
UNIT 25 LAND: ACCESS, CONTROL AND MANAGEMENT

Structure

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25.0 OBJECTIVES

After reading this unit you should be able to:

- Describe physiographic features of land in India;
- Discuss the land use pattern and ecological problems related to grazing lands, wastelands and croplands;
- Outline the nature of access to land and legal measures for land reforms;
- Explain the rise of agricultural labourers;
- Relate land use to urban development in India; and
- Analyse the form of people's participation in control and management of land in the rural and urban areas.

25.1 INTRODUCTION

This is the first unit of Block 7 on **Ecology and Resources**. As has been explained to you in the Block Introduction, we need to act well in time to stop depletion of such resources as land, water and forests. This is to maintain the ecological balance on which rests the survival of life on the earth. Unit 25 is devoted to a discussion of land as a basic resource. Land is a significant factor in any society and in India it is in a special way tied to people's imagination and livelihood. In this unit we have shown the difference between availability of land and its access to people. Similarly, we have also discussed the problems related to control and management of a resource. As Indian people are still dependent on an agricultural economy, relatively more attention is paid to rural land use.

The first section of the unit describes physiographic features of land in India. It is followed by a long discussion of ecological problems related to utilisation of grazing lands, wastelands and croplands. This discussion provides a context to analyse access to land, its control and management by the people. Agricultural reforms, meant to improve people's access to land has in fact resulted in creation of a class of agricultural labourers (Section 25.5). The next section of the unit draws our attention to issues related to land and growth of the urban sector in India. Finally, we have discussed people's participation in the control and management of land in rural and urban areas.

25.2 PHYSIOGRAPHIC FEATURES OF LAND IN INDIA

The landmass comprising the Indian subcontinent is a large peninsula, which covers an area of 328 million hectares (mha). It is the world's seventh largest country and supports a population of 1002 million (2001 figure). Its physiographic features (see Chaturvedi 1985: 13-19) are as follows:

- i) In the north, India is bordered by the Himalayan mountains which stretch 250 kilometres in length and 200 to 400 kilometres in width. It has a coastline 5,700 kilometres long. India, a large peninsula with high mountain on the north, presents an unparalleled hydrologic-climatic environment.
- ii) The great Indo-Gangetic Plains stretch at the feet of the north Himalayan mountains. These plains are built up from rivers flowing from the Himalayas. The alluvium, or the sedimentary matter deposited in the valleys of large rivers, was laid down in many geological phases. The plains are thousands of metres deep and form one fourth of the total land area of India. They have an area of 652,000 square kilometers.
- iii) The Central Highlands comprise a block of mountains, hill and plateaux. The area is intersected by valleys which are covered with forests (now disappearing at a fast speed). The Centre Highlands cover one-sixth of the total land area of India.
- iv) The triangle shaped peninsular plateau covers a little more than one-third of the total land area of India. Its elevation ranges from 300 to 900 metres and extensive plains cover its surface. The area is fairly well drained by several rivers which flow from west to east.

25.3 LAND UTILISATION AND RELATED ECOLOGICAL PROBLEMS

The land mass, described above in terms of its physical features, can be broadly divided into four categories from the point of view of land use. These parts are:

- i) grazing lands,
- ii) wastelands,
- iii) croplands, and
- iv) forests.

Of these, the forest lands are the subject of Unit 27. This is the reason why we will talk in this unit only about grazing lands, wastelands, and croplands. Our focus in this unit is on the human and environmental problems arising out of the present state of India's land, its access, control and management. Most of the information about the three types of land given in this unit, is based on *The State of India's Environment 1984-85*, the Second Citizens' Report (1985) and Report of the National Commission on Agriculture, 1976 (volume XV). We now begin with the present state of the grazing lands.

25.3.1 Grazing Lands and Problems Dependent on Animal Husbandry

Of all the components of India's land, especially the grazing lands face the greatest danger of losing their identity. Large portions of former grazing lands have not come under regular farming. You may ask 'Where are grazing lands in India?'

The best grazing lands in India exist in areas which report an unusual rainfall of more than 1,200 mm and a dry season of just about four months. Grazing lands or vegetation formation of typical grasslands are found in the temperate climate zone of the Himalayas. The remaining grass lands of India are the steppes and savannas.

At altitudes of about 1000 metres, grazing lands take the shape of savannas. A savanna is an extensive open grassy plain or meadow with scattered shrubs and trees. Savannas with trees and all tall grasses shelter large wild animals (cattle). The steppes are extensive level plans without trees. They are found in areas of sandy and saline soils in western Rajasthan. Here, the grass layer is quite thin and woody plants are few and far between. The forage or fodder in the steppes is available only during the brief wet season.

Forage in the savannas (extensive open grassy plains or meadows with scattered shrub and trees) of central and eastern parts of Rajasthan is mainly available from grasses which grow during the wet season. Some fodder or forage in the dry months is also obtained from the regrowth of grasses, in the dry months. As a result of overgrazing, the savannas reach a stage of degradation which makes them look like steppes. For example, in the Deccan the largest savanna comprises shrubs, but the soil has now become almost bare on the slopes of hills.

The ecosystems of both savannas and steppes are generated under pressure from human populations. In India only in inaccessible and remote hill areas

we do find a naturally formed savanna or a steppe. Mostly due the extensive use by animals and/or human beings various forest ecosystems degenerate and take the shape of savannas. The savannas in turn degrade into pseudo-steppes.

Activity 1

On a map of India, indicate first the areas where you find the presence of savannas and steppes in their natural form. Then show the degraded forests which have now become savannas and also show the degraded savannas which have become pseudo-steppes.

Much of India’s grazing land is now under agriculture. Only about 13 million hectares are officially classified as permanent grazing lands. If you look at India’s animal population (see Table 25.01), you can easily make out that this large mass of livestock population would need fodder in really huge quantities. The available 13 million hectares of grazing lands are simply not enough. As a result, the animals search or look around for fodder. They eat whatever they can find on fallow and uncultivated lands. They also scrounge in tropical forest lands and uncultivable wastelands. It is claimed (see CSE 1985: 3) that ‘almost all accessible vegetation in more than half of the total land area of the country is grazed by livestock’. Only one district in Mizoram and a few in Gujarat, Haryana, Maharashtra and Punjab have enough green fodder. In the rest of India, most animals feed on crop residues and forage on follow lands, unused *panchayat* lands, riverbanks, roadsides, wastelands and forests. Surviving on this kind of access to food, nine out of ten animals in the country still go hungry.

Table 25.01: Livestock Population in India (in millions)

	1951	1961	1972	1977	1982	1991	2001
Cattle	155.24	175.56	178.87	180.00	192.50	203.50	219.64
Buffaloes	43.40	51.20	57.94	91.96	69.80	82.70	94.13
Sheep	38.96	40.22	39.99	40.91	48.80	49.70	58.20
Goats	447.00	60.08	67.52	75.62	95.30	114.20	17.50

Source: Data from 1951 to 1961 from the National Commission on Agriculture and the rest from the Twelfth All-India Livestock Census. In this unit, the table is, with due acknowledgement, taken from Agrawal 1985: 3); for 1991, 2001 FAO cf. www.cifti.com

Degradation of land owing to overgrazing generates desert-like conditions. This causes a chain reaction because of lack of grazing lands reduces animal productivity, which in turn proves to be economically disastrous for human beings who practice animal husbandry. This is the process through which pastoral nomadic groups are forced to become landless labourers. The culprit is ‘overgrazing’ which is caused by the fact of too many animals and too little grass.

As the grazing lands have decreased in area, the planners, policy makers and implementers in the government have taken little action to save the quality and extent of even the existing grazing lands. Many irrigation schemes launched into croplands without paying attention to the rehabilitation of graziers. Lastly, we can also say that extreme pressure on grazing lands was built up because of

no organised and sustained programme of producing and managing fodder in India.

Check Your Progress 1

i) How much of India's land is covered by the great Indo-Gangetic Plains?

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ii) Identify the name of the one-sixth of India's total land area, comprising a block of mountains, hills and plateaux. It is intersected by valleys which are covered by forests.

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iii) From the point of view of land use, in how many parts can you divide the land mass of India?

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iv) What is the difference between a steppe and a savanna?

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25.3.2 Wastelands and their Effect on Rural Population

An area of uncultivated or devastated land is generally called wasteland. It is the land affected by salinity, alkalinity and wind and water erosion. An estimated area of one third of India's land is covered by wastelands. It measures well over 100 million hectares. This estimate does not include data relating to degradation of forest lands into wastelands.

i) **Salinity and Alkalinity:** Nearly 7.17 million hectares of wastelands are affected by salinity and alkalinity. This kind of land is generally referred to as barren and unculturable waste.

PROTECTION OF TREES BY AN ENVIRONMENTAL GROUP



- ii) **Wind Erosion:** The total area eroded by wind comes to 12.93 million hectares. Because of lack of properly worked out data, this figure does not include the estimated one to two million hectares of coastal land, affected by sand dunes. Shifting sand dunes, coastal sand dunes and extreme moisture stress cause wearing away of land by wind. Eleven western districts of Rajasthan and three districts of Gujarat and Haryana are affected by wind erosion.
- iii) **Water Erosion:** Land is also eroded by water in the form of sheet erosion, ravines, waterlogging, revering lands, gully erosion and shifting cultivation. Such erosion of land totals to about 73.6 million hectares. Of the above forms of erosion of land by water, ravine and gully erosions are most spectacular along the river Chambal in Madhya Pradesh, Yamuna in Uttar Pradesh, Sabarmati in Gujrat and their tributaries. A few words about ravines.

Ravines also affect the adjoining productive flat lands. Because of ravine formations more than ten per cent of villages in the districts of Chambal valley have been depopulated. People in such villages have gradually moved to unaffected villages which were already overcrowded. You may be curious to know how ravine and gully erosion take place. See box 25.01 for interesting details of ravine and gully formation.

Box 25.01

Ravines are formed when it rains on soil which is not protected by a cover of sustained growth of vegetation. The rain creates muddy water and particles of soil flow down along the moving body of water. This movement of sheets of water is called 'sheet erosion'. Instead of being absorbed into the soil, rain water concentrates and makes small brooks or streams. These brooks develop into gullies. When small gullies grow bigger they turn into ravines. Ravines are deep gorges which have many gullies running paralld to each other and carrying a heavy load of soil particles. They flow much lower than the nearby table lands and enter a nearby river depositing alluvial soil into it. This kind of fall of water into a river cause the river to cut deep channels along the banks. This process again forms more ravines.

It appears that India loses nearly 8,000 hectares of land to ravines annually. Ravines cause erosion and affect the stability of table lands. Besides this loss

of soil by erosion, ravines of the Chambal valley are notorious as hideouts of dacoit gangs. The production potential of the area lost to ravines in Uttar Pradesh, Madhya Pradesh and Rajasthan is estimated to be the extent of Rs. 157 crore per year. By failing to retain and develop the area lost to ravines, the potential of growing 3 million tones of foodgrain and other products like fruit, timber, fodder is lost each year. Experts advise that a process of reclamation should be started on a war footing.

iv) **Mining:** Besides the above processes, the mining too turns arable lands into wastelands. Apart from land, mining affects also water, forests and air. Here we will talk about how it affects land. The total land used for mining in India is a few million hectares. In addition, every mining enterprise needs lands for roads, railways, ropeways, townships for housing miners and executives administrative offices, stockyards and for initial processing operations. This results in wastage of land many times larger than the simple lease are allotted for mining.

In the initial stages of surface mining, vegetation and topsoil are removed and after the mining operations are completed the mined area is abandoned. As a result, over time land under mining becomes infertile. Additionally, also land surrounding mines becomes barren because mini debris is disposed off in this area. Often rain water washes out this waste material into the nearby fields and streams. On drying the residue becomes hard and makes the fields difficult to cultivate.

v) **Underground Mining:** Crater-like depressions are formed in the land by underground mining. After as much ore as possible is extracted the mine is abandoned, the land sinks and becomes unsafe for living, farming and grazing. Such land is officially treated as derelict land. It is unfit for productive purposes.

vi) **Mining of Minerals:** In the arid lands of Rajasthan, mining of minerals depriving the land of its biological potential. This leads to the creation of desert like conditions. Removal of vegetation and topsoil increases the arid land’s susceptibility to erosion and starts the process of desertification. For some examples of this kind of erosion of land see Box 25.02.

Box 25.02

Soil salinity due to mining in the districts of Jodhpur, Udaipur, and Barmer has reduced the fertility of land in these areas. Uncontrolled quarrying for limestone in the Doon Valley has reduced the area’s tree cover to 12 per cent. As a result, grazing lands are lost and the number of cattle in the area has dropped.

Check Your Progress 2

i) Name the areas in India, affected by wind erosion.

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ii) Identify the various losses suffered by the people due to erosion caused by ravines. Use four lines for your answer.

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iii) How do the mining operations create wasterlands? Use four lines for your answer.

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25.3.3 Croplands, the Main Source of Sustenance for the People

India’s land utilisation pattern is characterised by a continuous increase in the net sown area. This has been at the expense of grazing and forest lands. For example, large areas of land in the Ganga Valley, previously covered by forests till the Moghul Period, have been brought under cultivation of crops to meet the food need of the region’s fast growing population. The net sown area cover nearly half of the country’s total area. In 1960-61, the net sown area was 133.1 million hectares. It increased to 141.6 million hectares in 1972-73. In 1998-99 it has increased to 192.6 million hectares (CMIE 2004).

You will be surprised to note two processes happening in opposite directions. I have already mentioned that land use in India is characterised by a continuous increase in the net sown area. This mainly caused by reclaiming barren and uncultivable lands.

The persistent need for growing more food will lead to either an increased cropped area or to an intensity of cropping. As there is little scope for further expansion of the net sown area, food production is increased by growing more than one crop per year. This is exactly what we find if we look at land utilisation figures for 1986-87. The total cropped area is 177 million hectares. This achieved by sowing an area of 37 million hectares more than once. This how the total cropped area registered an increased of 12 per cent on the existing 46 per cent.

i) Population Supporting Capacity of Land in India

You may ask what is India physically capable of producing? Or, what is population supporting capacity of land in India? This is not an easy question to answer because there are numerous ecological variables to consider while trying to put a figure to the number of human or other living beings, a piece of land can support. Agrawal (1985: 157-162) has discussed in details in a study, *Potential Population Supporting Capacity of Lands in the Developing World*, published by the Food and Agriculture Organisation (FAO). This study is the result of research of a decade. According to this study, in 1975 ‘India had 119 million more people than its land could support’ (Agrawal 1985: 158). The

study shows that with appropriate management of the agricultural land's potential capacity to support population can increase three and half times its present level in India.

But you will be surprised to find that in actual term, India is at present experiencing the 'familiar phenomenon of diminishing returns to inputs in agriculture' (Shah quoted in Agrawal 1985: 160). This means that inputs in agriculture are higher than outputs. Between 1970-80, inputs increased at the rate of 4.2 per cent per annum. Expectations were that the outputs in agriculture would also increase in the same proportion. The real output increased by only 2.3 per cent annum. Let us look at the way agricultural production increases. It is usually achieved by increase in (i) the area under cultivation and (ii) yield per hectare using advanced technology.

As half of India's geographical area is already under cultivation, we do not have much scope for increasing it further. Agricultural production has not indicated any major increase. In fact, the current rate of growth in agricultural production is just about equal to the rate of growth in population. In other words, per capita agricultural production is stagnant.

Table 25.3: Extent of Desertification in Some of the Countries in Asia

Country	Total surface Area (in mha)	DEGRADATION		Total Population (in millions)	Population Density (No./Sq. km) (in ha)	Cultivated Area per Capita
		(in mha)	%			
China	932	260	27	1150	123	0.08
India	328	173.6	-	1012	324	0.18
Kazakhstan	271.1		60	16.9	6.2	2.13
Mongolia	156		41	2.3	1.5	0.16
Turkmenistan	48.8		66.5	4.2	8.6	0.35
Uzbekistan	44.7		59.2	21.7	48.5	0.21
Pakistan	79.6		52	131.6	165	0.16
Syria	18.5		75	14.3	77.3	0.42
Jordan	8.9		96	4.2	48	0.1
Islamic Republic of Iran	163.6		43	67.2	41	0.27

Source: UNCCD, 1998: The Social and Economic Impact of Desertification in Several Asian Countries

Table: 25.4: Decline in Arable Land in the World, in Asia and in India

Per capita area of arable land	1950-55	1981	1992	2000	2025	Source of Inf.
World	0.32	n.a.	0.25	n.a.	n.a.	M/o Agriculture, GOI
Asia	0.48	n.a.	n.a.	0.25	n.a.	CCD Report, Beijing 1997
India	0.9	0.5	n.a.	0.15	0.08	M/o Agriculture, GOI, 1997

Source: Status of Drylands and Deforestation in the world.

ii) Indifference of Ecological Base of Agriculture in India

According to Agrawal (1985:160), agricultural technology of India does not

take 'into account the ecological base of the country's agriculture'. What we need is a thorough understanding of ecological resources and constraints. For example, the FAO study argues that there is a close link between rates of soil loss and loss of productivity. This study considers soil conservation an integral part of agricultural management. As India has large tracts of arid and semi-arid lands and lands under higher slopes, it is not surprising that it has a serious problem of soil loss. If soil loss is not checked, it causes fast decrease in rainfed croplands. As a result, production of rainfed crops falls. This is exactly what we face in India.

It is well known that around seventy per cent of farmers in India practice dry-farming and only one-third are engaged in irrigation farming. Dry farming requires conservation of both soil and water. Very little of budgetary allocation is devoted to dry-farming. More than seventy per cent of India's expenditure relating to agricultural development goes to irrigation-based farming. The low level of inputs in dry-farming results in taking no measures for soil conservation. This has implications for loss in productivity and also for the choice of crops. At low level of inputs where the rate of soil loss is 51 to 100 per cent, farmers engaged in dry-farming grow a mixture of crops regardless of the total calorie-protein production. Only at the intermediate level of inputs (where the rate of soil loss is only 50 per cent), one can expect grow crops with high calories. At the high level of inputs (where the rate of soil loss is negligible) a minimum protein requirement is always present in the optimal cropping mixture.

iii) Problem of Soil Erosion

It is apparent that India has enough natural resources in terms of climatic suitability for agriculture. Eighty-five per cent of India's land has both rainfall and temperature conditions adequate for growing crops. A number of restraints to this ecological resource exist and they provide the level of productivity on a sustainable basis.

Most important factor in agriculture, as mentioned above, is degradation of land in India. This occurs from soil erosion. In other words soil conservation can stimulate agricultural production. So far we have discussed the natural aspects of land resources. Now we turn to the complexities of social organisation and land reform in India.

Access to land, its control and management in India cannot be fully understood without a birdseye view of land policies and land reforms. Much has already been documented on the topics in socio-economic histories of India. You will come across many reference to these works in the following section. If interested in knowing the details you should consult the references. As our focus in this block is on ecology and resources, we have discussed the resources of land mainly from the point of view of ecological balance which ensures sustainable development. Agrawal (1985: 162) writes, "If India's people were to go hungry, it can be said with authority that it would not have anything to do with their number but with the callous mismanagement of the country's natural resources."

Check Your Progress 3

- i) What is the phenomenon of diminishing returns to inputs in agriculture?

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- ii) What are the ways to increase agricultural production in a country like India?

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25.4 ACCESS TO LAND AND ITS CONTROL AND MANAGEMENT BY THE PEOPLE

The majority of the people in India live in its rural and the majority of its working population is engaged in agriculture-based economics activities. You can fairly conclude that agriculture plays a significant role in India's economy and in its people's social life. Agriculture is basically dependent on three factors of production namely, land labour and capital. A discussion of three factors in terms of agrarian reforms in India can give us a good idea of people's access to and how they control and manage it. In the context of this unit, by the term 'access' we mean capacity or ability to obtain or make use of a particular resource.

We have already talked about the land use pattern, and the productivity of each. We will now look at the landholding pattern.

25.4.1 Inequitable Access to Landholding by the People

Since ancient times, cultivation has been the main occupation of the people in India. This is why access to land has been a matter of foremost importance for the people and for cultivators in particular. Unit 10 of our elective course, **Society in India (ESO-02)**, gives, in its sections 10.3, 10.4, 10.5, a sketch of rural economy during the various phases of Indian history. I will not repeat the contents of these pages and would advise you to refer to them and form an idea of the importance of land for the people of India.

i) High Degree of Concentration of Land with Upper Levels of Society

According to the Report of the National Sample Survey in 1954, in India households owning land up to 5 acres or 2.02 hectares constituted 74.21 per cent of the total households and they held only 16.77 per cent of the total land. On the other hand, households with 25 acres (10.12 hectares) or more constituted 3.71 per cent of the total households but owned as much as 34.27 per cent of the total land. In an unequal society that India is, such skewed access to the resources of land by the poor as shown above indicates meager impact of the legislation of the last four decades for the rural poor.

The table 25.2 shows that the pattern of land ownership, at all India level has been characterised by the unevenness with the high concentration of the marginal cultivators at the bottom on the agrarian hierarchy. Their proportion in the rural households has been increased from 62.62% in 1971-72 to around 72% in 1992. These 72% of the households controls only 17% of the lands. While the increase in the percentages of these households has been to the

extent of over 9% in this period and their control over land increased only by 7%. On the other hand the large and the medium land owners accounting for only 5.5% of the household has a combined share of about 40% the total lands. There, however, has been a steady decline of the large cultivators from 2.12% to 0.88%; their area of the ownership has also decline from about 23% to less than 14% over these period. It is significant that, there has been a marginal decline in the proportion of the households in the categories of small and semi-medium cultivators. However, there has been noticeable increase in the percentage of the area owned by these categories.

Table 25.5: Percentage Distribution of Households and Area Owned by Categories of Households in Rural Area in India in 1971-72, 1982 & 1992

Categories	% of Household			% of area owned		
	1971-72	1982	1992	1971-72	1982	1992
Marginal	62.62	66.64	71.88	9.76	12.22	16.93
Small	15.49	14.70	13.42	14.68	16.49	18.59
Semi Medium	11.94	10.78	9.28	21.92	23.38	24.58
Medium	7.83	6.45	4.54	30.73	29.83	26.07
Large	2.12	1.42	0.88	22.91	18.07	13.83
Total	100	100	100	100	100	100

Source: NSS, 1971-72, 1982 & 1992.

ii) **Land Policy during the Pre-British Periods**

We find that during the pre-British phases of Indian history, the land policy was geared either to maintain or expand agricultural production or to gain political power. This policy allowed the agriculturists some freedom to control and manage their holdings. During the British rule the prevailing land tenures were transformed to secure the maximum revenue from land tax. The legislation/agreements on land, during the British rule in different parts of India created conditions of pauperisation among the cultivators, leading to recurring famines. Traditional systems of control and management of land were allowed to crumble down. Indian peasants protested against this injustice in the form of mass revolts – big and small in nature.

Even before India achieved independence, a strong public opinion had been formed against the role of feudal landlords. It was felt that a class of big landowning intermediaries was wasting away the country’s agrarian wealth by the directing it into unproductive channels. A National Planning Committee of the Indian National Congress with Jawaharlal Nehru as its president was formed in 1936. It had a sub-committee on Land Policy. On the basis of its interim report, presented in 1940 by the National Planning Committee, the latter decided to derecognize intermediaries between the State and the cultivators.

The Congress Agrarian Reforms Committee, with J.C. Kumarappa as its chairperson, submitted its report in 1949. The Report made a number of recommendations, including those on the size of the holdings. (For the details of this committee’s report see the Report of the National Commission on Agriculture, Vol. XVI 1976, pp. 21 to 23.). The report introduced the concept on an economic holding which refers to a holding ‘which affords a reasonable standard on living to the cultivator and provides full employment to a family of normal size and at least a pair of bullocks.

Before ending this sub-section, it is important to mention that the rural poor have also a limited access to common property resources (CPRs). A Study by Jodha (1990) defines the CPRs to include “community forest, pasture/wasteland, pond/tank, river/rivulet, watershed, drainage/river banks and river/tank beds”. This shows that common lands are of vital importance for income-generation by the rural poor. In other studies (see Rao, 1992), it has been found that the rich have better access to CPRs and only in backward villages (where there are no rich farmers) the poor are able to make use of CPRs. Driven out of their landholdings by the rich, now the poor have to face competition even in the use of CPRs.

Land reform policy recommendations, made by successive Five Year Plans, beginning in 1951, present a new perspective on land use, land tenure and agrarian relations. We will, therefore, analyse and evaluate, in the next sub-section, legal measures for land reforms introduced after India’s Independence in 1947.

Check Your Progress 4

i) Define, in two lines, marginal and small land holdings in terms of acreage.

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ii) Who can legislate about land tenure and rights in land?

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iii) What were the main aims of land policy in British India?

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iv) What initiated the conditions of pauperisation among the cultivators in India?

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- v) Define the concept of 'economic holding'.

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25.4.2 Legal Measures for Land Reforms, Implications for Cultivators and for Effective Use of Land

Legislative enactments for land reforms during the nineteen fifties, nineteen sixties and the seventies focused on (i) abolition of intermediary tenures, (ii) security of the tenancy rights, (iii) fixation of ceiling on land holdings, and (iv) consolidation of holdings. Enactment of legislation has to be followed by its implementation. We will now consider this aspect with regard to each of the above programmes.

i) Abolition

In the context of land reforms, intermediaries refer to holders of property which had its origin in the system of landlordism instituted by the British. Land reforms is a subject included in the State List. This means that each state of the Indian Union had to implement the legislation. This why we find that abolition of intermediaries took place with slight variation in each state. Here we will not go in the details of enactments in each states. It is however to be noted that in such states where statutory landlordism was deeply entrenched as Utter Pradesh, Bihar, West Bengal and Orissa, legislation for abolition of intermediaries was criticised for two reasons. The first reason was that the intermediaries were given a very high rate of compensation. The second reason was that they were allowed to retain in their possession large areas of land in the name of self-cultivated holdings.

ii) Tenancy Rights

During the initial years of land reforms after Independence the then existing tenancy laws were amended giving tenants more protection. This stimulated another social process. Landlords evicted tenants, sub-tenants and sharecroppers on a mass-scale. They did this in the name of saving for themselves the maximum land as self-cultivated land. Their drive was so strong that very soon the old system of tenancy broke down (see Khusro 1958: 73-75; Dandekar and Khudanpur 1957-187). To counteract this situation which had fairly spread by the middle of the sixties, the State amended tenancy laws. Tenancy reforms affected tenants of farm lands of the intermediaries, sub-tenants of the intermediaries, tenants holding land from the ryots in the ryotwai areas, and sharecroppers who were mostly not considered tenants. The objectives of tenancy legislation were related to (a) security of tenure, (b) fair rents to be fixed for tenants, (c) landowners to retain only limited measure of land for self-cultivation and (d) on non-resumable areas, landlord-tenant relationship to be ended and tenant cultivators to become peasant proprietors of these areas.

Because the term tenant could not be defined properly the tenancy legislation could not be implemented effectively. Besides this, landlords managed to evict tenants of many grounds, making their tenancy rights ineffective. Again,

landowners used the provision of 'voluntary surrender' and in reality coerced their tenants to surrender their tenancies voluntarily. In addition to this, in many states (Madhya Pradesh, Maharashtra, Kerala, Gujarat, Karnataka and Orissa) landowners were allowed to resume tenanted land within a limited period. Under this provision, many landowners had made tenancy rights of tenants insecure and ineffective.

Regarding fixation of rents, we have not yet come across a uniformly set fair rent. The procedure of fixing rent is cumbersome and a tenant demanding fixation of fair rents faces the threat of ejection from land. Lastly, a tenant can acquire the status of peasant proprietor only after occupation of a holding for a number of years. Landlords manage to manipulate records, rotate tenants from plot to plot etc. These result in a break in occupancy. Obviously, tenants do not then actually benefit from legislation on tenancy rights, until and unless there is a political will to implement the tenancy reform, on the part of the state.

iii) Fixation of Ceiling on Land Holdings

As a redistributive measure, fixation of ceiling on land holdings has been viewed as an almost compulsory step. For nearly fifteen years after independence ceiling on large land holdings continued to be an important item but was not taken up seriously for implementing. Even up to 1960 it was only a vague concept, a possibility. Between 1960 and 1972 ceiling laws were enacted and enforced in each state. Some states applied ceiling on the individual as the unit while others accepted the family as the unit for fixing ceiling limits. Each state has its own list of the classes of land which did not come under the ceiling laws.

Big land holders were able to escape these legislative measures which were full of the loopholes. Anticipating implementation of ceiling laws, big landowners partitioned their holdings and resorted to 'benami' transfers. The ceiling limits were usually fixed quite high. As a result land was still largely in the hand of rich cultivators. Exemption from ceiling made ceiling laws useless. In 1970, the then Prime Minister of India emphasised the need for land reforms. This did not facilitate the process of implementation of land reforms. In 1973, the failure in the area of land reforms was admitted in the Task Force Report of the Planning Commission, 1973 (Report of the National Commission on Agriculture, 1976-79).

The following have been identified as the main cause of ineffective legislation:

- a) exclusive dependence on legislation as an instrument of agrarian reforms
- b) the lack of political will
- c) sole responsibility for land reforms put on certain administrative agencies
- d) low degree of consciousness and organisation of the potential beneficiaries
- e) use of laws and implementation procedures in their own advantage by powerful landowners.

As a result, we find that even in the nineties, the Prime Minister of India has to give a call for seriously assessing the impact of land reforms on recipients (see The Time of India, 10.10.62, p.1). In a very clearly written article, Land Reform Experiences, Rao (1992): A-50-A64) has shown that 'the performance so far

various measures for land reforms,....., has ranged from modest to disappointing.’ Now we turn to the last part of legislative enactments for land reforms, i.e. consolidation of holdings.

Activity 4

Read the above-mentioned newspaper reporting of the Prime Minister’s speech (referred above) on land reforms and his call for implementation of legal measures in this regard. Write a note of 250 words about your own views on this Specify if you agree with the Prime Minister that land reforms have not been effectively carried out in India. Give reasons for your agreement or disagreement.

iv) Consolidation of Holdings

Successive Five Year Plans recognised the value of the consolidation of holdings for increase in productivity. In India, the law of inheritance among both the Hindu and Muslim communities refers to the succession to immovable property by all the heirs. This leads to excessive fragmentation of land, resulting in the small size of the average farm in India. Fragmentation produces the following disadvantages.

- a) small size of holdings is uneconomical to cultivate
- b) wastage of resources of money, time and labour in carrying out different operations from one plot to another
- c) supervision of farm operations is not easy
- d) expenditure on irrigation, drainage, farming increases
- e) during crop season, access to different plots is difficult and a source of quarrel and tension over trespass
- f) division of holding causes loss of land on demarcation of boundaries.

Recognising the problems arising out of fragmentation of land its consolidation was sought as far back as 1905 when Central Provinces undertook consolidation. Later other states too introduced measures to consolidate land under the Cooperative Societies Act. After Independence, almost all the States opted for compulsory consolidation. States such as Punjab , Haryana and Utter Pradesh have made considerable progress in this field.

The total area to be consolidated is about 137 million hectares . Of this , by the end of the Fourth Five Year Plan , the total area covered by the consolidation programme was about 39.3 million hectares. The Planning Commission (1989) reported that about 40 per cent of total cultivated land had been consolidated by 1989.

In the Southern and Eastern States, this programme has not found much favour. Most of these states have very small sizes agricultural holdings. It has been argued that land use capability, classification and consumption patterns of the local population as well as the topography of the land in these states present problems in the way of consolidation. One can also argue that many paddy growing areas in these States have a uniform cropping pattern, thereby providing an ideal setting for consolidation. That is why we can only hope that in due course of time the consolidation programme should find favour in these parts.

Let us now consider another important aspect of this programme. It relates to the cost of consolidation.

It depends on such factors as topography of the region, extent of division of agricultural holding, level of agricultural technology and participation of beneficiaries. Obviously, the cost in the hill tracts would be more than it would be in the plains. The cost of consolidation in each area is bound to be linked with several complex issues and therefore cannot give a uniform figure applicable throughout India. In many parts of the country, the cost of consolidation is partly met by the beneficiaries. This reduces the burden of the consolidation process of the State. All the same, it is expected that the State government would not make the small and marginal farmers share the cost of consolidation.

It should also be kept in mind that the advantages of consolidation are neutralised if fragmentation is not curbed. The cost of consolidation is justified only if there are curbs imposed on fragmentation by sale, gift and mortgage.

Check Your Progress 5

i) Who introduced the system of landordism (zamindari) in India?

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ii) Why did landlords evict, after Independence, their tenants, sub-tenants and sharecroppers on a mass scale? Use three lines for your answer.

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iii) How can a tenant acquire the status of peasant proprietor? Use two lines for your answer.

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iv) Is it possible of effectively carry out such agrarian reform as ceiling on landholdings by legislation alone? Give reasons for your answer.

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v) What is the rationale behind consolidation of landholding?

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25.5 RISE OF THE AGRICULTURAL LABOURERS AND OTHER CONSEQUENCES OF LAND REFORMS

The foregoing discussion on the implementation of land reforms does not gives us much hope for the well being of cultivators of small sized landholdings. Their problems have not been solved despite extensive legislation on agricultural reforms and despite the so-called green revolution in some parts of India. Consequently, we find rapid growth of the class known as agricultural labourers. It is a result of a process of disintegration of the rural economy. Marginal farmers and destitute artisans have been forced to become agricultural labourers. The wages are low and they are subjected to innumerable exploitative practices in the regions of the ‘green revolution’.

In the rural economy, land is not only a site – it is the prime means of production. As such it supports the owner, his servants, the village artisans. The merchant who buys the produce and a host of others. When the cycle of agriculture is disturbed, all these activities are disrupted and the livelihood of all the landless endangered (NCHSE 1986: ii).

However, those who do not own land, but depend on it for instance, are rarely taken into consideration. For example, data relating to changes in agricultural wage rates over the decades of 1960-61 to 1969-70 show that each State has reported an increase in money wage-rates. But in real terms, the wage-rate declined in most places. This means that the money received as wages did not carry enough purchasing power. In other words, wages did not match increase in the prices of essential commodities. So even if the money wage increased, it did not benefit the labourer who had to pay more to purchase food and other things. The rate of change in money and real earnings is mostly affected by the level of agricultural development, availability of agricultural labour and the organisational power of agricultural labourers. For example, Punjab has registered an increase in both money and real wages. This has been so because of the fast development of a agriculture in this State. Similarly, in Kerala, we find that effective unionisation of agricultural labour has helped agricultural labour to get increase in wages.

Another feature of the wages of agricultural labour is the male-female differential. Women are paid at a lower rate. Secondly, you may be surprised to know that on an average, in as many as 12 out of 17 States, on average a male agricultural labourer earns more than a small cultivator earns. This shows the poor socio-economic conditions of marginal farmers, most of whom are eventually forced to become landless agricultural labourers. Further, it has been found that casual workers receive the highest wages, followed by seasonally attached and permanently attached labourers (see Johri and Pandey 1972).

Relatively speaking, wages in the agricultural sector are less monetised than in the industrial sector. Although we find a considerable degree of monetisation in the rural areas, even then in many cases, wages are paid in kind in different part of India. This is more likely to be the case during the harvesting season.

The household income of wage earners depends largely on the level of wages, duration of employment and the number of earners in the household. This is why no generalisation can easily be made in this regard.

It was assumed by policy makers that the supply of agricultural labour exceeds its demand. It was felt that if there were no rules of the minimum wages the labourers would get only the bare subsistence wages. Here come several factors relating to the variety of labourers, their employers and regional peculiarities in the way of deciding the minimum wages for agricultural labour in India. It also includes conditions which make for persistent poverty in agriculture, in both absolute and relative terms and those conditions which enable the employer to exploit the labourer. Obviously, the policy for upgrading wages in agriculture needs to consider wide variety of the problem.

There are already programmes to mobilise surplus labour in the rural areas. This labour is directed to upgrade such agricultural and other rural structures as roads, wells, check dams etc. Welfare programmes are aimed to upgrade drinking water supply, sanitation, health and housing in the rural areas. Economic rehabilitation programme operate to reclaim any wasteland. There are other programmes to help agricultural labourers to move out of agriculture by training them to take to village industries. To remove caste and cultural biases and spread literacy there are social rehabilitation programmes. These programmes mentioned here only by name. For detailed information on them you may refer to Block 3 and 4 of this course.

After the above section on agricultural labour, we will briefly mention, in the next section, problems relating to land in the urban areas.

Check Your Progress 6

- i) In terms of economic status, whom would you place higher – a marginal farmer or an agricultural labourer? Why?

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- ii) Explain the differences between money wage-rates and real wage-rates.

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25.6 LAND AND URBAN DEVELOPMENT IN INDIA

Considering the rate at which the urban sector is developing in India, we need to look at problems arising out of tendencies of land-grab, encroachment, unauthorised structures on government and non-government land, slum dwellings as well as skyscrapers without adequate precautions against fire and the other hazards. This can in fact be the subject of another unit. Here we will only touch upon this theme in order to make you aware of these problems in relation to access to land, its control and management. Land use in an urban area indicates the spatial dimensions of urbanisation. Human use of land or human activities on land in a town or city are characterised by a complexity of socio-economic needs of urban dwellers. In India, most urban areas reflect a pattern of land use marked by the area's past history. Further growth of these areas is guided, under varying pressures by contemporary functional needs. Intricately interwoven patterns of land use develop in today's towns and cities of India.

In the urban areas, a large chunk of better quality land is occupied by the state/central government administration the armed forces and other defence departments. The fast developing sector of commerce, trade industrial manufacturing, transport etc. take up the remaining land. These organisations develop both horizontally and vertically. Many bodies set up their offices, warehouses on the outskirts of towns, thus extending their boundaries. Such organisations also house themselves in multi-storeyed buildings. Then you have the various educational recreational and the other services which need accommodation to function in a congenial atmosphere. With urbanisation, we have to make land available for all these purposes.

As the urban population is fast increasing, both the residential buildings and the amenities remain short of demand. As a result, shanty towns multiply to accommodate the poor. The more the urban affluent sections indulge in land grab the higher the prices of urban properties soar. Some of these problems have been touched in Unit 6 of Block 2 of this course.

Here, we may indicate that laws regarding ceiling on urban property need to be implemented more vigorously and social justice be given to slum dwellers who contribute substantially to the growth of the urban sector in India. Corresponding to legislation imposing ceiling on agricultural lands, the All India Congress Committee adopted, in 1964 a resolution on suitable legislation to impose ceiling on urban property. More than a decade later, the Urban Land (Ceiling and Regulation) Act, 1976, came into force on February 17, 1976. Towns and cities, classified into four categories, come under the purview of this Act which is viewed by its critics as a watered down version of the proposal earlier presented in 1969. The purpose of the Act seems to be confined to better use of land resources. With the contemporary practice of multi-storeyed construction of urban buildings, there is now need for a different type of legislation on ceiling on urban property. More than land, we need not to look at the users of land in the urban areas.

Activity 5

Imagine you are in-charge of land use in an urban area. What three steps will you take for making ecologically balanced land use in that area? Write a short note on 250 words on your plans.

25.7 PEOPLE'S PARTICIPATION IN THE CONTROL AND MANAGEMENT OF LAND IN RURAL AND URBAN AREAS

You would recall that in sub-section 25.4.2 of this unit, it was mentioned that one of the main causes of ineffective legislation on land reforms is the low degree of consciousness and organisation of the potential beneficiaries. Some Western scholars as Moore (1976) and Stokes (1978) consider that protest movements are only rarely found among the Indian peasants. Other scholars, like Gough (1974), Desai (1979), Dhanagare (1983), Guha (1983) and Singha Roy (2005) hold that during the eighteenth and nineteenth centuries peasant revolts were quite common in almost every corner of India. It is true that the poor peasants and landless labourers have in many cases successfully fought against their exploiters. Yet, this is also obvious that while organised movements among the Chinese and European peasants led to fundamental changes in their societies, in India peasant movements do not have an all-India character. They have not so far resulted in any remarkable and fundamental change in Indian society. Similarly, in the urban areas too, we have just begun to notice the arrival of some people's movements. They have yet to make their presence felt in the sense of bringing about noticeable social change in terms of control and management of land. In the following two sub-sections, we will only briefly bring to your notice, in relation to land resources, some of the peasant movements and emerging people's movements in the urban areas.

25.7.1 Peasant Movements

Again, as in section 25.6 on urban land, we have here a topic which deserves to be discussed in a separate Unit if not in whole Block. By including this sub-section in this Unit, our intention is to draw your attention to the nature of peasant movements which are found in large numbers in different parts of India.

Regarding people's access to land and their desire to control and manage agricultural operations, we can take as examples those peasant movements which revolved around agrarian conflicts between tenants and landlords. As shown by Dhanagare (1983), Pankhar (1979) and Namboodiripad (1943), the Moplah rebellions of the nineteenth and early 20th century in the Malabar region of Kerala were largely a result of the poor economic conditions of the peasantry. Similarly, the Wahabi and Faraidi (or Farazi) agitation of Bengal in the 1930s was also partly, if not solely, a consequence of agrarian discontent among the Muslim peasants.

More than simply rise in prices of essential commodities, organisational and ideological inputs have triggered and sustained peasant movements (Henningham 1982). Peasant uprising in Andhra Pradesh, from time to time, and especially in its Telengana region between 1946 and 1951, were organised on the basis of the intervention of political parties.

Agitation against forced labour (variously known as beggar, veth or vethi), performed by peasants, marks many a movement. For example, peasant movements in Rajasthan between 1887 and 1941, in Andhara Pradesh between 1922-23 and in Oudh during 1921-22, were basically against forced labour (Surana 1979). Further, control by the landlords in the form of various taxes on the peasants, raised land rents and eviction of tenants as cultivators were some factors in peasant uprising in Rajasthan, Uttar Pradesh and Andhra Pradesh (see Siddiqui 1978, Surana 1983 and Saraswati 1979).

A demand for two third share of the Produced Crops for the sharecroppers and land to the tillers were the main features of such peasant movements as the Tebhaga movement in Bengal in 1946-47 (Dhanagare 1976), land grab movement (Prasad 1986) and the Naxalite movement (Banerjee S. 1980, Banerji T. 1980, SinghaRoy, 2004). The Bhoodan movement was started by Vinoba Bhave in the 1950s. Peasant revolts occurred also due to change in the management of agricultural operations. The shift from subsistence to commercial crops entailed changes in agricultural practices and thereby also in traditional agrarian relationships. This gave an impetus to demands for higher wages by agricultural labourers. The Naxalite movement in West Bengal, Bihar and Andhra Pradesh (Mukherji 1979, Balgopal 1988) mobilised several peasant struggles on this issue.

Most of the revolts among the peasants took up the issues of small peasants, poor tenants, sharecroppers and landless labourers. Regarding active participation in these movements, we have a variety of peasants taking up of roles of leading and active participants. For example, Siddiqui (1978) shows that in the Eka movement in Uttar Pradesh, the rich peasants played a major role. So also was the case in North Bihar where peasant movements during 1917 and 1942 were led by rich peasants. On the other hand, Hardgrave's (1977) study of the Moplah Rebellion of 1926 shows the active participation of the poorest tenant cultivators of Kerala.

Hardiman (1981) shows that the Kheda Satyagraha was mainly supported by the middle peasants who owned three to five acres of land. Clearly, we do not have any basis on which to claim that one or the other class or category of peasants spearheaded and sustained protest movements in India. Because of a lack of documentation we are also not in a position to assess the extent of women's participation in these movements. We do, however, know about their heroic and remarkable role in some cases. For example, SinghaRoy (1992) shows that women played a radical role in sustaining the Tebhaga peasant movement in certain regions of West Bengal.

With this brief account of peasant movements we now turn to movements relating to urban land use.

25.7.2 People's Awareness of Problems Related to Urban Land Use

Acts of human beings, more than those of nature, make their residential land prone to various forms of calamities. People at large become vulnerable to the effects of these man-made calamities. In the urban areas because of lack of planning, slums develop mainly on public land. For example, side space of railway tracks, low-lying undeveloped land, construction sites of building, riverside lands are generally illegally occupied by poor people who migrate to

urban areas in search of jobs. Often these areas provide open ground for their children and space for daily ablutions.

These settlements do not have basic provisions of water, drainage, sanitation, toilets and transport etc. This situation creates a polluted environment. The pollution is further aggravated by air, noise, industrial dust and lead pollution found in cities. We do not have reliable data regarding land pollution produced by solid wastes from household, municipal and industrial operations. Liquid wastes are, of course, not exactly discarded and unusable matter. The earth has inbuilt systems of recycling liquid wastes. In the case of solid wastes, we have to worry a lot because we have to spend our resources of money, time and energy in recycling them. Dumping them may be cheaper but not the final solution. In some urban areas, people are now slowly becoming aware of this problem. In the Western countries, students and other young persons take upon themselves the task of collecting, separating and processing solid wastes. In India, we have yet to wake up to these problems. There are some voluntary organisation, working in the urban areas for improving the environment of slums. For example, in some areas mobile latrines (Sulab Shauchalaya) are provided for slum-dwellers.

Such schemes at the Environmental Improvement of Urban Slums (EIUS, item 10A of Twenty Point Programme) have not been able to make much headway according to a report of the Ministry of Works and Housing Review of the New 20 Point Programme (19.07.1984). This is mainly because

- i) local bodies lack funds and human power to maintain the improvements once introduced in slum areas;
- ii) the state governments do not release funds in time for implementers to carry out improvements; and
- iii) some of the states have not been carried out surveys for identifying the slums in the town and cities of their states.

It is often expected that voluntary organisations will come forward and carry out the improvement programmes. The beneficiaries of improvements do not however participate in such schemes and therefore even voluntary organisation are unable to carry out sustained activity. Many cities have a kind of Comprehensive Development Plan (CDP) to provide better environment (see Gowda and Sridhara 1987). These schemes are by and large, generated at the level of local/state governments and die natural deaths in due course, achieving very little. People's participation in them is not at all visible. Policy-makers and planners hardly seek people's participation. People on their own cannot undertake improvement of the urban environment because it requires large funds, infrastructural support and sustained interest of administration and people.

Urban forestry, introduced in Mysore city in 1986 (see Gowda and Sridhara 1987: 178-179), needs to be evaluated after a period of eight years. Urban forestry refers to planting and maintaining forests in the urban areas. The urban forestry programme is carried out by a division of the Forest Department, which distributed in Mysore city more than 50,000 seedlings produced in the urban forestry nurseries in 1986-87. The success of this programme depends largely on people's awareness and their support. In some urban areas, we hear of a science movement. This too has a potential of developing an environmental education input.

Check Your Progress 7

i) 'Peasant movements in India share a common organisation and common ideology'. Comment by using three lines for your answer.

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ii) Match the following items in the two columns.

a) Equal distribution of land	1. Pollution in the environment
b) Poor condition of peasants	2. Chinese and European peasant movements
c) Fundamental changes in society	3. Tebhaga movements
d) Lack of basic amenities	4. Moplah uprising

iii) What is urban forestry? Use two lines for your answer.

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25.8 LET US SUM UP

In this unit, we have in section 25.2, dealt with physiographic features of land in India. This description is followed by a discussion of land utilisation and related ecological problems. This is a rather long section with three sub-sections dealing with grazing lands, wastelands and crop lands. Each sub-section is again divided into sub-sections focusing on particular ecological problems affecting the people. As India is largely a land of agriculturists, we have discussed in some detail the nature of access to land, and its control and management. We have also looked at legal measures for and consequences of land reforms.

In a brief section we have talked about the pattern of land use in the urban areas. Lastly, we have looked at people's participation in the control and management of land in the rural and urban areas. This unit gives you a chance to build your own framework for evaluating the use of the resources in India. In the next two units we will discuss the resources of water and forests.

25.9 KEY WORDS

Access : Freedom or ability to obtain or make use of a particular resource.

Alkaline : A mixture of soluble salts obtained from the ashes of plants and consisting of potassium or sodium carbonate. These salts are present in some soils of arid regions in quantity detrimental to agriculture.

Alluvium	: Deposit of earth, sand etc. left by floods.
Ecosystem	: A complex dealing with the habits of living organisms, their modes of life and relations to their surroundings.
Gully	: A deep artificial channel, gutter, drain/ a water-worn ravine.
Hydrologic	: Of the science of properties, laws etc. of water.
Peninsula	: Piece of land almost surrounded by water or projecting far into the sea.
Physiographic	: Relating to the description of nature, or natural phenomena.
Ravine	: Deep narrow gorge.
Salinity	: The quality of being impregnated/soaked/saturated with salt or salts.
Savanna	: Grassy plain with scattered trees in tropical and subtropical regions.
Steppe	: Level plain devoid of forest.
Unculturable	: Uncultivable; and not capable of development.

25.10 FURTHER READING

Agrawal, Anil and Sunita Narain, 1985. *The State of India's Environment, 1984-85: The Second Citizens' Report*. Centre for Science and Environment: New Delhi.

Singh, Pramod, 1987. *Ecology of Urban India*. Volume II. Ashish Publishing House: New Delhi.

25.11 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- i) Indo-Gangetic plains form one fourth of the total land area of India, and cover an area of 65,200 square kilometers.
- ii) The area comprising a block of mountains, hill and plateaux and intersected by the valleys is called the Central Highlands which covers one-sixth of the total land area of India.
- iii) In terms of land use, the landmass of India can be divided into four parts, namely, grazing lands, wastelands, croplands and forests.
- iv) The Savannas are extensive open grassy plains or meadows with scattered shrub and trees while the steppes are extensive level plains without trees. Sometimes, due to overgrazing, the savannas reach a stage of degradation which makes them look like steppes.

Check Your Progress 2

- i) Eleven western districts of Rajasthan, and three districts of Gujarat and Haryana are affected by wind erosion. In India, the total area eroded by wind is 12.93 million.

- ii) Because ravines affect the adjoining productive flat lands, people cultivating those lands and living in that area have to move out of it. Secondly, the ravines are made into shelter places by gangs of dacoits. This creates feeling of insecurity among villagers of the adjoining areas.
- iii) When mining operations are over, the mined areas cannot be cultivated because vegetation and topsoil are removed in the initial stages of surface mining. In underground mining, after extracting ore, the mine is abandoned. Here, the land subsides and becomes unsafe for living, farming or grasing. Mining of minerals deprives the land of its biological potential. This leads to the process of desertification of the area.

Check Your Progress 3

- i) It means that inputs in agriculture are higher than output.
- ii) Agricultural production in India can be increased by either expanding the area under cultivation or receiving higher yield per hectare.

Check Your Progress 4

- i) Marginal holdings measure less than 1 hectare and small holding measure 1 to 2.0 hectares.
- ii) Land tenure and rights in land are governed by the both the central and the provincial apparatuses of administration.
- iii) Land policy in British India was aimed to secure the maximum revenue from land tax.
- iv) The various land settlements in different parts of India during the British rule created conditions of pauperization among the cultivators.
- v) An 'economic holding' refers to a holding which affords a reasonable standard of living the cultivators and provides full employment and at least a pair of bullock to a normal size family.

Check Your Progress 5

- i) The British introduced the zamindari system in India.
- ii) Because, during the initial years of land reforms, after Independence, then existing tenancy laws were amended to give more protection to tenants and other categories of non-owners working and subsiding on land. Landlords were afraid of losing their ownership of land.
- iii) A tenant can acquire the status of the peasant proprietor only after occupation of a land holding for a number of years.
- iv) It is not possible to effective secure land reforms through legislation alone because after the laws are made the administration has to implement them. For implementation, there has to be a political will and an efficient administrative machinery with sufficient resources. Also, the potential beneficiaries of reforms need to organise themselves and demand their legal rights. Only then, the laws can be effective.
- v) The reasons behind consolidation of land holding are as follows
 - a) small size of plots are uneconomic to cultivate;
 - b) money, time and labour are wasted in carrying out different operations from one small plot to another;

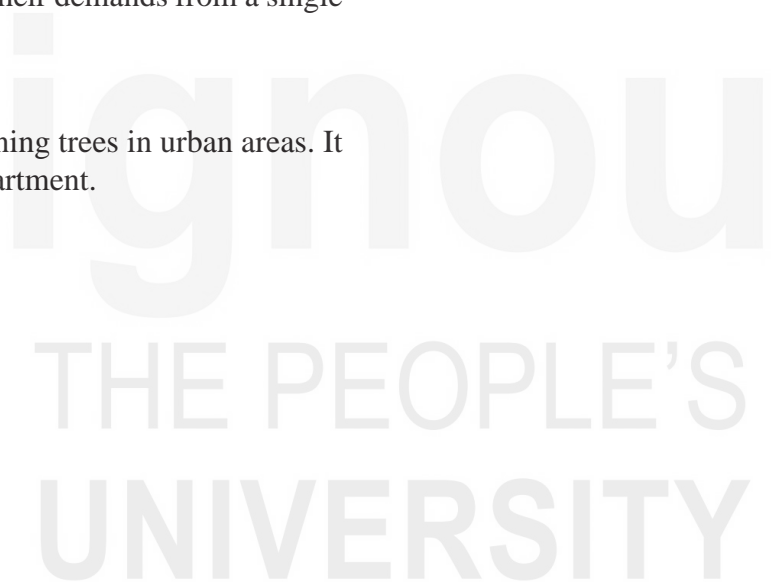
- c) supervision of farm operation is not easy;
- d) expenses on irrigation, drainage increase;
- e) during the crop season, access to different plots is difficult and a source of quarrels and conflicts over trespass;
- f) division of a holding causes loss of land for making boundaries.

Check Your Progress 6

- i) An agricultural labourer occupies a higher economic status because he/she gets daily wages which can be at times higher than the earning of a marginal farmer from the produce of his/her land.
- ii) Broadly speaking, money wage rates refer to the rates of money received as wages while real rates refer to the purchasing power of the money.

Check Your Progress 7

- i) Peasant movements in India are organised on local basis with different aims and objective. They do not so far voice their demands from a single forum.
- ii) $a=3$; $b=4$; $c=2$; $d=1$
- iii) Urban forestry refers to planting and maintaining trees in urban areas. It is carried out by a division of the Forest Department.



UNIT 26 WATER: ACCESS, CONTROL AND MANAGEMENT

Structure

- 26.0 Objectives
- 26.1 Introduction
- 26.2 The Present Situation of Access to Water
 - 26.2.1 Abundance of Water
 - 26.2.2 Reduced Access
- 26.3 Water Management Systems in Pre-British India
 - 26.3.1 Various Water Management Systems
 - 26.3.2 Water as a Common Property
 - 26.3.3 Limited Access
 - 26.3.4 Participation in Distribution
 - 26.3.5 Participation in Maintenance
- 26.4 Water Policy in the Colonial and Contemporary India
 - 26.4.1 The British Policy
 - 26.4.2 Water Policy after Independence
 - 26.4.3 Low Access to Water by the Majority
 - 26.4.4 Displacement: Who Pays the Price?
- 26.5 The National Water Policy 1987: Does It Increase Access?
 - 26.5.1 Setting of Priorities
 - 26.5.2 Strategy for the Strong
 - 26.5.3 Possible Alternatives
- 26.6 Let Us Sum Up
- 26.7 Key Words
- 26.8 Further Readings
- 26.9 Answers to Check Your Progress

26.0 OBJECTIVES

After going through this unit you should be able to:

- describe the present state of access to water by the poor, particularly women;
- describe the water management and distribution systems in India;
- analysis the policies that have resulted in monopolisation of the water resources by a few powerful sections;
- understand the consequences of this situation on the weaker sections, particularly women; and
- explain possible solutions to this situation.

26.1 INTRODUCTION

In Unit 25, we were concerned with the problems relating to the resource of land and its access, control and management. Equally important is the resource of water which is an essential component of human survival. Unit 26 focuses on social problems arising out of differential access to, and monopolistic control and so-called 'scientific management' of water resources in India.

Access to water is a fundamental right, since it is required for the very survival of every human being. Beginning with a discussion of the nature of the its access to various groups of society, we go on to analyse the traditional water management and distribution systems, and compare them with the British and post-independence policies of water management. This leads us to such questions as to who has gained greater access to water, who has been deprived of it and who pays the price of the present day water development policies. If it is found that a few classes have monopolised this resource at the expense of many other, it is important for the National Water Policy to deal with this problem. This is the reason why at the end of this unit, we look at the National Water Policy to deal with this problem.

26.2 THE PRESENT SITUATION OF ACCESS TO WATER

There is a certain contradiction in the management of and access to water in India today. There is an abundance of water in the country. The number of dams have grown enormously during the last four decades. At the same time, the access of the majority to this resource has decreased and, thereby, created a number of social problems on several fronts. In this section, we shall first discuss the fact of abundant supply of water in India, and then examine the state of the reduced access to water by the users.

26.2.1 Abundance of Water

According to a water flow chart, prepared by **Nag and Kathpalia (1975)**, India's total average annual precipitation is estimated to be 394 million hectare metre (mham). Precipitation is a term, denoting deposits on the earth, of hail, mist, rain sleet or snow. This figure is rounded off to 400 mham after including the snowfall which is not yet properly and fully recorded. To this figure of 400 mham you may like to add 20 mham of water, which comes from rivers flowing in from the neighbouring countries situated in the Himalayan watershed. We shall now see what happens to this 400 (or 420) mham of water resource that India gets every year.

Out of the 400 mham, nearly 40 mham is lost to the atmosphere through evaporation from soil. This leaves 330 mham, of which 215 mham percolates into the ground as soil moisture and groundwater recharge. Of this, only about 45 mham regenerates as surface flows. Besides 45 mham of the regenerated surface flow, 115 mham is the portion of the precipitation on the land that ultimately reaches streams and other surface water bodies. Adding 20 mham brought in by rivers originating in Nepal and Tibet, we have total surface flows of 180 mham available in the country.

Of 180 mham of surface flow, 150 mham goes to either the sea or some adjoining countries. Only about 15 mham is stored in reservoirs and tanks.

But about 5 mham of this water is lost by evaporation, resulting in the availability of only 10mham. Of the river flow, about 15 mham is used through diversion works and direct pumping. So we have a pattern of utilisation of only 25 mham out of 180 mham of surface flows. It is estimated that even on full development of the use of water through diversion works, direct pumping and storage facilities, 105 mham would continue to go to the sea and other countries (CSE 1987).

About 165 mham of 215 mham percolating into the soil is estimated to be retained in the soil as moisture and only 50 mham percolates as groundwater. According to scientists like Chaturvedi and Rogers (1985: 29), the groundwater recharge has to be and can be substantially increased. It is estimated that, at present, out of the total 67 mham of groundwater, only 13 mham is utilised while 45 mham becomes river flows and the remaining 9 mham goes into raising of the water table and loss of water from the soil both by evaporation and the passing off in the form of vapour from such living bodies as plants.

While nothing much can be done about such process of the hydrological cycle as evaporation and percolation into the soil, the current availability of 180 mham of surface flows can be analysed in terms of its access, control and development.

Before undertaking this analysis, let us also say a few words about the factors of flood and drought in India. Every monsoon season we read reports about the catastrophic occurrences of droughts and floods in different parts of the country. They indicate the wide range of seasonal and spatial variations in water resources of India. Floods cause damage to crops, houses, property and loss of human and animal population. High floods destroy railways, roads, communication lines and public utilities. In this way, they destabilise economic activity and also socio-economic and political relations.

Similarly, droughts also adversely affect the population. Droughts mean extended periods of sub normal precipitation. Their impact depends very much on the people's adaptation of their environment. In India, nearly 16 per cent of the total area of the country is drought – prone and about 11 per cent of the country's population is directly affected by drought conditions (see Saint 1988: 129-137; Murishwar and Fernandes 1988; 162-178).

Last but the least is the issue of water pollution. Whenever water is taken away from its original place and put to domestic, agricultural and industrial use, and later when the used water is returned to a water deposit, we face the large-scale problem of water pollution. Due to massive utilisation of water for agriculture/industry and rise in population at the same time and developmental activities, we are likely to face the problem of water pollution along with the age-old problems of floods and droughts.

Let us to back to our main focus, and examine how the availability of 180 mham of surplus flow is utilised for sustaining life in general and the Indian agrarian economy in particular. In a nutshell, we need to find out if availability means access.

Activity 1

Try to identify, on a map of India, the rivers which flow into India from the neighbouring countries situated in the Himalayan watershed. Write a short note of about 250 words about the course of these rivers.

26.2.2 Reduced Access

According to the Sixth Five Year (1980-85) Plan Document (1981), only 10 per cent of the rural population had access to safe drinking water, and only about 30 per cent of the cultivated land could be irrigated. Out of 123 million hectares of net cropped area, about 70 per cent still remains rainfed. Even with more development in the sphere of irrigation, experts estimate that at any point of time 50 per cent of India's cropped area will remain under the rainfed farming system. Hence, the water management and policy would have to ensure access to water by the farmer surviving on the rainfed system. As a matter of fact, access to water resources by the majority has considerably decreased for the following reasons:

- i) The groundwater table has decreased and the small farmers can afford only open wells and shallow village tanks most of which have dried up as a result. Any lowering of the groundwater table thus deprives them of access to irrigation.
- ii) The common water resources of villages that were carefully maintained till a few decades ago are neglected today. This deprives the small farmers of the water they require to ensure at least one crop, and deprives the family of water for domestic use. In fact, nearly half of the villages in India do not have a source of safe drinking water. Moreover, it is estimated that 70 per cent of the river water in India, which is used for human consumption, is polluted. Several thousand springs dry up every year.
- iii) Environmental destruction has disturbed the country's water balance. Droughts and floods are recurring more frequently and with higher intensity. In other words, while the availability of water for irrigation may have increased for the big farmer, it has not made much of a difference as far as access to it by the majority is concerned. This resource, like most others, seems to be controlled by a few, and more and more of it is monopolised by the medium and big farmers. (CSE 1987).

In this unit, we are looking at the process that has resulted in this situation and its consequences for the majority. It is in this context that we shall study the National Water Policy, 1987 and see up to what extent it deals with this situation. In order to understand the two points, we shall first study the water management systems in pre-British India and then discuss the water policy in India during the colonial and contemporary period. Before going on to the water management systems, please complete the exercises.

Check Your Progress 1

- i) Mark True or False against each of the following statements:
 - a) The increase in the number of dams has ensure equal access to water for every citizen of India. (True/False)
 - b) Small farmers have less access to water than in the past because the ground-water level has gone down. (True/False)
 - c) The drinking water is easily available in all the villages. (True/False)
 - d) The village tanks are not maintained properly. (True/False)

ii) Why do floods and droughts occur so often in India? Use one line for your answer.

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26.3 WATER MANAGEMENT SYSTEMS IN PRE-BRITISH INDIA

In this section, we first discuss the various forms of water management systems in India. Then we explore the possibility of water being treated as a common property in ancient India. This discussion is followed by the finding of limited access to water by common people. Next, we examine the nature of people’s participation in the distribution and maintenance of the resource.

26.3.1 Various Water Management Systems

In India, the systems of water management themselves differed from place to place because the precipitation varied from the east to the west. Eastern India has very high rainfall with Chirapunji in the north-east having the highest rainfall in the whole world. The annual precipitation goes up to nearly 4,000 mm, in some parts of the north-east, diminishes gradually as it comes westwards till it reaches about 800 mm a year in Rajasthan. Most parts of India have an annual rainfall of 1,000 mm. or less, the average for the country being 1150 mm.

Secondly, most of the annual rainfall is within a few months of the monsoons. As a result, for as many as eight months most of India has to depend on water that is stored in tanks, bunds, wells and streams. Consequently, the maintenance of these sources and equitable distribution are crucial for the survival of the communities in the rural areas (Sen Gupta 1991: 35-37).

Most parts of India are different from countries closer to the equator, for example the Philippines, where rainfall is more or less equally distributed throughout the country and every month there is some rainfall. This enables small rivulets to remain operational throughout the year. So in the Philippines , cooperation is mainly around distribution of water and maintenance of the distribution system, mainly canals. In India, on the contrary, cooperation has to begin in ensuring the very storage of water in tanks, bunds and wells etc., which are the main source in dry months. Nature has provided a cushion against this uneven availability through the forest that hold back the monsoon water and release it slowly into rivers, streams and groundwater systems. People have designed storing mechanisms through wells, ponds and tanks. In India, therefore, traditions of water management revolved not merely around distribution but also around the maintenance of the storage facilities. This has led to a peculiar pattern of access to water by various sections of society in India. Let us look at its peculiarities. It is peculiar because access to water is, like other resources, monopolise by powerful groups of society. But, because water in an essential element for human survival, it has to be made available to everyday. This is why we come across various mechanisms which ensure some availability of the resources even to the poorer and weaker sections.

26.3.2 Water as a Common Property

Archaeological evidence and historical records show that there existed a number of waterworks in India for providing drinking water and irrigation. They were of varied sizes, from small wells and tanks to big canals. In India, the technology of building small reservoirs with the help of earthen dams is quite old, and both in the northern and southern parts of the country tank irrigation was quite widespread.

One may perhaps speculate that in ancient India, water was, by and large, considered to be a common property. In other words, it belonged to the community, and individual could use it according to their needs. But this should not lead us into believing that in ancient times, every user had an equitable share of this resource, and participatory management of water was the tradition before the coming of the British. We do not have any evidence of this ideal state of affairs. All the same, one can perhaps argue that the concept of common property and its community character was maintained through sacredness attached to water.

Such sacredness is not specific to any one religion and can be located in almost every faith. Jews and Muslims think of it's a symbol of new life and Christians use it in the ceremony of baptism as sign of freedom from sin. The Hindu tradition of *gangajal* is well-known. Most tribal communities speak of divine presence in water. All these facts show that through the mechanism of attaching sacredness of water, the principle of ensuring its access for the use of common people was enunciated. We may also argue that the very fact of the existence of such a mechanism indicates that water was not in reality accessible to everybody, and, as it is a vital component for one's survival, it has to be made available by other means. This was done by imposing religious sanctions and by turning the giving of water to the thirsty into a pious and merit-earning act.

The concept of water being a common property does not necessarily imply that it was an open access resource. Among most tribal communities, resources such as water and the forest produce have traditionally been regarded the common property of the group, and its members have an open access to them. But even among the tribals not all tribal communities around the world today observe this as a rule. Many tribal groups even in India are today divided into high and low sections and sub-section, and also access to resources is among them inequitable. But that was not their tradition (Fernandes, Menon and Viegas 1988: 224-228). Let us discuss in the next sub-section the case of the caste communities and examine the access to water among the different castes in India.

26.3.3 Limited Access

As different from the traditional tribal village, most caste villages ensured access to this resources only to the powerful, and excluded the weaker sections. The control and management of water resources was largely limited to the land-owning groups which were also the powerful castes in the villages. The low castes and other landless categories were excluded from its management. There certainly was equitable distribution among the land-owning families. But those who did not own land and other assets, did not have any power in the village and were excluded from decisions concerning water management and hence also from equitable access to the resource. Secondly, the same source

of water was normally used both for drinking and irrigation purposes. The housewives were responsible for ensuring regular supply of water for domestic consumption while men occupied themselves mainly with agriculture and, as such, thought of water mainly for irrigation. Social organisation, including those dealing with water management, were controlled by men. As such, greater participation was ensured in the management of water for irrigation and much less organisation was involved in water meant for domestic consumption (Sen Gupta 1991: 119-120)

In essence, one cannot really call it equitable distribution as can perhaps be the case with the forest produce in the tribal tradition. Caste villages in India are an alliance of many communities with unequal power. Assets are owned by the more powerful castes and most decision-making is in their hands. Consequently, they ensure that there is equitable distribution within their own caste but not to the others. Moreover, most social groups in India are male-dominated and women's point of view is not always taken into consideration. The limited access to water was symbolic of limited access to other assets and to power in the traditional upper caste male-dominated Indian villages. Thus we can say that it was a common property, but not of the whole village. It was the common property of the powerful castes.

At times a few powerful individuals, even from among these dominant castes, tried to gain exclusive control over this resource. Tanks and irrigation resources were built by feudal lords, and emperors for their exclusive use. But such efforts as monopoly by a few individuals were not specific to water alone. They also enclosed some forests and other common properties for their personal use.

26.3.4 Participation in Distribution

As mentioned earlier, in most cases the same source of water was used both for domestic purposes and for irrigation. Both needed social mechanisms for equitable distribution. Relatively little is known about the social mechanisms for equitable access to drinking water.

When it comes to irrigation, around 20 large dams built in the Mughal era are in use even today (CWS 1990). The best-known pre-British irrigation system is the weir on the Cauvery known as the Grand Anicut. It is in use even in our days and in its heyday it must have irrigated around 2,40,000 hectares of land. In Uttar Pradesh too there is a fairly good canal system coming down from the Mughal times. These dams and canals were subsidised by the State and a distribution system was established. But in most cases the exact nature of the organisation is now known.

What is known is that most irrigation was from tanks, bunds, ponds and wells and in some cases from stream. A list in the 1880s shows that there were at least 32,000 tanks in the ryotwari areas of the Madras Presidency alone, and many more in its zamindari areas. There were similar tanks also in other parts of India. These tanks and many canals were managed by the "village irrigation community", i.e. the users' organisation. This participatory management ensured access to the users' but may have perhaps excluded the less powerful. It is estimated that around 7 million hectares were irrigated by tanks and canals before the arrival of the British as against 40 million hectares today.

There is a difference in the type of tanks in different parts of the country. By and large, the tanks in Western India, particularly in Gujarat and other areas

away from the coast are relatively small and used by five or six families. There are definite rules recognised by the village panchayat for these families to share their water. Since most of these tanks are refilled by springs, local regulations ensure that after every family uses it, it is left free for water to refill in a course of several hours.

In other parts of India, the tanks are much bigger, often irrigating more than 100 hectares and in some cases two or three thousand hectares. Consequently, water from one tank may be shared by more than a hundred families, sometimes from several villages. Acceptance of the rules of distribution by all of them and mutual cooperation have been coming up recently, particularly when some villages want to grow more hybrid varieties of rice or commercial crops that need more water. There are cases where some bigger farmers appropriate for themselves a bigger share of the resource than is their due. There have also been inter-village conflicts, because many of these tanks are inter-linked, and if one village neglects their maintenance or uses more than its share of the resource, its impact is felt by the others.

The traditional method of ensuring equitable distribution of water differed from place to place. Most of Tamil Nadu had a functionary, called **neerpaichy** in some places or **madai kudumban** in others to supervise the allocation and distribution of water. The **neerpaichy** usually belonged to a low caste that did not own land. Consequently, he did not have any vested interest in getting a bigger share for himself. He was, in practice, an employee of the village to ensure that water flowed according to the plan worked out by the committee. Since he had to be paid by all the families, he had to ensure that all of them received water according to this plan. In parts of Andhra Pradesh the **neerpaichy** was called **neeru kattudar** and was supervised by a **tennadeda**. There was an employee of the village and was paid in kind by the farmers, while the **tennadeda** represented the farmers to ensure proper distribution (Sen Gupta 1991: 97-120).

Such control was essential in water shortage regions like Tamil Nadu and Andhra Pradesh. On the other hand, in areas like Gaya, in Northern Bihar, where there was an abundance of water, such close supervision was not needed. The farmers had to ensure only the maintenance of the irrigation system and not its distribution, which was not a problem.

Activity 2

Find out if a traditional water distribution and maintenance system exists in your region or somewhere known to you and visited by you. If you have not known about such a system, interview an elderly person who is above 60 years of age. She or he may be able to tell you about it. Basing on any of the above sources of information, write a note of about 250 words on traditional water distribution and maintenance system in pre-British India.

26.3.5 Participation in Maintenance

For distribution to be meaningful, the water resource had to be refilled through regular rains and maintenance of the tanks. The main part of maintenance was desilting the tank every year and in some cases rebuilding its bunds in order to ensure that it retained water. This was done in every region by creating in people a vested interest in the silt itself in such a way that they had to desilt the tank in order to meet many of their other needs.

To begin with, a festive day was declared once a year in most communities, for all the villagers to come together and catch the fish in the tank just before the desilting season. After this followed the desilting season. Every region of the country found a definite use for the silt thus collected. In most part of the South, silt was used as manure for the fields. In many parts of interior Karnataka, the only manure that a coconut palm gets annually is one cartload of silt from the village tank. And in these areas coconuts are the main source of income for the people. Consequently, all the villagers had a vested interest in desilting the village tank since their livelihood depended on it. In Bengal and most of the East the desilting season coincided with the house repair and house building season and preceded the marriage season. The silt was, therefore, use to repair the existing houses in the village and to build new ones for the couples that would need them after their marriage (CSE 1987).

One should add, however, that neither the share of the benefits nor of the work was equitable. Much desilting work was done by the landless agricultural labourers. But they did not get much benefit out it other than drinking water. Even this benefit was denied to those who were known as untouchables. They were not allowed to draw water from the main tank reserved for the upper castes. They had to go to pond that was rarely well maintained since the powerful sections in the village did not have a vested interest in it.

Briefly, though there was participation in the distribution and management of the water resource, access to it was limited to the powerful. Those who did not have the same power, such as women, even those belonging to the powerful castes, and the landless from the low castes, had only limited access to it. One can still argue that as long as water remained a community resource, in some form or the other, its distribution to everyone was ensured, though it was not necessarily equitable for all the communities. In order to study changes in this situation, we need to look at water policy in India during both the British rule and the contemporary period. This will be the focus of the next section, i.e. 26.4.

Check Your Progress 2

- i) Mark whether the statements given below are True or False.
 - a) The irrigation systems began only with the coming of the British. (True/False)
 - b) The main source of irrigation before the arrival of the British was tanks. (True/False)
- ii) For each of the following statements select the correct answer out of the option given below.
 - a) Before the arrival of the British most irrigation system were managed by
 - 1) the State
 - 2) all the landowners
 - 3) committee of users.
 - b) The irrigation system evolved a management which paid attention to
 - 1) only irrigation waster distribution
 - 2) drinking water and irrigation
 - 3) only drinking water.

- c) The pre-British irrigation system ensured equal access to water by
 - 1) men and women like
 - 2) all the villagers
 - 3) the land-owning castes alone.
- iii) Describe, in about seven lines, the traditional water distribution and maintenance systems in India.

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26.4 WATER POLICY IN THE COLONIAL AND CONTEMPORARY INDIA

As far as access to water by the majority is concerned, the water policy in India appears to benefit the powerful and the rich. During the British rule, this was in favour of the imperial powers. Later, after Independence, the development planning evolved strategies for increasing productivity, which in turn, mean major benefits of development going to the rich and the affluent.

26.4.1 The British Policy

The water policy of the British was limited to the aspect of irrigation. One cannot state with any certainty that they had a policy concerning drinking water. The irrigation policy itself was closely linked to the British land settlement system which was mainly for revenue and not for production (see Unit 25). The Permanent Settlement of 1793 which was implemented in most of Eastern India, was to ensure permanent revenue to the British. Hence the land revenue was fixed once and for all. As a result, the Government had little interest in encouraging irrigation as such. It was left to the Zamindars. However, the zamindar was for all practical purposes only a tax collector who did not have an interest in developing the land under his jurisdiction. The tenants could not invest much on their land since they have no ownership right. Whatever the production, 50 to 65 per cent of the produce went to the land land-owner, leaving no surplus to invest in the land.

However, when North India was annexed, the British found many functioning irrigation systems. Besides, based on the lessons of the Permanent Settlement of Bengal, they did not fix the revenue once for all. Hence, it was possible to maintain the canals and in some cases to extend them. In the South and West, smaller areas were annexed gradually and then joined to the Madras or Bombay Presidency. The land settlement in these areas was different from that of the East and the North. Instead of Zamindari (which gave land to the highest bidder who sublet it to the tenants), the State entered into direct contract with individual cultivators (ryots), who had to pay the rent directly to the Government. This

was the ryotwari system (Sen 1979: 9-12). The State had to intervene to ensure the maintenance of common resources like tanks and canals, since they could not be handed over to individuals. Besides, the Grand Anicut and other irrigation systems, already existing, had to be maintained. In Madras Presidency alone, more than 50,000 kilometres (km) of embankments had to be maintained.

To ensure this, the British formed a Department of Irrigation, as they would not recognise the traditional irrigation communities. However, in order to maintain the Grand Anicut, the British engineers had to learn indigenous technology as their engineering model was not useful there. Moreover, in order to ensure maintenance at a low cost and to learn the indigenous technology, they had to involve the local people. Hence, there was the possibility of a model with people's participation evolving in the South.

However, between 1860 and 1921, irrigation was declared a central (not a state or provincial) subject. During these years, irrigation in the North was taken over by the British engineers who viewed maintenance only as a technical problem, and did not think of either local technologies or the involvement of the people. During these years this model was imposed on the whole country. With this, focus shifted to what was considered "scientific management" of water, and access to the majority decreased. Also the involvement of the people decreased and the maintenance of the tanks suffered, though some maintenance continued since the people needed the tanks. Only a few of the more than 30,000 tanks suffered every year. But the effect began to accumulate, and the access to their source of water by small farmers began to be reduced.

26.4.2 Water Policy after Independence

With independence began what is known as the era of planned development. The industrial, land, forest and water policies had to be changed accordingly. Higher productivity was one of the principles on which all these policies were based. The Five Year Plans kept repeating that productivity and distributive justice had to be combined in national development. Drinking Water, Drought-Prone Area Development, Small Farmers' Development, became part of this double approach to water management.

As in other resources, so also in water, the policy reflects the pressure coming from different sectors. And where there is pressure from contradictory forces, there is often an inclination to choose the strongest. This had happened in the forest policy (see Unit 27), in land management (see Unit 25) and was bound to happen also in water management. Higher productivity was essential. Only 9 per cent of the country's cultivated area was irrigated in 1950, and it was important to increase the area under irrigation. This had to be done fast, and the method found was to build large dams. Moreover, other forms of energy, mainly electricity, were needed, and water had to be exploited for this purpose too.

In this quest for fast development, it was assumed that the Western model was the only one available. The technology was, therefore, imported and major dams were built in order to make the natural resources as productive as possible. Little effort was made to study indigenous systems and to update them rather than replace them (see Gupta 1991: 140-145).

Slowly but surely, focus shifted towards the big farmers, since production had to be increased. This was done through the hybrid seeds, fertilisers, irrigation and mechanisation. Since dam water could not be made available to everyone, the farmers, were encouraged through subsidies to develop their own irrigation systems. Tube-wells became the norm for the farmers, who could afford them. India has a groundwater potential of 42.3 mham, and only 23.73 per cent of it is used. But what had happened in recent decades is overexploitation of deep tube-wells and neglect of shallow sources. The number of tube-wells bored has increased from around 5,000 per year in the 1950s to around 2,00,000 per year today. Because of this, the water table has declined in many parts of India and open wells have dried up. The Central Water Board had identified 645 blocks where this had reached serious proportions.

In Unit 27, you shall see that industrial clearfelling of forests had resulted in massive deforestation. Its consequences are soil erosion, droughts and floods. Many perennial streams like the Chos in the Shivalik Range in 'North-western India have become seasonal streams (CSE 1987).

26.4.3 Low Access to Water by the Majority

One finds that the overexploitation of water and of forests had combined to reduce the access to water by the poor and by women. Since many more tube-wells are bored, the water table has gone down considerably. Consequently, open wells and tanks are drying up. At the same time, also the village tanks previously maintained by the panchayat are now neglected. Most of the panchayat leaders are big farmers, who can afford their own tube-wells. As a result, they have lost the vested interest in the maintenance of the local drinking water and irrigation systems. As a result the poor do not have access not only to irrigation but also in many cases even to drinking water (Fernades 1988:92).

It was assumed by the policy-makers that productivity and justice could be combined. However, priority has been given to productivity and the policies have gone in favour of the big farmers. Around two-thirds of the India farmers are engaged in dry farming, and two-thirds of the agricultural development budget is devoted to irrigation and irrigation-based farming. This has resulted in a decline in overall agricultural productivity.

26.4.4 Displace: Who Pays the Price?

The big farmers and the better-off classes have gained access to water, and in the process, have deprived the small farmers, the poor and the housewives of access to the resource. The price of the big dams has been paid by the rural poor, particularly the tribals, the Scheduled Castes and other landless. They have paid the price in terms of their dislocation and consequent dispossession in the event of meager compensation by the state of their losses. The exact figures of the numbers of displaced are not available. But preliminary estimates indicate the around 140 lakh persons have been displaced by dams alone between 1951 and 1990.

The displaced are rarely the beneficiaries of the schemes. More than 40 per cent of those displaced by these schemes are the tribals, who form only 7.85 per cent of the total population of the country. Another 40 per cent are from the Scheduled Castes and other landless categories. None of them benefits from the dams and other development schemes that displace them (see Fernades and Thukral 1989 and Jain 1993).

It is not merely that they do not get the benefits of these schemes but also that their situation deteriorates. All the studies indicate that fewer than 30 per cent of the persons displaced by these schemes have been rehabilitated even 30 years after their displacement. Most of them are forced to rehabilitate themselves. Some of them do it by resorting to environmentally destructive practices, such as, cutting trees for sale as firewood. Many other migrate to the cities to fill the slums and are exploited further. A large number of them become bonded labourers. It is estimated that such bonded labourers form more than a quarter to the 5 million construction workers in the country (Fernades 1986: 269). Thus, those who pay the price of the development are deprived not merely of access to water, but also of their freedom and of their right to live as human beings.

Check Your Progress 3

i) “The British water policy alone is responsible for the low access to the resource by the majority.” Is this true? Use six lines for you answer.

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ii) Link causes with effects

Cause	Effect
a) Sharecropping	1) Water management with peoples participation
b) Too many tube-wells	2) Groundwater level goes down.
c) Grand-Anicut to be maintained	3) Displacement, mainly of the landless
d) Competition between higher productivity and distribution justice	4) Need to lean native technology.
e) Major dams	5) Department of irrigation organised
f) Scientific management imposed on all	6) Policy favours big farmers who can produce more.
g) Tanks and canals to be maintained	7) Lack of incentive to invest on irrigation

26.5 THE NATIONAL WATER POLICY 1987: DOES IT INCREASE ACCESS?

In the introduction, we mentioned the National Water Policy, 1987. The point has come for us to examine it in relation to the monopolisation of the resource by the few. We first observe what the national policy has set out to achieve, then we find out what happens at the level of its implementation. In the end, we offer some alternatives which, we hope, do provide possible answers to the problem of reduced access to water by the majority.

26.5.1 Setting of Priorities

It is the context of the strengthening of those who were already strong and further marginalisation of the weak that one has to examine in National Water Policy, 1987. To begin with, the priorities it sets are as follows. It speaks of

- Drinking water
- Irrigation
- Hydropower
- Industrial use, in that order.

But the policy document states immediately that these priorities can be modified in particular regions, according to their needs. It also sets

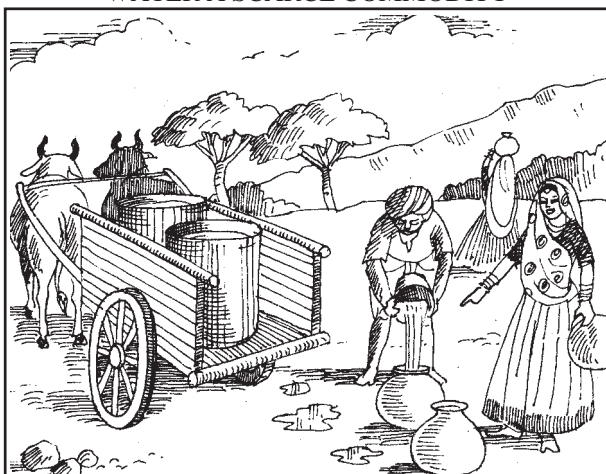
- a target of 1991 to provide adequate drinking water to the entire population
- that persons displaced by irrigation projects should be rehabilitated
- that in water management special attention should be paid to the needs of the Scheduled Castes and Tribes (see Fernandes 1988: 92-93).

26.5.2 Strategy for the Strong

When it comes to planning a strategy, it concentration seems to be primarily on irrigation and hydropower, i.e. on what the British called “scientific management” of water whose benefits have till now reached only to the powerful. The policy statement speaks of the need to exchange water between rivers, and to utilise the existing resources to the maximum. Not once are women mentioned in the statement though in the present division of labour in the country, they are responsible for ensuring the regular supply of water the family.

Similarly, focus is on irrigation dams, most of which will be in the forest areas, particularly in those inhabited by the tribals. While passing references are made to the need to give priority to the development of the tribals no concrete policy has been worked out either in this document or elsewhere for the rehabilitation of the displaced persons. Finally, the policy statement does not give any importance to dry and arid zones. Water utilisation, is, thus, only for those who can afford irrigated lands.

WATER A SCARCE COMMODITY



26.5.3 Possible Alternatives

Alternatives to this situation of marginalisation are possible. Only the Western model of sophisticated technology and engineering models is so far taken as the norm in planning development strategies in India. Dams are thought of as the only possible source of water. Consequently, the tribals and other rural poor are displaced in order to supply irrigation water to the farmers in the coastal areas, to industry and for household consumption in cities. The following are some of the suggestions.

i) **Desalinisation of Water**

A suggestion is that as India has a 6,000 km. long coastal line, it should be possible to desalinate water for use in the coastal areas of even in its immediate hinterland. The present desalination technology is extremely expensive because it belongs to the 1950s. There is no reason why research should not be done on new low-priced technology for desalination which can solve the water problem of most of the coastal areas and several other regions in the hinterland.

ii) **Increase Use of Solar Energy**

Similarly, another suggestion is that most regions in India have 300 days of sunshine in a year. But the solar energy has only marginal importance in today's energy policy. The present solar technology is expensive. In fact, in 1988 the creation of the infrastructure for 1 megawatt (mw) of solar electric power cost Rs. 4 crores as against Rs. 3 crores for thermal plants and Rs. 2 crores for hydel power. But very little research is being done on solar technology meant for the new century. What we have belongs to the 1970s and 1980s. Instead of displacing more people and depriving the poor of access to water and to livelihood itself, it is important to invest on energy saving devices, such as, solar power.

iii) **Diversion of Polluted Water as Fertiliser**

The pollution of water, too, is preventable. The Industrial, as well as human waste is diverted to rivers and the sea, thus, polluting the water the human beings need for their survival. Instead, it can be treated and used as fertiliser, resulting in both savings of foreign exchange and unpolluted water. Quite a bit of the foreign currency wasted for importing fertilisers either in its finished form or as raw material can thus be saved while reducing water pollution.

iv) **Ban on Wastage of Water**

Much water that can be made available to the poor is wasted in the cities to water its gardens, to clean middle class houses, etc. Electric power is wasted for street lighting. Do not think that we are against watering garden, cleaning a house or lighting a street. All this is necessary and must be done. We suggest that it should be done in a more environment-conscious manner. One sees no reason why sewage treatment plants should not become the norm, why biogas thus produced should not light the city streets, the water cleaned from it used for watering gardens and for fields. Better implementation of anti-pollution laws can prevent industrial pollution. You would be interesting to inform you that the residential campus of IGNOU is having Swage Treatment Plant. Here all the used water is treated and thereafter used for the gardening and the horticulture purposes in a very big way.

v) **Watershed Management**

Afforestation schemes as part of the watershed management are crucial for increased access to water. Where this had been done, one has noticed a rise in the groundwater table. At G.R. Hally of Karnataka, for example, where 199 ha in a watershed of 314 ha were afforested, groundwater increased considerably and the irrigated area rose by more than 50 per cent. Water harvesting through a combination of soil conservation and collection of water in tanks built in areas with more than 500 mm of rain per year can, according to one estimate, harvest 90 mham of water. Experience in Sukhomajri near Chandigarh and other experiments in parts of Himachal Pradesh have shown that these tanks can be built at the cost of Rs. 5,000 per hectare irrigated. The comparative figures per hectares irrigated are Rs. 15,000 to 25,000 spent by major dams (Agarwal, D. Monte and Samarth 1987).

vi) **Construction of Small Dams**

There are also indications that a large number of major dams are utilised at only about 30 per cent of their capacity and their lifespan has been reduced by half, because of siltation of their reservoirs (Singh, Kothari and Amin 1992: 173-174). Instead of building more dams that displace people and destroy the environment, the capacity utilisation of these dams can be doubled by desilting their reservoirs and afforesting their catchment areas. Less destructive smaller dams are yet another alternative. It is possible to use indigenous technologies for these dams since local artisans have a tradition of building them. These measures can create many jobs in the locality instead of displacing millions and abandoning them without rehabilitation.

Activity 3

If the water policy does not provide an access to water by the manority, list, in an order of priority, possible alternatives to provide it. Select one of the alternatives which you consider to be appropriate to your region. Now imagine that you are a member of the committee responsible for implementation of water policy in India. Work out, in a note of about 300 words, how you would like to develop in your region the alternatives selected by you.

vii) **Water as a Community Resource**

Many other alternative can be thought of. What is important, is to fix one's priorities and get away from the policy of the further strengthening the already powerful. Water has to be thought of as a community resource and not as individual property. Restrictions have to be put on its overexploitation by a few powerful individuals at the cost of the majority. The vested interest of big farmers and building contractors seems to prevent these alternatives. Efforts to control overexploitation of water by a few individuals have failed in most cases. For example, in 1975 a bill introduced in the Gujarat Assembly declaring water a common resource whose use by individuals should be regulated for common good. This bill was not allowed to be passed into law, and no effort has been made since then to reintroduce it either in Gujarat or in any other state (Bhatia 1988: 156). It is important to take decisions concerning common resources, according to the criterion of Mahatma Gandhi: "Recall the face of the poorest and the most helpless man who you may have seen, and ask yourself, if the step you contemplate is going to be of any use to him."

Check Your Progress 4

- i) Why has the National Water Policy, 1987, not increased the actual access to the water resource by the majority? Use two lines for your answers.

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- ii) Should the national water policy statement mention the role of the women in the division of labour in the context of supply of drinking water? Use three lines for your answer.

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26.6 LET US SUM UP

In this unit, we discussed at first the present situation of water management in India, and noticed that access of the poor to this resource is much less than that of powerful. To understand this, we went back to the water management systems in pre-British India and studied British and post-independence water policies. We noticed that water was relatively speaking more of a common property before the British evolved their revenue-based policy. However, unlike other resource like the forests, even in pre-British times, access to water as a source of irrigation was limited to the powerful land-owning groups. Water distribution and maintenance were participatory, but only as far as the asset owning communities were concerned. The assetless and the weaker sections were excluded. Even this participation was later reduced by the revenue-based British irrigation policy.

The trend has been further strengthened by the post-independence era of planned development. Focus has been on maximizing the productivity of the natural resources. In order to increase power generation and the area under irrigation, concentration has been mainly on the big dams that have displaced people particularly from the weaker sections. The beneficiaries are the already powerful categories.

26.7 KEY WORDS

Common Property Resource (CPR) : An asset belonging to the whole community which it uses with definite rules of distribution in such a way that every user gets his/her share.

Evapotranspiration : Evaporation of water through transpiration by plants.

Hectare Metre : 10,000 cubic metres.

- Permanent Settlement** : The settlement of the land-ownership pattern carried out by the British in the Bengal Presidency in 1793. In this system, a whole area or several villages were auctioned to the highest bidder (zamindar). The zamindar was to pay a fixed amount of the revenue to the government every year. He collected this tax by subletting the land to the tenants.
- Precipitation** : Fall of rain, sleet, snow or other forms of water.
- Ryot** : The cultivator (ryot) who entered in direct contract with the government and paid taxes to the State instead of being a tenant of zamindar. This system was practiced, mainly, in the southern regions of India.
- Ryotwari** : The tenant of the area where the ryots entered into direct agreement with the government..
- Sharecropper** : The tenant to whom the zamindars in the Permanent Settlement area sublet their land not at a fixed rent but a share of the produce. The share ranged from 50 per cent to 75 per cent of the harvest.
- Transpiration** : The process of water passing off in the form of a vapour from such living bodies as plants.
- Watershed** : It is a natural geographical unit drained by a natural stream within a catchment area with the upper boundary marked by a ridge line and the bottom boundary extending along the valley up to a point beyond which the lands do not require immediate attention. The size of a mini-watershed varies from 100 to 500 hectares and may be inhabited by 100 to 300 families.
- Weir** : Wall or barrier across a river to control the flow of water. Fence of stake or broken branches in a stream as a trap for catching fish.
- Zamindar** : The highest bidder to who the whole area was given at the Permanent Settlement. He sublet the land to tenants and sharecroppers.

26.8 FURTHER READINGS

Agarwal, Anil, Darryl D'Monte and Ujwala Samarth (eds.) 1987. *The Fight for Survival: Peopl's Action for Environment*. Centre for Science and Environment: New Delhi.

CSE, 1987. *The Wrath of Nature: The Impact of Environmental Destruction on Floods and Droughts*. Centre for Science and Environment: New Delhi.

Fernandes, Walter and Enakshi Ganguly Thukral (eds.), 1989. *Development, Displacement and Rehabilitation: Isses for a National Debate*. Indian Social Institute: New Delhi.

Sen Gupta, Nirmal, 1991. *Managing Common Property: Irrigation Systems in Idnia and the Philippines*. Sage Publications: New Delhi.

26.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- i) False
- ii) True
- iii) False
- iv) True

Check Your Progress 2

- i) a) False
b) True
- ii) a) 2
b) 1
- iii) Traditionally, the same source of water was used both for domestic purposes and for irrigation. Both needed social mechanisms for equitable distribution. Little is know about equitable accounts for drinking water, while some historical monuments provide the evidence of wide-scale arrangements for irrigation. Large dams were built during the Mughal period and we find remains of many tanks, bunds, ponds and wells. Some are still in use. The village Panchayat decided rules for governing use of water from these sources. Equitable distribution was ensured by appointing official to supervise operations involved in distribution of water for irrigation fields.

Check Your Progress 3

- i) The British water policy is partly responsible for the lack of access to the resource by the majority. It is clear that in India the water policy during the period of post-Independence has also resulted in the lack of access to water by the majority Even now, the powerful and the affluent have relatively more access to almost all resource including the water resources and the poorer and weaker sections of society are deprived of even the minimum access to as essential a resource as water.

ii) **Link causes with effects.**

a=7; b=2; c=4; d=6; e=3; f=1; g=5

- | | | |
|---|---|---|
| Sharecropping | - | Lack of incentive to invest on irrigation |
| Too many tube-wells | - | Ground water table declines |
| Grand Anicut to be maintained | - | Need to learn native technology. |
| Competition between higher productivity and distributive justice. | - | Policy favours big farmers who can produce more |
| Major dams | - | Displacement, mainly of the landless. |
| Scientific management imposed on all | - | Water management with people's participation discouraged. |
| Tanks and canals to be maintained | - | Department of irrigation organised. |

Check Your Progress 4

- i) The National Water Policy, 1987 has, **on paper**, accepted the need of access to water by the majority. At the level of implementation of the policy, even now most water management is in the fields of providing irrigation and hydropower. Both give benefits to the already powerful and rich.
- ii) Both in rural and urban areas, women are, by and large, responsible for housekeeping which requires an adequate supply of water for domestic use. Women are, therefore, directly linked to ways and means of acquiring water for domestic use. It is then natural to expect that the national water policy should recognise and mention the special role of women in the area of use of water. Further, it should also spell out how women can get better access to water, without being forced to carry it on their head from far off sources of water to their dwellings.

UNIT 27 FORESTS: ACCESS, CONTROL AND MANAGEMENT

Structure

- 27.0 Objectives
- 27.1 Introduction
- 27.2 The Situation of Forests Today
- 27.3 Traditional Forest Management Systems
 - 27.3.1 Extent of Dependence on Forests
 - 27.3.2 Protection of Ecosystems in Traditional Management
- 27.4 Forest Policy, State Control and Denial of Access to Forests
 - 27.4.1 Forest Policy and State Ownership
 - 27.4.2 Conflict between State and People
 - 27.4.3 National Forest Policy after Independence
- 27.5 Environmental Consequences
 - 27.5.1 Depleting of Tree Cover
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- 27.6 Consequences for the People
 - 27.6.1 Migration and Exploitation
 - 27.6.2 Malnutrition, Ill health and Break-up of the Community
 - 27.6.3 Tension with Forest Officials
 - 27.6.4 Greater Marginalisation of Women
- 27.7 Possible Solutions
 - 27.7.1 Legal Action
 - 27.7.2 The Forest Conservation Act and the Forest Policy
 - 27.7.3 Various Types of Plantations and People's Participation
- 27.8 Let Us Sum Up
- 27.9 Key Words
- 27.10 Further Readings
- 27.11 Answers to Check Your Progress

27.0 OBJECTIVES

In this unit we are discussing the present situation of forests in the country and attempting to understand it by going back to its historical background. After going through this unit, you should be able to:

- describe the situation of forests as it exists today;
- outline the traditional link between the tribal and forests till the First Forest Policy;
- understand and describe the main features of Forest Legislation from 1854 to 1988;

- discuss the role played by industry, revenue and the forest dwellers in the depletion of this resource today;
- discuss the environmental impact of deforestation;
- evaluate the impact of deforestation on the people; and
- suggests possible solutions of deforestation and the alienation of forest dwellers.

27.1 INTRODUCTION

In the previous two units of this block, we talked about the resources of land (Unit 25) and water (Unit 26). Both these resources are vitally linked to the state of forests in the country. As long as we have plenty of forests, we do not realise their importance. It is only after their depletion and its impact on our survival that we begin to pay attentions to the causes and result of disappearing tree cover.

During the last two decades more and more persons in this country have become aware of the serious harm caused to the environment and to the people, particularly the tribals who live, by and large, in and around forests, by massive deforestation in India. The first part of the unit (section 27.2) discusses the state of India's forests today. The beginning of the problem can be traced back to the 19th century when the traditional constructive link (section 27.3) was broken and a new Forest Policy was introduced. With every new step in this Policy, the forest dwellers were further alienated from their life support system till they were declared enemies of the forest (section 27.4). Slowly the people who had till then safeguarded forests, began to destroy them. Forests are thus being depleted and its consequences are felt in the form of soil erosion, floods, droughts etc. (section 27.5). More than that, it has a major negative impact on the people, particularly the communities like the tribals who had traditionally depended on it as a life support system and had established a constructive relationship with it (section 27.6). We shall, in the end, suggest possible solution to deforestation (section 27.7).

27.2 THE SITUATION OF FORESTS TODAY

According to the National Forest Policy of 1952, as well as the one of 1988, the country should have 33 per cent of its land under tree cover, namely, 60 per cent in the hill areas and 20 per cent in the plains. In reality, however, only 22 per cent of the country's landmass or 77 million hectare (ha) are controlled by all the forest departments of the States. But less than half of this area has a tree cover. The rest of it can be described as forests without trees. What is worse, every year the country is losing around 1.3 million hectares of forests and only around 5,00,000 hectares are replanted. At this rate, most of the country's tree cover may disappear within the next 20 years. In this Unit, we want to understand the implication of this situation.

The depletion of forests is attributed to:

- population explosion among the forest dwellers
- shifting cultivation, i.e. slash and burn cultivation
- fuelwood consumption – since around 100 million tonnes of it are used every year
- the industrial orientation of the Forest Policy.

We shall first examine the traditional forest management systems of the forest dwellers and then look at recent policy measures. We will then analyse deforestation within this historical perspective. This exercise will help us to appreciate

- a) the gravity of the current crisis in the area of control and management of forests
- b) the need for seeking better alternatives for a Forest Policy for India.

INDIA FORESTRY STATISTICS 2000

AREA

Distribution of Geographical Area and Actual Forest cover			
State/UT	Geographical Area (sp km.)	Actual Forest cover (Sq. km.)	Actual Forest Cover as % of Geographical area
1	2	3	4
Andhra Pradesh	275068	43290	15.74
Arunachal Pradesh	83743	68602	81.92
Assam	78438	23824	30.37
Bihar	173877	26524	15.25
Goa, Daman & Diu	3814	1255	32.91
Gujarat	196024	12578	6.42
Haryana	44212	604	1.37
Himachal Pradesh	55673	12521	22.49
Jammu & Kashmir	222235	20440	9.20
Karnataka	191791	32403	16.89
Kerala	38863	10334	26.59
Madhya Pradesh	443446	131195	29.59
Maharashtra	307690	46143	15.00
Manipur	22327	17418	78.01
Meghalaya	22429	15657	69.81
Mizoram	21081	18775	89.06
Nagaland	16579	14221	85.78
Orissa	155707	46941	30.15
Punjab	50362	1387	2.75
Rajasthan	342239	13353	3.90
Sikkim	7096	3129	44.10
Tamil Nadu	130058	17064	13.12
Tripura	10486	5546	52.89
Uttar Pradesh	294411	33994	11.55
West Bengal	88752	8349	9.41
A & N Islands	8249	7613	92.29
Chandigarh	114	7	6.14
D & N Haveli	491	204	41.55
Delhi	1483	26	1.75
Lakshadweep	32	-	-
Pondicherry	493	-	-
All India	3287263	633397	19.27

Source: Government of India 2000. Ministry of Environment & Forest.

27.3 TRADITIONAL FOREST MANAGEMENT SYSTEMS

The National Remote Sensing Agency reported in 1984 that India was annually losing 1.3 million hectares (ha) of forests and the end of 1985 it was estimated that India lost 34 per cent of its forest area. Does this mean that India has a vigorous tradition of destroying its forests? Far from it, the fact is that about a hundred and fifty year ago, India was quite green and its tree cover was adequate in terms of ecological balance and the needs of its industry and people. Let us here examine the traditional relationship between forests and the people.

27.3.1 Extent of Dependence on Forests

Such massive destruction of forests has not been the tradition of India. It is estimated that when the first Forest Policy of British controlled India was promulgated in 1854, the subcontinent which then comprised also the present day Pakistan and Bangladesh, had 40 per cent of its territory under tree cover. A hundred years later, when the first Post-Independence Forest Policy was promulgated in 1952, the tree cover had gone down to an estimated 22 per cent. In other words, during the one century, the country had lost tree cover of around 18 per cent of its territory or 0.18 per cent year. Thirty years later, during the Sixth five Year Plan (1980-85), the tree cover of the country was estimated to be around 10 per cent and today it is probably around 9 per cent. In other words, the loss during the first 30 years of planned development was of the order of 12 per cent or 0.4 per cent of the country's landmass per year. One cannot say that the loss of the tree cover has been only because of population increase. Other, probably more important, causes exist and these must be properly listed.

When we go back to the history of forests in India, we realise that before the first Forest Policy of India in 1854, the forest dwellers in rural India in general and the tribals in particular, had developed what has come to be known as a symbiotic relationship between forests and people. Symbiotic relationship refers to the living together, in close association of two dissimilar organisms. In this case, the forests and the people depended on each other. Because of this dependence, most rural populations in India developed a whole series of practices and beliefs geared to preserving the forests and other natural resources. The traditional thinking was that resources such as forests, land and water belonged to the whole community and not to any individual. Every family was allowed to use the resources for its needs. These resources were to be preserved for posterity, i.e. for all the generations to come.

27.3.2 Protection of Ecosystems in Traditional Management

To ensure that forests were treated as a community resource, every rural and forest dweller community in general and the tribals in particular, followed four modes of protection of forests.

i) Protection of Sacred Groves

Most tribal and rural communities give evidence of holding certain patches of forest land as special and therefore to be protected. Some ecosystems were identified as special, as such to be preserved from all destruction. Most

communities along the West Coast had such forests. they were called **devaranya** (God’s grove) in Maharashtra, **nagaranya** (serpent’s grove) in Karnataka, and **serpakkadu** (serpent inhabited jungle) in Kerala. These were considered sacred. As such, no sickle or axe could be used in them. Only fruits that could be plucked or dry twigs that could be broken with one’s hands or dry leaves and other material that had fallen down were allowed to be used.

Most tribals in India are known to have preserved three such systems. In Chotanagpur they were known as sarna, sasan and akhara and by other names elsewhere (Gupta, Banerjee and Guleria 1981: 9). Sarna is the place where the teenager boys were traditionally sent for training into adulthood. During these months of training they had to live in the forest and survive on what they could cut or kill with their hands. These young men were considered the future warriors of the tribe and as such provided continuity to it. The sasan was the burial ground in the forest. The ancestors were buried in these places and as such it was the sign of the continuity of the tribe. In many places such as Chotanagpur in Bihar, the tombstone of an ancestor was the only “document” a family required to prove its right to cultivate land in that village. The akhara was the dancing ground, a clearing in the forest, where young men and women met. On the annual festival day known as Dongora-dongari among the Konds of Western Orissa and by other names in other tribes, they chose their life partners, as such, that was the place where the future couples were chosen and children to continue the tribe were ensured (Fernandes, Menon and Viegas 1988: 161-163). Thus, the tribals preserved these ecosystems by linking them to the continuity of the tribe and by declaring them the house of their gods. These practices are, in many cases, a part of totemic beliefs among the tribal groups. To know about what is a totem and what are totemic beliefs, you are advised to read Block 3 of ESO-03 and Block 1 of ESO-05. You are also advised to watch the video programme, ‘**Religious Symbols**’, prepared for Block 1 of ESO-05. It will suffice here to say that in the world view of many tribal groups certain birds, animals, vegetation, groves, places are linked to the way they conceptualise their social structure. They worship these particular species and therefore also preserve them.

Activity 1

Myths associated with forests are part of each region’s folklore. Collect two stories related to forests in your area and show how they reflect the close links between forests and the people.

ii) **Protection of Important Species**

The second methods was to declare some economically crucial trees sacred and ban their cutting. Also some animals that were important for the survival of the tribe were declared sacred. Forest and rural populations in all parts of India, declared peepal (which is a very important medicinal plant), Tulasi, banyan etc. sacred and preserved them. The tribals added a much bigger number of economically important trees to the list, for example, sal, mahua, sahada, salap, etc. Besides, they created myths to link these economically important trees to the origin of the tribe. The Kond tribals of Kalahandi of Orissa believe that when the whole world was sub-merged in water and all the people died, two children survived on a hill and the salap tree gave them its juice and saved them from starvation. From these two children emerged the Kond tribals. As such salap is linked to the origin of all the tribals. The Gonds of Koraput

believe that their ancestors were born from the cow's feet (or god) from which comes the name of the tribe. The Konds of Ganjam speak of the first ancestors coming from **bel** fruit, **sarai wood**, **karela** etc. Hence, all these are declared sacred since they are linked to the origin of the tribe. The tribals are, therefore, told that their tribe itself will disappear if they allow these trees to be cut. Here, it is not out of place to refer to the theories of origin of religion among the primitive people. You may like to read Block 3 of ESO-03 and Block 1 of ESO-05, where under Durkheim's theory to totemism you will read about this very link between flora and fauna and the people.

iii) **Equitable Distribution of Forest Produce**

The third way of preserving the forests and other resources was through rules concerning distribution with justice. There were definite rules governing the use of fuelwood. For example, among the tribals of Dhenkanal in Orissa, every family was allowed to take one headload of fuelwood per week and in most of Chhattisgarh in Eastern Madhya Pradesh, every family was allowed one cartload per month. Similar regulations existed also in other parts of India. Every area found its own method of ensuring distribution of forest produce in such a way that everyone's needs were met but the resource was not destroyed by a few persons trying to get for themselves more than their due. Mahatma Gandhi echoed the essence of this culture when he said: "The world has enough for everyone's need, but not for everyone's greed."

Among the tribal communities women played an important role both in use and in the preservation of forests and other natural resources. They controlled the family economy, the work around shifting cultivation and other resources. You can say that they had a bigger vested interest in preserving these resources than men had and this gave them control over much of the decision-making in the family. This indicates also the relatively higher status of women in most tribal societies (Fernandes and Menon 1987: 72-80).

iv) **Appropriate Technology**

Finally, the forest dwellers preserved forests also through appropriate technology. This can be seen, for example, in shifting cultivation which is considered the best form of cultivation for slopes up to 20 degrees where either settled or terraced cultivation is not advisable. The tribals cultivated the highest slopes before the monsoons in such a way that the roots grew and soil was preserved when rains came. After that they would sow other crops in such a way that shifting cultivation provided some food every month from October to March, giving them a balanced diet. They cultivated an area for three years and left it fallow for 18-20 years for forests to grow again. Similar appropriate technology can be noticed in the cutting of trees and bamboos which they did in such a way as to ensure coppicing, i.e. new shoots coming out of the old one without damaging the surroundings (Gadgil 1989: 15-167).

Check Your Progress 1

- i) State, in a few line, the extent of India's tree over when the British stated their first Forest Policy in 1854.

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.....
.....
ii) What is a symbiotic relationship? Use two lines for your answer.

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.....
.....

iii) What is a sarana? Use one line for your answer.

.....

iv) What was the use of a sasan among the tribals of Chotanagpur? Use one line for your answer.

.....

27.4 FOREST POLICY, STATE CONTROL AND DENIAL OF ACCESS TO FORESTS

The ownership pattern with forests as a people’s community resource changed to one of State ownership with the first Forest Policy of British controlled India in 1854. The trend has continued also after independence and it is getting stronger now to such an extent that the people who have treated forests for centuries as a community resource are today considered enemies of forests. Why has this happened? That is what we shall try to understand in this section.

27.4.1 Forest Policy and State Ownership

The first feature of the British Forest Policy of 1854 and of the others that have followed till 1988, is state ownership. This is essentially alienation of the communities from forests which they had till then preserved as a community resource. The Forest Policy of 1854 was dictated by the British need for timber mainly as a source of revenue and for ship building for colonial wars in other countries. Later, timber was also required for railway sleepers. They had already destroyed the forests in Britain and in their colonies in southern Africa and needed more timber from India. Consequently the Forest Policy declared forests a national asset. They therefore, ceased to be the life support system of the tribals and other forest dwellers.

Efforts were made to introduce what was called **scientific management** by which was meant getting the highest possible revenue from forests. With this in view, the species that would give revenue were to be planted in preference to those that the people needed for survival. A German, Dietrich Brandis, was appointed the first Inspector General of Forests (IGF), in order to ensure “scientific management”. Some village forests were kept apart for the people and the rest were declared reserve forests that belonged to the State. No prior survey was made to people’s needs before making this division. In most cases what was left for the people was inadequate to meet their needs. Besides, the people were given some rights in the forests, such as the right to collect flowers, fruits and fuelwood for personal consumption (Gadgil 1983: 166-119).

27.4.2 Conflict Between State and People

With this trend towards State ownership, the foundation was laid for the conflict between the State and the people on the one hand and alienation of the people from the forests on the other. This conflict intensified as the tree cover decreased and the British needed more revenue from forests. This became evident in the Forest Policy on 1897. In this document, what was earlier referred to as **rights of the people** was changed to “rights and privileges”. Slowly the rights of the people began to be underplayed and what they required was viewed only as privileges. This approach was enacted into a law in the **Indian Forest Act 1927**. Much more than in earlier documents, it spoke of the forest dwellers as encroachers on State property.

27.4.3 National Forest Policy after Independence

One would have expected this to change with independence, i.e. with Indians running their own country. In reality the, trend has been intensified. The very first Forest Policy after Independence, the National Forest Policy 1952, changed the terms “right and privileges” to “**rights and concessions**”. It certainly spoke about safeguarding people’s interests, environmental needs as well as industrial and revenue requirements. But the focus appeared to be on **concessions** rather than on **rights**. This list of rights (known as **nishtar**) remained with the Division Forest Officers and was rarely communicated to the people. What the forest dwellers needed from the forest was thought of as concessions from the State, the owner of the forest. The National Forest Policy continued to favour the industries and manage forests with their interests in focus (Fernades 1988: 88-91). Its results were as follows:

i) **Industry and Forest Management**

This trend itself is understandable. Apart from being a source of revenue, national development had industrialisation as its cornerstone. It viewed the natural resources, such as forests and water as a raw material whose productivity has to be maximised. In order to encourage industrialisation, particularly in the backward areas (and forest areas were also backward), industrial raw materials were highly subsidised. For example, in the mid-1970s, in Karnataka a notional tonne (that is 2,400 running meters) of industrial bamboo was sold to the paper mills at Rs. 15/- while the ordinary people paid the equivalent of Rs. 1,200/-. Even in 1981-82, the paper mills in Madhya Pradesh got a four metre bamboo for 54 p. while ordinary people had to pay more than 2/- for it (Fernades, Menon and Viegas 1988: 204-207).

The result is that industrialists got the raw material so cheap that they had no vested interest whatever, in reforesting the area from which they cut bamboo or timber. Moreover, in many cases they gave up the coppicing technology which they considered too slow and expensive. The resource had to be exploited in the most economically profitable manner. So they often resorted to clearfelling, i.e., cutting trees and bamboos from a whole plot at one stroke. Besides, the industrialists began by cutting the trees that were the closest to the village from which the people got most of the produce they needed, since the area was accessible at least by bullock carts. Once the resource close to the village was exhausted, they would move away from there and keep exhausting tones of bamboo and timber produced in the country (Gadgil 1989: 8-10). India’s 175 paper mills consume 50 per cent of the bamboo. The people

are often deprived of what they need. Moreover, 4.5 mha of forest land is estimated to have been used up for building developmental infrastructure such as dams, mines and industries.

ii) **Industrial Clear-felling and People’s Impoverishment**

With the clearfelling of forests near their villages the people were gradually deprived of their food and other daily needs. The consequence was their impoverishment. This began a vicious circle that broke the symbiotic relationship between the people and forests. Because of impoverishment the forest dwellers fell into the clutches of the moneylender whose appearance coincided with introduction of the industrialist. As the tribals were deprived of access to more and more forests, their impoverishment and indebtedness increased. Slowly they lost their land to the money lender, became overdependent on shifting cultivation and started to overexploiting their plots. Increased population only added to the problem. As a result of all these factors, the shifting cultivation cycle has come down from 18-20 years 30 years ago to as little as 6 years in Orissa, 12 years in the North-east and 3 years in many parts of Western India. Many tribals now resort to the sale of firewood as the only source of survival, or work as wage labourers under timeber contractors and smugglers (Fernades, Menon and Viegas 1988: 224-230).

One can thus notice that the forest dwellers, particularly the tribals, who had developed a culture of preserving forests while using them for their needs, are today destroying the same resource for survival. Formerly they had what can be called a constructive dependence on forests. Today because of the vicious circle of their impoverishment and indebtedness caused by the industrialists the tribals are deprived of their access to forest products. They are forced into what can be called destructive dependence. In other words, they destroy or overexploit the forest for survival. Before discussing other consequence of this management and control of forests on behalf of industry, we shall study the environmental consequences of this approach.

Check Your Progress 2

i) What were the main British legislative measures regarding forests in India and why were they enacted?

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ii) What vicious circle has led to the change of tribal culture due to the national policy on forests? What post-independence measures led to it?

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27.5 ENVIRONMENTAL CONSEQUENCES

The above mentioned state of the country's forests has brought about the following environmental degradation.

27.5.1 Depletion of Tree Cover

The first consequence of this vicious circle is depletion of the tree cover which is today estimated to be around 9 per cent of the total area. It has resulted in soil erosion. Trees with large leaves protect the soil from wind, sun and rain. They preserve also the moisture in the soil required to maintain the water table. Studies in Russia have shown a 4 per cent loss in precipitation with 10 per cent reduction change in the tree cover. At distance of 100 meters from a forested area, soil erosion per hectare was 2.1 tonnes. It was 14.6 tonnes at 300 meters and 38.4 tonnes at 600 meters. Hills in the vicinity of Chandigarh were found to be releasing 900 tonnes of soil per year after trees were cut (CSE 1987).

Studies, like those of Madhav Gadgil (1989) of Bangalore, indicate that India loses around 6 billion tones of soil annually. 10 per cent of it is washed out into the sea, 69 per cent is deposited in rivers and the reservoirs of large dams. In the Maithon Dam, Bihar, for example, it was assumed that 1.62 hectare metres (ham) would be silted in every 100 sq. km. But later observation has shown that it is 13.10 ham. In Nazim Sagar it is 6.55 hectare meters against the original assumption of 0.29 (CPR 1985: 6). Similar figures can be produced for all the major dams. Consequently, their life span has probably been reduced by more than half. To this should be added the silting of rivers because of deforestation and soil erosion in the catchment area. The level of the Brahmaputra has risen by 1.98 meters in 20 years and the Ganga by more than 5 meters.

27.5.2 Floods and Droughts

The inability of the soil to absorb water, due to the rise in the river bed and siltation of dams causes massive flooding. According to the National Flood Commission, the flood-prone area of the country has increased from 19 mha in 1960 to 59 mha in 1984. The number of persons affected by flood rose from 5.2 million in 1960 to 15.4 million in 1970. In 1978 as many as 70 million persons were affected. In 2002 more than 100 million persons were affected by flood. To this should be added the damage caused by disruption of communications and from loss of production.

Along with floods, droughts too seem to be on the increase. During the last 30 years there have been three or four drought years per decade in the country as a whole, as against a total of four years in the four decades from 1920 to 1960. Studies like those of the Centre for Science and Environment (CSE 1987) and of India Social Institute (Fernandes 1987), New Delhi, show the situation is worse in the tribal areas where there was thick forest a few years ago. In southern Rajasthan, Saurashtra and Kutch in Gujarat, the Kalahandi district of Orissa and in parts of northern Karnataka and southern Tamil Nadu, there have been 6 to 8 successive years of drought.

The expenses incurred on flood and drought relief keep increasing. During the first Five Year Plan, the country spent an average of Rs. 5.64 crores a year on

it. In the late 1980s, it was around Rs. 1,200/- crores per year. To this should be added money that is spent on reconstructing all the facilities and communication systems that are destroyed by floods. The amount thus spent becomes enormous. This amount could better be spent on people's development.

Activity 2

What is, in your opinion, the most important environmental consequence of degradation of forests. For answering this question, observe your environment for various consequences of depletion of tree cover and read about it in old newspaper-clippings and other sources of information. You can also discuss the matter with your friends and the IGNOU Counsellor before writing a note of 250 words on this theme.

27.5.3 Deforestation and Rainfall

Some studies like those of B.C. Biswas (1980) in the Andaman and Nicobar Islands, S. Kalitha and S.K. Sharma (1981) in Assam, P.C. Agarwal (1976) in Madhya Pradesh and V.M. Meher-Homji (1988) in the South indicate that there is a link between deforestation and reduced rainfall. More studies are required in this field before reaching definite conclusions. However, most of us do know about the link between trees and rain. This known, in technical terms, as the hydrological cycle. Forests protect and stabilise soils. Rainwater in a forested area is clear and carries only 5 per cent of sediments while in an area denuded of forest the rainwater is opaque and carries 60 per cent of sediment.

27.6 CONSEQUENCES FOR THE PEOPLE

We have already mentioned the change of culture among the people. Those who had treated forests as a renewable resource and had used them in a balanced manner in order to preserve them for future generations, have today started destroying them for survival. They have been forced into this vicious circle by impoverishment and indebtedness. In a study in Orissa (Fernandes, Menon and Viegas 1988), for example, it is found that around 20 per cent of the tribals have lost their land to the moneylender because of impoverishment caused by deforestation. Today they survive through destructive practices. Briefly, people's impoverishment is a major consequence. Many of them are forced by it into destroying forests by overexploiting shifting cultivation plots, or by selling firewood for fuel or by cutting trees as wage-labourers. In the following sub-sections we will discuss some more consequences of the present state of forests on the people.

27.6.1 Migration and Exploitation

In the above mentioned study on the tribals of Orissa and Madhya Pradesh, an enormous increase was noticed in the number of bonded labourers as a result of impoverishment and indebtedness. A large number of them migrate to other States as plantation, construction or road labourers and often are not allowed to return to their families. This has also been seen in studies of migrant labourers in Manipur, construction workers during the Asian Games in 1982 in Delhi and others elsewhere. A recent study in Delhi shows that there has been a major migration of tribals and other forest dwellers to the city slums during

the last two decades because of deforestation and displacement by development projects. They can only become unskilled urban labourers and be further exploited (Fernandes 1990).

27.6.2 Malnutrition, Ill health and Break-up of the Community

Another consequence is the deterioration in the physical condition of the tribals. It has been calculated by persons like Almas Ali (1980) in Orissa that the average daily food intake of tribals like the Kondhs is around 1,700 calories as against the minimum requirement of 2,400 calories. This loss is the highest in milk, meat, fruits and nuts in which the area abounded before deforestation. As a result of this deficiency, their physical condition deteriorates. Moreover, because of ecological destabilisation, new diseases related to pollution and other factors in environment appear. Besides, for centuries tribals had depended on medicinal herbs that grew in the forests. With deforestation they are deprived of these herbs. The primary health centres are in towns 10-15 km. away. As a result they are unable to visit them except when their illness reaches a dangerous point (Agarwal and Narain 1985).

Shortage of resources leads to competition for them creating conditions for the break up of the community that had earlier enforced the practice of equitable distribution of the forest produce. A few better off persons not merely from outside, but even among the tribals and other forest dwellers, gain for themselves access to a bigger share of the resources than is their due, thus depriving the poor of the little that would have been available to them (Fernandes, Menon and Viegas 1988: 226-227).

27.6.3 Tension with Forest Officials

With the shortage of resources, and the poor being forced to sell firewood for survival, the already bad relations between the forest officials and the people deteriorate further. Greater exploitation of the poor by the forest officials follows: On the exploitation of forest dwellers, Joshi (1983) writes.

The various kinds of restrictions imposed on the forest dwellers virtually put them at the mercy of the FD (Forest Department) especially lower level functionaries. Illiteracy and poor economic conditions make their situation more vulnerable. Taking advantage of the cold attitude of the officials of the FD the lower level functionaries, such as forest guards, exploit the local people in the collection of forest produce. For example, in some areas in Andhra Pradesh, the forest guards have their cut (6 paise per rupees) on MFP (Minor Forest Produce) and in some areas the tribals are often made to work without payment. In spite of the rest houses spread all over the block, the forest rangers or high level functionaries could not find it convenient to inspect the area. This is not an isolated instance.

27.6.4 Greater Marginalisation of Women

While all the forest dwellers suffer, the situation of women gets worse than that of men (see Fernandes and Menon 1987). The task of ensuring the supply of food, fodder, water, medicinal herbs and fertilisers remains, traditionally the responsibility of women. But the distance between the forests and the village

increase. In eastern Madhya Pradesh and in Orissa the average distance of forests from the village was around one kilometer in the early 1950s. It went up to around 7 kilometers in the early 1980s. In the Garhwal Himalayas it is more than 10 km. This results in a higher workload for women. When forest was close to the village, children and older women helped the housewife in tasks such as the collection of fruits, flowers, leaves and other forest produce. With the distance increasing, the children and older women are unable to be of assistance. Hence, the housewife has to travel these additional 5-10 kilometers everyday to collect the produce. But despite the additional workload she collects less.

This results in shortage of food. In most tribal communities, the whole family used to eat together. But in the context of these shortages, many tribal communities have introduced the custom of the woman eating last after feeding men, boys and girls in that order. As a result, often the women has to survive with very little food (or none at times) since not much is left over for her.

Activity 3

In your own culture area observe and make a record of all those activities which women carry out and which are related with forest produce. Write a short note of 250 words, analyzing women's access to forest produce and their control and management of these resources.

The situation gets worse during droughts and famines. Formerly, years of shortage could be got over with the help of roots and tubers which were abundant in the forest. With deforestation, the number of drought years has increased and the tubers and roots that were their famine food have disappeared. The mutually supportive community has been weakened. Hence, the housewife has no support in periods of shortage (Fernandes 1987: 433-435)

27.7 POSSIBLE SOLUTIONS

It is from the point of view of the lack of access of the poor to the resources which they need for their survival that one has to look at forest management today to find solutions in favour of the people. Solutions are being attempted in the form of legal action and replanting of forest trees. We will first discuss, in this section, legal action and the Forest Conservation Act and the new forest policy. Then we will consider the measures to plant trees and people's participation in them.

27.7.1 Legal Action

Legal action is an attempt to deal with the reduced tree cover. With the depletion of forests, there is competition from various sectors and pressure on the State deprive the weakest of access to this resource. The first sign of this pressure was noticed in the report of the **National Commission on Agriculture**, (which was formed in 1971 and gave its report in 1976). In volume 9, which is dedicated to forests, the Commission speaks about the diminishing tree cover and states that serious measures should be taken to protect existing forests. The thinking of the Commission seems to be that the forest dwellers are the main culprits. "Fee supply of forest produce to the rural population and their rights and privileges have brought destruction to the forests and so it is necessary to reverse the process" (NCA 1976: 354-355). It, therefore, recommends that

48 million out of 70 million ha of forests should be set aside for industrial needs. It recommends also that State depots should be set up to supply people with their needs and that the forest populations should not be allowed direct access to the forest produce. Following this step, there were set up various committees. Let us examine them more closely.

- i) Based on this report, a new Forest Bill was drafted in 1980. It tried to protect forests by
- redefining forest produce to include many more items in the category of MFP (minor forest produce);
 - giving the forest officials additional powers to arrest and punish real or suspected offenders of the Forest Act; and
 - increasing punishment for offences.

Public opinion prevented the introduction of the Bill in the Parliament. But several committees were formed to study the link between forests and tribals. The first of them was constituted in 1981 by the Home Ministry (which was then looking after tribal development) with B.K. Roy Burman as its Chairperson. While understanding the extent of deforestation, this Committee emphasised the importance of forests in tribal life and reviewed the existing Forest Legislation in the light of this understanding. The Committee recommended that

- the Forest Policy and the system of running forests should be directed to turning them into a renewable resource,
- the individual tribal, the local tribal community and national interest should be the three corners of such a policy,
- it should fulfil needs of ecological security, the food, fuel, fodder, fibre, and other domestic needs of the rural population and raw material needs of cottage, small medium and large industries, of defence and communications.

It suggested the involvement of the people in forest production and regeneration and stated that the forest department alone cannot renew the resource.

- ii) **The National Committee on the Development of Backward Area** was constituted by the Planning Commission in 1980. Its report, given in June 1981, recognised the importance of forest produce in providing substantial sustenance to tribal communities and the rural populations. It also recognised the exploitative role played by middlemen and the State which viewed forests as sources of income. It stated that the commercialisation of forest produce should be only to ensure the maximum returns to the tribals and other forest dwellers. The Committee felt that creating such a vested interest in the tribals would help them to preserve forests. But the Committee did not respect the tribal community as such which has been safeguarding forests for generations but suggested only dealing with individuals. This would in practice break up the community and so remove the real source of protection besides depriving the weaker among them of access to forest produce. Its predominant view was the same as that of the National Commission on Agriculture which has viewed the people alone as destroyers of forests. Hence, it recommended that the rights of the tribal communities over forest land and forest produce should be reduced.

- iii) Finally, in October 1981, the Ministry of Agriculture set up the **Committee for Review of Rights and Concessions in the Forests Areas of India**, with M.S. Choudhury, former Chief Secretary of Madhya Pradesh, as its Chairman. Its reports presented in 1984, begins with the settlement that though the 1952 National Forest Policy had recommended that national interests should be given more importance than individual needs of tribal communities, “the implementation of the policy has not taken place in the desired manner”. In its analysis of deforestation the Committee makes no mention of the large scale clearfelling for industrial raw material and only proposes to place further restrictions on the forest dwellers. It states that it should be compulsory for the forest dwellers to protect forests and that their needs should be satisfied mainly through social forestry on 48 million ha of degraded and deteriorated forest areas. It recommends at the same time, using a part of the funds set apart for social forestry, for production forestry (which is meant for industrial needs).

27.7.2 The Forest Conservation Act and the Forest Policy

The Forest Conservation Act was enacted in 1980 to prevent diversion of any forest land for non-forest use. This Act was further amended in December 1988 to make any diversion of forest land without permission from the Government of India a cognisable offence. The forest officials who thus divert land can now be punished with imprisonment for up to 15 days. Secondly, fruits, medicinal and other commercial species are excluded from what are considered forest species. The intention is to prevent industry and commerce from using forest land for commercial plantation in the name of reforestation programmes. However, while enacting this legislation with such a good intention, policy makers do not seem to have been aware of the people’s culture. The local populations need for their survival, mainly fruit, fodder, fuelwood and medicinal species. As such, by forbidding the plantation of these species on forest land, the Act not only prevents control by commercial interests, but also deprives the local forest dweller communities of access to the forest produce.

A new forest policy was promulgated in December 1988. This document begins by acknowledging the need to keep a balance between environmental, industrial and people’s needs. It also states that there has been a symbiotic relationship between the people and forests and that forests cannot be safeguarded without people’s movement.

In India several schemes were introduced to ensure production of fuel wood and fodder and attaining maximum sustained yield of timber for railways, defence, industries and communication. Forests, which were over exploited during world wars, were rehabilitated. In the second and third Five Year Plans commercial plantations for pulpwood were established. The number of sanctuaries and national parks increased over the next two decades.

The Indian National Forest Policy of 1988 gave conservation orientation and a human face to forestry. The policy emphasised the protective role of forests in maintaining ecological balance and environmental stability. The basic objectives that should govern the National Forest Policy were enlisted as follows:

- Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that has been adversely disturbed by serious depletion of the forests of the country.
- Conserving the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna, which represent the remarkable biological diversity and genetic resources of the country.
- Checking soil erosion and denudation in the catchment areas of rivers, lakes and reservoirs in the interest of soil and water conservation, for mitigating floods and droughts.
- Checking the extension of sand dunes in the desert area of Rajasthan and along the coastal tracts.
- Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
- Meeting the requirements for fuelwood, minor forest produce and small timber of the rural and tribal populations.
- Increasing the productivity of the forests to meet essential national needs.
- Encouraging efficient utilisation of forest produce and maximizing substitution of wood.
- Creating a massive people's movement with the involvement of women, for achieving these objectives and to minimise pressure on existing forests.

(Balaji, 2001: 3-4).

However, the document makes it clear that what it calls national needs should get precedence over people's requirements. In the tradition of the last several decades, national needs usually coincides with industrial needs. Thus, on the one hand, the document states that every decision should be taken with environmental preservation in mind, and on the other, it gives priority to national needs over people's requirements. Thus, it puts the people's needs last. Moreover, the overall thinking of the document is in favour of State Control over forests rather than genuine people's involvement. For example, keeping in view the recommendations of the **National Commission on Agriculture, 1976**, it suggests State run depots to meet people's needs. Thus, the document seems to have tried to put all the needs together and has in reality ended up by giving much lower priority to the people than the earlier documents had done.

27.7.3 Various Types of Plantations and People's Participation

The other solution that has been thought of is in the form of plantations. Based on the recommendations of the National Commission on Agriculture, 1976, the forest department has been encouraging various types of forestry, particularly production forestry which is meant for industrial needs, social forestry to cater to people's needs, and other such as those meant for soil conservation, wind protection etc. Some of them are discussed here in the following sub sub-sections.

i) Social Forestry

Social forestry is meant for meeting people's needs. To be viable, it should

respond to the causes of deforestation which we have mentioned above and solve problems such as the break up of people's communities. All the data at our disposal would indicate that social forestry has in reality become commercial and even production forestry. First of all, more than two thirds of the total area is planted under production forestry. Of the rest which comes under schemes such as economic plantations, quick growing species plantations, rehabilitation of degraded forests and social forestry, it is estimated that around 80 per cent is planted with commercial species and not what the people need though that was the original purpose of these plantations. In fact, speaking at a seminar at the India International Centre, New Delhi, in May 1983, the then Inspector General of Forests, Government of India, acknowledged that 80 per cent species planted under these schemes of social forestry were of the commercial variety and that 80 per cent of them are planted by the 20% of the big farmers and the remaining 20% were distributed among the 80 per cent small farmers (Roy 1983). In other words, neither are the people needs met nor is inequality reduced.

The Conclusion drawn in a study of farm forestry on agricultural land in Gujarat by S.Jain (1988:47) is relevant. Farm forestry is a component of social forestry. Jain writes,

It is apparent that capitalist agriculture is the main trend in rural development in Gujarat in particular and of India in general, there is no escaping of the fact that the cultivation of forest trees is inevitably based on the rationale of profit-calculations. The market for polewood is then obviously linked with industrial and/or commercial enterprises. This explains why a large farmer with sufficient capital and a better entry into the timber market successfully adopts farm forestry on his agricultural land. On the other hand, due to the lack of capital resources and market information, small farmers face problems both in growing trees and selling timber.

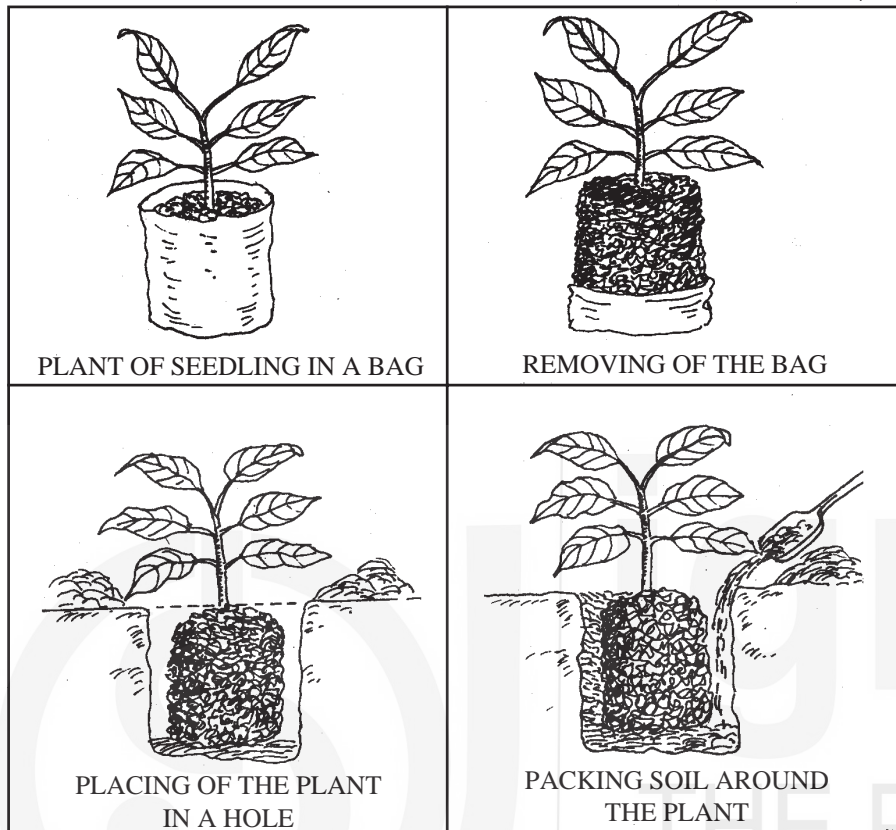
From this perspective, non-cash benefits and ecological gains of farm forestry become subsidiary for the farmers and a kind of alibi in the hands of the government for promoting commercial development of tree plantations.

ii) **People's Involvement in Social Forestry**

All the decisions on the scheme of social forestry and its components have been taken during the last several years by the forest department or by other governmental agencies with very little people's involvement. Often the local forest dwellers are used as wage labourers and not as decision-makers and in most cases not as beneficiaries of the produce. This goes against the statement that the programme should be turned into a people's movement. In fact, based on this statement of the National Forest Policy, 1988, on June 1, 1990, the Secretary, Ministry of Environment and Forests, Government of India, has sent a circular to the forest departments of all the States. The circular asks them to ensure that the local population gets involved in decisions concerning the afforestation and reforestation schemes. It states that land need not be given out either on lease or in some other form to the people, but that the whole scheme should be one of partnership between the forest department and the people. It states that the people should be involved in decisions concerning the choice of species, arrangement of work and the benefits to be reaped. Based on this the State Governments of Bihar, Orissa and Rajasthan have already

made new rules concerning afforestation schemes, and a few other states are in the process of getting them ready. The educational institutions also need to encourage habits of planting and caring of trees. Practical steps, as shown in the following illustration, are not hard to learn.

STAGES OF PLANTING A FOREST TREE



One would think that afforestation schemes on the part of the forest department are crucial. However, such schemes demand partnership between the forest department and the people, and that is not going to be easy. A major reason for the failure of social forestry is precisely that close cooperation between forest officials and the people could not be brought about. Foresters do not want their power to be curtailed and they think that the people are enemies of forests. The forest dwellers do not trust forest officials and consider them exploiters. Moreover, as we have mentioned above, among the people there has been a transition from constructive to destructive dependence on forests. This has added to the tension between the people and the forest officials.

iii) Role of Voluntary Organisation

These attitudes have to be changed and a constructive attitude towards forests recreated. For this to happen, the people have to have a stake in afforestation schemes. Most existing schemes of the forest department are of the commercial variety. The people get neither food nor income from them. Voluntary organisations can perhaps become the catalysts in this. They can help the people to recreate in themselves a vested interest in forest regeneration and the forest department can give them the technical support they need. These organisations can also relate the real needs of the people in terms of species. This has been proved in the successful schemes of organisations such as Bana Bharati in the Koraput District of Orissa. Harivallabh Parikh's Ashram at Rangpura in Gujarat, several groups in Uttaranchal and elsewhere. These organisations have been

attempting schemes that combine people’s involvement with overall environmental regeneration. Many of them speak in terms of watershed management. Such schemes are being attempted mainly in Karnataka and Maharashtra, most of them as partnership programmes between voluntary organisations and people’s communities with technical support from government departments. Several groups in Rajasthan are attempting environmental regeneration schemes in the form of drought-proofing (see Agarwal and Narain 1989).

iv) **Women’s Involvement**

As essential element in these schemes has to be women’s involvement as the experience of Chipko and others elsewhere has shown (see Jain 1984). However, a major shortcoming of many of these peoples and voluntary organisations is that they do not easily understand the role of women as an integral part of the community. Often, decisions are taken only by men or sometimes imposed on the people by voluntary agencies. And yet, women have been more instrumental than men in preserving the environment for centuries and they are also bigger suffers of its deterioration than men. As such, their involvement is essential both from the point of view of rebuilding the community that has been destroyed and for genuine long-term recreation of ecological balance.

Activity 4

Find out about the state of the tree cover in your area and possible measures and you can be involved in an attempt to improve it.

Briefly, one would conclude by stating that any environmental regeneration programme should keep people’s needs, industrial requirements and ecological balance in mind. These needs should not be treated as those of individuals but as those of communities that have broken up and have to be rebuilt. In this process, special focus should be on the weaker sections, particularly those communities that have suffered the most, for example the tribals and other forest dwellers. Even among them women’s role should get special importance.

Check Your Progress 3

i) Describe, in about seven lines, recent legislative measures on forests.

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ii) What was involved in the new Forest Bill, drafted in 1980s? Use four lines for your answer.

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27.8 LET US SUM UP

In this unit we discussed first the present state of forests in India. We then situated this depletion of tree cover in India in the context of the policies during the last 150 years in general and the four decades of planned development in particular. Going back to the history of forests before the arrival of the British, we noticed that till some decades ago there was what can be called symbiotic relationship between the people and the forests. Because of this mutual dependence, the forest dwellers had developed a culture and tradition geared to keeping a balance between human and environmental needs.

This mutual dependence disappeared when the British turned forests into State property and alienated from the communities that had preserved them for centuries. To the revenue orientation of the British, post-Independence India policy asserted the right of the state to use forests for industrial raw materials. As a result, the tree cover in the country had diminished enormously.

Today there is a realisation that forests cannot be saved without the involvement of the local communities. Solutions are, therefore, being attempted with the people as the major partners. However, various interests work at cross purposes and the policies often go against the people. It is, therefore, essential to experiment with new solutions that can put all these interests together.

27.9 KEY WORDS

- Afforestation** : Planting a new forest in an area where no forest existed earlier.
- Clearfelling** : Cutting down trees or bamboos on a whole plot at one stroke.
- Constructive Dependence** : Dependence because of which the users keep a balance and ensure that human needs are met without destroying the forest (or any other resource on which they depend).
- Destructive Dependence** : The type of dependence caused mainly by the shortage of a resource or by a profit motive, because of which the user destroys the resource (e.g. forest for fuelwood or industrial' raw material) without allowing it to renew itself.
- Ecosystem** : An integrated system of crop lands, forest lands, grazing and waste lands- each of these land use components interacting with each other in such a way that when one component it affected, it has an impact on all the others.
- Environment** : Surroundings that include forests, wildlife, air, water, land etc. on which human beings depend.
- Production Forestry** : Forestry meant to produce commercial species of timber needed in industry and commerce.

- Reforestation** : Planting forests in an area that once had forests that have disappeared now.
- Shifting Cultivation** : Also known as slash and burn cultivation is the form of cultivation on slopes. The existing trees (in most cases only branches) are burn to provide fertilise. The land is then cultivated for two or the three years and left fallow for 18 to 20 years for forests to grow again. In the north-east it is known as **jhum**. In southern Orissa and most of South India it is called **podu**. About 25 per cent of Indian tribals practice it.
- Symbolic** : A relationship of very close and mutual dependence between two dissimilar organisms as between the mother and the foetus in her womb.

27.10 FURTHER READINGS

Agarwal, Anil and Sunita Narain, 1989. *Greening India's Villages: Strategy for Environmentally Sound Participatory Rural Development*. Centre for Science for and Environment: New Delhi

Fernades, Walter and Geeta Menon, 1987. *Tribal Women and Forest Economy: Deforestation, Exploitation and Status Change*, Indian Social Institute: New Delhi

Fernades, Walter, Geeta Menon and Philip Viegas, 1988. *Forests, Environment and Tribal Economy: Deforestation, Impoverishment and Marginalisation in Orissa*. India Social Institute: New Delhi.

Jain, S. 1988. *Case Studies of Farm Forestry and Wasteland Development in Gujarat*, India. FAO: Bangkok.

27.11 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- i) During 1854, India's (including present day Pakistan and Bangladesh) tree cover comprised 40 per cent of its landmass.
- ii) Symbiotic relationship refers to living together, in close association, of two dissimilar organism.
- iii) *Sarna* refers to a sacred plot of forest in the rribal village. The young men (teengagers) of the trige were sent to this sacred place for training into adulthood.
- iv) The term *sasan* refers to the burial ground among the Chotanagpur tribals. Since the *sasan* was used for burying the ancestors it was also used as a sign of the continuity of the tribe in a particular area.

Check Your Progress 2

- i) One of the main measures of the British Forest Policy was the itroduction of State Ownership of forests. The second measure was the application of scientific managemet' of forest resources. The third measure was the

concept of people's 'right' in the forests. These measures were mainly adopted for providing timber as a source of revenue to the British government and for ship building for colonial wars in other countries and later for railway sleepers.

- ii) The post-Independence Forest Policy continued to encourage the use of forests for industrialisation. At the same time it undermined the common person's use of forest produce. This resulted in the impoverishment of those previously dependent on forest produce for their vital needs. As a result, they turned to moneylenders and found themselves trapped in an unending debt-cycle. This in turn resulted in marked changes in tribal culture.

Check Your Progress 3

- | | |
|---|--|
| <p>i) Source</p> <p>a) Large leaves and roots of trees</p> <p>b) Roots and tubers</p> <p>c) Symbiotic relationship between forests and people</p> <p>d) Moisture in soil</p> <p>e) Shifting cultivation</p> <p>f) Appropriate technology</p> <p>g) Control over family economy</p> | <p>Benefit</p> <p>i) Soil conservation</p> <p>n) Famine food</p> <p>j) Constructive dependence</p> <p>m) Water level</p> <p>k) Balanced diet</p> <p>l) Coppicing</p> <p>h) Women Status</p> |
| <p>ii) Causes</p> <p>a) Large leaves and roots of trees disappear</p> <p>b) Siltation</p> <p>c) Industrial clearfelling</p> <p>d) shortage of and competition for resource</p> <p>e) Distance of forests</p> <p>f) Depletion of tree cover</p> <p>g) Forest near village clearfelled</p> | <p>Consequences</p> <p>m) Soil erosion</p> <p>n) Floods</p> <p>k) Vicious circle resulting in destructive dependence on forests</p> <p>l) Break up of community</p> <p>h) Extra workload for women</p> <p>j) Reduction in rain</p> <p>i) Food shortage and impoverishment</p> |

Check Your Progress 4

- i) Recent legislative measures on forests include
- diversion of any forest land for non-forest use is prohibited;
 - any diversion of forest land without permission from the Government of India is a cognisable offence;
 - afforestation programmes should become a people's needs movement.
 - social forestry is to be introduced for taking care of people's needs;
- ii) The new Forest Bill, drafted in 1980, protect forests by redefining forest produce in order to include many more items in its list. It gave the forest officials additional powers to arrest and punish real or suspected offenders of the Forest Act. It increased punishment for offences.

UNIT 28 ROLE OF THE STATE AND OTHER ASSOCIATIONS

Structure

- 28.0 Objectives
- 28.1 Introduction
- 28.2 State as an Association
- 28.3 Role of the State
- 28.4 Non-state Associations
 - 28.4.1 Features of Voluntary Organisations
 - 28.4.2 Differences between Voluntary Organisation and Non-government Organisations
- 28.5 Role of Voluntary Organisations
 - 28.5.1 Voluntary Organisations and Ecology
 - 28.5.2 Role of Voluntary Organisations for Development of Scheduled Castes and Scheduled Tribes
- 28.6 Problems Faced by Voluntary Organisations
- 28.7 Suggestions for Promotion of Voluntary Efforts
- 28.8 Let Us Sum Up
- 28.9 Key Words
- 28.10 Further Readings
- 28.11 Answers to Check Your Progress

28.0 OBJECTIVES

After reading this unit you should be able to:

- discuss the concept of State as an association;
- describe the role of the State;
- distinguish between the state and non-state associations, voluntary organisations (VOs) and non-governmental organisations (NGOs);
- discuss the role of the VOs in development;
- identify problems faced by VOs; and
- suggest ways to promote voluntary efforts.

28.1 INTRODUCTION

In the preceding three units of this block, we talked about the resources of land, water and forest and discussed access to them and their control and management by people. In all three units, we reviewed the role of the State and of other associations in the control and management of these resources.

We will take up in this unit the theme of ‘role of the State and other associations’ in greater details, so that we become aware of the alternatives available for

solving problems related to ecological imbalance. (About the concepts of ecology and ecological imbalance you are advised to read Unit 37 of Block 8 of ESO-02). This will also create in us an awareness of **our role** in solving social problems in India. As Unit 28 is that last unit of both of the course (ESO-06) and of the Block (Ecology and Resources), it addresses to concerns of both the course in general and the Block in particular. In other word it deals with social problems in general and with ecological problems in particular. Taken together both ecological and socio-economic and political problems provide a context of most of the activities and associations. Participation in the processes of both the State and other association interests the individual and the wider society. It is interesting to understand how this happens. Unit 28 will explain this process.

The Unit begins with a brief discussion on viewing on viewing the State as an association and its role. Then we proceed to explain the concept of other associations which play an equally important role in the process of development. This is followed by identifying the problems faced by voluntary organisations and suggestions for promoting voluntary efforts.

28.2 STATES AS AN ASSOCIATION

Before discussing the role of the State, we need to say a few words on what is the State? A preliminary definition can be that it is an association. You may ask-what is an association. You may ask – what is an association? The answer is that association refers to a group of persons who associate and organise themselves for a common goal. In this sense, the state is an association just like the family or political party or business firm. It comprises a group of members who are organised in a certain manner and for certain goals. You may also ask how is the State as an association different from an institution or society of community? For the answer of this questions see Box 28.01.

Box 28.01

The state is found within society. But the state is not a form of society. The state is a system of order and control and its business includes to the conservation and development of human abilities and of economic resources. Society is, on the other hand, a relational concept insofar it is viewed as a chain of social relationships. It is not a substantial concept and it does not denote a concrete reality, rather it refers to social relationships.

To explain the difference between association and institution, it will suffice here to say that an association refers to a group of persons who associate and organise into a unity of will for a common goal. The term institution does not denote persons. It denotes the form along which those persons, activities are related.

Lastly, let us also look at the difference between association and community. One spends only a part of one's life within an association. But one's whole life is spend within one's community. As organisation of the state is not all social organisation, we can say that the state is a partial unity and in that sense it is an association. Communities, like a country, city, village, nation, tribe, are integral unities.

The common point between the state and other associations is only that both comprise groups of members, who are organised in a specific manner for

common goals. Because of its special features the State is different from other associations. It is an association of a type of its own. Other or non-state associations do not share with the State those special features which make it a category by itself.

These features are as follows:

- i) One feature is that the state includes under its control all those who live within its territory. It does not matter whether these people are deliberately its members or not. The state maintains social order within a territory.
- ii) The second features of the state is sovereignty which is an attribute of common will. In its aspect of sovereignty, the state has the decisive right of force.
- iii) The state has coercive framework of political law and, therefore, has a permanence and fixity.

These characteristics apply only to the state and not to other associations. As the state is an associaton which forms a type by itself, its role in relation social problems is not similar to that of other associations. Because of this difference we have, in this unit, first discussed the role of the state and then taken up the role of other association. But remember that both the modern state and other non-state associations play an equally important role in regulating and managing societies.

28.3 ROLE OF THE STATE

In broad terms, the state upholds social standards and prevents exploitation and injustice. It works towards the removal of socio-economic problems and improving general well-being of its members. The role of the state is not fixed, rather it changes with the conditions. Such Marxists as Lenin argued that the State does not work for general well-being of all its members. It represents only the private property owners and there by becomes an instrument of promoting the interests of dominant classes in a society. You may or may not agree with this point of view but you will certainly agree with this point that even Marxists hold that the state plays a comprehensive role in modern societies. You may further raise a point that if the state plays such a major role, there is perhaps no need for other associations to enter the scene. Is it that the state is unable to perform its comprehensive role and, therefore, other associations step in?

Scholars like Bhambri (1987: 36) hold that the existence of non-state associations in developed countries represents the rejection of the modern state system, which has over time become oppressive and dehumanised. In developing countries, the state is considered to play an active role in removing the burden of backwardness. It is held that only the state can perform this role. According to him, planning process of the Indian State has already broken the 'the essentials of a stagnant economy'. The Indian state has provided 'a social space' to its disabled and deprived strata. Bhambri (1987: 397) holds that 'the hold of the state is visible in whatever limited successes have been achieved by the poorest of the poor'. For him, other associations like voluntary agencies 'are a footnote in India development' and the 'the problems of development of India require more of state intervention and not less of it'. In Unit 25, 26

and 27, we have also discussed at length the land, water and forest policies of the government and legislative measures adopted from time to time in matters related to the control and management of these resources. Clearly, the role the state in the case of India is very such similar to what Bhambri holds. We should however questions his view of other associations as 'mere footnotes in India development'. It is not a questions of either one or the other. Taking a balanced view of the giving relative importance to both, we find that both the State and non-state associations play significant role in the socio-economic well-being of a society. Again, roles of both the state and other associations work for particular and sectoral interests. But they are not opposed to each other. Only in certain situations, when voluntary organisations involve themselves in confrontationist action, they may take a posture of direct opposition to the State. Similarly, when a State becomes too oppressive and dehumanising, non-state associations may take a distance from it or even oppose it. These possibilities apart; we need to consider the role of both, especially in the context of Indian society. In India, the state plays a major role in changing the existing social power structure when other associations are there to challenge the pressurise the State to accelerate its machinery for preventing exploitation and injustice.

Among the chief roles of the state we may have here consider promotion and regulation of such physical conditions as hygienic requirements, housing, occupational recreational conditions of health. These are closely linked to conservation and economic utilisation of the natural resources. As we have already noticed this role of the state is manifest in the planning and general control of urban and rural development. The state has a command over resources and it is expected to curb the selfish aims of those who waste resources for immediate gains. The state can undertake vast construction whose benefits can be enjoyed by all for a long time. It has the authority of preserving the natural resources which are threatened by the growth of industrialism. It is a separate matter if a state fails to carry out these activities. There is no political principle to stop the state from playing the role of a legitimate protector of the natural resources and of exploiting natural resources only in judicious manner, in an-environmentally conscious manner.

In conserving and developing human capacities as well as economic resources, the State in expected to promote education and cultural life. In this fashion we can go on describing the state's role because its range as a social agent is vast and limited by only the instruments at its command. One conditions of an ordered society is that it shall be protected by a power which can punish violations. The State has a negative role to play when it has to use force. The force at the State's command makes the community to learn and to entrust to the state the right of enforcement. In a way, the state's role is also to prevent, by using the weapon of force, interruptions in its work. So you can say that the state has both a positive and negative role to play.

Within the comprehensive structure of the state, from time to time, appear temporary collectivities. They lead separate and independent life in the form of associations. They serve the interests for which the state does not or cannot play role. We will now turn to the role of these associations.

Activity 1

Describe, in a note of 300 words, the Indian State's role in solving the problems of illiteracy, overpopulation, low standard of health, poor state of medical facilities and disregard for environmental issues. For preparing the note, read daily newspapers and weekly magazines. Also, interview politically active leaders in your area.

28.4 NON-STATE ASSOCIATIONS

Neither parts of the state nor its mere subjection, non-state or other associations exist in their own right. In certain cases, role of the state and that of other associations overlap. For example, in the sphere of education, the Constitutions insists on universal education and the State is expected to make provision for primary education. At the same time we find also the existence of independent voluntary bodies imparting elementary education through various methods. Further, some areas in which other associations have traditionally played a role, have been transferred to the state. For example, previously trade unions provided relief to the unemployed. Now in many societies the State has taken over this responsibility.

One can assert that the state plays an overwhelming role in development with social justice and promotion of the interests of the disadvantaged. This does not, of course, imply that the role of the other associations is reduced to insignificance. In most areas of social problem, the importance of efforts of other associations has in fact increased, and not decreased. Let us now discuss the nature of other associations.

i) Nature of Other Associations

Associations other than the state are recognised by their voluntary nature. Taking part in the activities of voluntary associations, like political parties, trade union and professional bodies is considered a way of forming a link between the marginal groups and the rest of society. In countries such as the United State of America, voluntary associations are held as significant components of participatory democracy. They integrate the individual or family with the wider society. By the voluntary nature of an associations we mean that it members participate in its activities as a result of their own volition. But you should not equate voluntarism with people's participation in the process of socio-economic development/change.

ii) Difference between Voluntary Effort and People's Participation

Often, associations mobilise people to help themselves by exploring their own potential to solve their problems. But people's participation should not be treated as identical to voluntary effort. It is possible to find that some individuals decide to form an association for undertaking a certain programme. The association many work out its plans and strategies to carry out the programme. This would be known as a voluntary effort. Only when in addition the association seeks participation of members of the community and gets it in full measure, we can legitimately add the term people's participation to the voluntary effort of some individuals. Keeping this important distinction in mind, its is hoped that you will not use the two terms interchangeably. Let us now turn to the main characteristics of voluntary bodies.

28.4.1 Features of Voluntary Organisations

Associations formed on the basis of voluntary efforts are generally called voluntary organisations (VOs). In the terminology of the United Nations, such organisations are known as non-governmental organisations (NGOs). Many use the two terms interchangeably. It is true that both VOs and NGOs are non-state associations; but the element of voluntarism is not necessarily present in all the NGOs. We shall first look at the features of voluntary organisations and then at the differences between VOs and NGOs. Material on both these points is based on Unit 1 of Block 3 of an IGNOU course on Rural Development Planning and Management: RD. D-3. You are advised to consult Block 3 of RD. D-3 for further information on this topic. Voluntary organisations are characterised by the following features.

- Voluntary membership
- Non-profit making
- Formed by the initiative of those inspired by social consciousness about the welfare of the disadvantaged people of society.
- Own set of rules and regulations and outside the administrative control of the government
- Registered VOs are entitled to receive grants in-aid from the government. They may have to accept terms and conditions of the grants-in-aid provisions.

Often it is assumed that most VOs are familiar with the social problems at the grassroots and, therefore, they are also closer to the people. Further, they are supposed to be more committed and zealous than the bureaucratic systems of the government. For the same reason, VOs are also supposed to be more cost-effective than a bureaucratic body. You may have to find out for yourself as to what extent particular VOs conform to these assumed roles. Let us now examine how VOs are different from NGOs.

Check Your Progress 1

i) In which ways are voluntary organisations different from the State?

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ii) Give five examples of voluntary organisations and of non-government organisations in India.

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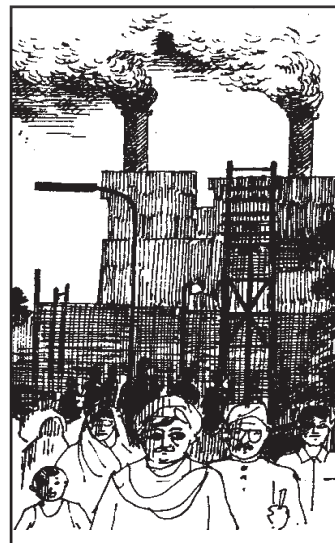
28.5 ROLE OF VOLUNTARY ORGANISATIONS

As we mentioned above, voluntary organisations may be both non-political and politically oriented. In this section, we will be discussing mainly those voluntary organisations which are non-party and non-state. Pre-independence efforts as voluntary action turned out to be politically motivated action. Today, India has a wide range of voluntary organisations. Some are directly political groups while some others operate under the government's directives. The rest are of the non-political type. Kothari (1987: 441) calls that first two 'agency style groups' and the last one as 'small groups working at the grassroots'. We are going to focus on the activities of non-political small groups working at the grassroots. Involvement of voluntary organisations in the process of development is a kind of strategy of the government for mobilizing people's participation in developmental programmes of the State. In this context, voluntary action in development and social transformation has assumed a variety of roles. We will now discuss some of these roles of voluntary organisation..

28.5.1 Voluntary Organisations and Ecology

As we have already learnt in Units 25, 26 and 27 the developmental strategy through industrialism has altered the relationship between nature and human beings. This alteration threatens the survival mechanisms of nature. In the name of protecting forests, the tribal groups have been denied access to their traditional habitat. Due to the government's insistence on building large dams as 'temples' of industrial India, millions have been displaced, without receiving adequate compensation for their losses. It is quite clear that modern industrial growth disturbs the ecological balance which have been evolved by different cultural patterns of living. Most industrial civilisations are now found to be inherently anti-ecological (see illustrations below). The irony is that the very people who worked to nurture their natural environs are now forced to destroy them for the sake of their own survival (See Unit 27)

POWER STATION POLLUTION



We have to also look at the social implications of technologically inspired industrial growth. In developing countries, of such development are inequitably distributed. Consequently, many voluntary organisations have sprung up at the grassroots to ask for better compensation and rehabilitation programmes.

In fact, among the developing countries, India has the largest number of voluntary groups involved in environmental issues. Many of them are concerned with

- i) creating awareness of issues relating to the environment
- ii) protesting against public/private sector projects which are harmful to either the environment or to the people dependent on it.
- iii) solving such environmental problems as deforestation , depletion of grazing land, creation of wastelands, desertification etc.

Among the groups which focus on (i) we can name the centre for Science and Environment, Kalpavriksh, Delhi Science Forum, Lokayan, Bombay Natural History Society. There are also groups involved in but are scattered all over the country, opposing the present forest and wasteland policies , big dams, nuclear stations, missile testing ranges. Organisations such as Appropriate Technology Group, Lucknow; ASTRA, Bangalore ; MCRC, Madras; DGSM, Chamoli, are involved in using technologies which are environment friendly and ecologically benign. They can be grouped as those involved in (iii) of the above listed concerns. The Kerala Shastra Parisad is an example of a group which is involved in almost all of the above three concerns.

Apart from the above mentioned better known groups, there are many small ones operating to save endangered species, preserving old monuments, planting useful trees and repairing old tanks and bunds.

Groups involved in voluntary action to focus interest on environmental issues use a wide range of strategies, ranging from the media to protest meetings, petitions in court and building networks. Stopping of the proposed Forest Bill in 1982 was the result of such strategies. The debate on the construction of the Narmada Valley Project, Tehri Dam, the Munna Dam and Inchampalli Dam or the Koel Karo Dam is another example of voluntary efforts at the grassroots. The efforts are aimed at giving a direction to development which is pro-people and pro-environment. Efforts of DGSM at Chamoli have demonstrated how a mixed species tree plantation scheme with people's participation can provide an alternative to government sponsored and unsuccessful schemes of afforestation. This description should not give you an impression that all is well with voluntary groups working for environmental protection. Like all other voluntary groups they too face many problems which we will discuss in section 28.6 of this unit. We will now move on to the voluntary organisation's role in the area of social problems faced by the Scheduled Castes and Scheduled Tribes.

28.5.2 Role of Voluntary Organisations for Development of Scheduled Castes and Scheduled Tribes

You have already learnt in Block 6 of this course about the problems of denied opportunities in the case of Scheduled Castes and Scheduled Tribes. As shown by Prasad (1987: 588-612), among these groups, missionaries have played a remarkable role in areas of education, health and human rights. For example, the American missionaries opened schools in Nagaland as early as 1830. Lutheran missionaries opened schools in the latter part of the 19th century for both boys and girls in the Chotanagpur area of Bihar. They started dispensaries to serve the Christian and non-Christian public (see Vidyarthi 1977: 40). Later, the Roman Catholic missionaries began their work in the Chotanagpur area.

The missionaries did initially make an effort to convert the people to Christianity. They did not succeed in these efforts. So, to attract the tribals they began to help them in such non-religious affairs as land rights and services. They even took their cases to court and won them in favour of the tribals. This established their credibility in the eyes of the Chotanagpur tribals. According to Roy (1931) the tribals were also protected by missionaries from the clutches of moneylenders. Father Hoffman, a Catholic missionary, organised a cooperative society in 1909. The network of this society in the whole of Chotanagpur provided a strong foothold to the Catholic missionaries in this area. In the tribal area of Madhya Pradesh, Orissa, Andhra Pradesh and Bihar, the missionaries worked for improvement in education and health of the tribals.

Later, during the freedom movement, in 1921, Thakkar Bapa, a Gandhian, established an Ashram at Mirakhedi in Panchmahal District. He set up another organisation, known as Bhil Seva Mandal at Dohad in Gujarat. Not only these two, he established 21 such institutions in various parts of India. Dhebar (1961: 303) has described the history of his role in social service as 'a romance of social work in India'. Thakar Bapa's organisations worked in the field of education and public health. Following this, voluntary efforts to solve the socio-economic problems of the Scheduled Castes and Scheduled Tribes in Bihar were initiated at Seva Kendra. In the 1939 session on the All India Congress at Ramgarh, national leaders such as Mahatma Gandhi, Jawaharlal Nehru and Patel resolved to work for the well being of the primitive and backward sections of Indian society. Rajendra Prasad and his colleague, Sri Narayanji, started Seva Kendra and encouraged people to learn to read and write.

The Banvasi Seva Mandal at Mharajpur in Mandla, another voluntary organisation in Madhya Pradesh, was established in 1945-46. It worked in the area of education among the tribals. It managed also an agricultural farm, three cooperative societies, a mobile dispensary, a training centre for Panchayati Raj etc.

We find that throughout the nineteenth and twentieth centuries, voluntary efforts played significant role. This role was primarily in the area of religion. But in order to increase its appeal, action took place outside the realm of religion. Such organisations as Harijan Sevak Sangh, Nai Talim Sangh and Leper Society represented the humanistic tradition in voluntary action (Prasad 1987: 593).

In India, voluntary efforts after 1947 received a further impetus from governmental support. The government made efforts to work with voluntary agencies for solving the socio-economic problems to backward communities. Many organisations came to the forefront in the tribal areas. These organisations received financial support from the government and the public. For example, Bharatiya Adimjati Sevak Sangh was established in 1948 with the purpose of bringing tribal communities into the mainstream of socio-cultural development of India. This institution had its affiliated bodies all over India. It played a significant role in the formation of government policy for tribal welfare.

Further, organisations such as the Ramkrishna Mission, the Servants of India Society, Seva Sangh, Gandhi Smarak Nidhi, Kasturba Samarak Nidhi, Bharatiya Lok Kala Mandir have made a noticeable impact on public life in India. Educational and medical institutions run by these organisations are quite well-known for their successful role in producing well-trained personnel in the areas of education and health.

Most voluntary organisations play a role in aiding participatory democracy. They take away much of developmental effort from the governmental to the voluntary sector. If allowed they play a successful role in planning, implementation and evaluation of development projects. It has been felt that voluntary organisations can further play important roles in several field of development of the scheduled castes and scheduled tribes. For example, as Prasad (1987: 607) suggests, they can work for correctly recording the landholdings of tribals. They can identify the nature and extent of bonded labor in the tribal areas of Bihar and Madhya Pradesh. Ecological study of primitive tribal groups by voluntary organisations would tell us about their social organisations and the relationships they have with their physical environment. They can also look in the agricultural practices of shifting cultivation in the tribal and hilly areas. There are very few studies of tribal women, who have not yet benefited from developmental efforts.

We have, in the above two sub-sections, discussed the role of voluntary organisations in ecological movements and in the development of Scheduled Castes and Scheduled Tribes, Now we will look at the nature of problems faced by voluntary organisations.

Activity 2

Select a voluntary organisation of your choice and find out about its activities. Write a note of 250 words on its objectives and method of functioning.

28.6 PROBLEMS FACED BY VOLUNTARY ORGANISATIONS

We find that voluntary efforts in India are represented by a variety of groups and individuals. Differences in size, ideology, concern, focus and impact characterise the voluntary sector. Functioning of voluntary organisations is often sporadic and appears in interrupted sequences. This reflects poor planning of ill-conceived programmes. As soon as some kind of momentum is gained and a take-off stage is reached, there comes a long spell of inactivity. Often, voluntary effort remains alive as long as outside help is forthcoming. It stops with the withdrawal of outside source of support – financial or organisational or inspirational. Why it is so?

A striking fact about voluntary action in India is that nearly all of its initiated by outsiders who have to sooner or later leave the place. By and large, as soon as the outside element departs, the developmental effort crumbles and vanishes. Old structures reappear and the status quo is once again ruling the scene. In order to avoid this, it is necessary for voluntarism to grow at grass-roots. The leadership need to come from within the group rather than outside it. Besides this major problem, other factors in the way of voluntary action are as follow:

- i) Most voluntary organisations are happy to work among accessible and relatively better-off groups. Here, they need to make little effort to get results. They do not take on challenges of acute poverty-ridden areas.
- ii) Majority of voluntary groups lack in independent source of income. They depend on an external financial base. Haunted by lack and uncertainty of funds, many of them are compelled to stop functioning mid-way. Whenever funding comes from the government, perennial delays and

cumbersome procedures in the bureaucracy hit the smooth functioning of their projects. Even well planned projects suffer from delays at the implementation stage.

Today we have a very large flow of funds from foreign donor agencies to non-governmental organisations in India. Such bodies, in order to receive funds from foreign agencies, have to register with the Home Ministry. According to Maheshwari (1987: 506), in 1984, foreign contributions to Indian voluntary sector were Rs. 254 crores and increased to 350 crores in 1986. the major donor countries were USA, West Germany, Great Britain, Switzerland, Canada, Holland and Italy. In India, the states of Tamil Nadu, Maharashtra, Andhra Pradesh, Kerala, West Bengal, Karnataka, Bihar and Uttar Pradesh were the main recipients of foreign funds. In case any misuse of funds is proved, the Home Ministry can revoke the registration of the erring agencies. For example, in 1986, registrations of 27 voluntary groups were revoked for violation of rules. It is alleged that often foreign funds are a cover for spy-activity and/or religious conversion efforts. Voluntary organisations in this situation are faced with a real dilemma of accepting or not accepting foreign funding.

- iii) At present, voluntary action is not always initiated by inspired individuals. It has now acquired the status of professionalism. Its focus has shifted from individuals to communities, demanding various skills of trained personnel. Professionalised experts with appropriate training have come to expect corresponding high returns for their skills. Not all organisations can afford them. With the emergence of a certain pattern of employment in the voluntary sector, many young persons join a voluntary group only to move up the ladder. Some of them have little regard for the needs of their particular projects.
- iv) Maheshwari (1987: 567) has pointed out that voluntary organisations are often harassed by the governmental machinery. Only a common platform from by solidarity of bodies may force the governmental bureaucracy to behave more responsibility. In some areas, local landlords, state level legislators and other power holders have threatened voluntary agencies which happen to challenge their unjust supremacy in all spheres of life. Again, in such circumstances, an isolated voluntary body can do little to survive while of federation of voluntary bodies may successfully support its member organisations.
- v) In the case of environmental movements, voluntary bodies are often faced with the problem of lack of expertise and knowledge of environmental problems. Awareness about the problem of ecological balance is of recent origin. Lack of systematically recorded data about ecological disasters in terms of the depletion of forests, soil erosion and over consumption of natural resources dilute many arguments offered by voluntary groups against the government's so-called development projects. Usually, voluntary groups have limited budgets and cannot undertake surveys and environmental impact analyses. For example, voluntary groups, active in the case of Bhopal gas disaster, could not even test samples of water, plant life and food, affected by the gas leakage.

The small size of environmentalist voluntary groups denies them a sympathetic hearing. For example, groups agitating against the building of

dams over the Narmada have been active for the last ten years. Their leaders are arrested and released after a few days and the authorities do not seem to take them seriously. Protest efforts of some groups are considered anti-national, a threat to law and order. The state comes down on them with punitive action.

- vi) Strategies of protest and public interest litigation (see Key Words) by voluntary groups prove to be of little use. This shows the little impact of voluntary action on very important issues of public concern. For example, the government of India gave a clearance to the construction of Tehri Dam while a case against its construction was listed for hearing in the Supreme Court. There is little public debate on issues taken up by voluntary organisations. Many such bodies are active in asking for the rehabilitation of persons displaced due to development projects. No public debate has taken place on the multiple displacement of 150,000 people in the Singruli region (see Jain 1993).
- vii) The politics of utilisation of the natural resources is played by very strong lobbies of powerful interests. The voluntary sector is not able to acquire a 'hearing space' in this power-game. Environmentalists try to explain that issues related to the natural resources are not only those of just distribution. They are fundamentally linked to our understanding of human survival and nature. In a mad rush for consumption oriented cultural practices, nobody wants to give a hearing to environmentalists. This takes voluntary groups to a dead-end. They have to remain satisfied with their efforts to sensitise the public and policy makers to the negative impact of development projects. More than this they cannot expect. They cannot expect to modify governmental policies about its cherished development projects.

Problems faced by the voluntary sector are many as well as formidable. The question is what can be done about this situation. In the next section we will discuss some of the strategies voluntary bodies can employ to improve their effective

Check Your Progress 3

- i) In your opinion, should a voluntary organisation receive funds from foreign donors? Give reasons for your answer.

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- ii) Has the State already played an important role in solving the problems of socio-economic backwardness of the Scheduled Tribes and Scheduled Castes? Give reasons for your answer.

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28.7 SUGGESTIONS FOR PROMOTION OF VOLUNTARY EFFORTS

Our discussion so far has focused on the role of voluntary organisations in the area of socio-economic problems. We have also looked at difficulties faced by the voluntary sector in India. In the last section we spoke about the need of a common platform which can be formed by a federation of voluntary bodies. In fact, in states like Karnataka, Tamil Nadu and Andhra Pradesh, voluntary agencies have formed a federation. This will bring about a feeling of solidarity among them, giving impetus to gather some clout for gaining influence in political terms. Let us see in what other ways they can strengthen their efforts.

i) **Culture and Community Orientation**

People's participation in the Chipko movement (see Jain 1984) has proved that grassroots can provide a strong and sustainable basis to a movement. Without a widespread organisational structure and without a top heavy pattern of leadership, this movement has successfully achieved its objectives of conserving forests and providing the local people control over community resources. The common people of the area have been able to impress upon the outsiders that forests are not a resource for commercial exploitation. The forests are givers of life, livelihood and of water and healthy air. This world-view of Himalayan people has provided them the strength to fight the outsider who have destroyed the culture of their area. The Chipko movement has now risen above the mainstream discourse. It is solidly keeping alive the cultural traditions of the area and undertaking ambitious programmes of afforestation. We can say that this is a way of finding one's way out of the problems mentioned above.

ii) **Organisations of Beneficiaries**

There has been a tradition of voluntary organisations entering certain territories for their activities. Perhaps now the time has come for voluntarism, to grow form within. Those who wish to derive benefits from welfare action need to organise themselves. They need to demand at a political platform and pressurise the administration to provide them amenities and other benefits. For example, agrarian laws have in many states remained mere showpieces. Small and marginalised farmers need to organise and demand effective implementation of agrarian laws.

iii) **Inbuilt and Ongoing Evaluation**

Groups interested in not only the improvement of socio-economic conditions of the deprived sections of society but also in the way of functioning of those involved in the work need to have a process of inbuilt and ongoing evaluation of their projects. In addition a time bound and overall evaluation of projects can provide a cumulative assessment of achievements over a project of time. The final judges of a project and its success are the people themselves. All evaluatory exercises bring to the forefront problem areas and a need to improve on performance by all concerned. Techniques for evaluating such tangibles as economic status, improved health are available and must be used by voluntary bodies to examine their performance. It is necessary to develop methods to evaluate intangibles such as people's participation and democratic processes of decision making, greater awareness of issues etc.

Further, it is important for voluntary agencies to strike a balance between qualitative and quantitative analysis of issues. When a group's focus is on material development, quantitative analysis will be more useful. Similarly when the focus is on people's growth and their organisation, the group will need to undertake qualitative analysis. As material development and the development of people's awareness of their rights and corresponding duties go hand in hand, it would be advisable to pay sufficient attention to both the qualitative and quantitative analysis. Every material gain for the deprived sections must also accompany the ability of the people to receive benefits and to increase their bargaining power. Often, voluntary organisations reject one aspect in favour of the other. But to be effective in the long-run, they need to have a balanced approach of combining gains in economic development with corresponding gains in the organisational power of the beneficiaries.

Activity 3

Imagine you are planning to start an environmental group which will get involved in recycling of waste material. What kind of waste material would you first collect? What will be your order of priorities if you are going to recycle three types of waste material? Write a short note on your plans.

28.8 LET US SUM UP

We started this unit with a discussion of the state as an association. The state was defined as a special category of association. Its characteristics distinguish it from other associations. This was followed by a discussion of the role the state plays in maintaining laws and order within a territory and in maintaining the general well being of its inhabitants. Then we examine the nature and role of non-state or other associations.

Differences were explained between voluntary and non-governmental organisations. We selected two areas, environmental movements and development of Scheduled Tribes and Scheduled Castes, for illustrating the role of voluntary organisations. Then we discussed some of the problems facing voluntary bodies. Finally suggestions were offered to promote voluntary efforts in India.

28.9 KEY WORDS

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| Association | : An organisations of persons with a common interest. |
| Ecology | : A branch of science dealing with the interrelationship of organisms and their environments. |
| Participatory Democracy | : Active partnership of the common people in a government in which the supreme power is vested in the people. |
| Public Interest Litigation | : Intervention by a social action group to make judicial system or courts accessible to the deprived, the poor and victims of social oppression. |

- Voluntarism** : Intentions or motives of those who are assumed to act by their own will and not as determined by the social structure.
- Sovereignty** : An autonomous state, free from external control.

28.10 FURTHER READINGS

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28.11 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- i) The state is not like other associations. It is a category by itself. It is because the state has certain characteristics it does not share with other associations. These are (i) territory, (ii) sovereignty, (iii) coercive power.
- ii) The state is found within a society and, therefore, the state is a narrower entity than a society. It is possible to find a state which encompasses several societies within its territory. Society is also taken as a concept which refers to the chain of relationships between individuals, between individuals and groups and between one group and another. In that sense, the concept of state refers to only particular types of relationships.

Check Your Progress 2

- i) A voluntary organisation seeking funds from foreign donors is the one which has no or little sources of income of its own. Such a body has to depend on funds from national/international donors. In the light of the globalisation of issues, particularly ecological issues, it makes good sense to pool both resources and efforts for creating a better ecologically balanced world.
- ii) It is neither proper to expect the state to solve all the problems of any group of society, nor it is possible for the state to solve all the problems of any group of society. In this sense, we do not find that the state has already solved the problems of the scheduled castes and scheduled tribes. Their problems are many and they need to be solved by both the state and voluntary efforts.

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