

CHAPTER - VIII

TAMIL NADU WATERSHED DEVELOPMENT AGENCY (TAWDEVA)

1. Distribution of Government Wasteland to Landless Poor Agricultural Labour 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 above and 50 acre and above 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 identification of wasteland by the Revenue Department, wherever the land development is required it is undertaken by Agricultural Engineering Department. Out of 51,559 acre requiring land development, so far 51,337 acre have been developed. For irrigation and ground water recharge, the farm ponds are created of the size of 15X3X1.5 cu.m. and, 15X6X1.5 cu.m. at the rate of Rs.2,750/-, Rs.4,650/- per pond respectively. In total, 21,205 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	6,763.00	6,763.00
Vth Phase (17.9.07)	32,065.61	24,932	6,547.00	6,547.00
VIth Phase (29.12.07)	26,982.62	21,487	5,411.00	5,411.00
VIIth Phase (17.3.08)	18,040.14	18,979	2,635.00	2,507.00
VIIIth Phase (17.6.08)	12,901.00	4,355	1,058.00	1,034.00
IXth Phase (17.9.08)	16,493.00	11,948	995.00	925.00
Xth Phase (17.11.08)	2,028.38	1,664	Necessary action being taken	
Outsourcing	-	-	3,460.00	3,460.00
Grand Total	2,10,134.35	1,74,941	51,559.00	51,337.00

b. Development of land parcels of 10 acres and above:

Under the development of land parcels of 10 acre and above in category I and II, 102 clusters with an extent of 1937.27 acres out of 142 over an extent of 2609.23 acres at the cost of Rs.631.92 Lakhs have been developed by planting horticulture crops. In the remaining 40 clusters, development activities in an extent of 671.96 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 for maintenance of common infrastructures created under cluster development.

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

Government has sanctioned the scheme of development of clusters in the patta wasteland and dry lands in an extent of 50.00 ac. and above lands of small and marginal farmers by providing common infrastructures like borewell, micro irrigation, planting of high income generating horticulture crops. Wherever ground water is not available bio-mass tree crops are planted at free of cost.

So far 4 clusters covering an extent of 222.63 ac. out of 42 clusters covering an extent of 2347.4 acres have been developed by planting horticulture crops. In the remaining 38 clusters with an extent of 2124.77 ac works are under progress. The development cost for the clusters is Rs.575.27 lakhs which has benefited 1539 small and marginal farmers.

Area of Operation:

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

Financial achievement:

An expenditure of Rs.2555.28 lakhs has been incurred towards the development of waste lands.

It is proposed to implement the above programmes during 2009-10 also for the benefit of poor landless agricultural labourers and small /marginal farmers in this State to improve the income and status of agricultural labourers and small /marginal farmers.

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

National Watershed Development Project for Rainfed Areas (NWDPR) is being implemented in Tamilnadu from VIII Five Year Plan (1990 – 91) onwards. The project is shared between centre and state on 90:10 basis.

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, shrubs and grasses.
- ❖ Reduction in regional disparity between irrigated and rainfed areas.
- ❖ Creation of sustained employment opportunities for the rural community including the landless.

The scheme is implemented under the Chairmanship of the Collector through DWDA at District level and through Watershed committees/Associations at Village level. The X Plan progress made under NWDPR is detailed below:

Progress under NWDPR

Five year Plan	Year	No.of District	No. of water-sheds	Fund utilized (Rs.in lakhs)	Area Treated in Ha
X	2002 - 03	23	755	1407.06	31268
	2003 - 04			1525.00	33888
	2004 - 05			2089.06	46424
	2005 - 06			1990.16	44227
	2006 - 07			3738.70	83082
	2007 - 08			2315.21	51449
	Total			13065.19	290338

XI FIVE YEAR PLAN

During XI Plan NWDPR, it is proposed to treat an area of 1, 00,000 Ha in new 200 watersheds at an estimated cost of Rs. 60.00 crores

Five year Plan	Year	No.of District	No. of water-sheds	Fund Allocation (Rs.in lakhs)	Area Treated in Ha
XI	2007 - 08	18	200	1076.08	17935
	2008 - 09			1000.00	9167

ACTION PLAN FOR 2009-10:

Under XI Plan, during 2009-10, it is proposed to treat 16667 Ha with an outlay of Rs.10.00 crores.

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.

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. (Hence the no. of projects has been increased from 100 to 150)
3. Interest rate is 4.5%
4. Repayment period 9 years (3 years after availing Loan)

Project period:

1.	Capacity Building Phase (CBP) (50 to 100 Ha. to be covered)	18 months.
2.	Preparation of feasibility study report. (FSR)	6 months.
3.	Full implementation Phase (FIP)	3 years
	Total period	5 years.

Area of Implementation:

At present the programme is being implemented in the following 23 Districts in the State.

Coimbatore, Cuddalore, Dharmapuri, Dindigul, Kancheepuram, Karur, Krishnagiri, Madurai, Namakkal, Perambalur, Pudukottai, Ramnad, Salem, Sivaganga, Theni, Thoothukudi, Tirunelveli, Tiruvallur, Tiruvannamalai, Trichy, 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 which would be effective for new Full Implementation projects from 2009-10.

Unit cost per Ha.		Rs. 12,000.00
Physical treatment	- 70%	Rs. 8,400.00
Administrative overheads	- 10%	Rs. 1,200.00
Livelihood support for Landless Farmer & Women	- 7.5%	Rs. 900.00
Community Organisation & Training programme	- 12.5%	Rs. 1,500.00

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.

Year	Number of Watersheds Handed over by NABARD for FIP	Funds Released Rs. in Lakhs	Area Treated in Ha.	Number of FIP Watersheds Handed over to NABARD
2005-06	10	115.48	1925	--
2006-07	15	219.61	3660	--
2007-08	--	173.13	3727	12
2008-09	10	200.61	3345	--

15 Watersheds have been sanctioned for the Full Implementation Phase which will be handed over to TAWDEVA by NABARD by 2009-10.

During the year 2009-10, treatment works would be taken up in the current 23 Full Implementation Projects to treat an area of 1875 ha with a financial commitment of Rs.112.50 Lakhs.

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 promote participation of farmers in cluster mode 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 2008-2009, nine districts namely Erode, Vellore, Tiruvannamalai, Trichy, Cuddalore, Sivagangai, Virudhunagar, Theni and Tirunelveli 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, 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.

During 2007-08 out of the targeted 35 clusters up to March 09, 34 clusters are developed by sanctioning an amount of Rs.421.24 lakhs, benefiting 1152 small and marginal farmers, in an extent of 1910 acres in which planting is under progress.

During 2008-09 the scheme is implemented in 9 focused districts of Erode, Vellore, Tiruvannamalai, Tiruchi, Cuddalore, Sivagangai, Virudunagar, Theni & Tirunelveli. It is proposed to cover 27 clusters, with an allocation of Rs.364.78 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 and the work is under progress.

DROUGHT PRONE AREAS PROGRAMME (DPAP)

The Drought Prone Areas Programme (DPAP) is being implemented in Tamil Nadu since 1972-73. The basic objective 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. Since 1995-96, this programme is being implemented as per the guidelines of Government of India on Watershed basis with peoples' participation.

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.

On the operational side, as per the Hariyali guidelines the responsibility of implementation has shifted from line departments to Village Panchayats wherein the user groups identify the works and execute the works through Village Panchayats. Government of India and State Government share the expenditure in the ratio of 75:25. The unit cost for a hectare is Rs.6,000/-. The cost of the works undertaken under this programme is entirely met from project fund. However, contributions are collected from beneficiaries at 10%. In respect of community works and SC/ST, the contribution amount is 5% of the value of the work.

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

- 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.
- Plantation Activities : Agro Forestry, Horticulture Plantation, Fodder Development, Crop Demonstration, Community Nursery, Social Forestry and Homestead Garden.

Under Drought Prone Areas Programme, watersheds are sanctioned by Government of India in batches. The duration of the project is five years from the year it was sanctioned. From 1999-2000 to 2006-07 the Government of India have sanctioned 1222 watersheds in 7 batches at a total cost of Rs.33,670.00 lakhs, for treating a total area of 6,14,142 Ha. Upto 31.03.2009 the Government of India and State Government have released Rs.25,357.69 lakhs. Of which Rs.23,417.56 lakhs have been spent by the District Rural Development Agency of 17 districts and a total area of 4,28,938 Ha have been treated. The details of ongoing 1222 watersheds are given below.

(Rs. in Lakhs)

No. of Ongoing Watersheds	1222
Project cost	33,670.00
Government of India	25,252.50
Government of Tamil Nadu	8,417.50
Amount Released (upto March 2009)	25,357.69

Government of India	19,174.73
Government of Tamil Nadu	6,182.96
Expenditure (upto March 2009)	23,417.56 (92%)
Area to be treated for the released amount upto March 2009 (Hect)	4,65,970
Area Treated (Hect) (upto March 2009)	4,28,938 (92%)

During the year 2008-09, the Government of India have released Rs.3,549.24 lakhs and the State Government have released its share of Rs.998.50 lakhs under DPAP and the programme is being implemented.

INTEGRATED WASTELAND DEVELOPMENT PROGRAMME

The Integrated Wasteland Development Programme (IWDP) has been under implementation in Tamil Nadu since 1993-94 in non-DPAP blocks to develop non-forest wastelands on the principles of watershed development. The basic theme of the programme is to harvest the rainwater and to bring the degraded lands into productive use.

From 1st 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. The duration of the project is five years. The unit cost for a hectare is Rs.6,000/-. The cost of the works undertaken under this programme is entirely met from project fund. However, contributions are collected from beneficiaries at 10%. In respect of community works and SC/ST, the contribution amount is 5% of the value of the work. Presently, the expenditure is shared between Central and State Government in the ratio of 11:1

At present, this programme is being implemented in 96 blocks of 24 districts viz., Coimbatore, Dharmapuri, Dindigul, Karur, Krishnagiri, Namakkal, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivagangai, Tiruvannamalai, Thoothukudi, Tiruchirappalli, Tirunelveli, Vellore, Erode, Theni, Madurai, Kancheepuram, Villupuram, Tiruvallur, Cuddalore and Virudhunagar.

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

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.

Plantation : Agro Forestry, Horticulture
Activities : Plantation, Fodder Development,
Crop Demonstration, Community
Nursery, Social Forestry and
Homestead Garden.

Under Integrated Wasteland Development Programme, watersheds are sanctioned by Government of India in projects. The duration of the project is five years from the year it was sanctioned. From 1999-2000 to 2006-07 the Government of India have sanctioned 910 watersheds in 80 projects at a total cost of Rs.26,220.39 lakhs, for treating a total area of 4,57,596 Ha. Upto 31.03.2009 the Government of India and State Government have released Rs.19,933.05 lakhs. Of which Rs.18,007.28 lakhs have been spent by the District Rural Development Agency of 24 districts and a total area of 3,06,854 Ha have been treated. The details of ongoing 80 projects are given below.

(Rs. in Lakhs)

No. of Ongoing Projects	80
Project cost	26,220.39
Government of India	24,241.43
Government of Tamil Nadu	1,978.96
Amount Released (upto March 2009)	19,933.05
Government of India	18,528.34
Government of Tamil Nadu	1,404.71
Expenditure (upto March 2009)	18,007.28 (90%)
Area to be treated for the released amount upto March 2009 (Hect)	3,52,389
Area Treated (Hect) (upto March 2009)	3,06,854 (87%)

During the year 2008-09, the Government of India have released Rs.3,460.07 lakhs and the State Government have released its share of Rs.255.17 lakhs under IWDP and the programme is being implemented.