13. SPECIAL AREA PROGRAMMES

Developmental problems are faced by certain areas arising out of their distinct geo-physical structure and location and concomitant socio-economic development. To deal with the specific problems of these areas, region-specific plan strategies are formulated keeping in view the special needs of these areas. Tamil Nadu has a long coastline, nearly 1000 kms. in length representing 12% of the entire coastline in the country. Apart from the Western Ghats that separate Tamil Nadu from Kerala, Tamil Nadu has another mountain chain, the Eastern Ghats. The Eastern Ghats and Western Ghats run along the State’s eastern and western borders. Thus the special areas in the State may be classified as:

1) Hill Areas          - the entire district of The Nilgiris
2) Western Ghats - Spanning 8 districts in the State
3) Eastern Ghats  - Spanning 16 districts in the State
4) Coastal area

Special area programmes have been formulated to deal with the special problems faced by certain areas arising out of their distinct geophysical structure and location and concomitant socio-economic development. The Central Government is supplementing the efforts of the State Governments in this direction through special Central assistance for special area programmes such as Hill Area Development Programme (HADP) and Western Ghats Development Programme (WGDP). For the Eastern Ghats and the Coastal Areas, there is no special Central assistance at present.

It is necessary to adopt a strategy of development, keeping in view the special features and problems of these areas and implement area programmes for the socio-economic development, as also for conservation, protection and preservation of these areas. The need to conserve the natural resources and their environment particularly to prevent further damage to the eco-system has been well recognized. The State Government has formulated proposals for development of the Eastern Ghats and the Coastal Areas also for seeking Central assistance.

I. Hill Area Development Programme

The Hill Area Development Programme has been implemented in the Nilgiris District since the year 1975 under financial assistance from Union Planning Commission, with a view to supplement the efforts of the State Government in preservation, protection and enrichment of bio-diversity. The Nilgires Districts endowed with rich bio-diversity due to the existence of wide range of climatic and geological conditions, it receives annual rainfall with a spatial variation ranging form 800 mm to 3000 mm. It is also gifted with thick layer (1 to 1.5 Mts ) of fertile soil. This particular region of Western Ghat is the most suitable habitat for all kinds of flora and fauna.

The Centrally sponsored Programme, HADP, was initiated in the Nilgiris District during Fifth Five Year Plan. Over the years, the basic objectives, and approach have undergone changes in tune with the emerging needs. At present, the main objectives of the programme are ecological preservation, restoration and overall development of district economy. Specific objectives of the programme are mentioned below.
To preserve and conserve extremely fragile tropical eco-system, i.e. shoals and grasslands of Nilgiris.

Development of land use plan for forest area as well as cultivated areas on the basis of slope levels and other climatic, ecological considerations.

Conserve soil and water to increase productivity of the land by predominantly using vegetative methods and changing the cropping pattern.

Promote non-land based economic activities to uplift the poor people and to ensure environment protection.

Economic up-liftment of tribals in isolated locations, settlements.

Manage the human pressures on eco-system through comprehensive human settlement policy and discourage migration.

"Areas based Approach" will be given top priority. Integrated plans shall be prepared for all watersheds and high priority watershed shall be chosen for treatment.

Use of scientific interventions will be encouraged, i.e. application of Remote Sensing, high tech farming methods etc.

Promotion of Non-Conventional Energy sources, i.e., a Solar, Hydro, Biogas etc.

The activities of Hill Area Development Programme are focused not only on Forest, Soil, Conservation and Horticulture as the Core Sectors but also for the sectors meeting the socio-economic development needs for the district.

The major thrust during this plan period is given for area development. Soil erosion was identified as the major problem deteriorating the area development due to improper drainage pattern, unscientific agricultural practices etc., Due to the problem of exposing of the top soil without adopting the slope percentage cultivating practices, the top fertile soil is often washed away during floods and rainy season, posing a major threat of landslides and decreased crop yields. The heavy usage of chemical fertilizers and pesticides constantly threaten the ecology besides heavy expenditure incurred for landslide treatments. When natural disasters are unavoidable, the damages to the fragile ecology of Nilgiris caused should be minimized.

Therefore, integration of the activities of the core departments along with other line departments to stabilise the ecology is given prime importance apart from involving the local people along with Non-Governmental Agencies.

Soil Conservation works such as River Widening Works, Staggered trenching with vegetative measures, Drainage Line Treatment works with vegetative measures, Water Harvesting Structures, Stream draining Works etc., are the important works taken up during the plan period strictly on watershed basis, so as to ensure the saturation of the watersheds with the soil conservation activities. In respect of Landslide treatment works, adequate care is taken to avoid Masonry works as far as practicable and to take up vegetative barrier based works through Gabion structures, which is more economic than masonry structures.
In respect of Forestry works, taking up afforestation works in the denuded hills, development of shoal forests, fuel wood plantations in the porambokes, second storey firewood plantations, road side avenue plantations are given top priority apart from other regular forestry programmes.

Regarding Horticulture, tea cultivation and eco-friendly vegetable cultivation have been taken up. Schemes such as floriculture, rejuvenation of Mandarin Oranges Mushroom cultivation, Development of area under arecanut and other economic plantations are also given adequate importance to provide economic stability. Research and development of infrastructure for development of horticultural are also given importance.

The programmes also lays focus on the other need-based sectors like Road, Development of Local Bodies, Welfare of SC/ST, INDCO Tea Factories, Human Resources Development, Animal Husbandry & Dairy Development, Medical and Public Health, minor irrigation, Tourism etc.,

An amount of Rs. 2210 lakhs is proposed for the year 2005-06.

Details of the work proposed in 200-06 are given below:

1) Soil Conservation

Soil erosion continues to be one of the most serious problems threatening the ecology of this fragile Nilgiris District. The loss of fertile top soil is almost impossible to replace, resulting in poor agricultural yields and simultaneously silting up the down stream reservoirs in the plains. The most important causes of soil erosion are:

(i) improper agricultural practices
(ii) inappropriate drainage pattern and
(iii) denudation of tree cover

HADP had launched a drive towards tackling the above problems through forestry and horticultural activities. Besides these, soil conservation measures play an important role in arresting soil erosion and in high retention of run-off water.

Agricultural Engineering Department has undertaken various Soil and Moisture conservation activities such as treatment of landslides with vegetative barrier, drainage line treatment works in three reaches, provision of water harvesting structures, stream training works in the stream courses, dry stone pitching works, contour / staggered trenching works, formation of bench terraces, collection wells etc., towards this end.

For the year 2005-06, a sum of Rs.380 lakhs has been proposed.
2) **Forestry**

Almost 56% of the total areas in the Nilgiris District is covered under forest but the percentage of area covered by natural and permanent tree cover is comparatively less. In order to maintain the ecological balance by rejuvenating the denuded forests, great priority has been given to forestry. The forest department has undertaken various conservation measures with the people's participation as follows:

(i) Afforestation in the degraded and denuded hills and their maintenance  
(ii) Shola Afforestation and its maintenance  
(iii) Miscellaneous Forests Afforestation programme and their maintenance  
(iv) Soil and Moisture Conservation activities in the forest areas  
(v) Protection of shola and endangered species  
(vi) Minor Forest Produces Afforestation and its maintenance  
(vii) Eco-Tourism in Forest Areas without disturbing the nature  
(viii) Urban / Avenue Planting along the road margins  
(ix) Demarcation / Conservation of Forest areas  
(x) Creation of awareness among local people  
(xi) Scheme for the Tribal Welfare living in remote forest areas  
(xii) Forest Research Works  
(xiii) Special works by Wild Life Warden and  
(xiv) Construction and Maintenance of Water Harvesting Structure  

For the year 2005-06, a sum of Rs.375 lakhs has been proposed.

3) **Horticulture**

The district has ideal climatic and topographical features for raising horticultural crops such as potato, hill vegetables, tea, coffee, spices and fruits. Though the annual crops are highly suitable for this terrain, studies reveal that cultivation of annual crops is detrimental to the ecology, since the top soil is often exposed. Moreover, the unscientific agricultural practices, without considering the slope percentage does more harm to the ecology.

Having regard to the above problems, HADP has launched its drive through horticulture department to correct the skewed and suitable landuse pattern. Besides efforts are also on to introduce economically viable crops such as medicinal plants cultivation, mushroom production and floriculture.

Efforts are now directed to substitute modern chemical farming practices to eco-friendly organic farming, to make the district an “Organic Farming District”.

An amount of Rs.297.50 lakhs has been proposed for the year 2005-06.
4) Animal Husbandry & Dairy Development

The Animal Husbandry and Dairy Development sector provides necessary back-up support for the Dairy Development activities in Nilgiris district. The total cattle population in Nilgiris is roughly around Rs.2 lakhs including non-descript breed. In order to improve the breed of cattles for augmenting the milk production, financial assistance has been extended under Hill Area Development Programme to this sector.

The Animal Husbandry and Dairy Development sector has taken various steps to improve and upgrade the cattle population / breed in the district. Efforts have been directed towards the following measures:

(i) Controlling the contagious disease
(ii) Upgrading of the cattle
(iii) Programmes on animal health cover
(iv) Programmes on Animal Breeding cover
(v) Development of infrastructure for the above purpose and
(vi) Popularisation of frozen semen techniques
(vii) Other Regular works for improving the Milk Yield and maintaining the hygienic conditions for milk processing.

A sum of Rs.58.23 lakhs has been proposed for the year 2005-06.

5) Roads

Recognising the importance of road connectivity for socio-economic development of this district with difficult terrain, the HADP has given due importance to this sector. Besides, the heavy and increasing inflow of tourist to the district also emphasizes the need for better roads. A sum of Rs.265 lakhs has been proposed for the year 2005-06 towards developments of roads.

6) Development of Local Bodies

To supplement the scant resources available for sanitation, water supply and other developmental works mainly in urban local bodies i.e. four Municipalities, four Panchayat Unions and 11 Special Panchayats, fund is proposed to be allocated to these bodies. With a view to simplify the accounting, workload and also to ensure integrated development, it is proposed to merge all the three sectors into one sector i.e. Development of Local Bodies.

Due to the topography, providing infrastructural facilities such as roads, footpaths, water supply, bridges, culverts, drainage, etc., require considerably higher investment compared to the areas in plains. Added to it, increasing inflow of tourists to the tourist spots located in Municipalities and Town Panchayat areas also demands provision of sufficient infrastructure facilities.

A sum of Rs.288.25 lakhs has been proposed for the year 2005-06.
7) **Human Resources Development**

For Human Resources Development, provision of adequate infrastructure is a pre-requisite. Accordingly, under the head Human Resources Development, funds are being provided under Hill Area Development Programme for the following schemes:

(i) Provision of sanitation with water supply facilities to the schools  
(ii) Construction of additional class rooms / computer rooms to the schools  
(iii) Awareness programmes among students on ecology and other subjects  
(iv) Provision of adequate and sufficient infrastructure to play grounds  
(v) Conducting Seminars/Workshops on various needy topiocs  
(vi) Conducting training Programmes etc.  
(vii) Imparting vocational training to the students etc.

A sum of Rs.61.00 lakhs has been proposed during the year 2005-06.

8) **Medical and Public Health**

It has been the avowed objective of the Government to provide health care to all. Towards this noble goal, several programmes have been formulated and implemented. However, one major lacuna has been lack of proper infrastructure. Hence the necessity to provide adequate infrastructural facilities for these programmes to succeed, especially among the tribals, who are in remote areas inside reserved forest is imperative. Therefore, priority has been given to such remote areas for construction of Primary Health Centres, Health Sub-centres. A sum of Rs.67.00 lakhs has been proposed for the year 2005-06.

9) **Tourism**

The Nilgiris district is one of the main tourist centers in the country and its importance in the lives and economy of the peoples of this hill district cannot be overemphasized. It still has a tremendous potential for development. It has an abundance of natural beauty and a variety of wild life. The average inflow of tourists is also increasing year by the year. The strategy adopted under Hill Area Development Programme in Nilgiris District is to promote tourism without disturbing the prevailing ecological conditions as also by augmenting the tourist infrastructure, which has often been stretched to its limits.

A sum of Rs.64.50 lakhs has been proposed during the year 2005-06.

10) **Welfare of Scheduled Castes / Scheduled Tribes**

Nilgiris has the highest concentration of tribals in the State. Primitive and backward tribes like the Todas, Kothas, Irulas, Kurumbas and Paniyas inhabit the district. Apart from the above tribes, the scheduled caste population is also high.
Due to the secluded and conservative outlook of the tribes many of the tribal habitations in the district remain remote and they are hesitant to come forward to have closed contact with the modern world. Many of these habitations also lack basic amenities. In respect of the Scheduled Castes, the economic constraints make them to deprive of their amenities and social development.

Provision of adequate basic amenities and development / improvement of infrastructure to the Scheduled Castes and Scheduled Tribes for their economic and social upliftment has been given adequate importance under Hill Area Development Programme. The repairs to houses and construction of new house and other small works will be taken up by the beneficiaries themselves for execution with the help of Voluntary Organisations/NGOs/Village Panchayats and Town Panchayats.

A sum of Rs.142.70 lakhs has been proposed for the year 2005-06.

11) Rural Energy Conservation

With conventional energy becoming more expensive and scarce by the day and with many remote areas still unserviced, the use of alternative sources of energy becomes imperative.

Keeping this in mind, Hill Area Development Programme in a joint venture with Tamil Nadu Energy Development Agency (TEDA), had taken up a study on the usage of non-conventional energy sources and had suggested to take up the following programmes in order to ensure coverage of all the hamlets, which are inaccessible and unelectrified.

- Provision of Solar Photovoltaic Street Lights / House lights for Remote Habitations not covered by electrification
- Provision of Solar Photovoltaic Lanterns
- Provision of Solar Water Heaters
- Provision of Solar cookers etc.
- Establishment of Energy Parks etc.

A sum of Rs.57.91 lakhs has been proposed for the year 2005-06.

12) Sericulture

Sericulture activities are of relatively recent origin in Nilgiris District. The prevailing climatic conditions in the low-lying plateau of the district are conducive for rearing the bivoltine variety of Silk Worms. As the generation of employment is limited in this hilly district, financial assistance is being extended under HADP to build up the infrastructure for Sericulture activities, impart training to the Sericulturists (mainly Tribals) and free supply of saplings, free supply of rearing tools, construction of rearing sheds etc.

The strategy adopted by Sericulture under HADP has been to undertake the following with 50% beneficiary contribution.
13. Special Area Programmes

1) Establishment of Seed Multiplication Farms.
2) Encouraging Mulberry Cultivation.
3) Extension of Technical Service to the Sericulturists
4) Free supply of training / rearing tools.
5) Encouraging inter cultivation of Mulberry.
6) Other Infrastructure to Sericulture activities.

A sum of Rs.2.24 lakhs has been proposed for the year 2005-06.

13) Minor Irrigation

The topography of the district ensures high run-off and little retention of water. With more water intensive horticulture crops being introduced, the demand for water both for drinking and irrigation has increased manifold.

To mitigate these problems, the Water Resources Organisation of Public Works Department had launched their programmes with the financial assistance of Hill Area Development Programme under Minor Irrigation sector. The main objectives of the programme are construction of checkdams nearby the river / stream course to meet the demand of land irrigability / drinking water during pinch seasons, lift irrigation works, desilting / repairing the feeder channels and main channels of irrigation and special repairs / maintenance of the damaged checkdams already constructed under HADP.

A sum of Rs.10 lakhs has been proposed for the year 2005-06.

14) Remote Sensing

To regulate the urban development in consonance with desirable ecological parameters, to guide and monitor the spatial growth of the towns in the district and to regulate the landuse pattern keeping in mind the protection of ecology of the district which is fragile in nature, the need for special techniques for planning and for suggesting corrective measures was felt absolute. Remote sensing technology provides the answer.

Accordingly, funds have been allocated from Hill Area Development Programme towards preparation of aerial photographs, orthophotomaps and thematic maps for the present landuse, drainage pattern, slope percentage / contours, settlement pointing etc., in order to suggest corrective measures and to enact policies towards conserving the distinct ecology of the district. Besides efforts have also been taken to correlate the spatial data with the cadastral level maps in order to build a powerful database for effective Planning, Monitoring and Evaluation of the scheme implementation. A sum of Rs.15 lakhs has been proposed for the year 2005-06.

The Hill Area Development Programme sectorwise allocation for the year 2005-06 is as follows:
Outlay proposed for the year 2005-06.

<table>
<thead>
<tr>
<th>Name of the sector</th>
<th>Allocation proposed during 2005-06 (Rs. in lakhs)</th>
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<tbody>
<tr>
<td>Soil Conservation</td>
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<tr>
<td>Forestry</td>
<td>375.00</td>
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<td>Horticulture</td>
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<td>Animal Husbandry &amp; Dairy Development</td>
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<td>Roads</td>
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<td>Development of Local Bodies</td>
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<td>Human Resources Development</td>
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<tr>
<td>Medical &amp; Public Health</td>
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<td>Welfare of SC/ST</td>
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<tr>
<td>Tourism</td>
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<tr>
<td>Minor Irrigation</td>
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<tr>
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<tr>
<td>Remote Sensing</td>
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</tr>
<tr>
<td>Training / Exposure Visit / Seminars</td>
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</tr>
<tr>
<td>Administration &amp; Monitoring</td>
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</tr>
<tr>
<td>HADP Cell</td>
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<tr>
<td>Technical Cell, Secretariat</td>
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<tr>
<td>Geo Technical Cell</td>
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<tr>
<td>Evaluation</td>
<td>5.00</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2210.00</strong></td>
</tr>
</tbody>
</table>

II) Western Ghats Development Programme

Western Ghats Region

Mountains are the nature’s gift to mankind. The mountain regions contain the sources, the catchments and the watersheds of several major river systems that flow to the plains; they abound in forests, plants and mineral wealth. The hill areas of the country particularly the Himalayan and Western Ghats region support the natural resources which constitute the primary life support systems for all forms of life-microbes, vegetation, animals and human beings. They have very fragile and very sensitive eco- systems. Western Ghats are a range of mountains along the west coast about 1600 km long and 80 to 100 km wide, running continuously from Maharashtra to Tamil Nadu with interruption in continuity in Palghat district of Kerala. Western Ghats form 8.82% of the country’s mountainous area. Hilly ecosystems of Western Ghats are fragile but endowed with one of the richest flora and fauna and an unique bio-diversity with 30% of the area under forest. The Western Ghats range is an important determinant in shaping the climate, economy and social milieu of the peninsular India.
Western Ghats region receives very high rainfall in northern and the western parts mainly from the south-west monsoon. The eastern slopes of Western Ghats being the rain shadow region receive less rainfall. The Western Ghats in Tamil Nadu largely consist of rain shadow region except in the southern portion of Kannyakumari district where both the south-west and north–east monsoon occur.

Scope for Development

Western Ghats region offers scope for development of forest, horticulture, Animal husbandry and improving the water availability for recharging ground water as well as for drinking purposes. The development of Western Ghats will also help ecological upgradation and sub-soil storage of water. This will help in the conservation of natural resources. Western Ghats also offer scope for increasing the area under plantation crops like tea, coffee, cardmom, cocoa, rubber, pepper and mandarin orange etc.

Special Area Programme for development of Western Ghats region

Preservation of genetic diversity of the Western Ghats is an imperative necessity for the prosperity of the posterity. Development of the resources of the hill areas is essential in order to enable the people living in these areas, who are by and large very poor, to have their share of benefits. The proper management of mountain resources and economic development of the people deserves special attention. The need to conserve natural resources and the environment, particularly to prevent damage to fragile and irreplaceable eco-systems necessitated special plan strategies. It was in realization of this need that Special Area Development Programmes have been formulated by Government of India to deal with the special problems faced by certain areas arising out of their distinct geo-physical structure and location and concomitant socio-economic development. A Centrally Sponsored Programme for the Integrated Development of Western Ghats Region called Western Ghats Development programme was launched by GOI in 1974-75.

Objectives, Approach and Strategy for the development of Western Ghats Region over the Plan periods

The objectives, approach and strategy for the development of the Western Ghats region have changed over a period of time. During the Fifth Five Year Plan, WGDP laid emphasis on economic well being of the local population in hill areas and exploitation of the resources of the hilly region. The activities in the Fifth Five Year Plan were mainly in the areas of horticulture, plantation, afforestation, minor irrigation, animal husbandry and tourism.

The Sixth Five Year Plan stressed the need for a balance in emphasis between beneficiary oriented and infrastructures development schemes, keeping in view the vital importance of ecological restoration and conservation. During Sixth Plan, the Watershed Development Programme was taken up on a pilot basis.

The Seventh and Eighth Five Year Plans emphasized maintenance of the ecological balance, which was essential for life support system to preserve genetic diversity, to restore the ecological damage caused by human interaction and to create awareness among the people and educate them on the far reaching
implications of ecological degradation and to enlist their active participation in the eco-development schemes.

The general approach under WGD during the Eighth Five Year Plan was continuance of the strategy adopted in the Seventh Five Year Plan which was to take up integrated development on compact watershed basis keeping in view the over riding priorities of eco-development and eco-restoration as well as the basic needs of the people like food, fodder, fuel and safe drinking water.

In operational terms, integrated development of watershed approach envisages the following sequence of action:

a. Identification and delineation of macro watersheds in the entire WGD area in the State by a competent organization.

b. Prioritisation of all the identified and delineated watersheds on the basis of suitable criteria adopted by the State Government.

c. A base-line survey of the watersheds taken up for development to determine the micro or mini watersheds to be taken up for development programmes which need to be undertaken in each such area, keeping in view its development potential, the needs of the local people and the financial allocations available.

d. Preparation of an integrated development plan for each macro / micro watershed covering all relevant activities, such as soil conservation, agriculture, afforestation, fuel and fodder development, minor irrigation, animal husbandry and sericulture.

e. Making necessary administrative and institutional arrangements for implementation, monitoring and review of the integrated development programme for each watershed taken up for development.

The basic idea is that all development activities in the Western Ghats Region should be undertaken in an integrated manner in all selected watersheds on the lines indicated above. During the Ninth Five Year Plan period, the broad objectives for developmental schemes under WGD were ‘Development in harmony with environment’ and ‘Development without upsetting the fragile systems’.

WGD Programme in Tenth Plan

The main objective will continue to be eco-preservation and eco-restoration with a focus on sustainable use of bio-diversity, recognizing the needs and aspirations of local communities. The planning approach would aim to facilitate community participation in the design and implementation of strategies for conservation of bio-diversity and sustainable livelihoods.

The broad objectives of this programme are i. Maintenance of the ecological balance essential for life support system. ii. Preserve genetic diversity, iii. Restoration of ecological damage caused by human interaction, iv. Creation of awareness among the people and educating them on the far-reaching implications of ecological degradation and securing their active participation for the eco-development schemes. Under this programme, the main activities undertaken are Soil conservation,
Horticulture, Forestry, Minor Irrigation, Rural Roads, Animal Husbandry, Fisheries, Sericulture, Remote Sensing and Palm Products Development. Eighty percent of the total outlay is set apart for three major sectors such Soil Conservation, Horticulture and Forestry.

**Allocation of Funds**

The Western Ghats Development Programme was initiated in Tamil Nadu in 1975-76. Tamil Nadu received Rs.3.55 crores during the Fifth Five Year Plan, Rs.14.47 crores during the Sixth Five Year Plan and Rs.26 crores during the Seventh Plan for the WGDP. During the two Annual Plans of 1990-91 and 1991-92, the allocation was given at Rs.7.18 crores for each year. During the Ninth Five Year Plan, a sum of Rs.50.07 crores had been received from the Union Planning Commission, Government of India as Special Central Assistance. In the Tenth Five Year Plan, a sum of Rs.10.99 crores per year has been received from the GOI as Special Central Assistance during the year 2002-03 and 2003-04.

**Activities under WGDP**

WGDP adopts an integrated approach for development of identified watersheds in the areas under its purview. This is done through the formulation, implementation and monitoring of soil conservation, agriculture, horticulture, afforestation, fuel and fodder development, minor irrigation, animal husbandry and sericulture schemes in these watersheds. Programmes for soil conservation on watershed basis which include land development activities such as levelling, terracing and contour bunding, water harvesting and soil erosion structures such as check dams, development of horticulture, programmes for afforestation, regeneration of degraded forestlands, fuelwood and fodder development, pasture land development and social forestry schemes etc. have been undertaken under WGDP. The major sectors involved are soil and water conservation, afforestation, horticulture, animal husbandry, fisheries, Khadi and Village Industries, minor irrigation etc. Agricultural Engineering Department has identified the high, medium and low priority watersheds using remote sensing satellite imageries for the entire Western Ghats region in Tamil Nadu.

Government of India sanctions funds for the Western Ghats Development Programme to different States. At the State level, the Planning, Development and Special Initiatives Department distributes the funds to the line departments for implementation. 60% of the total allocation is earmarked on the basis of the integrated watershed approach and the balance 40% is for outside the designated watersheds.

**Proposals for 2005-06**

Tamil Nadu received Rs.3.55 crores during the Fifth Five Year Plan, Rs.14.47 crores during the Sixth Five Year Plan and Rs.26 crores during the Seventh Plan for the WGDP. During the two Annual plans of 1990-91 and 1991-92, the allocation was at Rs.7.18 crores for each year. During the Eighth Five Year Plan, a sum of Rs.37.62 crores was received as Special Central Assistance. During the Ninth Five Year Plan, a sum of Rs.50.07 crores was received from the Union Planning Commission, Government of India as Special Central Assistance, out of which a sum of Rs.8 crores
was for the year 1997-98, Rs.9.07 crores for 1998-99, Rs.11.60 crores for 1999-2000, Rs.10.94 crores for 2000-01 and Rs.10.99 crores for 2001-02. In the Tenth Five Year Plan, a sum of Rs.10.99 crores per year has been received from the Govt. of India as Special Central Assistance during the years 2002-03, 2003-04, and 2004-05.

New Sectors

A minimum of 60% of the schemes on watershed basis has been maintained for 2005-06. The watershed schemes have been prepared by the district officials after prioritizing the watersheds and after conducting meetings with local population and NGOs to ensure a participatory approach.

For 2004-05, 60.47% of activities will be undertaken in an integrated manner in the identified priority watersheds. 36.05% for non-watershed based beneficiary oriented activities including staff cost and 3.48% for maintenance of assets created under WGDP. Both Forest and Agricultural Engineering Departments will undertake works in the same priority watersheds to the extent possible to ensure coverage of upper, middle and lower reaches in a coordinated manner. Horticulture and Animal Husbandry schemes within the watersheds will be taken up in coordination with the above two main departments.

1) Soil Conservation (Agricultural Engineering)

(a) Preparation of status report using Remote Sensing techniques

The Remote Sensing activities have been started in Agricultural Engineering Department from 1985. A Remote sensing Cell was created to prepare the status report of parson Valley, Kundah and Vaigai Reservoir catchments in Tamil Nadu under HADP by Union Planning Commission. After completion of this work, the cell was entrusted with the task of preparation of status report of Western Ghats Region in Tamil Nadu. Satellite Imagery and Aerial Photographs are used for preparation of status reports to map and investigate about soil erosion, land use, geology, drainage etc. Based on the status reports, priority watersheds are selected for implementation soil conservation programmes under Western Development Programme. Out of the 26000 Sq.Km. area of the Western Ghats region, status reports were prepared for 21000 Sq.Km. in book form and simultaneously reports were prepared for 5250 Sq.K.m. areas in digital format.

During the year 2005-06, it is programmed to prepare status report for 1500 Sq.Km. on watershed basis for the watersheds in Theni, and Madurai district in 1:12500 scale maps using latest satellite data. Apart from this, the Cell will assist the district officers to create GIS of the WGDP areas in 1:10000 scale with survey No. field boundaries, etc.,

It is also proposed to create Western Ghats information System in coordination with the Anna University in 1:50000 scale. The attribute data on area covered under WGDP in micro-watershed and village will be added to this GIS.

As regards to using Photogrametric software and Aril Photographs, 3000 ha. watershed will be covered in Tirunelveli District where the cadastral information from
village records and the Topograpetic in 3D form will be incorporated with 2M Contour intervals. This study will enable to use the Aerial Photographic Data and village maps village maps effectively in mapping the difficult terrain of Western Ghats.

B) Provision of Computer with GIS area for preparation of status Report:

It has been decided to create Western Ghats Information System for the Western Ghats Districts in Tamil Nadu. The watershed is already delineated upto Micro-watershed. The area covered, the conservation measures carried out in the micro watershed land use details in the micro watershed will be created as a separate layer using Remote Sensing and GIS package and the corresponding attribute table will be generated. This Western Ghats Information System is the ready reckoner for evaluating, implementing and monitoring officials to know about the status of the implementing area. For the above purpose, GIS Software and the Computer system with latest configuration will be provided for updating of the data in Western Ghats Districts. For the year 2005-06 the following the two districts i.e. Virudhunagar and Madurai will be provided with GIS Software and the Computer system with latest configuration at the cost of Rs. 10.00 lakhs. A sum of Rs.324.38 lakhs has been proposed for the year 2005-06 under Soil Conservation (including anti-soil erosion).

2) Horticulture

In view of the limited water availability for conventional crops, needs of economic development and for protecting the environment, horticulture activities are assuming greater importance. Under WGDP, horticulture development activities aim to bring under use the vast stretch of dry lands by raising perennial crops that improve the eco-system and uplift socio-economic status of poor farmers. In the first and second years of the Tenth Plan period i.e. 2002-03 and 2003-04, a sum of Rs.135.01 lakhs each year and in 2004-05, a sum of Rs.135.48 lakhs was sanctioned under WGDP. A sum of Rs.133.37 lakhs was proposed during 2005-06 under Horticulture sector.

3) Animal Husbandry and Veterinary Services

Animal Husbandry is an important subsidiary occupation as it provides income generating employment to the weaker sections in the rural areas. The Western Ghats Region in Tamil Nadu has a great scope for development of livestock because of its favorable climate, substantial area under pasture lands, tree and fodder crops. In the first and second yeas of the Tenth Five Year Plan period i.e. 2002-03 ands 2003-04, a sum of Rs.45.79 lakhs and Rs.46.00 lakhs respectively were sanctioned. For the year 2004-05, a sum of Rs.16.00 lakhs had been approved for continuing ongoing Animal Husbandry schemes. For the year 20006, a sum of Rs.94.30 lakhs was proposed under Animal Husbandry and Veterinary Services.

4) Forest

To prevent forest degradation and increase forest cover, the emphasis has been given on eco-development, eco-restoration and eco-preservation on watershed basis. Priority has been given to degraded watersheds, and in order to realize saturation, an integrated approach is being followed. Simultaneously, forest coverage has also to be taken care of, in other than designated watershed areas.

During the years 2002-03, 2003-04 and 2004-05 a sum of Rs.375.66 lakhs, Rs.399.33 lakhs and Rs.161.23 lakhs respectively were sanctioned under this sector. For the year 200-06, a sum of Rs.370.00 lakhs was proposed under forestry sector.
For the year 2005-06, a sum of Rs.200.25 lakhs has been proposed for implementing various forestry schemes on other priority watersheds and it includes an establishment cost of Rs.25 lakhs and Rs.13 lakhs for maintenance of assets.

5) Sericulture

Sericulture is a labour intensive, agro based cottage industry ideally suited for self employment with low investment and high returns over the short term. Sericulture is an eco-friendly industry consonant with eco-preservation, eco-restoration and eco-development. More over, Sericulture provides regular cash flows throughout the year and is ideally suited to the needs of small, marginal, women farmers and economically weaker sections in the Western Ghats areas.

For the years 2002-03, 2003-04 and 2004-05, a sum of Rs.11.70 lakhs, Rs.11.80 lakhs and Rs.11.80 lakhs respectively have been provided to the Sericulture sector under Western Ghats Development Programme.

It is proposed to continue the implementation of the sericulture activities under Western Ghats Development Programme in the year 2005-06 and the scheme components are as follows with the outlay of Rs.11.80 lakhs:

i) Supply of Mulberry saplings on subsidized costs.
ii) Construction of separate rearing house.
iii) Procurement of rearing equipments.

6) Rural roads

The Western Ghats Region occupies about 20% of the geographical area of Tamil Nadu and hence the development of infrastructure facilities will enhance the overall development of the State.

For the year 2005-06, a sum of Rs.45.00 lakhs is proposed for rural roads sector.

7) Palm Products Development.

Palm products industry is a major industry among coastal and hill areas of Tamil Nadu. Out of estimated 8.59 crores of Palmyrah trees in India, 5.20 crores of trees are in Tamil Nadu providing employment to 6 lakhs of artisans in rural areas. The industry also attracts foreign exchange by way of export of Palm products.

For the year 2005-06, a sum of Rs.4.50 lakhs is proposed for distribution of Tools and Equipements to the 300 Palmgur Artisans to process the Palm Jaggery out of Neera under Western Ghats Development Programme.

8) Evaluation

A sum of Rs.7.50 lakhs is proposed for Evaluation and Applied Research Department for 2005-06 under WGDP for undertaking the following three evaluation studies.

1. Impact of WGDP on State Horticulture Farms in the Western Gahts Region.
2. Scope for optimizing the potential of minor forest areas: and
3. Study on the convergence of schemes in the implementation of WGDP.

9) Tourism

Western Ghats Region is one of the hill ranges in India with many natural places for tourism development. Already many tourist places are located in the Western Ghats Region viz., the Nilgiris, Indira Gandhi Wildlife Sanctuary, Mudumalai sanctuary, Kodaikanal, Courtallam in Tirunelveli, Theni, Kanniyakumari etc. There is more scope for strengthening tourist attraction like Kovai Kutrallam in Coimbatore, Monkey falls near Pollachi, Tirumurthy Hill near Udumalpet, etc. Moreover, there are number of reservoirs in the region like Parambikulam, Aliyar, Tirumurthy, Amaravathi, Siruvani, Pillur, Manjalar, Vaigai, Papanasam, Manimuthar, Pechiparai etc.

Considering the vital role to be played by the tourism sector in the overall development of Western Ghats Region, it has been proposed to allocate an amount of Rs35 lakhs for tourism sector.


Rs.15.00 laksh has been proposed for 'Evaluation of Western Ghats Development Programme for a decade using Remote Sensing and GIS in Dindigul and Virudunagar District' through IRS Anna University, Chennai and Rs.8.00 lakhs has been proposed for Project 'WEGHARIS' (WEstern GHAts Resources, Hazards and Environment Information System) through CRS, Bharatidasan University, Trichy.

For the year 2005-06, a sum of Rs.23.00 lakhs is proposed for Remote Sensing.

The sector wise allocation for 2005-06 under Western Ghats Development Programme is as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sector</th>
<th>Outlay proposed for 2005-06 (Rs. in lakhs)</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>Watershed areas</td>
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<tr>
<td>1</td>
<td>Soil Conservation (incl.anti-soil erosion)</td>
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<td>2</td>
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<td>6</td>
<td>Minor Irrigation</td>
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<td>7</td>
<td>Sericulture</td>
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<td>8</td>
<td>Palm Products Development</td>
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<td>Rural Roads</td>
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<td>Evaluation</td>
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<td>Survey &amp; Studies (incl. Remote Sensing)</td>
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<td>Preparation of Project report for formation of WGDP Authority</td>
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<td>15</td>
<td>Non-Conventional Energy schemes</td>
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<td>16</td>
<td>Tourism</td>
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<td><strong>Total</strong></td>
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