UNIT 11 SOCIAL FORESTRY AND JOINT FOREST MANAGEMENT

Structure

11.1 AIMS AND OBJECTIVES

After studying this Unit, you should be able to:

- critically analyse the role and extent of inter-dependence between the communities and forest resources in sustainability and conservation;
- explain the concepts of social forestry, Joint Forest Management and Village Eco-development;
- describe the programmes of the Government for the promotion of people's participation in forest management; and
- outline the performance of these programmes and the factors associated with them.

11.2 INTRODUCTION

The forests are a natural asset of great value, which, are renewable, can be productive and useful under proper management. Forests represent the largest, most complex, and self-generating of all eco-systems. Forests have a

direct and beneficial influence on various aspects like the environment, flora, fauna, and mankind. They act as buffer zones between natural and man-made eco-systems. Globally, around 25 percent of the world's population relies on forests for their livelihoods, many of whom are the poorest. Forests provide US$ 75–100 billion per year in goods and services such as clean water and healthy soils. Forests are home to 80 percent of the world's terrestrial biodiversity. Forests account for about 75 percent of the gross primary production of the Earth's biosphere and contain about 80 percent of the Earth's plant biomass. India faces a critical imbalance in its natural resources base with about 18 percent human and 15 percent livestock population of the world is supported only on 2.4 percent geographical area, 1.5 percent forestsand pasture lands, and 4.2 percent water resources. Increasing population, development programmes and accordingly the invasive use of forests has caused shrinking of forest areas and therefore increase in the pressure for forest products and services. Naturally the rural poor in the vicinity have been the worst affected lot. Managing forests increases the benefits, meets society's needs and maintains its sustainable services for the benefit of present and future generations.

The diversion of forests for various development needs also has contributed to the depletion of these resources. Conventional rural development programmes have seldom taken into consideration this situation and there have not been any specially designed rural development models for the rural areas with populations wholly dependent on the forest resources for subsistence. As a result, various programmes formulated with good intentions have often resulted in conflicting situations, especially in the context of the conservation status of natural resources like forests and wildlife. This has caused further impoverishment of the people. The maintenance of the forest resource base has always been a critical factor in the life of forest fringe communities, but it has seldom been seen as a means of rural development. Concepts of social forestry and participatory forest management have emerged as a response to these circumstances. This Unit aims at providing you an understanding of the concepts and programmes associated with *the forestry aspect* of natural resource management in a rural development environment. Also, the recent trends in the management of forest resources as applied in the social and legal framework of the empowerment scenario of rural life are introduced.

11.3 CONCEPT OF SOCIAL FORESTRY

The term social forestry coin by the West boy and which was used in the ninth commonwealth forest congress in 1968. Prasad (1985) describes social forestry as "Forestry outside the conventional forests which primarily aims at providing a continuous flow of goods and services for the benefit of people". It refers to the promotion and self-help management and use of trees and perennials to sustainably improve the livelihoods of local people, especially the poor, generally using participatory methodologies. Between the 1970s

and 1990s, almost all countries that were or remain in the developing world experienced the introduction of one kind of social forestry or another, either by their government or by non-government organizations at varying scales of implementation and incorporating a mix of practices. Social forestry is 'social' in the sense of being socially configured, that is, adaptable, dynamic, and responsive to the context and social environment.

The National Commission on Agriculture, considering the need to expand the tree resource base of the country, suggested the adoption of *social forestry* in rural are as in 1976. The Sixth Five Year Plan period (1980-85) gave a boost to the afforestation activities with the Centrally Sponsored "Social Forestry including Rural Fuel Wood Plantations" scheme. A series of social forestry projects followed with the support of international agencies including the World Bank, SIDA, DANIDA, US AID, and others.

11.4 OBJECTIVES OF SOCIAL FORESTRY

Social forestry projects aimed at taking the pressure away from the forests by afforestation of all the unused and fallow lands including village common lands, the Government wasteland and Panchayat lands. Planting of trees in and around agricultural fields, along railway lines, roadsides, river and canal banks were carried out to meet the growing demand for timber, fuel wood, fodder, etc., thereby reducing the pressure on the traditional forest area. It was also considered as a means of putting to the optimum use the fallow and degraded lands. Community Development schemes like NREP and RLEGP too had the components of social forestry, but the implementation through the Government establishment was aimed at planting trees as mentioned above. People's participation was envisaged through awareness creation through campaigns and extension services.

In 1976, the commission also highlighted certain aims about social forestry based on the needs of people lives and conditions, as under:

1) Arranging employment to increase family income will eradicate poverty in society.

2) To develop the forest-based industries like a collage.

3) To form the rural youth into the well verse for organise to achieve their destiny.

4) To indoctrinate the value of village-level self-sufficiency and self-management in the production as well as distribution of forest products with social justice.

5) To protect agriculture from natural calamity.

6) To solve the food problem of the rural area to a great extent. Certain edible fruits like cashew, mango, coconut, and palms have high nutritional value and grow under the social forestry programmes.

11.5 TYPES OF SOCIAL FORESTRY

Social forestry activities may be categorized into three groups: farm forestry, agro-forestry and community and extension forestry.

11.5.1 Farm Forestry

Farm forestry incorporates commercial tree growing into farming systems and includes plantations and native forests on farms. By careful planning and location in the landscape, farm forestry can:

- simultaneously address multiple NRM issues, making it a cost-effective public investment.
- provide landholders with an alternative source of income from wood and non-wood products.
- improve agricultural production by providing shelter for livestock and crops.

Individual farmers are encouraged to plant trees in their own farmlands to meet the market requirements of wood products. In five of the states viz. Gujarat, Andhra Pradesh, Rajasthan, Odisha, and Karnataka, tree growing co-operative has been developed on the line of An and cooperative pattern. The village wastelands are taken on a long lease and trees and fodder crops are planted by the members of cooperatives. Farm forestry co-operatives aim at establishing integrated farming systems including agro forestry and animal husbandry livestock, poultry, piggery, etc., the main objectives of these co-operatives are to develop farm forestry on a large scale on wastelands to bring ecological balance and to conserve soil and moisture.

Forest departments, as well as industries, promoted forestry as a diversification option to conventional agriculture in suitable farmlands. In the initial stages, planting material was made available by the state forest departments. Subsequently, industries established buy-back agreements with *tree growers,* and financial institutions also facilitated investments. These systems developed in the states like Punjab, Haryana, Gujarat, Karnataka, Uttar Pradesh, parts of Himachal Pradesh, etc. Now industries have their nursery development programmes and quality seedlings are provided to the farmers with whom they have buy-back arrangements.

The acceptance of farm forestry was not uniform throughout the country. The difference between these regions manifests itself in the number of farmers involved in tree plantation, total trees planted, survival rate, and the place and purpose of planting. For instance, in subsistence areas, trees were mainly grown for household use and to complement or supplement food crops. Consequently, a majority of the trees were planted on homesteads or farm bunds. In some subsistence areas, the government subsidies offered rather than the returns from the tree produce were the main motivation for planting them.

The programme experienced a setback in the wake of smaller holdings coming to the fore and difficulties of the industries to organize these arrangements with smaller farmers and also the relaxed import of pulp. A relatively longer gestation period, demand-driven market, and emphasis on exotics and monoculture also contributed to the slow progress of the programme. However, economic considerations ensured that the system survived in the private sector and is still prevalent in many parts of the country.

11.5.2 Agro-Forestry

Agro-forestry is the system of land use that combines the growing of forest trees along with agricultural crops. The farmlands are used for crops and trees are grown along the margins for various needs of the farmers. In fact, most farmers in India grow crops, rear animals, and plant certain trees on their land, often on the boundary areas. The growing of trees helps in conserving soil, enhancing soil fertility, and providing shelter belts for crops and fruit trees, apart from wood and other produce.

The commonly used definition of agroforestry is "Agro-forestry is a collective name for land-use system in which woody perennials (tree, shrubs etc.) are grown in association with herbaceous plants (crops, pastures) or livestock, in spatial arrangement, a rotation or both; there are usually both ecological and economic interactions between the trees and other components of the system". Recognizing agro-forestry as a viable venture, many business corporations, limited companies such as ITC, WIMCO, West Coast Paper Mills Ltd., Hindustan Paper Mills Ltd., and other institutions initiated agro-forestry research with emphasis on production of improved planting material of the fast-growing species with an objective to meet the demand of wood-based industries.

The agro-forestry programmes in India were started in the late 1970s as a component of social forestry programmes. The Government promoted agro-forestry systems that included fast-growing species like eucalyptus, poplar, sub label, siris, etc. These systems though still prevalent in some areas, have not become very popular because of the market situation, which led to the slump in farm-forestry systems. In the Tenth FiveYear Plan, it is proposed to popularize agro-forestry as a strategy to increase the green cover of the country in areas outside the government forests.

India launched the National Agro-forestry Policy in 2014 and became the first country in the world to have a National Agro-forestry Policy. The policy is not only seen as crucial to India's ambitious goal of achieving 33 percent tree cover but also to mitigate GHG emissions from the agriculture sector. After launching the NAP in 2014, considerable progress has been made in terms of putting it into practice. Department of Agriculture Cooperation and Farmers Welfare (DAC and FW) under the Ministry of Agriculture and Farmers Welfare (MOA and FW) is also playing a significant role in the

promotion of agro-forestry. It has taken a policy decision to include trees in all its programmes, and this will significantly increase tree-planting on farms, especially under schemes funded by the National Mission on Sustainable Agriculture (NMSA). This has so far approved the funding for 80,000 ha of new agro-forestry projects (pers. comm.). Efforts are on to issue guidelines on the production.

11.5.3 Community Forestry

Community forestry is a collective name of a variety of forestry management strategies, which gives attention to the participation of local communities in forest and tree resources management and their use in meeting their daily needs for food, fodder, timber, employment, income, and environment. It is a form of social forestry that helps to promote well-informed decisions as the decision-makers are familiar with the forest and land base in question as well as the concerns and goals of the local population (FAO, 1978). Community forestry entails the empowerment of the local people to take part in the management of natural biological diversity. Forests constitute a major natural resource in the tropics and subtropics on which a large number of people depend for their survival.

In India under the programme efforts have been made in raising trees on community land and not on private land as in farm forestry. All these programmes aim at creating tree resources for the entire community and not for any individual. The government takes the responsibility of providing seedlings, fertilizers, etc., but the community has to take the responsibility of protecting the trees. Some communities have managed the plantations sensibly and in a sustainable manner and the public continues to benefit.

Planting of trees on the sides of roads, canals, and railways, along with planting on wastelands came to be known as ‘extension forestry’, as it increases the domain of forests. Planting of trees in vacant lands in urban areas, mainly along roadsides for beautification and for reducing noise and dust levels, came to be known as ‘urban forestry’. Developing beautiful landscapes for recreation like picnics, jogging, relaxation, education, etc. have been named ‘recreation forestry’. Under this system, wood lots have been created in village common lands, government wastelands, panchayat lands, and urban areas.

11.6 SOCIAL FORESTRY PROGRAMME: AN EVALUATION

Forestry activities since independence fall into three distinct phases. They are as follows. The first phase was the initial *van mahotsava* movement which fails to gain momentum. The second phase was when farm-forestry was promoted in some of the States in the Seventies. The third phase has been the large scale Social Forestry activities started during the Eighties with massive aid programmes. In the developing countries, some of the International

Development Institutions like the World Bank and the Developed Nations, and the Bilateral Countries have been extending financial aid particularly for the development of natural vegetation.

It is pertinent to state that the development of vegetation through Social Forestry Programmes has been given due importance in all the Five-Year Plans of India. In this regard, the main emphasis of the Five-Year Plans is not only to accelerate the speed of the development of forestry but also to create fresh awareness among the rural poor for popularisation of these programmes as well as the expansion of forestry to protect the environment. After 2000 Social forestry activities are expected to be carried out in a comprehensive manner in conjunction with other related activities such as soil conservation, rain-water harvesting, minor irrigation work, suitable treatment wastelands, and afforestation. With the introduction of this scheme, the government is formally encouraging rural participation in the management of natural resources. In order to achieve these new objectives of social forestry, various schemes have been implemented that include: Plan plantation activities under - Integrated Watershed Development Projects, Western Ghat Development Programme, Drought Prone Area Programme, Employment Guarantee Scheme, etc. Non-plan activities such as Kisan Ropwatika Yojana (Plant Nursery by a farmer), Van Mahotsav (First Week of July is celebrated for protecting forests), and development of Central Nursery. After 2001 SFD was given the responsibility to implement watershed development projects under 'Hariyali' in some watersheds. In this project, there was the involvement of villagers in the planning, implementation, and monitoring of the project.

Most social forestry projects, however, came under increasing criticism because they failed to adequately involve the local communities and the rural poor, the main beneficiaries. Instead, these projects catered mainly to urban and commercial interests through the widespread promotion of fast-growing tree species for pulp and paper manufacture, rayon production, urban fuelwood supply, and other commercial uses. On the management front, the main drawbacks included greater emphasis on silviculture, lack of the required extension work, involvement of people and Panchayati Raj Institutions, commensurate modifications in the forest regulations to motivate people to grow trees, and that of orientation for the grassroots functionaries towards the needs of social forestry. Many socioeconomic issues of vital importance such as socio-cultural and economic structures of a village community, which were overlooked during the planning process, later became constraints or limiting factors to the successful implementation of community development projects.

11.7 JOINT FOREST MANAGEMENT

Indian forests cover about 633,400 sq km, or almost one-fifth of the national land area. However, about 42 percent of this is patchy or degraded. All forest land is state-owned, apart from small areas which are community- or

privately-owned. About 200 million of India's population of around one billion are partially or wholly dependent on forest resources for their livelihoods. There are strong co-relations between the locations of tribal people, high-poverty areas, and forests. Pressure from forest-dependent people causes much forest degradation. However, the overall process of degradation occurs through a series of human interventions, with multiple actors, including the forest industry, involved in disturbing the same area of forest at different points in time. With the forest policy of 1988, a radical shift occurred, with conservation becoming a priority, along with an emphasis on meeting the subsistence requirements of forest-dependent people. Joint Forest Management (JFM) subsequently emerged – requiring forests to be protected and managed through partnerships between forest departments and communities. Over the last twelve years, these groups have jostled for positions of influence, attempting variously to fulfill or subvert implementation of the pro-poor forest policy. India has some 200,000 forests infringe villages having a population of over 75 million people. India's forest supports some 270 million cattle, grazing of whom affects 78 percent of forest cover.

India has a long history of local community involvement in managing the forests. It was in this context Joint Forest Management was initiated as a major departure from the traditional approach to the management of the forest. It is a partnership arrangement between the forest department (the legal owner) and the local communities. Through an arrangement, the local communities assume the responsibility to protect and manage the forests and in return for this, they are given access to the products and share of the income from the area.

11.8 BASIS OF JOINT FOREST MANAGEMENT

JFM derives its grounding from the National Forest Policy 1988. Which besides the basic conservation, aims for massive afforestation and social forestry management, and meeting the requirements of the fuelwood, fodder, minor forest produce, and small timber of the rural and tribal population. The objectives of National Forest Policy, 1988 clearly point out the need or a community-based local forest management approach specially to meet the other objectives of the local subsistence needs, expanding forest cover, environment, and forest product. Also, this policy recognizes the intrinsic relationship of the tribal people with the forest and, entrusted tasks to all the agencies responsible for the forest management, including forest development corporations that they should be associate the tribals, people, closely in the protection, regeneration, and development of forest as well as to provide gainful employment to the people living in and around the forest. Subsequent guidelines for JFM were released by the Ministry of Environment, Forest and climate change in June 1990, February 2000, and December 2002. The main highlights of these guidelines are:

A) Legal backup to the JFM committee by registration, uniformity in names, expansion of membership, and MoU between the state government and JFM Committees.

B) To promote the participation of women by including them at different levels of the governing body.

C) Extending the reach of JFM to the good forest areas also alongwith degraded forest areas.

D) Guidance for micro-level planning and guidance for conflict resolution.

E) A better relationship with the Panchayati raj institutions, and

F) Capacity building for Non-Timber Forest Products especially in good forest areas.

11.9 JOINT FOREST MANAGEMENT COMMITTEE/ECO-DEVELOPMENT COMMITTEE

Joint Forest Management Committee (JFMC) is a democratic, decentralized, and transparent local institution of forest and forest fringe dwelling communities, that is part of the Gram Sabha fully or partially and set up as per the provisions of applicable JFM rules/guidelines of the state. Typically, there is one JFMC in one revenue village. However, in special situations, e.g., a historical collaboration between neighbouring villages, or where it doesn't make sense to divide the forest, a JFMC may cover two or more villages. On the other hand, especially in tribal areas, there may be situations where one village may have several dispersed hamlets, JFMCs may be set up at sub-revenue village or hamlet level Structures and nomenclatures of JFMC have varied from State to State.

An Eco-Development Committee (EDC) is similar to JFMCs but meant for villages in Protected Areas and their buffer zones. Their setup, working, role, responsibilities, powers, funds, etc. are as per the state-level orders. Their area of operation is restricted to protected areas, and forest and non-forest areas near protected areas. EDCs are set up with twin objectives – to protect wildlife and other biodiversity, and also undertake eco-development activities in the villages.

The base of the JFM structure, which comprises village-level institutions, is referred to as "forest protection committees". These bodies include a "General Body" and a "core", "Executive" or "Management Committee (MC)" elected by the General Body for discharging the assigned functions. The General Body comprises eligible members of the village. The eligibility criteria for membership vary from State to State. In most states, adults are eligible for joining the General Body. The General Body elects the local community representatives in the Executive Committee. The Executive

Committee has elected members ranging in numbers from 5 to 15. It also includes ex-officio, non-elected members drawn from the Forest Departments, local NGOs, village schools, village administrative and development officers, and in some cases representatives of the Gram or Mandal Panchayats. The States of Bihar, Himachal Pradesh, Karnataka, Jammu and Kashmir, Kerala, Madhya Pradesh, and Punjab give representation for underprivileged communities and castes and women in the executive committee. The term of the Executive Committee is generally for two years in most of the States. However, in Arunachal Pradesh, Jammu and Kashmir, Madhya Pradesh, Maharashtra, Tripura, and West Bengal, the tenure is one year. In Karnataka, Nagaland, and Tamil Nadu, the tenure of the Executive Committee is five years. The Executive Committee undertakes decision-making, planning, and implementation of management plans. By the year 2000, JFM had embraced an area of 102,500 sq. km., which accounted for 39.22 percent of the open forest area of 261,310 sq. km. in India. FPCs in the country numbered 36,130. By March 01, 2002, JFM had covered 140,953.6 sq. km. spread over 63,618 FPCs in 27States

11.10 FINANCIAL SUPPORT

Availability of finance is a critical issue for the success of the JFM system. In the early 1990s there was significant support from several international agencies. According to Ravindranath et. Al. (2000) JF has been particularly successful in states which have received external assistance from the forestry projects. The States of Karnataka, Maharashtra, Madhya Pradesh, Haryana, Himachal Pradesh, Andhra Pradesh, and West Bengal have received external assistance, which the authors attribute as the reason for the States bringing in a higher percentage of open forests under JFM. However, there are problems in assuming that JFM has worked well in all States that have benefited from externally aided projects. The States of Kerala and Maharashtra, which have benefited from externally aided projects, have not really performed well in terms of the multiple criteria for evaluating JFM success. 5 While Maharashtra has done well in terms of coverage, the structuring of FPCs in this State has not been in accordance with the objective of empowering communities. Similarly, the State of Kerala, despite having the benefit of World Bank assisted Social Forestry Project, has not extended the JFM concept beyond “pilot zones”

Besides financial resources have been channelized from the central and state governments especially under the scheme of the integrated watershed development programme, national rural employment guarantee programmes. Also, an increasingly substantial amount has been channelized for forestry development to FDAs and JFMCs to implement the programme like National Afforestation Programme, Green India Mission.

11.11 PANCHAYATI RAJ INSTITUTIONS AND JOINT FOREST MANAGEMENT COMMITTEE

The Panchayati Raj System in India envisages a 'democratic decentralization process in which people at the grass-root level can formulate their course of governance in tune with their general and specific interests. Among the 29 subjects, which have been transferred to the PRIs through the 73rd amendment lies the social forestry, minor form produces, fodder, and fuel. It shows that local stakeholders have a direct say in the policy formulation and management of the flora and fauna of the nearby areas. The new forest policy of 1988, marks a significant departure from the earlier stand of maintaining forest a state affair, to the involvement of communities in maintenance, management, and restoration at the grass-root level. Similarly, Panchayat (Extension to the Scheduled Areas) Act 1996 extended PRIs to the tribal-dominated districts of the different states and in tune with the NFM, it enables them to assume control over their own destiny to preserve and conserve their traditional rights over natural resources.

Gram Panchayats have knowledge about Panchayat's jurisdiction and laws. Therefore, they can help in establishing cordial relations between Panchayat & JFMC. Besides, they have the right to vote as they are a number of JFMC as well as elected representatives of the areas with the backing of the entire community. In case villagers elect the Gram Panchayat Sarpanch or Panch as JFMC president/ vice-president/ treasurer, any other member of the gram panchayat shall be selected as the ex-officio member.

Sometimes, confusion persists over the management of the forest produce especially the right over the Minor Forest Produce (MFP). The ownership of MFP with the PRIs has been accepted only to the extent of making only residual profits of state forest corporation/ federation cooperatives valuable to them. Therefore, the state forest is kept beyond the domain of PRIs, the option of appropriation of MFP by the communities in the JFMCs is available under the JFM regime for the state forest while MFP from the community forest such other forest areas will be at the disposal of PRIs. In the guidelines issued by the Government of India on JFM, it is suggested that the benefit accrued from the non-timber forest produce (NTFP) sales should be shared with all the members of the Gram Sabha including the JFM committee Panchayats & State Forest Corporation have been advised to assist the JFMs for developing skills for handling the NTFP collection, storage, and marketing. In some states, like Madhya Pradesh, the representative of Gram Sabha has been made a number of the executive committee of the JFMC as a measure of conflict resolution. The micro-planning and major decisions are taken in general meetings, there are few chances of conflicts. However, relations between JFMC and PRIs vary from state to state and it is essential to bring harmony between these institutions to avoid any conflicting situation.

11.12 PARTICIPATION OF WOMEN IN THE JFM PROGRAMME

The guidelines called for 50 % of the JFMC general body members to be women and also require 50 % of the women members to be present for a general body meeting. Further, the guidelines also laid down that the management committee or the executive committee should have 33 % of their membership from women general body members. The quorum for holding meetings of the committees should be one-third of women executive members or a minimum of one, whichever is more. Further one of the office bearers of the MC had to be a woman. Similarly, there have been major failures when it comes to efficiency in the distribution of produce. While the distribution of produce has been effective in cases from West Bengal.

The original JFM guidelines issued in June 1990 were "indicative"in nature and served to underline the desirability of a shift in the system of governance of forests in the country. It outlined the need for a participatory approach towards the management of degraded forests by providing suitable incentives to local communities. However, the guidelines did not specify the structure and nature of local bodies that were to be constituted for the purpose. The generality of the circular was exploited by State Governments, most of which accorded primacy to 'conservation', over the livelihood needs of local communities.

11.13 JOINT FOREST MANAGEMENT: AN ASSESSMENT

It is very difficult to judge the success of any scheme as it always carries the mix bag experiences, and Joint Forest management is no exception. The outcome of JFM has been extremely varied considering the enormous diversity in the social, political, economic, and institutional environment. Several studies suggest that JFM had a positive impact on the condition of forests. JFM has enhanced the income-earning opportunities –especially from the collection of non-wood forest products, sale of timber, and wages for various ongoing activities. witnessed an improvement in Afforestation and reforestation. In many states, JFM has broadened its intervention to improve the overall development of the villages, especially through investing in schools, healthcare centres, improving irrigation, agriculture development, etc.

The JFM process in India has suffered from key difficulties and constraints, which have hampered its efficiency in terms of planning, technology adoption, and execution. While case studies from West Bengal denote the successful effort of Forest Protection Committees in micro-planning and technology adoption and practice particularly in relation to natural regeneration, there have been instances where technologies relying on non-mechanical measures have not succeeded due to implementation problems. In

the Uttar Kannada District of Karnataka, studies have indicated that the economic efficiency of biomass produced from plantations under JFM has not been cost-effective as compared to regular Forest Department plantations, although it must be conceded that the methodology of carrying out the cost-benefit analysis was different. The effectiveness dimension of JFM programs has had mixed results, judging by the effects JFM had in improving the regeneration of forests and the standards of living of local communities. In Jammu and Kashmir, West Bengal, Bilaspur, and Hoshangabad areas of Madhya Pradesh regeneration of forests have been reported with positive effects. Sustainable harvesting of NTFPs by local communities is also reported for these areas. However, in South-West Bengal some FPCs experienced failure in conserving forests due to FDs not honouring their agreed commitment of sharing the benefits.

To conclude, the JFM process in India needs to be appreciated and analysed from a wider philosophical perspective that partakes of the issue of changing property rights over forest resources entailed by the process. Such a perspective can provide a better appreciation of the changing policy intent of the Central Government noticed since the National Forest Policy of 1988 and the circular of June 1990. In the case of JFM, the changes in guidelines noted in 2000 and 2002, serve to indicate the growing efforts on the part of the Central Government to fashion JFM as a property right restructuring measure. In India, with forests coming under the concurrent list of the Constitution in 1976, the *de facto* role of the Union Government in forest legislation has significantly increased. Though the Central Government has been exercising persuasive powers to convince State Governments to launch JFM in the true spirit of the National Forest Policy, 1988, there have also been efforts to wield the 'stick' by way of directly channelling financial resources to FPCs.

11.14 LET US SUM UP

With the growing demand, land-use change, and due to anthropogenic pressure globally, forest cover is shrinking rapidly, which brought to the necessity of decentralization and devolution of the governance process. Decentralization and participatory governance have increasingly been advocated especially in the context of natural resource management. Social forestry and Joint forest management are such broader contrive, with some local sub-manifestation, which aspire for restricting growing bio-diversity loss at the same time creating alternative livelihood options for the forest-dependent and communities. Both the mechanism focuses on the relationship among structures, processes, traditions, and institutions which determine how participation occurs, who makes key decisions, how authoritative power is transferred and exercised, and how the responsibilities and benefits are distributed among stakeholders. Social forestry and joint forest management need government support in various forms, including providing a legal basis and technical assistance to ensure community members' communal rights on

forest produce. This unit pointed to the vision and mission of both the programme, their institutional arrangement, which is gradually taking shape in the protection and management of the forest resources in India, and challenges faced in this regard.

11.15 Keywords

Agro-forestry: It involves growing trees in a way to provide the landowners with forest and agricultural products on a commercial basis. The purpose is to have positive interactions between the two systems of forestry and agriculture.

Van Mahotsav: it is an annual celebration of the plantation of trees in India. As it is celebrated in the first week of July, it coincides with the monsoon season.

11.17 SUGGESTED READINGS AND REFERENCES

Baynes J, Herbohn J, Smith C, Fisher R, Bray D (2015). Key factors which influence the success of community forestry in developing countries. Glob Environ Chang 35:226–238.

FAO (1978). Forestry for local community development. Forestry paper 7. FAO, Rome.

FAO (2012). Community-based forestry. Retrieved from www.fao.org/ forestry/participatory

Ravindranath N. H., Rajiv Kumar Chaturvedi and Indu K. Murthy (2008). Forest Conservation, Afforestation and reforestation in India: Implications for forest carbon stocks, *Current Science*, Vol. 95, No. 2, July, Retrieved from ww.inseda.orgSocial%20Forestry-002.doc

Pant M. M. (1980) The Impact Of Social Forestry On The National Economy Of India, *International Tree Crops Journal*, 1:1, 69-92, Doi: 10.1080/01435698.1980.9752716

India: State of forest report (2017). Available at http://fsi.nic.in/ details.php?pgID=sb_64

Joint Forest Management and Community Forestry in India: An Ecological and Institutional Assessment, Oxford and IBH, New Delhi, pp. 279-318.

Westphal, Lynne M. (2003). Social Aspects of Urban Forestry: Urban Greening and Social Benefits: A Study of Empowerment Outcomes. *Journal of Arboriculture* 29(3):137-147.

Bhattacharya, Ajoy Kumar (2001). *Community participation and sustainable forest development, globalperspective*, Concept publishing company, New Delhi.