

6. AREA DEVELOPMENT PROGRAMMES

The State though increasingly experiences pressure on land, yet nearly one-fifth of the geographical area remains unutilized / degraded. It emphasizes the imperative need for the development of unutilized / degraded land for cultivation of crops. Since, the State is water starved, it has vast scope for water management, rain water harvesting, improving rainfed farming and development of degraded / wastelands. Development of wastelands / degraded lands and improving rainfed farming is crucial as well as a formidable problem that agricultural planning faces today. Reclamation of wasteland / degraded lands and improving rainfed farming ensures to enhance production in significant extent of land which remained hitherto either uncultivated or uneconomically utilised. Based on the above grounds, the State aims at increasing food and fibre for the increasingly prosperous population and attaining sustainability, arresting and reversing the adverse effects of degradation on agriculture, forest and environment and ensuring viable balance between different uses of natural resources. To achieve the avowed objectives, various area and location specific Centrally Sponsored and State Schemes are implemented over a period of time on watershed basis with the participatory approach following separate guidelines. The State has about 133 major watersheds, which are further sub- divided into 18568 micro watersheds. For convenience, watersheds are classified in terms of size into basins, watersheds, sub-watersheds and micro watersheds. Watershed development involves conservation, regeneration and judicious utilization of natural resources especially land and water. It aims to bring about an optimum balance between the demand and use of natural resources so that they remain sustainable over time.

Box -1

Positive Aspects of Watershed Programmes

The implementation of watershed programmes has brought to fore some desirable positive signals which are listed out below:

- increase in recharge of ground water aquifers;
- reduction in soil erosion;
- increase in cropping intensity;
- change in cropping pattern;
- rise in overall bio-mass in the watershed;
- increase in employment and
- increase in crop productivity.

Eleventh Plan : A Synopsis

The main objectives of the Plan are as follows:

- Conservation of moisture;
- Prevention of Soil erosion;
- Prevention of land degradation;

The following strategies are adopted to achieve the above objectives and to sustain benefits -

- Rainwater harvesting with suitable constructions and storing run-off for later use during critical periods to save the vital crop;
- Renovation of Water sources and
- Afforestation in degraded lands .

The total expenditure incurred for 'soil conservation and watershed management' under different programmes during the Tenth Plan was Rs 323.58 crores (73.9%) as against the total outlay of Rs 437.60 crores. The outlay for 'soil conservation and watershed management' had almost doubled to Rs.643.17 crores during the XI Plan period. The share of on-going and new schemes stood in the ratio at 47: 53. The relative share of outlay on 'soil conservation and watershed management' in the total Plan outlay of the State worked out to 0.75 percent. Its share in the total allocation of 'agriculture and allied activities' stood at 8.2 percent. The total area to be treated under 'soil conservation and watershed management' during the current plan through various programmes is 92870 hectares.

Western Ghats Development Programme (WGDP):

The multi-sectoral Centrally Sponsored Scheme viz., Western Ghats Development Programme is being implemented in the State since 1975-76. Initially, the immediate objective of the programme was the economic development of the well being of people residing in the area. Subsequently, the objective of the programme has gradually been changed to ecological preservation and restoration thereby maintaining ecological balance and the overall socio-economic development of the region on a sustainable basis. Initially, the programme was fully funded by the Centre. At present 90 percent of the funds is provided in the form of grants and the remaining 10 percent as loan to the beneficiary State. The Programme covers 25.70 lakh hectares spread over 33 taluks of eight districts viz., Coimbatore, Erode, Dindigul, Madurai, Theni, Virudhunagar, Tirunelveli and Kanyakumari. It is implemented on watershed basis in a phased manner in the chosen taluks. Accordingly, of the total 5,197 watersheds delineated, 2,366 watersheds have been identified as 'very high priority' and 'high priority' on the basis of soil erosion for taking up treatment at the first instance. The average unit cost per hectare is Rs.6,000/-. The process of implementation is based on the guidelines of Union Planning Commission. In the last 31 years of implementation a total sum of Rs.176.20 crores was spent treating a total extent of area of about one lakh hectares in the above eight districts. During the Tenth Plan alone, the State received Rs.61 crores and the entire sum was spent. About 70 percent of the expenditure was incurred towards the promotion of soil and water conservation and water harvesting in the reserved forests and in agricultural lands, forests and horticulture. The total area treated during this period is of the order of 57747 hectares comprising soil and water conservation 7,111 hectares (12%), forests 3868 hectares (7%) and horticulture 46,768 hectares (81%). During the first year of the Eleventh Plan (2007-08), it has been proposed to spend Rs 17.04 crores for developing 99 already existing watersheds and 35 new watersheds to be taken up for treatment.

Hill Area Development Programme (HADP):

The Hill Area Development Programme is being implemented in the Nilgiris district from 1975-76 under the financial assistance from the Union Planning Commission with a view to supplement the efforts of the State towards ecological preservation, restoration and overall development of the district economy. At present 90 percent of the funds is provided in the form of grants and the remaining 10 percent as loan to the beneficiary State. The inter se distribution of Special Central Assistance among the States is based on area and population as per the 1981 Census. In the case of HADP equal weightage is given to both these criteria. The strategy for the programme is centered on the sub-plan approach under which a separate sub-plan for the hill area in the concerned State was prepared indicating the flow of funds from the State Plan and Special Central Assistance so that convergence could be achieved without any duplication. The emphasis was gradually shifted from beneficiary oriented to watershed based development of the area from 2000-01. The total geographical area of 2.74 lakh hectares of the district has been delineated into 75 watersheds. Out of which, 37 Macro Watersheds have been prioritized for taking up works. The balance 38 watersheds are fully covered with reserve forest which do not require treatment.

About 60 percent of the allocation under HADP is earmarked for the works viz., soil and water conservation and water harvesting measures on integrated basis in selected high priority watersheds and the remaining 40 per cent is allotted for other than watershed works. The activities of HADP are focused not only on forest, soil conservation and horticulture as core sectors but also the other need based sectors like road development of local bodies, welfare of SC/ST, human resource development, animal husbandry & dairy development, medical and public health, minor irrigation, tourism meeting the socio economic development of the district. Action plans are prepared based on the needs and priorities of the local people constituting the Watershed Association and Resource Management Committee. During 2006-2007, 101 Micro Watersheds from 14 newly selected Priority Macro Watersheds were proposed to be taken up for treatment. Out of which 75 Micro watersheds from 8 newly selected Macro watersheds and one model micro watershed are being taken up for implementation of different sectoral activities from 2006-2007 onwards. For the remaining 6 Macro Watersheds, comprising of 25 Micro watersheds, preparatory works are under progress. For the year 2007-2008, the total outlay to the tune of Rs.35.50 crores was earmarked, of which, Rs.21.36 crores (60.18%) has been proposed for sectoral activities in the selected and prioritised watersheds, Rs.12.13 crores (34.16%) for the works in Non-Priority watersheds and for establishment and others Rs. 2.01 crores (5.66%) .

Since the inception of the Programme, the Government of India has allotted a total sum of Rs 5056.41 crores for HADP, of which the State has received Rs 371.57 crores (7.3%) and on an average it works out to Rs 11.61 crores per year. The share of the State which hovered around 4.5 per cent upto Eighth Plan was increased to 7.6 per cent during the Ninth Plan and further a quantum jump to 23.2 per cent during the Tenth Plan.

Table –1: Plan-wise Outlay on HADP - Tamil Nadu

(Rs. Crores)

Sl. No.	Plan	Government of India		Tamil Nadu		Relative share (%)
		Outlay	Expenditure	Outlay	Expenditure	
1.	V plan	150.00	150.00	7.00	7.00	4.6
2.	VI plan	473.24	473.24	21.81	21.81	4.6
3.	VII plan	750.00	750.00	33.75	33.75	4.5
4.	Annual Plans	480.26	499.58	22.18	22.18	4.6
5.	VIII plan	12566.47	1256.47	55.49	55.49	4.4
6.	IX plan	1414.28	1412.71	107.44	107.44	7.6
7.	X plan	532.16	530.52	123.90	123.90	23.2

Source : Union Planning Commission, Government of India

Drought Prone Areas Programme (DPAP):

This Programme is a centrally shared programme launched in 1973-74. The basic objectives of the programme is to minimize the adverse effects of drought on the production of crops, productivity of land, water and human resources thereby ultimately leading to 'drought proofing' of the affected areas.

The Programme initially paid attention towards employment generation and creation of infrastructure facilities. Subsequently, the focus has been shifted to rainwater harvesting and overall economic development. Since 1995-96, this programme is implemented as per the Guidelines of Government of India on Watershed basis with participatory approach. Prior to 1995-96, the implementation of Programme was taken up by line departments. Subsequent to the introduction of Watershed Guidelines, the responsibility of implementation was shifted to Watershed Associations and Watershed Committees. Consequent to the 73rd and 74th Constitutional Amendments, the responsibility of implementation is vested with Village Panchayats since 2003. User Groups/Self Help Groups of the watersheds would identify and carry out the execution of works. The works undertaken are of special nature and involve a variety of activities under three broad categories viz., land development, water resource development and afforestation. Presently, the Government of India and the State share the expenditure for the implementation of the Programme in the ratio of 75:25 respectively. The duration of the Programme is five years and the unit cost per hectare is Rs.6,000. A contribution of 5 percent on investments in private lands of SC/ST farmers, farmers living below poverty line and for works executed in community lands from the users is collected. For other farmers, a uniform contribution of 10 percent of investment is collected. Under the Programme, it is proposed to treat 29.42 lakh hectares in 80 notified blocks spread over in 17 districts of the State.

Under DPAP, the watershed projects are sanctioned directly by Government of India in batches. In the first (1995-2000) and fourth (1998-2003) batches, 400 watershed projects were sanctioned and completed at a total cost of Rs.7801.83 lakhs treating a total area of 1,97,060 hectares. No project has been sanctioned to the State under II, III and VI batches. During 2007-08, no new projects were sanctioned by the Government of India under DPAP. As on March 2008, it is proposed to treat 614142 hectares of land through 1222 watershed projects at a project cost of Rs 33,670 lakhs which are under different stages of progress.

Table – 2: DPAP - Financial and Physical Performance

1. Number of ongoing Watershed Projects	1,222
2. Project Cost (Rs Lakhs)	33,670.00
a. Government of India (Rs Lakhs)	25,252.50
b. Government of Tamil Nadu (Rs Lakhs)	8,417.50
3. Funds Released (Rs Lakhs) (Upto March 2008)	20,809.98
a. Government of India (Rs Lakhs)	15,625.52
b. Government of Tamil Nadu (Rs lakhs)	5,184.46
4. Expenditure incurred (Rs lakhs) (Upto March 2008)	18757.67
5. Project Area (Hectares)	6,14,142
6. Area Treated (Hectares) (Upto March 2008)	3,30,084
a. Common Land (Hectares)	1,04,161
b. Private Land (Hectares)	2,25,923

Source : Agriculture Department, Chennai-9.

Integrated Wasteland Development Programme (IWDP) :

The Integrated Wasteland Development Programme has been under implementation in Tamil Nadu since 1993-94 in non-DPAP blocks. The programme aims at conservation measures in ecologically fragile watersheds, regeneration of degraded forest areas, technology extension and development of special problem lands for fuel, wood and fodder production. The approach of the programme has been changed when the guidelines for Watershed Development through participatory approach came into force. Since then, the programme has been implemented on lines similar to that of DPAP. New IWDP programmes are prioritised for sanction in consultation with the States. The duration of the programme is five years and the unit cost per hectare is Rs 6,000/-. Presently the expenditure is shared between the Central and State Governments in the ratio of 11:1. The works taken up under this programme are similar to those taken up under DPAP covering the broad categories of land development, water resource development and afforestation.

In Tamil Nadu, totally 85 projects were sanctioned since inception at a total cost of Rs 27,364.21 lakhs to tackle a total extent of 4,75,239 hectares of degraded lands spread over in 24 districts. Of these, 5 projects were completed treating a total area of 18,151 hectares at a cost of Rs.1,086.39 lakhs. During 2007-08, no new IWDP projects had been sanctioned by the Government of India to the State. As on March 2008, 80 projects are under different stages of implementation in 910 watersheds spread over 96 blocks of 24 districts.

Table -3: IWDP- Financial and Physical Performance

1. Number of ongoing Watershed Projects	80
2. Number of watersheds	910
2. Project Costs (Rs Lakhs)	26,220.31
a. Government of India (Rs Lakhs)	24,241.69
b. Government of Tamil Nadu (Rs Lakhs)	1,978.62
3. Funds Released (Rs Lakhs) (Upto March 2008)	16,217.80
a. Government of India (Rs Lakhs)	15,068.26
b. Government of Tamil Nadu (Rs lakhs)	1,149.54
4. Expenditure incurred (Rs lakhs) (Upto March 2008)	14,737.36
5. Project Area (Hectares)	4,57,596
6. Area Treated (Hectares) (Upto March 2008)	2,37,226
a. Common Land (Hectares)	58,238
b. Private Land (Hectares)	1,74,850

Source : Agriculture Department, Chennai-9.

National Watershed Development Project for Rainfed Areas (NWDPR):

With the main objective to increase productivity and production in rainfed areas through sustainable use of natural resources adopting watershed approach, the National Watershed Development Project for Rainfed Areas (NWDPR) was launched in 1990-91 as a centrally sponsored programme. Prior to the Tenth Plan it was implemented in 84 blocks spread over 19 districts of the State and treated a total extent of 2.27 lakh hectares at a cost of Rs.73.29 crores.

Subsequently, the programme was restructured as Watershed Areas Rainfed Agricultural Systems Approach (WARASA) during the Tenth Plan period and the restructured NWDPR was implemented a Five Year project from 2002-03 to 2006-07. Barring Thanjavur, Nagapattinam, Tiruvarur, Chennai, Nilgiris and Kanniyakumari, it is being implemented in 23 districts. The expenditure for the implementation of the project is shared in the ratio of 90:10 by the Government of India and the State. The scheme is being implemented in 755 watersheds spread over 155 blocks having less than 30 percent of assured irrigation in arable land and having a slope of less than 8 percent. The unit cost per hectare is Rs 4,500/-. It is proposed to treat 500 new watersheds during the Eleventh Plan (2007-2012), in 22 districts excluding Coimbatore wherein all watersheds have been saturated and there is no scope for taking up of new watersheds.

During the Tenth Plan period, the total release of Rs 93.43 crores was spent for treating a total area of 2.39 lakh hectares. During 2007-08, an allocation of Rs 23.91 crores was made for treating 29227 hectares. As the first step, the State released Rs.10.76 crores during 2007-08 for taking up the preliminary works.

Table - 4 : Physical and Financial Achievement under NWDPR

Year	Financial (Rs. in lakhs)			Physical (in ha.)	
	Allocation	Release	Expenditure	Target	Achievement
2002-03	1407.07	1407.07	1407.07	31268	31268
2003-04	1525.00	1525.00	1525.00	33888	33888
2004-05	2089.06	2089.06	2089.06	46424	46424
2005-06	1990.16	1990.16	1990.16	44227	44227
2006-07	3738.70	3738.70	3738.70	83082	83082
2007-08	2391.30	2391.30	2391.30	29227	29227
Total	13,141.29	13,141.29	13141.29	2,68,116	2,68,116

Source: Agriculture Policy Note 2008-09, Government of Tamil Nadu.

Backward Region Grant Fund :

With the aim to develop backward districts and the districts affected by extremism, a centrally sponsored programme viz., Rashtriya Sam Vikas Yojana was launched by Government of India in 2003-04. The districts were identified by the Government of India. A Special Central Assistance of Rs.15 crores was provided annually to each district for three years by the Government of India for undertaking works relating to drought proofing, promotion of agriculture and horticulture development, creation of basic infrastructure facilities, uplifting social sector and providing livelihood support in these districts. The districts of Tiruvannamalai, Dindigul, Cuddalore,

Nagapattinam and Sivagangai were selected for implementation of the programme. The scheme has been renamed as 'Backward Region Grant Fund' (BRGF) and is implemented under the revised guidelines issued by the Ministry of Panchayat Raj, GOI. It is administrated by the Rural Development and Panchayat Raj Department for 2007-08 in the State. As against the total fund allocation of Rs.225 crores, the total expenditure up to March 2008 was Rs.200.30 crores. Of the 25223 total works, 24760 works had been completed as on March 2008.

Table – 5: Physical and Financial Achievement under BRGF

District	Financial (Rs in crores)		Physical (No of works / Activities)	
	Allotted	Expenditure	Taken up	Completed
Tiruvannamalai	45.00	44.95	13492	13492
Cuddalore	45.00	41.56	1265	1240
Nagapattinam	45.00	35.68	1953	1587
Dindigul	45.00	42.01	4167	4133
Sivagangai	45.00	36.09	4346	4308
Total	225.00	200.29	25223	24760

Source: Directorate of Rural Development and Panchayat Raj, Chennai-15

Watershed Development Fund (WDF):

With the objective to create necessary framework conditions to replicate and consolidate the isolated successful initiatives under different programmes in the government, semi- government and NGO sectors, Watershed Development Fund was created in NABARD with a contribution of Rs.100 crores each by NABARD and Government of India during the year 2000 to cover 100 districts in a phased manner in three years. In Tamil Nadu, it has been created to treat 100 watersheds at a cost of Rs.60 crores. The fund has two components viz., loan and grant. Two-third of the fund is for loans to the State Government for watershed development and one-third is for grant based activities covering promotional efforts, capacity building etc. The scheme is operated for a period of 6 years from 2004-05. The projects are implemented through NGOs . At present 124 projects are implemented in 20 districts through 68 NGOs. Upto the end of 2007-08, capacity building phase and feasibility study report stages were completed in 25 watersheds and handed over to Tamil Nadu Watershed Development Agency. The total area treated so far was 9312 hectares and the total expenditure incurred was Rs 514.36 lakhs.

Comprehensive Wasteland Programme:

Aiming to reclaim 20 lakh hectares of wastelands over a period of five years, the State had launched the Comprehensive Wasteland Programme in 2002-03 by adopting the following two strategies:

a) Development of Wastelands with Participatory Approach:

Under this approach, planting of Horticulture / Agro forestry seedlings is taken up in farmers' wastelands on micro watershed basis and envisaged provision of a maximum subsidy of Rs.8500 per hectare. Initially, it was implemented on pilot basis in 10 districts in 2002-03, subsequently extended in a phased manner to 24 districts in 2005-06. The programme was implemented in 1244 watersheds in the State. During the four year period 2002-03 to 2005-06, as against the target of 2.30 lakh hectares, the actual area covered under planting stood at 1.71 lakh hectares (74%).

b) Development of Government Wastelands by leasing out to Corporate Houses, Small companies, Co-operatives, Federation of Women SHG's

Under this strategy, Government wastelands are grouped into three categories viz., below 8 ha, above 8 ha to 40 ha and above 40 ha. The extent of notified Government wastelands was 24231 hectares. The area allotted for lease was 1073 hectares of which 384 hectares were taken in possession by the leasee. The maximum period of lease will be 30 years. The relevant details are presented below:

Table - 6 : Leasing out of Waste Land

Sl. No	Category	Notified area	Area allotted for lease	Area taken in possession
1	Below 8 hect.	14004	187	128
2	Above 8 ha to 40 ha	5127	566	130
3	Above 40 ha	5100	321	126

Source: Tamil Nadu Watershed Development Agency, Chennai.

Distribution of Wasteland:

The State launched massive scheme viz; 'Distribution of 2 acre wasteland to landless poor agricultural labour families' free of cost in 28 districts (including Ariyalur district) during 2006-07. Under this scheme, the wastelands in the State are classified into three categories viz., Government poramboke wastelands without any encroachments, Government poramboke wasteland under encroachment by small and marginal farmers; and private wastelands of small and marginal farmers. This scheme aims to empower landless agricultural labour households through distribution of entitlements of Government wastelands (Category I & II) to them after developing lands for sustainable agricultural operation by taking up of land development, creation of irrigation source, providing micro irrigation and planting with pedigree planting materials by dovetailing resources from various ongoing schemes adopting cluster approach. In the case of patta wastelands (Category III), if the land owners voluntarily come forward, such assistance is provided for developing their land into cultivable land. The scheme contemplates that about 191320 acres would be reclaimed and made worthy for cultivation and distribution to landless poor agricultural families not exceeding 2 acres per family in a phased manner. The government poramboke lands of 69217 acres encroached by small and marginal farmers would be regularized and to be upgraded for sustainable cultivation. Similarly wastelands to an extent of 684411 acres owned by small and marginal farmers would be reclaimed. Upto the end of March 2008, the entitlement

of government wasteland of 1.79 lakh acres were distributed to 1.51 lakh beneficiaries in seven phases. Of the total extent of 41506 acres of land required for land development, 39673 acres (96%) were reclaimed at a total cost of Rs.1242.16 lakhs. Under category I &II, totally 165 clusters with an area of 2945.72 were formed, of which 1212.40 acres belonging to 54 clusters have been developed with planting of horticulture crops and in the remaining clusters (111), the works are under progress. Under the development of private patta wastelands in a cluster of 50 hectares and above, totally 1589.96 acres have been taken up for development at a total cost of Rs.370.00 lakhs.

Box-2

Thrust Areas

All these programmes aim at the development of rainfed, degraded and wastelands. For effective implementation of these programmes and to prevent duplication of efforts, it is necessary to evolve machinery for executing land based activities in all districts. The project staff now positioned under various schemes / programmes may be brought under the fold of one umbrella and to make them function under a single command. At the same time, the expenditure towards staff component and development works have to be apportioned to the respective scheme heads for accounting purpose and to keep the funding sources intact. The machinery to be created may be entrusted with the development of rainfed, degraded and wastelands. In the districts, where the area development programmes are not implemented, staff support may be provided either by creation or by deployment.

1. After withdrawal of the programmes, the sustainability of the benefits is questionable due to poor maintenance of assets so created under the programmes. Hence, maintenance of assets created under these programmes should be entrusted to the Village Panchayats as a mandatory one.

2. For the maintenance of assets under these programmes after their withdrawal, the Government may provide separate funds for maintenance to the Village Panchayats most of them are funds starved.