CHAPTER - IV

GROWTH AND DEVELOPMENT OF
SOCIAL FORESTRY IN ANDHRA PRADESH
Introduction

Andhra Pradesh has had a great spread of rich and valuable forests in the past. The population was small and there was no pressure on forests for their timber and fuel requirements. Many rulers, Jagirdars and Zamindars protected the forests under their rule because of their fondness of Shikar. With the advent of British rule, the forests were destroyed as they considered the forests an inexhaustible source of raw material for their defence, industrial and commercial purposes. With the astronomical increase in the population of both people and cattle, the pressure on forests for their requirements and cultivation has tremendously increased. This, coupled with the setting up of many timber-based industries and multipurpose programmes in the State has further added to the pressure on the ever shrinking forests.

As a consequence, heavy destruction and disturbances to the forests due to various reasons, many drastic changes in the eco-system have occurred. The spate
of droughts and floods in recent times are not due to any other single factor, but for the denudation of the forests and the consequent siltation of rivers, lakes, and other water reservoirs. The shortage of fuel and timber is also due to thoughtless felling of the forests. The forests which protect the soil, conserve the moisture, attract monsoons, ameliorate the climate and make this planet safe to live on are neglected, ruthlessly exploited and mercilessly hacked as their protective role in the eco-system is not appreciated.

After experiencing the adverse effects like droughts, floods etc., the truth that forests are essential for our survival has dawned upon the people and a silent revolution is taking place in the rural scenario of our State and more and more people started planting trees on their lands, in houses etc.

Andhra Pradesh - An Overview: Physical and Demographic Features

Andhra Pradesh is situated between the latitudes 13°N and 20°N, and longitudes 77°E and 85°E. The State has a long coast line of 960 Kms. The State is divided into 23 districts for administrative purpose. The ten districts in the North - West comprising Mahaboobnagar, Hyderabad Urban, Ranga Reddy, Medak, Nizamabad, Adilabad, Karimnagar,
The State can be divided into three distinct physical zones, viz., the Coastal plains, the Eastern Ghats, and the Western Penneplains. To the West of the Coastal plains lie the Eastern Ghats, a series of hills except for a wide stretch of river basins between the Godavari and the Krishna. These broken chains of hills are well-wooded, with an annual
rainfall of about 1000 mm. In the rest of the State, a large and wide belt covering the western part consists of the Deccan Peneplains, developed on the Archean genesis. All the Telangana districts, part of Kurnool district and the whole of Anantapur district of Rayalaseema fall under this region. This region is a scanty rainfall zone where dryland farming is mostly prevalent.

Climatic Conditions

Andhra Pradesh receives its rainfall, both from the South-West as well as the North-East monsoons. On account of the varying land formations of the plateau, the East coast and the intervening hill ranges, the effects of the monsoon vary in different regions. Most of the rainfall during the South-West monsoon occurs in the months of August and September. Rayalaseema is a zone of precarious rainfall, the annual average being 672 mm. The maximum rainfall received here is in November. Agriculture depends heavily on the monsoon, which often fails. This area therefore, has long been known as "the stalking ground of famines." The coastal area generally receives the highest average rainfall of about 1000 mm. The coastal area is quite often lashed by depressions and cyclonic storms occur in the months of October and November.
The State may generally be said to have a hot summer and pleasant winter. The period from March to June is fairly hot throughout the State, May being the hottest month. The maximum and minimum temperatures for the State are 45°C and 11.1°C.²

Andhra Pradesh has a river system with a total length of about 4,480 kms. Tanks and Ponds cover about 10,125 hectares, and Reservoirs cover 1,11,375 hectares. The major river systems which drained the State are the Godavari, the Krishna and the Pennar which ultimately developed the delta systems. Besides these major rivers, there are about forty and odd medium and minor rivers draining the State.

Forests

Andhra Pradesh occupies fifth place in India both in Geographical area as well as population. Out of the total 275 lakh hectares of Geographical area in our State around 64 lakh hectares or 23 per cent of the area is under forests. This area also has only 40 lakh hectares has real forests and the remaining 24 lakh hectares contain only degraded forests. To achieve the National Forest Policy target of one-third of Geographical area to be under forests, still there
is a need to raise ten per cent to fulfill the condition of the Forest Policy.

The average annual turn-over of the forest produce in the State is about 1,50,000 cubic meters of timber, 5,00,000 metric tonnes of fuel wood and 3,00,000 metric tonnes of bamboo. It indicates that such large quantities of forest produce is required to be produced on sustained basis to meet the needs of forests based industries, of the people for small timber, fuelwood and other needs of the people and cattle. This is impossible to be achieved exclusively from the traditional reserve forests, in the absence of a special drive geared on a massive scale.

Apart from the above productive needs of forests which can be quantified, the protective role of forests, which can't be assessed, is very important in the ever deteriorating eco-system. To put it a single sentence - "The survival of the mankind is dependent on the survival of plants and animals."

**Forestry Under Five Year Plans**

During the First Five Year Plan (1951-56), the major emphasis of the State Forestry was on consolidation of Panchayat and Estate forests and preparation of working plans.
The Second Five Year Plan (1956-61) marked the initiation of soil-conservation activities and raising coffee plantations in Araku hills of Eastern Ghats. Raising of quick growing species of eucalyptus, subabul and bamboos, soil and water conservation schemes, and creation of industrial infrastructure were the highlights of the Third Five Year Plan (1961-66).

Three annual plans, Fourth Five Year Plan (1969-74), and Fifth Five Year Plan (1974-79) emphasized raising of plantations on a commercial scale. During these plans the major investment was on raising plantations of teak and eucalyptus.

During the Fifth Five Year Plan, a separate institution (Andhra Pradesh Forest Development Corporation) (APFDC) was established to raise plantations on a commercial scale by drawing finances from various financial institutions. During this Five Year Plan, some of the afforestation activities such as shelterbelt plantations in coastal areas, fuel and fodder plantations in drought prone areas and tribal areas were also taken up.

Only during the Sixth Five Year Plan period (1980-85), emphasis was given to creating wood resources both in public and private agricultural and village/Government
wastelands. During this plan period, 34 per cent of the total outlay (100 million rupees) was allotted to Social Forestry activities.

In the Seventh Five Year Plan (1985-90) main stress was given to the requirements of the rural community, for instance, fodder, fuelwood, green manure and small timber. Apart from this there is a stress on giving employment opportunities to the local people in this plan period. During the Seventh Five Year Plan period the financial allocation for Social Forestry in the State has been stepped up considerably. Of the total allocation of Rs. 1,85,000 lakhs to the Forest Department, Rs. 1,65,200 lakhs was earmarked for the Social Forestry Programmes. Further, under the poverty alleviation programme such as the NREP, RLEG, DPAP 20 per cent of the total funds are earmarked for the Social Forestry.

Social Forestry various Programmes of A.P. State

The forests in Andhra Pradesh are performing a vital function in meeting the domestic needs of fuelwood, fodder, green manure, small timber and other forest products (mostly through illicit removals). The fuelwood consumption survey indicated that the domestic fuelwood requirement for Andhra Pradesh was about 15 million tons annually. Out of
this, 75 per cent of the demand was estimated to be met from agricultural residues, cowdung, or from privately owned tree lands leaving a balance of about four million tons of fuelwood needs to be met from public forests. But only about 0.35 million tons of fuelwood is made available annually by the Forest Department to the domestic sector. 7

To bridge the gap between supply and demand of forest products, especially fuelwood, A.P. Forest Department called for a two-pronged approach in the late 1970's. One line of action proposed was to continue the reforestation of public degraded forests with the aim of meeting local requirements of fuelwood, fodder and other forest products. Another was to develop or promote extensive multipurpose wood resources on private, village, and Government lands in the name of "Social Forestry."

As noted in the discussion in the preceding section, Social Forestry in Andhra Pradesh did not make much headway till the early 1980's. Only recently, funds from various sources (inside and outside the Country) were pooled to organise the activity on a massive scale. The main activities of all Social Forestry Programmes consists of:

1) Raising large scale nurseries of tree seedlings throughout the State.
2) Farm-forestry.

3) Planting of trees on community lands like Panchayat and village porombokes, to form village woodlots.

4) Planting in the foreshore area of tank beds, and

5) Planting of trees in rows along roadside avenues, canal-banks, and railwaysides.

Now many developmental schemes have a Social Forestry component. The programmes which are under implementation with Social Forestry in Andhra Pradesh include:

**National Rural Employment Programme (NREP)**

The NREP is a centrally sponsored scheme with the expenditure shared equally by both the Central and State Governments. Social Forestry forms an important component under NREP and 20 per cent of allocations are earmarked for the purpose. The scheme covers all the districts in the State. Works envisaged under the programme are: raising plantations, avenue plantations and distribution of nurseries. The allocation of funds between the Forest Department and the Mandal Praja Parishads is at the ratio of 65:35.

**Rural Fuelwood Plantation (RFWP)**

This is also a Centrally sponsored programme now being implemented with a view to mitigate, to some extent, the acute shortage of fuelwood since 1980-1981.
The RFWP scheme was introduced in the Sixth Five Year Plan to take up fuelwood plantations in the districts which were considered chronically deficient in fuelwood. The objective of the scheme is to augment fuelwood production to make it available to the rural people near their habitations.

It involves raising of fast growing species, fodder and small timber, both in block plantation and farm-forestry. It is a Centrally sponsored scheme, with 50 per cent of the plantation given as grant assistance to the States, and 100 per cent to the Union Territories.

The scheme was originally known as Social Forestry including RFWP was continued in the Seventh Five Year Plan. Simultaneously the farm-forestry component of the old scheme was dropped since a new scheme for Decentralised People's Nursery (DPN) was introduced. The scheme was re-named in 1986-87 as "Rural Fuelwood Plantations and Afforestation of Eco-Sensitive Non-Himalayan Areas."

Special Component Plan (SCP)

The SCP is funded by the Central Government. It envisages raising of nurseries of fuelwood, fodder, small timber species including low cost fruit species exclusively for identified scheduled caste beneficiaries. These plantations help the people in the rural areas to meet their
fuelwood needs by planting the seedlings distributed from these nurseries. The SCP is expected to act as a subsidiary supporting scheme under the Integrated Rural Development (IRD) and help the weaker sections to cross the poverty line.

The identified beneficiaries are supplied with nurseries by the Forest Department. Each individual is allocated 50,000 seedlings. All the necessary inputs required to raise the nursery will be supplied to the beneficiaries and after the plants grow fully the department will purchase the seedlings at the cost of Rs. 0.25 per each seedling after deducting the cost of material supplied. In addition, a bonus of Rs. 0.25 is paid to each beneficiary. In this way substantial income is assured to the beneficiaries under this programme.

Drought Prone Area Programme (DPAP)

Various schemes like soil and moisture conservation works on hill slopes adjoining farm lands, development of sheep and cattle pastures, afforestation of degraded scrub forests etc., have been implemented in the drought effected areas of the State since 1974. These schemes were carried-out in the districts of Chittoor, Anantapur, Cuddapah, Kurnool, Nalgonda, Mahaboobnagar and Prakasam.
The Drought Prone Area Programme (DPAP), which was formerly known as the Rural works programmes, was initiated in the Second Five Year Plan of the Fourth Five Year Plan primarily with a view to mitigating the severity of the drought conditions in the areas covered by the programme through labour intensive and production oriented works like soil conservation, development of sheep and cattle pastures, afforestation of degraded scrub forests, and road buildings, etc.

The main objectives of the DPAP are:

1) Reducing the severity of the impact of drought.

2) Stabilising the income of people, particularly weaker sections of the society, and

3) Restoration of the ecological balance.

Rural Landless Employment Guarantee Programme (RLEGP)

The Government of Andhra Pradesh in their G.O.Ms. No. 509, Panchayat Raj and Rural Development Department, Dated, 29-8-87, have entrusted the implementation of Social Forestry activity to Forest Department, Integrated Tribal Development Agency and Mandal Praja Parishads only from 1988-89 onwards. Thus, these agencies alone are implementing the Social Forestry Programme now. All the districts in the State except Hyderabad, are covered by this programme.
The role of the Forest Department is limited to Mandal Praja Parishads and it supplies seedlings for raising plantations. So far RLEGIP works have not been undertaken by the Forest Department.

RLEGIP has been launched in 1983. The programme aims at providing job opportunities to at least one member of each landless family in rural areas. The schemes to be selected would be located in such areas as are traditionally backward and where there is large concentration of unemployed landless labour.

Funds will be released to the States up to the extent they specifically indicate their readiness to undertake and accomplish programmes relevant to the main objectives of the 20 point programme. The RLEGIP is being funded 100 per cent by the Central Government.  

The RLEGIP aims at creation of tangible assets capable of boosting production. Among these will be rural link roads, field irrigation channels, land development, reclamation of wastelands, Social Forestry, Soil and Water Conservation etc.

The State Government and the Union Territory administration have been required to prepare specific work programmes for approval and sanction of the Central Government.
Jawahar Rozgar Yojana (JRY) (1989)

In the place of NREP the Jawahar Rozgar Yojana has come into existence in 1989. Social Forestry has been given a place of pride in the JRY. The main objectives in implementation of Social Forestry schemes under JRY is to provide employment to the unemployed agricultural labour in the rural areas. To achieve this objective, labour oriented works has been taken up like (planting of all types of fruit, fodder and fuel trees) raising of nurseries, raising of plantations in degraded forests, communal lands, raising avenue plantations, etc.  

Make Indian Green (MIG)

The movement of Make Indian Green was started in pursuance of G.O.Ms. No. 366, Dated, 7-5-1977 of the Government of Andhra Pradesh, Persuant to these orders, committees for the "Make India Green Campaign" were setup at the State and district levels. (and huge amount have been spent for raising distribution of seedlings free of cost to Government Institutions and to people at large).

A large numbeer of seedlings have been distributed free of cost to people to plant them either in their backyard or on the farms. Since seedlings for distribution are also being raised under other schemes like Rural Fuelwood
plantation, it was proposed that, in future, instead of raising seedlings, the demonstration plots of one hectare in size should only be arranged under this scheme in each Mandal to popularise tree plantation.  

Decentralised People's Nurseries (DPN)

The scheme of Decentralised People's Nurseries (DPN) was introduced in 1986-87 with a view to promote people's participation in afforestation and other similar activities. The objective is to produce maximum possible seedlings in the people's sector. The scheme also envisages making the seedlings of desired species locally available in adequate numbers. It is also expected that cost of raising and subsequent planting by the users will be reduced and a market will be developed for seedlings on a regular basis.

The decentralised nursery programme has enabled decentralisation of production of seedlings with the help of the people.

Decentralised School Nurseries (DSN)

In order to create and develop love and respect for children, school children are being involved in raising nurseries in their schools. The primary objective of raising seedlings in schools through school children is to enlighten them about the importance of forests, environment, and ecology.
Under this scheme the Forest Department supplies the required polythene bags, seeds, manure, etc., to the schools and the seedlings are raised by children under the technical guidance and supervision of the forest personnel. The seedlings raised in such school nurseries are purchased by the Forest Department at the time of planting season at a flat rate which provides adequate incentive to the school. The school management can utilise the income that is generated by this work for development and betterment activity of the poor students, for providing them books, mid-day-meals and other financial assistance. The management can also utilise the money for development of the institution.

Silvi-Pasture Scheme

This scheme was started in 1986-87 as a Centrally sponsored scheme in the Seventh Five Year Plan to augment production of grass and fodder. The objectives of the scheme are to make available nutritious grass and fodder and to provide it at reasonable prices to the rural population so that they are encouraged to do stall feeding of their cattle.

Fodder shortage is acute shortage for those dependent on common resources. Estimated cattle population is around 400 million, fodder availability in relation to requirement is only 20 to 30 per cent. During drought the Government spends crores of rupees bringing fodder from other
States to relieve the situation. In order to strengthen the fodder situation in the Country, the NWDB has formulated a Silvi-pastural Scheme with the above objective.

Central assistance of 50 per cent of the reckoned cost is provided to the State Government, subject to a ceiling of Rs. 1250/- per hectare.

**Tree Patta Scheme**

This scheme has been introduced by NWDB, where the beneficiary will be given ownership rights of trees. The Government of Andhra Pradesh in G.O.Ms.No. 337 Forests and Rural Development Department, Dated, 13-12-1983 decided to lease out degraded forest areas to weaker sections for raising blocks of tree crops on tree patta basis in all the 22 districts.

Identified families belonging to Scheduled Castes, Scheduled Tribes Communities living below the poverty line are given degraded forest lands to raise fuelwood trees. The salient features of the scheme was:

1) Forest lands can be leased out to tribes in the tribal areas.

2) In non-scheduled areas, the lease can be given to other weaker sections.
3) Not more than two hectares of land can be leased out to each beneficiary family at the rate of one hectare per year for two successive years.

4) The species such as babul, eucalyptus and bamboo shall be raised.

5) Raising of non-forestry crops or inter-cultivation of agricultural crops in between rows of trees shall be strictly prohibited.

6) The beneficiary are entitled to financial assistance under NREP towards the wages for a period of two/three years.

7) Total wages thus paid shall be recovered at a flat rate when the tree crop is harvested.

8) A land rent of Re. 1/- per hectare per annum shall be collected, and

9) At the time of harvest, the amount due to the Forest Department shall be recovered and the beneficiary shall be entitled to the balance amount.

Village Woodlots

Every village has common land in which village cattle graze. It is common property. These grazing lands in most villages are in a totally degraded stage and serve no more than an exercise ground for the village cattle. In order to help the beneficiaries, the Forest Department in most
of the States are implementing the scheme of raising woodlots in the Panchayat land at Government cost because the financial resources of these institutions are meagre.

The Forest Department raises plants in these areas at its cost. The Panchayats are expected to cooperate with the department in protecting the plantation. The grass is allowed to be cut free and the Panchayats if they so desire may levy some amount to improve their monetary position.

In some States the planted areas are handed over back to the Panchayat after about five years, and when plantations are saved from cattle damage, for further administration by them as per prescribed working scheme. At the time of harvest, the panchayat gets about 50 per cent of the net profits derived from the disposal of the tree crop from these fuel and fodder reserves. This scheme of raising mixed plantation has become quite popular in rural areas.  

Canadian International Development Agency (CIDA)

A memorandum of understanding for implementation of a Social Forestry Programme in Andhra Pradesh was signed between the Government of India and Canada in October, 1984. The Canadian Government has agreed to pay 40 million dollars for the A.P. Social Forestry Programme with a loan component of 26.8 million dollars. As per the agreement, CIDA provided
funding for two-thirds of the programme cost and the State provided for the rest. The Government of India has designated the A.P. Forest Department to the agency responsible for the programme implementation and CIDA has appointed Forestal International Limited, Vancouver, Canada as the Canadian Executive Agency. Originally the duration of the programme was five years with a scheduled completion date of 31-3-1988. For various reasons, the programme has been extended for two more years. The programme was implemented in 1983-84 and activities have accelerated since 1985-86. 21

Major Objectives of CIDA Social Forestry Programmes in Andhra Pradesh

1) To fulfil the urgent requirements of fuelwood and to provide poles, small timber, fodder, fruits and other minor products to meet the basic requirements of the rural populace.

2) To induce community involvement in creating and protecting plantations raised under the programme by ensuring that communities participate in involvement activities and receive a share of the benefits of the project. 22
CIDA Programme Components

The programme consists of a series of operational components to raise trees for fuelwood, fodder, marketable products such as pulpwood, poles, and small timber, fruit, shade, green manure and other uses. Eight model plantation were devised to establish plantation on communal lands, public lands, degraded reserve forests and privately owned marginal farm land. The eight plantation models are:

1) Tank foreshores.
2) Other Communal lands.
3) Avenues (Roadside).
4) Canal banks.
5) Rail roads.
6) Degraded Forests:
   a) Family Assistance Method.
   b) Labour Intensive Method, and
   c) Semi-Mechanical Method.
7) Small and Marginal Farmers Assistance, and
8) Seedlings Distribution.

Tankforeshore Plantations

The G.O.Ms. No. 645/Forests IV Forests and Rural Development Department, Dated, 11-8-1977 states that plantations in Tankforeshores shall be raised and maintained by
the Forest Department until harvest and the proceeds shall be shared between the pattadar and the Forest Department on a 50:50 basis.


The salient features of these plantations are:

1) Tree Patta not exceeding more than two hectares shall be given per family.

2) For felling trees in tree patta, prior permission of the Forest Department shall be taken and the produce sold publicly giving preference to the requirements of local villages and revenue shall be shared on 50:50 basis by the department and the beneficiary.

3) The tree patta will be cancelled if survival of trees in the area is less than 80 per cent, and

4) Fresh plantation shall be raised in the same season after clearance of the earlier crop.

Strip Plantation

The National Commission on Agriculture (NCA) has also recommended the raising of plantations of quick-growing species
on land available on the sides of strips. These plantation are raised in linear strips along roadsides, canal banks and railway lines. The trees are in single or multi-rows depending on the land available. Except in a few places, the work is carried out departmentally.

Beneficiaries of weaker sections were identified and engaged in raising avenues. Each Beneficiary is given a limited extent of the road length for planting and maintenance which includes watering, weeding, and soil working. They were paid wage equivalent to the labour component provided in the estimate. By this, each beneficiary is getting a wage of Rs. 250/- to Rs. 400/- per month. This model was implemented in all the districts whenever beneficiaries are forthcoming.

In the case of planting along railway lines, it is agreed that the railways would keep at the disposal of the Forest Department all land available along the railways tracks at a nominal rent of Rs. 1/- per hectare per year for raising tree plantation. One crop shall belong to the Forest Department.
Shelter-Belt Plantations

The sand drift is a common problem in arid and semi-arid regions of the Country. The shelter-belt plantation is done close to the drifting sand into the fertile agricultural fields, highways, railwaylines, canals, etc.

The shelter-belts, which are wide strips of trees, shrubs and grasses planted in rows and at right angles to the direction of the wind deflect air currents, reduce wind-velocity so as to protect roads, railways and canals from wind erosion. The shelter-belts also protect crops and habitation from the hot desicating wind.

The shelter-belts should have a certain amount of penetrability to enable the slight movement of wind to keep off the upper dry air masses from descending to the lower protected areas. The height of trees in a shelter belt is very important for protection on the leeward side. The gaps within the shelter-belts should be avoided because they act as wind tunnels creating more devastation on the leeward side.

Benefits of Shelter-belts

The shelter-belts reduce wind velocity and therefore, protect crops. They also provide protection to the livestock from the hot and cold winds and it also provides
fuel and smallwood to the farmers. Russian experiments have shown that shelter-belts reduce the evaporation, increase the soil moisture content and increase the relative humidity. The shelter-belts add organic matter to the soil which improves the fertility of the soil.26

Roadside Plantation

Khanna (1984) stated that though roadside plantation was initially started as avenue planting of a single row of trees on both sides of the road with the object of providing shade to the travelling public and for maintenance of the road surface which was damaged due to great variation in during the range of temperature in the absence of avenues, it is now being undertaken as strip planting to achieve the various objects of afforestation plantations are now being raised on such lands in different States under the Social Forestry Programme. The land which belongs to the railway authority has now been passed on to the Forest Department for the purpose of tree planting under an agreement.

Objectives of Roadside Plantation

1) To create tree row belts along the roadside, besides serving as shade and adding scenic beauty.

2) To meet the increasing needs of fuelwood, small timber
and fodder of the society and consequently, to make possible the greater use of cowdung as organic manure and thus augment agricultural production.

3) To check the environmental pollution and improve the aesthetic value of the surroundings.

4) To increase the area of forest and to reduce the pressure on the traditional forests. Villagers who live close to these plantations are allowed the free removal of grass, fodder, fallen wood and tree loppings.

5) To check the drifting sand.

6) To give shelter to avian fauna, and

7) To reduce noise pollution. Tiwari and Singh (1984) stated that trees and shrubs can be effectively used as a noise-reducing medium, each 30 m. width of trees can absorb six to eight decibels of sound intensity.27

Railway Strips

On the recommendation of the NCA, afforestation of railway strip is in progress in many States.

Objectives

1) To establish tree belts at vulnerable spots on the windwood sides. It will prevent sand accumulation on railway tracts.
2) To protect the railway tracks from erosion.

3) To make optimum utilization of lands possible for the welfare of mankind, and

4) To provide fuelwood, timber, fodder and raw materials for cottage industries.

**Canal Bank Plantation**

With the increase in population shortage of forest products is becoming severe day-by-day. Therefore, canalside plantation has been taken up under the Social Forestry Programmes. The NCA has also recommended tree planting on the canal banks.

**Objectives**

1) To prevent seepage of water on either sides of the canal. This also prevents water logging in the agricultural fields, which lie on both sides of the canal.

2) To stabilise the canal sides and also to check the shifting sand getting into the canal in the arid zone.

3) To improve ecological conditions.

4) To provide, timber, fruits and fodder.

5) To tap more water from the ground and thus decrease the danger of water-logging.
6) To provide raw material for cottage industries, and

7) To increase the area of forests.

Communal Land Planting

Communal lands like tankforeshores, Porambokes etc., are being afforested by Forest Department, 50 per cent of the net revenue on harvesting the crop will be credited to the concerned village community (Gram Panchayat) and the Government takes the balance of 50 per cent. The Government is also ready to forego this 50 per cent revenue provided the Gram Panchayat reinvest their profits for replanting the areas.

The various activities and programmes under implementation in the field of Social Forestry Programme have rural bias, mostly towards benefiting the individuals, particularly those of weaker sections of the society - Scheduled Castes and Scheduled Tribes and others.

The various beneficiary oriented programme in-built in Social Forestry schemes are:

Family Assistance Scheme (FAS)

The scheme would be implemented in the degraded reserved forest areas being planted under the CIDA aided
Social Forestry Programmes. FAS provides for allotment of 1.5 hectares of degraded forest area per year to each beneficiary as well as landless poor for raising a fuelwood plantation. The entire planting stock and other inputs are provided by the Forest Department while the labour component is to be looked after by the beneficiary. The beneficiary continues to get the allotment of 1.5 hectares every year for a period of six to seven years, i.e., till the first plantation is ready for harvest. The beneficiary is also permitted to plant 10-15 per cent of the seedlings of fruit bearing and minor forest produce species.

The beneficiary is paid Rs. 450/- per month during each year for maintaining the plants. He is expected to involve his family and protect the plantation till its harvest. The revenue fetched at the time of the harvest will be shared equally by the Forest Department and the beneficiary.

Incentives to Small/Marginal Farmers

The programme is one of the operational components of CIDA aided Social Forestry. Under this Programme several small and marginal farmers are helped to raise vegetative cover in their own lands which is substantial contribution to the Social Forestry effort. The programme provides for payment of incentives to such farmers at the rate of Rs.0.50 for each surviving plant at the end of planting year and also
another similar payment at the end of second year. It helps to encourage planting on big scale and creates interest among the farmers to protect them well at least for two years.

**Social Forestry in Urban Areas**

Social Forestry for urban areas has different objectives. In these areas the main emphasis is on the aesthetic development of the landscape and beautification of compounds, roads, parks and vacant lands in and around the towns and cities for creating tree reserves for maintenance of clean environment. Another objective of urban forestry is to improve physiological, sociological and economic well-being of urban forestry. This can be accomplished by planting trees of different varieties. The various Municipal Corporations and Urban Development Authorities in the State have been showing considerable interest for undertaking afforestation of barrenlands, located in and around the urban areas, and also for undertaking avenue plantation, raising of seedlings etc.\(^{30}\)

The services of forest officials are made available to the urban development authorities on tenure-basis for implementing these schemes.

An overall Social Forestry adoption model can be seen in the following Figure 3:1.
SOCIAL FORESTRY ADOPTION MODEL

ADMINISTRATION

- Research Activities
- Social Forestry Organisation
- Forestry Personnel
- Extension Activities
- Villages

Creating Awareness through
- Individual approach
- Group methods
- Mass Media

Coordination/Extension service support through
- Institutional building
- Financial support
- Technical advice

Resource support
- Providing seedlings
- Land
- Incentives
- Other inputs

Process of implementation of Social Forestry

HOMOGENEITY
- Numbers of castes
- Proportion of landless households
- Institutional support

EXTERNAL FACILITIES
- Access to market
- Transport facilities

COMMUNICATION FACTORS:
- Urban contact
- Change Agent contact
- Media contact

SOCIAL FORESTRY
- Communal land plantation
- Tankfore- shore plantation
- Road rail/ canal plantation
- Village woodlots
- Shelter belt plantation
- Urban forestry

Socio-economic factors:
- Caste
- Occupation
- Education
- Land holding etc.

ATTITUDE
- Creating Awareness

ADDITIONAL
- Adoption of Farm Forestry

FAMILY ASSISTANCE SCHEME
- Farm plantation
- Field bund plantation
- Homestead plantation
REFERENCES

1. A. I., Ran, Guidelines for Tree Planting in Andhra Pradesh, Society for promotion of Wastelands developments, New Delhi, 1991, p. 5.

2. Ibid., A. L. Rao.

3. A Forestry Management Plan usually written for a Forestry Division for a period of 10 years.


5. 16.52 rupees is equivalent to one U.S. dollar as on November 3, 1989.


25. Ibid.,


