

LAND IMPROVEMENT, SOIL CONSERVATION AND WATERSHED DEVELOPMENT

(Item No.2(b))

In this part, subjects in two items (Item 2 and 3) are being dealt. Land improvement, Soil Conservation (Item 2), and Watershed development (Item 3) are interrelated items. However in both items other subjects viz., Land Reforms and Consolidation (Item 2) and Minor Irrigation and Water Management (Item 3) have been dealt separately. The two specific subjects though interrelated, the schematic implementation, organisational involvement and funding pattern are different. Therefore, these are explained in an elaborate manner.

Watershed Development.

2. The concept of 'Watershed Development' signifies insitu water and soil conservation to improve crop productivity and farmers' income. Thus, the improved cropping techniques have been developed with emphasis on micro watersheds of about 1000 Ha. Tamil Nadu has been implementing a series of watershed projects like Drought Prone Areas Programme (D.P.A.P.), National Watershed Development Project for Rainfed Areas (N.W.D.P.R.A.), Integrated Watershed Development Project (IWDP) with World Bank funding, Comprehensive Watershed Development Projects (CWDP) with DANIDA funding, and Integrated Wasteland Development Projects (IWDP), etc. All these programmes provide for soil and water treatment to control soil erosion, optimum rain water utilisation, crop development by using crop and location specific dry farming technologies, farm forestry, horticulture, sericulture etc. These Projects also encourage farmers to have other subsidiary occupations to increase income levels. Since the objective of the watershed development is conservation of natural resources, ecological improvement and socio-economic development of local population, the efforts in these projects include insitu soil and water conservation and Land use planning, taking into consideration not only physical inter-relationships but also economic, social and institutional factors. Land improvement and soil conservation are methods adopted to implement the large strategy of watershed development. With the above focus, the following programmes are being implemented in the State, are briefly narrated.

Drought Prone Area Programme (D.P.A.P.)

3. This is a centrally sponsored Programme and the expenditure is shared between Centre and State Govt. on 50:50 basis. This is being implemented in the State since 1972-73. From 1995-96, the DPAP area coverage has gone up from 43 blocks to 80 blocks. The Project content and implementation modalities have undergone changes on the basis of the Report of Hanumantha Rao Committee. This adopts watershed strategy to achieve the Programme objectives.

Wasteland Development Project

4. The objective of the scheme is to take up sustainable development of wastelands on watershed basis with active support and participation of the local Communities. This scheme envisages green coverage by planting many species of trees on wastelands to ensure production of types of woodlots to meet the fruits, fodder, timber and fuel needs of the local people, the fodder needs of the local cattle and employment opportunities to local people. This is a Centrally Sponsored Programme funded by the GOI. State Government has emphasised the importance of bringing more areas of wasteland under this Project. The Non-Governmental organisations, interested farmers, Corporate Bodies, Private Entrepreneurs avail funding / assistance under this scheme. Many of them have submitted project proposals under "Grant-in-aid to voluntary Agencies Scheme" and "Investment Promotional Scheme". One of the earliest proposals approved for Tamil Nadu relates to Gandharvakottai Project. The G.O.I. have approved the project proposal for the implementation of "Integrated Wasteland Development Project in an area of 2155 Ha. in Gandharvakottai Block of Pudukkottai district at a total cost of Rs.1.26 crores for a period of 5 years. Further the project proposed under "Investment Promotional scheme" submitted by M/S T.N. Plantations in Kanyakumari Dt., at a total cost of Rs. 40.58 lakhs was also approved by the G.O.I.. Some proposals for six Districts as approved by the G.O.I, and are under implementation from 1995-96, are indicated below:-

<i>Name of the the Dist.</i>	<i>Total area (Ha.)</i>	<i>Total cost (Rs.in lakhs)</i>	<i>Project Period (In year)</i>	<i>Name of the Block watershed.</i>
1) Pudukottai	2155	126.45	5	Gandarakottai
2) Periyar	4000	344.00	4	10 watersheds in Kudiyalathar
3) P.M.D.	3072	285.00	5	Kalayarkoil
4) S.A.	3010	249.88	5	Gadilam
5) N.A.A.	5000	296.04	3	Ponnaiyar
6) T.V.S	3900	255.94	4	Chengam

Integrated Watershed Development Programme: (TNADP).

5. Another important Watershed Programme which is in operation in Palar and Vellar watersheds covers an area of 54,000 Ha. Additional area of 36,000 Ha. in 12 Districts on watershed basis is also being implemented under Tamil Nadu Agriculture Development Project funded by World Bank. The objective of this programme is to improve arable and non-arable rainfed lands in the Project area besides reversing the ecological degradation to ensure long term sustainable development.

National Watershed Development Project in Rainfed Areas (N.W.D.P.R.A.)

6. The twin objectives of the N.W.D.P.R.A. are 1) sustainable production of bio-mass and 2) restoration of ecological balance. The NWDPR is being implemented in 84 watersheds located in 15 Districts at a total cost of Rs.41.51 Crores spread over a period of 7 years from 1990-91 to 1996-97. During the Ninth Plan period (1997-2002), it is expected to get greater emphasis and larger outlay. The activities being implemented in the Project include 1) Basic activities 2) Arable land activities 3) Non-arable land activities and 4) Livestock management. The important works being taken up under this project are i) to conserve Soil Fertility ii) to Conserve rain water by constructing small check dams, Vegetative barriers etc., iii) to provide employment opportunities to the farmers by means of giving sub-works and thereby increasing their income. The above activities implemented under N.W.D.P.R.A. can be best implemented with the active involvement of Village Panchayats, Panchayat Unions and District Panchayats.

Comprehensive Watershed Development project: (CWDP)

7. The objective of this DANIDA funded Project is to develop the degraded lands in Thirunelveli Kattabomman, V.O. Chidambaranar districts and three other districts. An area of 17861 Ha. was covered at a cost of Rs.583 Lakhs under this Project in Thirunelveli Kattabomman, V.O. Chidambaranar districts in the Phase I of the Project till April 1994. Phase II was taken up from August 1994 onwards with the bridging arrangements for the period from May 1994 to July 1994 with DANIDA. This Project will be of 7 years duration and an area of 42,500 Ha. will be treated at a cost of Rs.4172 lakhs. During 1995-96, an area of 5160 Ha. had been covered at a cost of Rs.400.81 lakhs. An area of 3600 Ha. at a cost of Rs.486.69 lakhs is being treated during 1996-97. Similar to the Thirunelveli Project a DANIDA assisted project was taken up at a cost of Rs.13.85 crores in Ramanathapuram, Kamarajar, and Pasumpon Muthuramaliga Thevar Districts. This will benefit 11,000 Ha. in 5 1/2 years. An area of 1,500 Ha. has been treated during 1995-96 at a cost of Rs.174.32 lakhs. During 1996-97, an area of 2250 Ha. is being treated at a cost of Rs.249.46 lakhs. Land improvement, Soil Conservation, prevention of good land becoming wasteland, rejuvenation of wasteland and comprehensive land, water, vegetation planning and development through watershed management approach is pivotal for sustaining livelihood sources for the rural population and for raising agricultural productivity. It is acknowledged that many attempts and expenditures made through multiplicity of programmes, in this behalf over several decades have not borne commensurate or durable results. Reasons identified include lack of local institutions and lack of local community involvement. It is possible now to rectify these lacunae by entrusting responsibility for such programmes to panchayat institutions as has also been advocated by the 9th Plan Approach Paper.

8. Over the VIII plan period the above programmes were implemented for which Rs.119.81 Crores have been utilised. The following Table indicates scheme commencement year and expenditure incurred for the period of 1992 to 1997.

(Rs.in Lakhs)

<i>Name of the scheme</i>	<i>Year of Commencement</i>	<i>Expenditure 1992-1997.</i>
1. D.P.A.P	1972-73	3717.39
2. N.W.D.P.R.A.	1990-91	3825.04
3. I.W.D.P.(Watershed)	1990-91	2252.37
4. C.W.D.P.	1987-88	1888.29
5. I.W.D.P.(Wasteland)	1994-95	298.12
Total		11,981.21

9. Soil and Water management to augment agricultural production in rural areas holds the key to successful rural poverty alleviation. More than 50 percent of cultivable land being rainfed; more and more cultivable lands being converted into non-agricultural purpose; and agricultural production having reached a plateau, the major necessity for Tamil Nadu is to undertake massive land improvement programmes for diversification of nature friendly cropping system, on a sustainable basis, with active participation of the local People. Watershed strategy developed over the years has stood the test of time. Panchayat Raj Institutions are the People's organisation, very close to them and capable of implementing these land based Programmes in a better way. Land improvement, watershed development are location specific and composite projects. Therefore their planning and implementation is best served by entrusting them to local panchayat institutions to obtain better and durable results. In this back drop the SPC Group opines that Panchayats should be involved in organising the Watershed Programmes and recommends the following entrustment of powers for Village Panchayats, Panchayat Unions and District Panchayats:-

I. VILLAGE PANCHAYAT

<i>ACTIVITY</i> (1)	<i>ENTRUSTMENT OF POWERS</i> (2)
I. Watershed Management.	<ul style="list-style-type: none"> i) Approval of all land/water use plans for watershed development through Village Panchayat. (Gram Sabha) ii) Organise appropriate utilisation of community land and other common properties for development and productive use under watershed development project. iii) Assist in supervising and monitoring quality of watershed works. iv) Promoting watershed development approach in all areas for better management of natural resources and environment development.
II. Land Improvement	<ul style="list-style-type: none"> i) Draw up comprehensive land and water use plan for the Panchayat Village. ii) Arrange soil health cards for Department for all the cultivable lands in the Village. iii) Identify crops including tree crops suitable to Panchayat Village ecologies. iv) Promote insitu soil and water conservation techniques in the dry lands and rainfed areas.

II. PANCHAYAT UNION

<i>ACTIVITY</i> (1)	<i>ENTRUSTMENT OF POWERS</i> (2)
I. Watershed Development.	<ul style="list-style-type: none"> i) Plan and integrate watershed project, if any, with area plans interacting with Village Panchayats. ii) Organising people to form Work Committee, Users Groups and watershed committees. iii) To form a team of technical staff to assist V.P in the implementation of watershed projects. iv) Monitoring, supervision and review of the progress of all the watershed project implemented in the Panchayat Union.
II. Land Improvement	<ul style="list-style-type: none"> i) Arrange to draw up land and water management plan on the basis of Agro-climatic Regional Planning and Remote Sensing Data. ii) Organise institutional linkages for the Village Panchayats to get soil health cards. iii) Promote suitable cropping system by organising crop and land based training programmes in Panchayat Union area. iv) Organise training for the farmers in the latest soil and water conservation and land improvement technologies.

III. DISTRICT PANCHAYAT

<i>ACTIVITY</i> (1)	<i>ENTRUSTMENT OF POWERS</i> (2)
I. Watershed development programme, land improvement, and Soil conservation	<ul style="list-style-type: none"> ii) Develop land, soil and water resources data base for the districts and prepare perspective plans for watershed development. ii) Review and Monitor the programme of watershed Development programmes in the district. iii) Study experience of other districts in the State/Country in watershed development and disseminate the lessons to PUC and V.Ps.

Administrative Implications:

10. Agricultural Department is the main agency in implementing NWDPR, DPAP and IWDP with watershed development strategies. There are Assistant Directors of Agriculture exclusively positioned for the watershed development works under NWDPR in many Panchayat Unions. They have a small supporting office. This administrative unit should be transferred to the Panchayat Union for implementing NWDPR watershed development schemes. Drought Prone Areas Programmes (DPAP) are being implemented in 80 blocks (Panchayat Unions) on watershed basis and the implementing staff have been sanctioned by the Government Panchayat Union wise to implement these programmes. It will be appropriate to depute all the DPAP staff irrespective of the fact from which department of the Government they have been co-opted and should continue to be under the control of Panchayat Union for implementing all the DPAP programmes. The DPAP staff at the State level should continue to be in the Agriculture Department. In case of Comprehensive Watershed Development Project, Agricultural Engineering Department has got separate Project Directors who engage NGOs and watershed users groups in operationalising the programmes. In this background staff of the Agricultural Engineering Department will not be in a position to be attached to the Local bodies.

11. All the Government servants so attached to the Panchayat Unions will continue as Government servants and get the necessary facilities applicable to the Government servants. The Group does not suggest to develop a parallel organisation in the Panchayat Unions because all watershed development programmes are for specific areas and to be implemented on a time bound manner. As and when the programmes gets completed, the officers sent on deputation to Panchayat Union from Agriculture and other Departments will be reverted back to the parent department. The Village Panchayats/Panchayat Unions and District Panchayats will receive necessary technical advice from the line departments for effective implementation of watershed development programmes.

Financial Implications.

12. The SPC Group find that all these watershed development programme funding should be fully transferred to the Panchayat Unions. The administrative cost permissible under each of the schemes should also be provided to the Panchayat Unions. These scheme funds available under Drought Prone Area Programme, NWDPR, Integrated Waste Land Development Programme, all coming under the Agriculture Department, should be transferred to the respective Panchayat Unions.

Legal Implications.

13. The State has a Tamil Nadu Land Improvement Act which needs to be amended for incorporating some of the latest technologies, strategies and objectives adopted for soil and water conservation and management. People's participation from the Panchayat Raj Institutions is very crucial to the successful implementation of Watershed Development Programmes. Thus, the Land Improvement Act should be ammended to incorporate the above suggestions.