

## **CHAPTER - 9**

### **FOREST DEPARTMENT**

9.1 Rajasthan, being the largest state in the country, has geographical area of 342 lakh sq. kms. which is 11 % of country's geographical area. There is marked difference in the physiographic features of the State. The Aravallis, one of the oldest mountain systems, divides the State into two unequal parts. The Aravallis cover over 30% of the State. A vast expanse of arid and semi-arid tract lies in the west of the Aravallis.

9.2 Rajasthan has the distinction of having largest population of cattle, sheep and camels. The livestock constitute an important component of State's economy, particularly in its western parts, where nearly two third of the population is engaged in animal husbandry and allied activities. The ratio of livestock to human population in the state is approximately 1:1 as against the national average of 1:2. This indicates the excessive biotic pressure on the limited forest resources of the state and is also a threat to the agriculture.

9.3 National Forest Policy (NFP) 1988 envisages that 33% of the geographical area should be under forest or tree cover. The State Forest Policy has not been officially announced but for all practical purposes various strategies, plans and programmes are taken up within the overall framework of the National Forest Policy with special emphasis on combating desertification, checking soil erosion and denudation with massive people's movement.

9.4 The present forest area of the State is only 9.5% of its total geographical area, which is far below the national average of 23% and 33% as envisaged by National Forest Policy 1988. Considering the existing extent of forest area and availability of non-forest wastelands, about 20% of the state's geographical area can be brought under forest or tree cover by adopting appropriate technologies and providing required level of investment by 2016.

9.5 The existing area under various Protected Area (PAN) is 2.8% of the state's geographical area which compares favourably with that recommended by the Wild Life Institute of India for Rajasthan which envisages 3.1% of geographical area of the state under PAN. The state has proposed world heritage sites like Sambhar lake, other wetlands, sacred groves, locally called organs and other similar areas rich in biodiversity, which are monuments of our rich cultural heritage. On a conservative estimate these areas constitute about 1.8% of the geographical area. Considering all these aspects it is possible to have 4.8% of geographical area of the State for biodiversity purposes.

9.6 During Tenth Plan, likely expenditure to be incurred is Rs. 32856.54 lakhs including Rs.29119.33 lakhs under externally aided

scheme Rajasthan forestry and Bio diversity project. During Tenth Plan, the important achievements made are as under: -

- Afforestation activities undertaken in 1.98 lakhs hectares.
- Enhancements of growing stock of the state forests from 19 million cum to 31 million cum.
- Employment generation of 509 lakhs man days.
- To involve local people in forest management under Joint Forest Management, 4691 Village Forest Protection & Management Committees have been constituted and these institution are acting as "social hub" besides being custodian of natural resources in their areas. These committees are managing around 7.69 lakhs hectares of forest/ plantation area.

9.7 During Eleventh Plan, the objective for Forestry are

- To increase the green cover of the state.
- To conserve forest, wild life & entire bio-diversity of the forest eco system.
- To arrests the march of the desert & combating desertification.
- To enhance bio-diversity of forest land.
- To augment supply of firewood, fodder & other forest produce.
- To ensure livelihood security of people living around forests including the tribal community by employment generation.
- To enhance recharge of ground water by rain water harvesting.
- To involve local people in the village forest protection and management committees and to empower them for taking decisions and to act as a "Social hub" besides being custodian of natural resources in their areas. Also Janta Van Yojna will be implemented to make Joint Forest Management more effective so that from the initiation of planning process villages can be associated with the forestry activities.

9.8 For Eleventh Plan, an amount of Rs.19700.04 lakhs is proposed while amount proposed for Annual Plan 2007-08 is Rs.13200.00 lakhs. The scheme wise details of outlay are as under :-

(Rs. In Lakhs)

S. NO.	Scheme	Proposed Outlay	
		Eleventh Plan 2007-12	Annual Plan 2007-08
A. Forestry			
1	Working Plan Forest Demarcation & Settlement	530.00	72.00

S. No.	Scheme	Proposed Outlay	
		Eleventh Plan 2007-12	Annual Plan 2007-08
2	Forest Protection	1390.00	225.00
3	Forest Development & JFM	2490.00	340.00
4	Training Research Extension & Education	405.00	51.00
5	Preservation of Wild life and Biodiversity Conservation	1585.00	212.00
	Total	6400.00	900.00
B.	Twelfth Finance Commission	1500.02	500.00
C.	Externally Aided Projects -		
	Rajasthan forestry and biodiversity project	11800.02	11800.00
	Grand Total	19700.04	13200.00

9.9 Scheme wise details of Eleventh Five Year Plan (2007-12) & Annual Plan 2007-08 are as under :-

#### **Working Plan, Forest Demarcation & Settlement**

9.10 Working Plans are an important document for Forest Management. Working Plan is the instrument by which the resource inventory of forest divisions is assessed from time to time. But over the years the importance of Working Plans has been diluted and preparation of working plan has been relegated to back seat. In order to facilitate preparation of working plans, it is proposed that the Working Plan offices are proposed to be equipped with computer hardware & software, printers, UPS facilities, etc. along with operators on contract.

9.11 Consolidation, Demarcation & Settlement is an important component in forestry as it demarcates the forest boundary and enables the custodians of the forest to know the land under their possession. Construction of boundary pillars have been given top priority.

9.12 Forest land records and maps are very essential for forest management and administration. It is essential that beat maps are available at beat level, range maps at range level and division maps at division level. It is proposed that new copies of existing maps will be prepared under the XIth Plan and will be made available at all level. The following strategies will be followed in this regard:

- Top priority for construction of boundary pillars.
- Timely preparation of working plans.
- Survey, demarcation, mutation and notification of remaining forest areas.

- Modernisation and outsourcing of survey work., preparation of maps of forest areas including superimposition of revenue maps on forest maps.
- Strengthening of land record keeping system at division level & at range level.

9.13 An amount of Rs 530.00 lakhs for Eleventh Plan and Rs.72.00 lakhs for Annual Plan 2007-08 has been proposed for the scheme.

### **Forest Protection**

9.14 The forest ecosystems of the state are under tremendous biotic pressure. At present 12 to 16 sq. km. area is looked after by one forest guard. The workload under the charge of other supervisory staff is equally heavy. Considering the excessive biotic pressure, it is a highly impossible task to protect the forest against illicit felling, encroachments, illegal mining, incendiary fires, poaching and smuggling. There has been no recruitment of frontline staff for last twenty years. The foremost task at hand is to protect the existing forest resources by adopting the following strategies:

- Strengthening of institutional framework along with supporting infrastructure.
- Providing incentive to informers leading to detection of forest offences.
- Institutionalising participatory forest protection and management systems.
- Modernization of protection machinery by providing mobility and communication network.
- Undertaking modern forest fire control methods.

9.15 An amount of Rs 1390.00 lakhs for Eleventh Five Plan and Rs.225.00 lakhs for Annual Plan 2007-08 has been proposed for the scheme which will also cover 25 % state marching share of integrated forest protection scheme.

### **Forest Development & JFM**

9.16 With a view to meet the forest biomass based needs of the local communities and the state it is essential to undertake appropriate strategies for conservation., management and sustainable development of the forest to bring them to an optimum level of productivity and expand forest cover out side the traditional forest boundaries to achieve the proposed policy goal of having 20% area by 2016 under proper forest or tree cover. As per Forest Survey of India Report 2003 the existing Forest cover for Rajasthan is 15826 Sq. km (4.62% of Geogr. Area of State) and the Tree cover in Non-forest area is 8638 Sq.km (2.52% of Geogr. area of the State) making the total Forest & Tree cover as 24464 Sq. km. i.e.

7.15% of geographical area of the State. For increasing Forest and Tree Cover, the following development strategies are proposed during XIth five year plan: -

- Eco-restoration of degraded forests through closures, tending and silvicultural operation, in situ soil and moisture conservation measures, adopting low cost regeneration options such as direct seeding and cutback operation with supplementary multi-tier plantations of indigenous and site specific species.
- Promotion of Agro/Farm Forestry on private lands which constitute approximately 61% of the area of the state.
- Pancyati Raj institutions will be actively involved in plant raising and their distribution. During the year 2007-08, 50 lacs plants will be raised by PRI institutions and will be distributed in subsequent year.
- Promoting urban forestry in the major urban centers (cities and townships) to provide green lungs and improve the general environmental conditions as well as for pollution abatement.
- JFM consolidation through entry point activities and skill development for income generation.
- Creation of herbal gardens and bud orchards.
- Development of eco-tourism sites.
- Productivity enhancement through cultural operations in suitable areas.

9.17 World Food Programme has been merged with Forest Deveopment and JFM. Under this scheme welfare of rural poor through afforestation with World Food Programme assistance is under implementation in four tribal dominated districts namely Udaipur, Chittorgarh, Banswara and Sirohi of the state. Under this programme, the labourers, who are mostly poor & work on forestry works, are provided with foodstuff wheat and pulses at a concessional rate. The State Government has to bear the inland transport, supervision and distribution cost of this food to the labourers.

9.18 Total amount proposed under Forest Development & JFM scheme during the Eleventh Plan is Rs. 2490.00 lacs while for Annual Plan 2007-08, an amount of Rs. 340.00 lacs is proposed for carrying out the proposed activities.

### **Training, Research, Extension & Education**

9.19 Research, to improve forest management has been a mainstay of forestry science under which the study of plants with respect to their biophysical environment is done. In view of the recent transition of society's environmental expectations, forestry science has to address the functional linkages between people and forests. In order to ensure

sustainable development, forest management should develop technology to generate stable, holistic models based on ecosystem dynamics. These will focus on key interactive biophysical and socio-economic elements of forest performance leading to improved cost efficient management options.

9.20 The technical and professional strength of the department lies in the capability of technically trained manpower. Reorientation of the staff is also required to update and upgrade the technical knowledge and skills of the staff for participatory management. Intensive training programme have also required for addressing the training needs of village forest protection and management committee members, NGOs, public representatives and government officials. System of incentives and awards is also required for motivation. The following strategy will be adopted in this regard.

- Outsourcing of research work in existing institution.
- Modernisation of training facilities at forestry training institutes.
- Adopting E-governance.
- Increased emphasis on communication, extension and training by organizing trainings, van mela, van mahotsav, activating van chetna kendra, exchange visits, creating smriti van Eco-club, etc.

9.21 The outlay proposed under this scheme for Eleventh Plan is Rs. 405.00 lacs and for Annual Plan 2007-08 an amount of Rs. 51.00 lacs is proposed.

### **Wildlife Preservation and Biodiversity Conservation**

9.22 The state has 2 National Parks, 25 wild life sanctuaries spreading over 9828 sq. km, which is nearly 2.8 % of the geographical area of the state. The vast floral and faunal diversity of the state is evident from the fact that there are about 2500 species of plants, 450 species of birds, 50 species of mammals, 20 species of reptiles and 14 species of amphibians besides numerous species of insects, butterflies, micro flora and fauna. A large number of big and small water birds scattered all over the state including the recently created wetlands along Indira Gandhi Nahar have enhanced the habitat diversity in the state. For improvement and development of national parks, sanctuaries and closed areas following measures will be taken.

- It is necessary to create inviolate spaces for the wild life so as to minimize human interference in the protected areas in the interest of their conservation. To achieve this, relocation of villages situated inside these areas should be carried out amicably in phased and time bound manner. Relocation package incorporates adequate means of livelihood, proper shelter and grazing needs of the people being relocated.

- Participatory eco development works will be taken-up to secure the cooperation and participation of local people residing on the fringes of protected areas as well as inside the protected areas.
- Emphasis will be given on drainage line treatment and other water conservation structures to ensure famine proofing of sanctuaries.
- Development of wetlands will be taken up inside as well as outside forest areas, based on species of birds, reptiles and flora preservation of wetland ecology.
- In protected areas, emphasis will be on habitat improvement by way of natural regeneration, drainage line treatment and grassland development in gaps. Only selective planting would be proposed on minimum essential scale. It will enable treatment of more areas in given funds.
- Promoting Eco-tourism by construction / improvement of nature trails, wide publicity by way of wide distribution of folders, training of nature guides and providing camping facilities etc.

9.23 Total outlay proposed under this scheme during the Eleventh Plan is Rs.1585.00 lacs. For Annual Plan 2007-08, an amount of Rs. 212.00 lakhs is proposed for carrying out the proposed activities.

### **Twelfth Finance Commission**

9.24 Looking to the increasing threats on meager forest resources of the state, forestry development activities will be carried out during Eleventh Plan period from funds provided by 12th finance commission. Priority has been accorded to forest protection, infrastructure development & human resource development. An amount of Rs.1500.02 lakhs has been proposed in the Eleventh Plan while an amount of Rs.500.00 lakhs is proposed for Annual Plan 2007-08.

### **Externally Aided Project**

9.25 The Externally aided Rajasthan Forestry & Biodiversity project (RFBP) was started during the year 2003-04 with the assistance from Japan Bank for International Cooperation (JBIC). The project is being implemented in Ajmer, Alwar, Banswara, Bhilwara, Chitorgarh, Dungarpur, Dausa, Jaipur, Bundi, Sawaimadhopur, Pali, Sikar, Sirohi, Tonk, Rajsamand, Udaipur, Bikaner & Jaisalmer districts. The total cost of the project is 442.00 crores, out of which Rs. 369.54 crores is loan component. About 1.24 lac ha. area is to be treated under this project. Rajasthan Forestry and Biodiversity Project is likely to be completed by 2007-08. Second phase of the project with an estimated cost of Rs.561.63 crores is under consideration.

9.26 The Annual Plan outlay, for RFBP for the year 2007-08 is proposed as Rs. 11800.00 lakhs, while an amount of Rs. 11800.02 lakhs has been proposed for the Eleventh Five Year Plan.