accrue to the community. Current access for the poor is put at risk. Also, pastoralists remain almost invisible in the joint forest management process.

### ***Forestry in Jammu and Kashmir***

According to the State of Forest Report (FSI 1997), forest cover in Jammu and Kashmir was 20,905 sq.km. in 1987. By 1995, cover had come down to 20,433 sq.km. Forest cover as a percentage of geographical area is highly uneven from district to district varying from 0.02 per cent in Ladakh to 41.31 per cent in Riasi. The state government has

<b>Table 8: Women's Role in Joint Forest Management Institutions</b>				
Region	Eligibility for general body membership	Women's representation in management	Entitlement to benefit-sharing	Access to information or decision-making
Jammu and Kashmir	One female or male per household	Minimum two women out of 11 members	Community institution to decide on benefit-sharing in consultation with all members	No quorum or presence of women specified for general body committee
Himachal Pradesh	One male and one female per household	Minimum of five village representatives out of a total of 9-12 management committee members. Of village representatives, 50 per cent to be women. <i>Mahila Mandal</i> representative also to be on managing committee	25 per cent of income from 'final felling' to go to the village development fund; Existing rights to be protected	For general body and management committee, a 50 per cent quorum required; women's presence for completing quorum not specified
Uttar Pradesh hills	One representative per household (male or female); no minimum membership of women indicated	One-third of members elected plus five nominated	Only for non-timber forest products, 25 per cent of net proceeds to go to the local institution and 25 per cent to be shared among members based on their contribution	66 per cent quorum for general body meeting for management committee elections

Source: Sarin et al. 1998.

introduced stringent laws to curb timber smuggling and upgrade forests. Colluding forest officials are dealt with sternly.

The total growing stock of timber from all sources is estimated at 143.7 million cubic metres, and that of fuelwood is 163.4 million tonnes. Per capita forest area was 0.45 ha in 1971 and down to 0.25 ha in 1991. It is still higher than the national average of 0.11 ha. The animal population exceeds eight million. According to a study carried out by the Solan University of Horticulture and Forestry, the intensity of grazing is 'more than six times the maximum permissible intensity and forest areas are particularly under stress from nomadic grazing' (Khosla *et al.* 1992). The area under alpine pastures and other grazing lands is 419,000 ha, but this does not include the high altitude vegetation of Ladakh. Demand for fuelwood is estimated to reach 3.37 million tonnes by 2000 (per capita consumption of 430

kg/yr); natural forests can supply only 1.92 million tonnes at current rates of extraction. This indicates sustained pressure on already shrinking forests and demands a massive fuelwood plantation programme or a planned shift to alternative energy sources.

### **Forest Policy**

In 1990, the Jammu and Kashmir Government announced a policy that said, 'Forest must be managed so as to ensure environmental stability and ecological balance. The derivation of direct economic benefit must be subordinated to this principal aim'. This was in conformity with the broad aims of the National Forest Policy 1988. It placed emphasis on social forestry, people's participation, and the enlisting of NGO cooperation. It decided upon more stringent restrictions on transportation of timber out of the Kashmir Valley. In 1990-91, annual timber extraction was limited to 0.2 million

cubic metres, brought down to 0.17 million cubic metres in 1991-92, and further reduced to 0.14 million cubic metres in 1992-93. In 1990, commercial felling had been fully or partially banned in 24 forest divisions. Use of wood for electricity poles was prohibited.

### **Joint Forest Management**

Villagers had traditionally been given some participatory role in forest management but this was limited. The Jammu and Kashmir Government promulgated the Rehabilitation of Degraded Forests and Village Plantation Rules in 1992. By 1996, 580 village forest committees, enjoying legal status, had been constituted and over 12,000 ha of community wastelands re-habilitated on a benefit-sharing basis. Village forest committees operate both in village commons and degraded departmental forest areas. From 1981-82 to 1991-92, plantation through social forestry programmes covered 82,000 ha. In the last five years, 8,000–10,000 ha/yr have been planted.

An eco-taskforce is engaged with the assistance of the Army in greening some severely degraded areas in Jammu region. Non-timber forest products are important to Jammu and Kashmir's economy, especially resin (3,000MT/yr) and medicinal plants (110MT/yr).

### **Case Study on Managing the Forest Herdsman's Way**

This is the story of Bashir Khan Bakerwal, a migratory herdsman of Jammu and Kashmir (Rizvi 1994). He winters in Jammu and migrates in the summer with his herd to the alpine pastures of Kashmir and Rangdum in Zaskar (Ladakh). In 1989, he had 1,300 animals (mostly sheep and goats). The herd size was too large to be sustained on the forest area allotted to him. The consequence, inevitably, was forest degradation.

The stock, too, deteriorated; productivity fell. The social status of herdsmen being determined by flock size, Bashir was reluctant to reduce his stock. Rizvi, a former Forest Secretary, explained to Bashir that if he culled unproductive animals each year and sold them as meat that he would yield a cash income and also improve stock quality. Bashir saw the logic of the alternative management practice and adopted the suggestion. The forest compartment allotted to him for grazing revived, providing better nutrition for the reduced herd. By 1992, Bashir had reduced his stock to around 700 animals. He had sold the culled animals and put his money in the bank (Rs 500,000). Rizvi recalls that it is not the bank balance that was the main cause of Bashir's happiness but the remarkably improved condition of his herd. The reduction in stock had yielded both positive economic and environmental results. The Bakerwals have a system of clans, and, consequently, the example of Bashir was adopted by twenty other families without the help of extension efforts.

### **Forestry in Himachal Pradesh**

In Himachal Pradesh, the cadastral survey is only partially complete. This means that accurate information about forests is hard to find. By legal definition, the forest area is 37,591 sq.km, while revenue records quote a figure of 33,575 sq.km. However, satellite data interpretation (FSI 1997) reveals that actual forest cover is only 12,521 sq.km. Actual forest area is 22.5 per cent of the geographical area. Between 1995 and 1997, there was a net increase of 20 sq.km. Reserved forests covered 1896 sq.km., protected forests 31,473 sq.km., and unclassified forests 2,038 sq.km.. Most forests are either understocked, rocky or blanks (Gulati, 1998). Alpine pastures cover 29.4 per cent of the forest area, permanent snow covers 17.6 per cent, while 38.1 per cent has some sort of forest cover. The first cycle of satel-

lite-based estimation put forest cover in 1981-83 at 12,480 sq.km. In 1993-95, cover was estimated at 12,521 sq.km. Thus, in 12 years, increase in cover was 0.32 per cent, which can probably be accounted for by experimental error.

There is a situation of stagnancy. Growing stock is estimated by the state at 102.5 million cubic metres (this estimation covers only 58 per cent of the forest area). According to FSI, the total growing stock of all forests is 212 million cubic metres (FSI 1995). In the 20 years from 1975, the stock of commercially important species increased by 2.6 per cent. According to Gulati, annual removal of timber has been below prescribed yield levels reflecting the approach taken by the state in the utilisation of forest resources (Gulati 1998).

### **Forest Settlement**

In 1873, forests were classified into three categories: reserved, protected, and village. Permanent demarcation commenced in 1884. In 1952, all forest lands were brought under state ownership. The legal classification at present is reserved forest, demarcated protected forest, and un-demarcated protected forest.

### **Forest Policy**

Himachal Pradesh followed the National Forest Policy of 1952 until 1980 when it formulated its own policy. The salient features of this policy are as follow.

- Forest policy to become an integral part of overall land management
- All surplus lands (under ceiling law) and vested village commons handed over to Forest Department for management
- Rapid afforestation programme (50 per cent of land under forest cover by 2000)
- Four-year moratorium on commercial felling
- Abolition of *nautor* (freshly broken

land) grants

- Enlistment of people's participation
- Pasture improvement
- Nationalisation of sale of trees from private lands

The 1980 policy needs to be revised in the light of the National Forest Policy 1988, the joint forest management guidelines of 1990, and the new state Panchayati Raj laws of 1992 that have given many forestry-related functions to village *panchayat*(s).

### **Grazing Policy**

Grazing pressure is heavy with an animal population exceeding five million. The 'grazing incidence is estimated to be more than three times the carrying capacity of the pastures' (Gulati 1998). Average biomass availability from pastures varies from 1.74MT/ha in 2,100–3,500m altitude range to 0.50MT/ha in alpine areas above 4,000m (Misri 1995). Grazing pressure overflows to forest floors with attendant adverse impacts. The State Government constituted a Grazing Advisory Committee in 1968. In 1970, it recommended reduction of goat and buffalo numbers, control of migratory herds, registration of flocks and establishment of their routes, levying of a uniform grazing fee, and rotational closures. However, these measures have not been enforced effectively. The population of animals rose from 4.2 million in 1966 to 5.2 million in 1987. The state is deficient in dry and green fodder (32% and 62%, respectively) (Sood *et al.* 1995).

### **Forest Code**

Laws and regulations pertaining to use and management of forests are scattered over a large number of enactments, rules, notifications, policy documents, and government orders. 'As a result, the law is not a coherent body of provisions but a contradictory body of conflicting objectives, modalities, and provisions' (Gulati 1998). The existing

legal framework is a deterrent to the implementation of joint forest management.

### **Non-timber Forest Products**

Non-timber forest products play an important role in the rural economy of the state. They include b habar grass (used for paper production), *kat ha*, resin, medicinal herbs, etc. B habar grass is taken by a paper mill on a royalty basis. *Acacia* (the source of *kat ha*) is grown on forest and private land. All resin has to be sold to the Himachal Pradesh Forest Corporation. It is reported that 4,750 MT of medicinal herbs were exported in 1992-93 (value Rs 23.5 million). The general impression is that utilisation of non-timber forest products has been 'unregulated and indiscriminate'.

### **Joint Forest Management**

In 1993, the Himachal Pradesh Government issued a notification constituting village forest development committees for participatory forest management as non-political bodies. The duties of village forest development committees include persuading villages to 'give available areas for plantation' and assisting Forest Departments in planning, protection, afforestation, and 'judicious use of existing rights' and 'equitable sharing of usufructs'. The Forest Department explains the joint forest management plan, gives weightage to village forest development committees' recommendations and provides technical know-how. One-fourth of net sale proceeds are given to the village forest development committee to be retained as a common fund to be utilised for village development works. The shift from a top-down, authority-based, regulatory system to a participatory, decentralized one in which people can take decisions themselves was somewhat half-hearted. According to Gulati, from 1990 to 1993, that is, before the 1993 notification was issued, 'more than 4,000 such village forest development committees were formed most remained non-starters and be-

came defunct' (Gulati 1998). The effort was resumed in 1993; from 1994-95 to 1996-97, 1,095 village forest development committees were constituted, and 439 resource management plans formulated. The effort is still, to a major extent, 'donor-driven' and methods/techniques of participation adopted differ. Traditional rights and concessions are household-based while surpluses from 'final felling' will accrue to the community collectively. This may create conflict. The legal framework is still restrictive; there are many inhibiting laws that need to be modified to bring about consistency and simplicity. There is a need to concentrate on capacity-building of forest officials and village forest development committee members. Village forest development committees as institutions have to be strengthened, gender issues to be addressed, and the full support of the Forest Department in philosophy and action ensured. Another issue that needs addressing is the interface between village forest development committees that are concerned with management and forest resources in a limited context and village *panchayats* that have been assigned wider functions, including forest-related tasks such as social/farm forestry, utilisation of non-timber forest products, fuel and fodder, and soil conservation.

### **Forestry in the Uttar Pradesh Hills**

In hill areas of India, recommended forest cover is 66 per cent. In the Uttar Pradesh hills, the recorded cover is 63.9 per cent but this is a legal-status figure. Actual cover is only 44.5 per cent and, of this, only 77.7 per cent constitutes dense cover while the rest is open forest. Satellite observations made in 1987 showed actual cover to be 22,536 sq.km (FSI 1991) and, in 1995, 22,658 sq.km (FSI 1997). This means that, in a period of eight years, the growth of forest cover was 0.54 per cent (probably accountable for by experimental error). Per capita forest cover is about 0.32 ha (on a rough projection of 1997 population). The quality of cover is highly uneven. There are

some areas classified as forest that are mostly treeless. For Uttar Pradesh as a whole, growing stock is estimated at 334 million cubic metres of which roughly 266 million cubic metres are in the Himalayan hill regions (FSI 1993). The volume/ha varies from 97.6 cubic metres in Garhwal forests to 185.4 cubic metres in Alak-nanda catchment forests (SHERPA Survey 1993). One-fourth of the hill forest area is located below 600m in Bhabar-Terai, lower Siwalik and Dun Valley areas where considerable deforestation has taken place. This is a belt where human settlements abound and tourism is an important activity. Consequently there are severe biotic pressures that threaten it from both an ecological and conservation point of view.

It has been calculated that, in Dehradun district, between 1880 and 1980 the area under forest was reduced by 34,739 ha (Ives and Messerli 1989); the major diversion having taken place for agricultural and human uses. Available arable land declined from 0.3 ha per capita to 0.1 ha per capita, and access to natural vegetation from 1.8 ha per capita to 0.4 ha per capita. Annual timber export in the early years of this century was over 6,000 cubic metres and over 27,000 cubic metres was consumed each year for fuelwood and charcoal. According to Uttar Pradesh's forest statistics (FSI 1997), from 1951 to 1980 forest areas lost to other uses was 230,005 ha. Following the promulgation of the Forest Conservation Act 1980 this diversion has come down. It stood at 20,407 ha from 1981 to 1992, and reduced to 3,171 ha between 1992 and 1997 (Ghildiyal and Banerji 1998). This does not take into account illegal diversions.

### **Chipko Movement**

Frequently, it is issues of land degradation, deforestation, and water resource management that inform the struggle for a voice and a right in the use of local resources. This is what gave rise to the widely known

Chipko Movement in Garhwal. It demonstrated a form of community and gender strength against the destruction of forest by contractors. In 1975, the felling of trees and destruction of mountains were resisted near Reni. Women successfully confronted lumbermen, crying, 'Embrace the life of the living trees and streams, clasp them to your hearts'. Chipko created awareness; the message was spread. It evoked responses in terms of policies and laws. It served to bring forests, particularly mountain forests, to the focus of public concern. However, the movement became too conservationist in its bearing and the needs of local communities were not reflected; 'the forest that women tried to protect has been converted into the Nanda Devi Biosphere and women cannot take a blade of grass or pick a herb' (Rodda 1991). More than two decades after the Reni protest, another protest has been initiated demanding traditional access for villagers living on the edge of Nanda Devi Biosphere.

### **Fell-the-Trees Movement**

Felling of green trees above 1,000m has been banned in the Uttar Pradesh hills. The Forest Conservation Act 1980 put a severe break on diversion of forest lands for non-forest purposes. Such diversion required prior permission from the Central Government. Many development projects, for which forest land was required, were stalled or delayed. There was public resentment. Activists, who had earlier supported the Chipko Movement, felled a large number of trees in Kumaon and Garhwal during 1988-89 flouting the Forest Conservation Act. This 'Fell the Trees' Movement was a protest against inordinate delays or rejection of making forest lands available for projects such as roads, buildings, pipe-laying, hospitals, schools, public conveniences, etc. It is obvious that while hill people want trees they also want development (Rawat 1998).

### **Legal Framework**

The Forest Act 1927 is still an important law valid at present and being considered for revision. Under this act, village forests can be created within reserve forests or any other land owned by government. *Van Panchayat* Rules were formulated in 1931. In 1935, the National Park Act was enacted and the first national park in the country (Corbett National Park in the Uttar Pradesh hills) came into existence. In 1948, the Kumaon Nayabad Grant and Wastelands Act came into force by which the rights of villagers were restored over unmeasured or government lands, subject to certain conditions. However, it gave rise to uncontrolled grazing and extension of agricultural holdings. In 1973, this law was repealed. The last land settlement commenced in the 1950s and all land was measured. In 1974, the State Forest Development Corporation was set up to departmentalise commercial forestry. The Tree Protection Act was promulgated in 1976. Forest, as a subject, was shifted to the Concurrent List of the Indian Constitution through an amendment in the 1970s and, in 1980, the Forest Conservation Act was promulgated by the Central Government prohibiting use of forest lands for non-forest purposes without its approval. In 1981, the felling of green trees above 1,000m was banned. The ban excluded trees felled for meeting the demands of rights- and concession-holders. In 1988, a new National Forest Policy was announced which was followed, in 1990, by the Joint Forest Management Guidelines. It took nearly seven years before Uttar Pradesh Village Forest Joint Forest Management Rules were promulgated in 1998. In 1972 and, again in 1976, the *Van Panchayat* Rules were amended. Revision is again under consideration.

### **Grazing Problems**

Hill people have rights in respect of grazing and fodder collection in almost all categories of forests. However, an increase in ani-

mal population had led to excessive demands for fodder. For example, in the current working plan of Garhwal Forest Division, the animal population was estimated at 473,200. In terms of standard cow units, it was 359,900. According to the Forest Department, 0.41 cow units can subsist on one ha of forest. In Garhwal Forest Division, suitable forest area is only 263,000 ha. This means that grazing incidence is 1.37 cow units/ha which is over three times the sustainable capacity (Ghildiyal and Banerji 1998). Forest floors are under pressure and the situation in alpine pastures is also bad. Overall productivity is low and this accentuates the fodder problem. Stall feeding has not caught on and current animal feeding practices are wasteful.

### **Van Panchayats**

Joint forest management may be a comparatively new slogan yet it has a distant echo in the history of forestry in the Uttar Pradesh hills. To an extent community co-operation has its root in the cultural traditions of Uttarakhand which reflect a closely knit social structure. When demand on resources increased to fulfill the needs of regions outside the hill areas, the people of the Uttar Pradesh hills felt threatened. Their survival was put in danger because of new policies that, in the name of conservancy, sharply curtailed their access to traditional resources. They protested with vehemence, even violence. The State Government responded by setting up a Grievance Committee that suggested people's participation in the management of community forests through *van panchayat(s)*. The *Van Panchayat* Rules were instituted in 1931. They were modified in 1972 and, then again, in 1976. By early 1998, 4867 *van panchayat(s)* had been set up (3,056 in Kumaon and 1,811 in Garhwal) covering about seven per cent of hill forests. *Van panchayat(s)* were intended to be grass root institutions but they were not supported genuinely or allowed to grow and acquire

credibility. There was dual control by the Revenue and Forest Departments that hindered their becoming effective local institutions. Barring exceptions, most *van panchayat(s)* remained organizationally weak and economically poor. The *Van Panchayat Rules 1976*, while devolving upon them responsibility for management of village forests, denied them the authority needed to do so. For example, a *van panchayat* cannot appoint paid staff without the approval of the Deputy Commissioner. It cannot compound cases beyond a value of Rs 50 or sell produce without approval of the Forest Department. For commercial sale of trees, approvals from both Forest and Revenue Departments are required. The *Van Panchayat Rules* are under revision. It is learned informally that the new rules will arm *van panchayat(s)* with greater powers—legal, financial, and managerial. These institutions, given a chance, can bring about community-based, village-level resource management that could be self-regulatory, sustainable and suited to villagers' needs. An important issue to be addressed would be the development of a constructive and working interface between village *panchayat(s)* established under the sanction of the Constitution (which have a much broader range of functions) and *van panchayat(s)* that have forest resource management as their principal task.

### **Joint Forest Management**

Another important initiative in the area of localised resource management is the concept of joint forest management. The Central Government issued directions in this respect in 1990. However, it took until 1998 for the Uttar Pradesh Government to issue its own guidelines. Their main features are as follows.

- Larger, feasible, viable, and compact blocks of 250–300 ha will be taken up for community management.
- Blocks selected will be in the proximity of villages and can include reserved or unreserved forest areas, i.e., both government and community forest areas.
- Villagers will prepare, execute, and monitor microplans.
- Joint forest management will include afforestation, biomass production, water regeneration, protection of forest, non-conventional energy-resource generation, animal husbandry, and agri-horticulture.
- Emp hasis will be given to training and orientation and appropriate accounting.
- Fifty per cent of project surplus will accrue to the village community: half to individual beneficiaries and half for community works.
- Non-forest development works will be dovetailed with joint forest management programmes.