

2.9. Irrigation, Command Area Development And Flood Control

2.9.1. Water is a serious limiting factor as the State has harnessed the available surface water potential. Of the total annual water potential of 46,540 million cubic metres (MCM) in the State, surface flows accounts for nearly half. The total surface water potential of the State is 24,160 MCM (853 TMC) including the contribution (7391 MCM or 261 TMC) from the neighbouring States, viz., Kerala, Karnataka and Andhra. The total water potential of the State including ground water is 46,540 MCM (1643 TMC).has almost been fully (more than 95%) tapped. Ground water resource is, therefore, the only alternative source for further development. The amount of ground water recharge is 22,380 MCM (790 TMC). The river basin planning for optimum utilization of water resources is particularly important for water starved Tamil Nadu State. Since a large %age of consumptive use is through Irrigation, Irrigation water management is to be given a high priority. This task requires a strong institutional arrangement for effective implementation of the polices for better water management and participatory approach, which is being strongly advocated by water experts.

Major and Medium Irrigation and Flood Control:

2.9.2. Out of the total geographical area of 130 lakh hectares in the State, the net area sown is about 58 lakh hectares of which about 30 lakh hectares (50%) gets irrigation facilities from surface water through canals, (9.50 lakh hectares) tanks (9 lakh hectares) and wells, tube wells etc. (11.50 lakh hectares). During the 10th Five Year Plan (2002-2007) upto 2003-2004, an additional irrigation potential of 2323 hectares has been created. During 2004-2005, additional irrigation potential of 7573 hectares is expected to be created and in the year 2005-06 an irrigation potential of 5143 hectares is proposed to be created.

Restoration of Channels – Systems:- Canals.

2.9.3. The growth of Ipomoea in the irrigation sources is creating major problems in water management and flood control. Therefore silt and Ipomea are being removed by using heavy machinery. The Government have accorded sanction for Rs. 30.00 Crore for restoration of channel system

during the year 2006-07. An amount of Rs.1500.00 lakh is proposed for the year 2007-08 for Modernisation of Tank, Regulators and Supply Channel etc. with loan assistance from NABARD

Improvements to Veeranam Lake for Water supply:

2.9.4. Raising the tank bunds of Veeranam tank, increasing the capacity and improvements to the main source works in Canals are proposed. Major portion of the works are completed. An ayacut of 44588 acres are stabilized by this scheme. 98% of work is completed. Shutter works are under progress. An amount of Rs. 1386.72 Lakh is proposed for 2007-08.

Construction of an Anaicut across Ayyar River near Puliyancholai:

2.9.5. It is proposed to construct an anaicut across this channel to divert flood flows to feed Mahadevi and three other tanks with an outlay of Rs.190 lakh. An extent of 974 acres will be benefited out of this scheme and an extent of 41 acres of Patta land and 3.5 acres of porompoke land will have to be acquired for this scheme. A case is filed in the High court opposing implementation of the scheme and a counter affidavit is filed on 7.2.2005. An amount of Rs. 50.00 lakh is proposed for this scheme during the year 2007-08.

Formation of Nanganjiyar Reservoir near Idayamkottai village in Palani Taluk:

2.9.6. A reservoir across Nanganjiyar, a tributary of river Amaravathy near Idayamkottai village in Ottanchathiram Taluk, Dindigul District to benefit 2,530 hectares of new ayacut with a stabilisation of 24 hectares of old ayacut at a cost of Rs.41.68 crore was formed. The unprecedented rain in November 2005 has caused failure in the bund. Immediate rectification work has been undertaken. An amount of Rs. 40.00 lakh is proposed for 2007-08.

Malattar Anaicut Scheme in Sengapadi Village of Ramnad District:

2.9.7. The construction of an anaicut across Malattar river at a revised estimate of Rs.42.00 crore will benefit stabilisation of an extent of 1758 hectares besides bridging a gap of 156 hectares under the existing 54 tanks

in Kamudhi and Kadaladi taluks. About 65% of the work has been completed and is programmed to complete the entire work by March 2007. An amount of Rs. 549.49 lakh is proposed for 2007-08.

Vaigai Reservoir - Irrigation facilities

2.9.8. Under this scheme excavation of a high level canal of 27.26 Kilo metre to provide irrigation facilities to 58 villages in Usilampatti taluk by utilizing the surplus flood water from Vaigai Reservoir with the revised estimate cost of Rs.74.60 crore is being undertaken. By implementing this scheme, 570 hectares of wet lands will be stabilized besides bridging a gap of 128 hectares of wet lands under 29 existing tanks and 3 existing ponds in Usilampatti Taluk. Further new dry ayacut of 227 hectares will be brought under irrigation through 3 new tanks. Overall 63% of work is completed. An amount of Rs.2000.00 lakh is proposed for 2007-08.

Formation of reservoir across Andiyappanoor Odai:

2.9.9. Under this scheme the formation of a reservoir of 112 M.Cft. capacities at a revised estimate cost of Rs.27.38 crore has been proposed to benefit 810 hectares of direct ayacut, This project is being implemented through the loan assistance from NABARD. An amount of Rs. 151.50 lakh is proposed for 2007-08 for the remaining work.

Construction of Shenbagathope Reservoir

2.9.10. Formation of a reservoir across Kamandaluru in Shenbagathope village of Polur Taluk in Thiruvannamalai District with the revised estimate cost of Rs.34.00 crore has been accorded with NABARD assistance. This scheme will benefit 2067 hectares by stabilisation and 642 hectares by bridging the gap 98% of the work has been completed. An amount of Rs.102.64 lakh is proposed for 2007-08.

Kuppanatham Reservoir:

2.9.11. Under this scheme, formation of a reservoir across Cheyyar near Kuppanatham village in Chengam Taluk of Thiruvannamalai District, with the revised estimate cost of Rs.43.50 crore with NABARD assistance. An extent of 2528 hectares ayacut will get stabilized besides bridging the gap of

580 hectares.. Acquisition of patta land have been completed and transfer of poromboke lands are in progress. About 45% of the work has been completed and an amount of Rs 500.00 lakh is proposed for 2007-08.

Malattar-Bathalapalli Reservoir:

2.9.12. Formation of a reservoir across Malattar River at an estimated cost of Rs.29.55 crore was proposed. An extent of 1,064 hectares of ayacut will get stabilized besides bridging the gap of 61 hectares . This scheme will improve the water quality of the wells in the area now affected by pollution from tanneries. For 2007-08 an amount of Rs. 1700.00 lakh is proposed for this scheme.

Nallathangal Odai Reservoir Scheme

2.9.13. Under this scheme, formation of a reservoir across Nallathangal Odai with the revised estimate cost of Rs.42.70 crore and it was proposed to irrigate an area of 1,919.87 hectares. An amount of Rs.127.00 lakh is proposed for 2007-08.

Formation of reservoir across Vellakkal Kanar Vinnamangalam

2.9.14. The Government have sanctioned this scheme for formation of a reservoir across Vellakkal Kanar near Vinnamangalam village in Vaniyambadi Taluk of Vellore District at an estimated cost of Rs.7.70 crore. This scheme will stabilise 431 hectares of existing irrigation besides bridging a gap of 57 hectares. The components of this scheme are 320 m length earth dam, surplus weir of 40 m length and construction of River sluice. An amount of Rs. 576.04 lakh is proposed for 2007-08.

Sirumalayar Reservoir:

2.9.15. Formation of a new tank across Sirumalayar near Rajadhani Kottai village in Nilakottai Taluk with the revised estimate cost of Rs. 8.87 crore was sanctioned to benefit 128 ha. of dry lands in Dindugul District. 75% of the work is completed. An amount of Rs. 100.00 lakh is proposed for 2007-08.

Formation of a new tank across Mathalapallam in Dharmapuri District:

2.9.16. A scheme was sanctioned by the Government at an estimated cost of 14.15 crore for formation of a tank across the river Mathalapallam in Ramakondahalli Village of Pennagaram Taluk in 2001. An ayacut of 445 hectare will be benefitted by this scheme. Land Acquisition work is in progress. About 60% of work is completed. An amount of Rs. 276.00 lakh is proposed for 2007-08.

Formation of new tank across Virumanuthu Odai

2.9.17. For formation of a tank across Virumanuthu Odai near Konavaipatti (Ganesapuram) village in Andipatti taluk at an estimated cost of Rs.205.00 lakh which was proposed to benefit 35 hectare of wetland. About 50 % work of this project has only been completed and an amount of Rs. 133.83 lakh is proposed for 2007-08.

Formation of new tank across Sanguliyar Koil Odai / Sinnathu Odai

2.9.18. For formation of a tank across Sanguliyar Koil Odai / Sinnathu odai in Anjukulliapatti village of Dindugal Taluk at a cost of Rs.190.00 lakh was proposed to benefit 140 hectare of wetland. During 2007-08 an amount of Rs. 137.08 lakh was provided.

Strengthening and Improvement of Palar Basin under State Water Resources Consolidation Project (SWRCP):

2.9.19. The Government have sanctioned an amount of Rs. 2000.00 lakh for Strengthening and Improvement of Palar Basin. During the year 2007-08 an amount of Rs.894.00 lakh is proposed.

Construction of new tanks, Canals and Renovation of existing

2.9.20. Under this scheme, modernization of canal, extension work, construction of check dam, construction of anicut will be taken with RIDF assistance. All works except the work of Modernisation of shutter in Kallanai are in progress. An amount of Rs. 2516.25 lakh is provided during the year 2007-08 for these works.

Implementation of the world Bank Aided Hydrology Project II

2.9.21. Hydrology project I has established Hydrological information system with facilities to collect, store and disseminate Hydrological, Hydro metrological and Hydro geological data. To transform the available data into technical information for the use of policy and planners, Hydrology project II with a cost Rs. 25.27 crore has been taken up. The World Bank loan amount is Rs. 20.65 crore and the balance is funded by the state Government.

2.9.22. Project agreement has been signed and the project has commenced and will be implemented in six years from April 2006. The project will be of immense use for long-term water planning of the state.

Construction of Bed Dam and Dividing wall across Palar near Kavasampattu Village and regarding the existing Goddar river in Vellore District

2.9.23. The Government have accorded sanction for Rs. 650 lakh for the above scheme. The above scheme was cleared by NABARD with loan assistance and the Design is under finalization. During 2007-08, an amount of Rs. 350 lakh is proposed for this scheme.

Executive Establishment: Special Division under WRO

2.9.24. In order to meet the establishment charges of the Staff working in the schemes, an amount of Rs.2565.75 lakh is proposed for 2007-08.

Renovation of existing Irrigation channel, tanks and strengthening of Dams

2.9.25. The Government have sanctioned an amount of Rs. 5329.01 lakh with loan assistance from NABARD under RIDF XI-Batch 1 for Renovation of lower Bahavani Dam, Sholayar Dam, Ayyangudi Channel, Sirumarudhur Channel, Kalakkamangalam Channel, Manimuthar Main Canal and Kanadian Channel. The Government have also sanctioned an amount of Rs. 1898.32 lakh for 11 Minor irrigation works under RIDF XI Batch-3. An amount of Rs. 4102.27 lakh is proposed for 2007-08.

Excavation of supply channel from Jerthlav canal to feed tanks in Palacode and Pennagaram Taluk

2.9.26. The Government have accorded sanction for Rs. 629 lakh for this scheme, with NABARD loan assistance. An amount of Rs. 350 lakh is proposed for 2007-08.

Formation of 18th Canal across Vairavanar River

2.9.27. The formation of 18th Canal in Uthamapalayam Taluk with the revised estimate cost of Rs.28.60 crore. was proposed to stabilize 511.16 hectares and bridging a gap of 73.90 hectares and to irrigate 22.81 hectares of new areas. About 71% of the work has been completed and an amount of Rs 883.14 lakh is proposed for 2007-08.

Formation of Reservoir across Mambazhathuraiyar:

2.9.28. Under this scheme the formation of a reservoir across Mambazhathuraiyar near Villukuri village in Kalkulam Taluk with the revised estimate cost of Rs.14.80 crore has been sanctioned to stabilise 3.57 hectares to bridge a gap of 25.82 hectares in single crop and 18.14 hectares in second crop and to provide irrigation facilities to an extent of 308.98 hectares The work will be commencing shortly. During 2007-08 an amount of Rs. 1265 lakh is proposed for this scheme.

Irrigated Agriculture Modernisation And Water Bodies Restoration And Management (IAMWARM):

2.9.29. Tamil Nadu is one of the driest states in India, averaging only 925 millimeters of rainfall a year. Per capita availability of water resources in Tamilnadu (population about 62 million) is only 900 cubic meters a year, compared with 2,200 cubic meters for all of India. The state's dry season lasts five months (January through May) even in good years, and severe dropughts occur in 3 of 10 years, severely limiting cultivation of crops between June and September. A recent series of droughts and water shortages has highlighted the importance of good water resources and irrigation management. It is with this background that the Irrigated

Agriculture Modernisation and Water-Bodies Restoration and Management (IAMWARM) project is prepared.

2.9.30. The Project Development Objectives is to improve irrigation service delivery and productivity of irrigated agriculture with effective integrated water resource management in a river basin / sub-basin frame work in Tamil Nadu.

2.9.31. The above objective is to be achieved through investments as described below for (i) modernizing irrigation infrastructure (ii) intensification and diversification of agriculture, accelerating horticulture development, improvements in animal nutrition through provision of irrigated fodder and associated breed improvement and veterinary healthcare, fisheries development in the various tanks associated with irrigation and also in farm ponds to be demonstrated through the project and promoting public-private partnerships, (Rs.1273 Crore for i & ii above) (iii) strengthening the institutions involved in irrigation developments as well as associated agriculture and allied activities, development information kiosks and assisting the WUAs with modern communication facilities both to receive information from the line agencies and other service providers and to facilitate interchange of information amongst WUAs through development of websites for each WUA; (iv) re-orienting and strengthening institutions and instruments required for effective integrated water resources management in the State including unbundling resource management from service delivery institutions, strengthening and expansion of Basin Development and Management Boards; and (v) assistance in the coordinated implementation of this multi-disciplinary project (Rs.22.50 Cores for iv & v above) and others (Rs.37.5 Crore).

2.9.32. To facilitate fast-track preparation of the project development plans, 9 Sub basins spread over three agro climate zones have been taken up for detailed project preparation, and have been extrapolated for the selected 63 Sub basins development plans and assessment of ultimate project costs.

2.9.33. The total project cost including physical & price contingencies are assessed as Rs.2547 Crore.

World Bank Assisted Water Resources Consolidation Project-II:

2.9.34. Sanction order of the Government for implementing the schemes under WRCP-II is awaited. However an amount of Rs. 500.00 lakh is proposed during the year 2007-08.

State Dam Safety Directorate:

2.9.35. A revised proposal for rehabilitating tentatively 22 dams under DRIP at a cost of Rs.70.90 crore was sent to GOI and the same is under the consideration of the GOI and World Bank. During 2007-08, an amount of Rs. 48.17 lakh is proposed.

Desilting, Widening and Strengthening works under Emergency Tsunami Reconstruction Project (ETRP)

2.9.36. The Government in October 2005 have accorded administrative sanction for Rs. 19.271 crore for desilting and strengthening various canal banks in Nagapattinam District, with World Bank assistance for execution of the Desilting, widening and strengthening the banks of Vedaranyam canal, South Buckingham Canal, Tsunami affected Coleroon diversion banks, and Nathikanni Manniar drain works. During 2007-08, an amount of Rs.1427.10 lakh is provided of these works.

Chennai Flood Relief with HUDCO Assistance Works- Chennai City Water Ways:-

2.9.37. To alleviate the problems faced by the Chennai City Waterways, the Ministry of Environment and Forest, Government of India approved Chennai City River Conservation Project. An amount of Rs. 2700.00 lakh is proposed for the year 2007-08

Flood Control and Anti Sea Erosion

2.9.38. The High-level committee has selected 30 works costing worth Rs.47.97 crore and prioritized the Anti Sea Erosion works based on the report of the Indian Institute of Technology, Madras. Major works such construction of Groyones, Construction of RMS walls to protect the coast,

and construction of retaining walls will be taken up. An amount of Rs. 1282.00 lakh is proposed for the year 2007-08

Minor Irrigation:

Hydrology Project Phase II:

2.9.39. The Hydrology Project Phase II is a vertical extension of H.P- I and it was envisaged for an amount of Rs.25.27 crore which will be funded by World Bank . The project period is 6 years from 2006. The objective of this project is to use the data stored in HIS for the development of decision support system (DSS) for the integrated planning and management of water resource in the river basin of Tamil Nadu. For 2006-07, the expenditure is anticipated to be around Rs.1.84 crore.

Command Area Development and Water Management Programme:

2.9.40. Command Area Development and Water Management Programme is being implemented in the State with an aim to improve the water use efficiency in canal irrigated areas. This scheme is implemented with financial assistance from both centre and state on 50:50 basis. During 2006-07, it is programmed to implement the scheme at a total cost of Rs. 5588.16 lakh, out of which the State share will be Rs.2794.08 lakh. The works will be completed in Chinnar Reservoir system and Marudhanadhi system by March 2007.

2.9.41. During 2007-08, it is proposed to continue the programme in the remaining eight commands to cover an area of 21500 hectares at a total cost of Rs.5600.00 lakh out of which the State share is Rs.2800.00 lakh.

Major and Medium Irrigation and Flood Control and Anti Sea Erosion Works:

2.9.42. An outlay of Rs. 565.97 crore has been provided for the year 2007-08 for the programmes under Major and Medium irrigation and Flood Control, Minor irrigation and Command Area Development sector.