

## CHAPTER VII

### Tamil Nadu Watershed Development Agency

#### 1. Distribution of Government Wasteland to Landless Agricultural Labourer Families

The Government has announced this massive scheme during 2006-07 and is being implemented till date. The lands covered under this scheme are categorized into 3 types :

Category I : Government wastelands without any encroachment

Category II : Government wastelands under encroachment by small and marginal farmers

Category III : Private patta waste lands of small and marginal farmers

#### Objectives of the Scheme:

- i. Identification of wastelands and developing these lands for profitable and sustainable agricultural operation by undertaking land development wherever required and issue of patta to landless poor agricultural labourer families.
- ii. Wherever contiguous blocks of 10 acre and above of category I and II lands exist, and if ground water is available then efforts are taken to develop them into horticulture clusters by undertaking land development, creating irrigation sources, free energisation, establishing micro irrigation system and by planting quality horticultural seedlings.
- iii. Wherever the private patta wastelands along with punjai lands are available in a cluster of 50 acre and above, such lands are taken up for cluster development, if the small and marginal farmers come forward for joint management. If ground water is available then land development, source of irrigation, free energisation and micro irrigation system are provided for developing horticultural crops through cluster mode.
- iv. In 10 acre and 50 acre. clusters Lift Irrigation Societies are formed by the beneficiaries for joint development and management of common infrastructure created. In case, if the ground water is not available, depending upon the preference Bio-mass tree species and fodder crops are planted and given to the farmers.

#### Achievements

##### a. Land Development:

After the land identified by the Revenue Department, wherever the land development is required it is undertaken by Agricultural Engineering Department. Out of 41,506 acre requiring land development, so far 39,673 acre have been developed. For irrigation and ground water recharge, the farm ponds are created of the size of 15 X3X1.5 cu,m, or 15X6X1.5 cu,m, at the rate of Rs.2,750/-, Rs.4,650/- per pond respectively. In total, 10,470 farm ponds have been completed by dovetailing various departments' ongoing programmes.

Physical

(Extent in acres)

Phase	Extent distributed	Number of beneficiaries	Reclamation needed	Reclamation done
Ist phase (17.9.06)	25,282.11	24,358	11,122.00	11,122.00
IIInd phase (17.12.06)	25,805.53	26,749	8,078.00	8,078.00
IIIrd phase (17.3.07)	26,029.61	20,648	5,490.00	5,490.00
Ivth phase (17.6.07)	24,506.00	19,821	6,596.00	5,892.00
Vth Phase (17.9.07)	32,065.61	24,932	4,364.00	3,397.00
VIth Phase (29.12.07)	26,982.62	21,487	2,396.00	2,234.00
Outsourcing	--	--	3,460.00	3,460.00
VIIth Phase (17.3.2008)	18,040.14	13,270	Development Work under Progress	
<b>Grand Total</b>	<b>1,78,711.62</b>	<b>1,51,265</b>	<b>41,506.00</b>	<b>39,673.00</b>

**b. Development of land parcels of 10 acre and above:**

Under the development of land parcels of 10 acre and above in category I and II, 54 clusters with an extent of 1212.40 acres out of 165 over an extent of 2,945.72 acres have been developed with planting of horticulture crops and distributed. In the remaining 111 clusters, development activities in an extent of 1,733.32 acres are under progress.

About 1,517 farmers belonging to these clusters have been trained to acquire the technical knowledge on planting, micro irrigation, Integrated Nutrient Management etc. and maintenance of common infrastructures created under cluster development.

**c. Development of private patta wastelands along with punjai lands in a cluster of 50 acre and above.**

Under the scheme, 50 acre and above having an extent of 1,589.96 acre have been taken up for development at the cost of Rs.370.00 lakhs.

**Area of Operation:**

The scheme is implemented in all 29 districts except Chennai and Nilgiris.

**Financial achievement:**

An expenditure of Rs.1,242.16 lakhs has been incurred towards the reclamation of 39,673 acres of wastelands.

(Rs.in lakhs)

Non-cluster development		Cluster development		Total Expenditure				
Dove-tailing	Contri-bution by TAWDEVA	Dove-tailing	Contri-bution by TAWDEVA	Dove-tailing	Contri-bution by TAWDEVA	Training	Farm Pond	Total
155.91	545.07	141.64	269.46	297.55	814.53	1.82	128.26	1,242.16

These schemes shall continue during the year 2008-09.

## 2. Restructured National Watershed Development Project for Rainfed Areas (NWDPR)

Under Restructured NWDPR for XI Five Year Plan period (2007-2012), it is proposed to take up 500 watersheds in 22 districts, where the area has less than 30% assured means of irrigation in arable lands and having slopes less than 8%. The pattern of assistance is in the ratio of 90:10 for the Centre and State respectively. The minimum area for a watershed is 500 Ha.

### Objectives:

- ❖ Conservation, development and sustainable management of natural resources including their use.
- ❖ Enhancement of Agricultural productivity and production in a sustainable manner.
- ❖ Restoration of ecological balance in the degraded and fragile rain fed eco-systems by greening these areas through appropriate mix of trees and shrubs.
- ❖ Reduction in regional disparity between irrigated and rainfed areas.
- ❖ Creation of sustained employment opportunities for the rural community including the landless.

### Area of implementation

During the X Five Year Plan project, the scheme was implemented in Tamil Nadu with community approach in 755 watersheds in 155 blocks in 23 districts. During the XI Five Year Plan project, the scheme will be implemented in 22 districts excluding Coimbatore district which has been saturated and as there is no new watershed available for treatment.

The scheme is implemented under the Chairmanship of the Collectors through District Watershed Development Agency at District level and through Watershed committees / Associations at Village level.

### PROGRESS IN IMPLEMENTATION:

So far, 2,68,116 Ha. of land has been covered at the expense of Rs.131.413 crores.

## PHYSICAL / FINANCIAL ACHIEVEMENT UNDER NWDPRA

Sl. No.	Year	Financial (Rs.in lakhs)			Physical (in Ha.)	
		Allocation	Release	Expenditure	Target	Achievement
1.	2002-03	1,407.067	1,407.067	1,407.067	31,268	31,268
2.	2003-04	1,525.000	1,525.000	1,525.000	33,888	33,888
3.	2004-05	2,089.063	2,089.063	2,089.063	46,424	46,424
4.	2005-06	1,990.160	1,990.160	1,990.160	44,227	44,227
5.	2006-07	3,738.700	3,738.700	3,738.700	83,082	83,082
6.	2007-08	2,391.300 **	2,391.300	2,391.300	29,227	29,227
	<b>Total</b>	<b>13,141.290</b>	<b>13,141.290</b>	<b>13,141.290</b>	<b>2,68,116</b>	<b>2,68,116</b>

\*\* Rs.10.76 crores allotted for undertaking preparatory works under XI Five Year Plan – (2007-08)

### Strategic Plan for XI Five Year Plan:

Year	Extent to be treated in 500 Nos. of new watershed area (in Ha.)	Fund requirement for new watershed area (Rs. in crores)
2007-08	25,000	15.00
2008-09	50,000	30.00
2009-10	50,000	30.00
2010-11	50,000	30.00
2011-12	75,000	45.00
<b>Total</b>	<b>2,50,000</b>	<b>150.00</b>

The flow of funds to SC and ST is 19% and 1% respectively.

### ACTION PLAN FOR 2008-09:

Under XI Five Year Plan, during 2008-09, it is proposed to treat an area of 50,000 ha. at an estimated cost of Rs.30 crores as detailed below.

Sl. No	Name of the Component	Amount (Rs. in crores )
I	Management Component	
	1. Administration cost 10%	3.00
	2. Community Organization 17.5%	5.25
	3. Training 5%	1.50
II	Development Component	
	1. Natural Resource Management 50%	15.00
	2. Farm Production System for land owning 15%	4.50
	3. Livelihood Support System 2.5%	0.75
	<b>Total</b>	<b>30.00</b>

### 3. Watershed Development Fund assisted by NABARD

Watershed Development Fund in Tamil Nadu has been created to treat 100 watershed projects at a cost of Rs. 60 Crores with the assistance of National Bank for Agriculture and Rural Development (NABARD). The scheme has been in operation since 2004-05 and the duration of the scheme is six years.

#### Objective of the scheme:

1. To spread the message of participatory Watershed Development.
2. Involvement of Government, NGOs/Voluntary organization in implementation.
3. Constitution of Watershed Association & watershed committee to develop the watershed based on the local needs.

#### Project period:

- |   |                   |
|---|-------------------|
| 1. Capacity Building Phase<br>(50 to 100 Ha. to be covered) | - 18 months.      |
| 2. Preparation of feasibility study report .                | - 6 months.       |
| 3. Full implementation Phase                                | - 4 years         |
| <b>Total period</b>   | <b>- 6 years.</b> |

#### Components of Watershed Development Fund:

As per new Guidelines being made operational since 21.11.2007.

1. Capacity Building Phase of Watershed Development Fund is 100% grant component being released by National Bank for Agriculture and Rural Development (NABARD).
2. Full Implementation Phase of Watershed Development Fund is 50% Loan to State Government & 50% Grant by NABARD.
3. Interest rate is 4.5%
4. Repayment period 9 years (3 years after availing Loan)

#### Area of Implementation:

At present the programme is being implemented in the following 20 Districts in the State.

Cuddalore, Dharmapuri, Dindigul, Kancheepuram, Karur, Krishnagiri, Madurai, Namakkal, Perambalur, Pudukottai, Ramnad, Sivaganga, Theni, Thoothukudi, Tirunelveli, Tiruvallur, Tiruvannamalai, Vellore, Villupuram, Virudhunagar.

Apart from the regular watersheds that are being approved by the State Steering Committee there are 5 PPID projects (Pilot Project for Integrated Development of Backward Blocks) in 5 Districts namely Ramnad, Dindigul, Thoothukudi, Trichy and Nagapattinam which is being completely funded by NABARD.

#### Allotment of fund for different component:

Unit cost per Ha.	-	Rs.6,000.00
Physical treatment	- 70%	Rs.4,200.00
Administrative overheads	- 10%	Rs. 600.00
Livelihood support for Landless Farmer & Women-	7.5%	Rs. 450.00
Community Organisation & Training programme	- 12.5%	Rs. 750.00

## **Project Implementation:**

During 2004-05 and 2005-06, 100 watersheds were selected by the State Steering Committee.

In the first 2 years period of the project, Capacity Building Phase is done during the first 18 months and Feasibility Study Report is done in the next 6 months with the assistance from NABARD.

From the third year the project is handed over to TAWDEVA by NABARD to carry out works in the Full Implementation Phase.

Among the projects selected during 2004-05, 10 projects which have completed Capacity Building Phase and Feasibility Study Report stage were handed over to TAWDEVA by NABARD in 2005-06 during which 1,925 ha was treated with a financial commitment of Rs.115.487 Lakhs. Subsequently in 2006-07 an area of 3,660 ha was treated with a fund of Rs.219.611 Lakhs. After completing the works these watersheds were handed to NABARD in 2007-08.

In 2006-07, 15 Watersheds were handed over to TAWDEVA for Full Implementation Phase and in 2007-08, an area of 3,727 ha was treated with a financial commitment of Rs.179.26 Lakhs. During 2008-09, an area of 2,902 ha would be treated in these 15 watersheds with a financial commitment of Rs.234.207 Lakhs and would be handed over to NABARD after completing the treatment works.

During the year 2007-08, no Full implementation Phase projects have been handed over to TAWDEVA by NABARD.

## **4. National Agricultural Development Programme - Rashtriya Krishi Vikas Yojana**

The National Agricultural Development Programme has been launched to achieve 4% annual growth rate in agricultural sector. The objective of the scheme is to more participation of farmers in agriculture, reducing yield gap in key crops through focused interventions, maximize returns to the farmers and bringing quantifiable changes in the production and productivity of agriculture and allied sectors. The pattern of funding is 100% grant by the Government of India. Under the programme Agriculture, Animal Husbandry, Milk Production, Fisheries Development and Irrigation Development schemes are being implemented.

During 2007-08, nine districts namely Coimbatore, Dharmapuri, Dindigul, Krishnagiri, Namakkal, Perambalur, Ramanathapuram, Salem and Villupuram have been identified as focused districts. The Tamil Nadu Watershed Development Agency is the Nodal Agency for the scheme being implemented by the departments of Agriculture, Horticulture, Agriculture Engineering, Public Works Department, Fisheries, Animal Husbandry, Dairy Development, Pubic Works Department, Tamil Nadu Veterinary and Animal Sciences University and Tamil Nadu Agricultural University.

As a part of National Agricultural Development Programme, Tamil Nadu Watershed Development Agency has been sanctioned funds for implementing the following projects:-

### **(i) Development of land parcels of 50 acres & above in patta dry lands**

Land parcels of 50 acres and above in dry lands (punjai lands) would be taken up for development of Horticulture clusters if ground water is available, otherwise Bio-mass

clusters would be taken up depending on the preference of the beneficiaries. It is proposed to cover 35 No. of land parcels of 50 acres and above under the scheme in the focused nine districts during the year at the cost of Rs.470.00 lakhs.

### **(ii) Management Information System**

Tamil Nadu Watershed Development Agency has been accorded sanction for the development of the Management Information System for Web based monitoring of National Agricultural Development Programme at State level and the District level at the cost of Rs.30.84 lakhs.

### **DROUGHT PRONE AREAS PROGRAMME**

This programme has been in implementation in parts of Tamil Nadu from 1972-73. Presently 80 notified blocks of 17 districts viz., Coimbatore, Dharmapuri, Dindigul, Karur, Krishnagiri, Namakkal, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivagangai, Tiruvannamalai, Thoothukudi, Tiruchirappalli, Tirunelveli, Vellore and Virudhunagar have been identified by the Government of India as drought prone areas and efforts are on to mitigate the adverse effects of drought conditions.

A watershed project covers an area of 500 hectares. The unit cost per hectare is Rs.6000/-. The Government of India and State Government share the expenditure for a watershed project in the ratio of 75:25. The duration of the project is five years.

Over the years, the objectives of the programme and the mode of implementation have undergone modifications from infrastructure creation and employment generation to rainwater harvesting and overall economic development through water-based activities. On the operational side, implementation has shifted from line departments to Village Panchayats wherein the user groups have identified the works and execute the works through Village Panchayats. Watershed approach with peoples' participation is given importance to tackle the problems of desertification.

The works being taken up under this Drought Prone Areas Programme are of a special nature and involve a variety of activities such as:-

Plantation Activities:	Horticulture Plantation, Fodder Development, Crop Demonstration, Community Nursery, Homestead Garden, Agro Forestry and Social Forestry.
Land Development:	Land Leveling, Summer Ploughing, Vegetative Bunding, Contour Bunding, Stone Bunding, Retaining Wall, Continuous trenching and Silt Application.
Water Resources Development:	Formation of Supply Channel and desilting, Check Dams, Cattle Pond, Farm Pond, Percolation Pond, Formation of Oorani, Desilting of Tanks, and Development of Drinking Water Resources.

The present strategy of the Government of India is to accord sanction for new watershed projects in batches. So far watershed projects totaling 1622 were sanctioned to Tamil Nadu at a total project cost of Rs.41,650.25 lakhs. Of them, watershed projects numbering 400 were completed at a cost of Rs.7,801.83 lakhs, treating a total area of 1,97,081 hectares. The remaining 1222 watershed projects at a total project cost of Rs.33,670.00 lakhs comprising Government of India's share Rs.25,252.50 lakhs and the State Government's Share Rs.8,417.50 lakhs. The total area to be treated is 6,14,142 hectares. Upto the end of February 2008 a total amount of Rs.20,490.67 lakhs consisting of

Government of India's share Rs.15,567.31 lakhs and the State Government's share Rs.4923.36 lakhs were released to District Rural Development Agencies for implementation of 1222 watershed projects. Of which Rs.18,085.31 lakhs (88%) were spent. The total area that has been treated under ongoing watershed projects upto the end of February 2008 was 3,28,175 hectares. The remaining 2,85,967 hectares is under treatment. The details are given in the Table 9.

During the year 2007-08 the Government of India have released Rs.3200 lakhs and the State Government have released its matching share of Rs.940 lakhs under Drought Prone Areas Programme upto the end of February 2008. It is an ongoing scheme.

## **INTEGRATED WASTE LAND DEVELOPMENT PROGRAMME**

Integrated Wasteland Development Programme aims at tackling the non-forest wasteland in non-DPAP blocks. The basic theme of the programme is to harvest the rainwater and to bring the degraded lands into productive use. At present, this programme is being implemented in 99 blocks of 24 districts viz., Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kancheepuram, Karur, Krishnagiri, Madurai, Namakkal, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivagangai, Theni, Thoothukudi, Tiruchirappalli, Tirunelveli, Tiruvallur, Tiruvannamalai, Vellore, Villupuram and Virudhunagar.

This programme has been under implementation since 1993-94. From 1<sup>st</sup> April 1995, the programme has also been brought under the purview of the Common Guidelines like Drought Prone Areas Programme, presently it is governed by Hariyali Guidelines. As per Hariyali Guidelines the User Groups have identified the works and execute the works through Village Panchayat. Presently, the expenditure is shared between Central and State Government in the ratio of 11:1. The unit cost per hectare is Rs.6000/-.

The works taken up under this Integrated Waste Land Development Programme are of a special nature and involve a variety of activities such as:-

Plantation Activities:	Agro Forestry, Horticulture Plantation, Fodder Development, Crop Demonstration, Community Nursery, Social Forestry and Homestead Garden.
Land Development:	Land Leveling, Contour Bunding, Silt Application, Stone Bunding, Retaining Wall, Summer Ploughing, Vegetative Bunding and Continuous trenching.
Water Resources Development:	Cattle Pond, Farm Pond, Formation of Oorani, Desilting of Tanks, Formation of Supply Channel and Desilting, Check Dams, Percolation Pond and Development of Drinking Water Resources.

Since the inception of the programme 85 projects have been sanctioned in 24 districts at a cost of Rs.27,364.21 lakhs to tackle a total degraded land of 4,75,239 hectares.



Out of 85 Projects, 5 projects have since been completed. The area treated was 18151 hectares at a cost of Rs.1086.39 lakhs. The remaining 80 Integrated Wasteland Development Programme Projects at a total cost of Rs.26,220.31 lakhs comprising Government of India's share Rs.24,241.69 lakhs and the State Government's share Rs.1,978.62 lakhs treating a total area of 4,57,596 hectares are under implementation. Upto the end of February 2008 a total amount of Rs.16,165.77 lakhs consisting of Government of India's share Rs.15,015.91 lakhs and the State Government's share Rs.1,149.86 lakhs were released to District Rural Development Agencies towards the implementation of the projects in the State. The total expenditure incurred under these projects stood at Rs.14,446.24 lakhs (89%). The total area that has been treated under these projects upto the end of February 2008 was 2,31,227 hectares and the remaining 2,26,369 hectares is under treatment. The details are given in the Table 10.

During the year 2007-08 the Government of India have released Rs.2649 lakhs and the State Government have released its matching share of Rs.248 lakhs under Integrated Wasteland Development Programme upto the end of February 2008. It is an ongoing scheme.