MINOR IRRIGATION

AGRICULTURE (GROUND WATER)

Water is the most critical component of life support system. The water required for all usages in Puducherry are mainly met-out from ground water resources. Owing to the dependency on ground water, the ground water resources of Puducherry has reduced in the past and it is a natural fact that the water requirement of a developing society gets increased day by day. In tandem, the water requirement of Puducherry has also increased owing to agricultural activities, population explosion and proliferation of industries. Of the total water requirement of Puducherry, 80% is required for irrigation. The intensity of irrigation through tube wells, which was 50% during the pre-independence period has increased to 98%. As an adverse effect, the ground water levels in the villages of Puducherry have lowered gradually and have gone down from 12 to 35 mts below mean sea level and the sea water intruded in the ground water regime of villages along the coastal tract to a distance of 1 to 4 kms inland from the coastal line. The development of ground water also touched 179% as on March 2004.

To protect the ground water regime of Puducherry from desaturation and deterioration of quality of ground water due to sea water intrusion, the attention of administration focused on the implementation of various rain water harvesting schemes and also various water conservation schemes like adoption of drip/ sprinkler irrigation system, and precision farming during the 10th and 11th five year plan periods. Besides, "the Pondicherry Ground Water (Control and Regulation) Act 2002" was enacted, and the provisions of the act are being implemented by a separate body viz "Pondicherry Ground Water Authority". The behavior of ground water is being monitored intensively in terms of quality and quantity. The hydrogeological conditions of the ground water regime of Puducherry are monitored with the help of observation tube wells constructed in Pondicherry and Karaikal regions. Besides a World Bank Loan assisted Project " Hydrology Project Phase-II (6 year period) has been taken up since 2006-07 onwards for better water resources planning and management of Puducherry. Under the Project, a water resources data centre and a level-II + laboratory will be established at Lawspet for which the required buildings have been constructed. Besides, additional numbers of observation tube wells have been constructed to strengthen the existing water level data collection network and an Automatic Weather Station has also been established and a

research study to improve the potential of ground water in the North western parts of the Puducherry is under progress.

To encourage peoples' participation in the water management, subsidy assistance was extended to farming community, for rain water harvesting, water conservation and for stabilizing their existing irrigable command during the 10th and 11th five year plan periods.

Owing to the implementation of the above said programmes during the 10th and 11th five year plan periods, the development of ground water, which was 179% as on March 2004 was reduced to 158% as on March 2008 and also considerable improvement in the water levels of Puducherry was noticed. In order to continue with the positive trend in the ground water scenario, the policy of the administration is concentrating its focus on water conservation in terms of ground water potential and quality. The Hydrology Project under implementation, which will be wounded by June 2012, will be continued to be operated under a separate organization "Union Territory of Puducherry Hydrology Organization" (UTOPHO) which was created under Societies Act. The society will undertake water research studies for better water resources planning and management of Puducherry in future and required funds for functioning of the society will be extended in the form of Grant-in-Aid.

The Action Plan will be focused to the deepening of all 82 tanks in Puducherry region and construction of more No. of bed dams to augment the ground water recharge in all regions except Mahe.

Accelerated Irrigation Benefit Programme with central assistance will be used for the improvement of irrigations channels like Mettuvoikal, Pallavoikal, etc. in Puducherry.

In order to control and regulate the exploitation of ground water "The Puducherry Ground Water (Control and Regulation) Act" was enacted, and is being enforced by a separate body "Pondicherry Ground Water Authority". For better water resources planning and management of Puducherry, a World Bank Loan assisted project "Hydrology Project Phase-II" is implemented in Puducherry since 2006-07 and will be completed during the financial year 2012-13. Under the project, a water information system, water quality and hydro meteorology will be established. Under the project, building for the establishment of a state-of-art data centre and level-II + laboratory for water testing has been constructed at

Lawspet. The establishment of the data centre and laboratory are under process. Besides, an automatic weather station at Kalapet has been established and most of the proposed observation tube wells to monitor the behavior of the ground water have been constructed. The other programmes under this project like establishment of river gauging sites across rivers for measurement of surface water flow and research study to improve the ground water potential in the North Western parts of Puducherry are under progress. To disseminate the water resources data collected, a website has been created and the project is coming to end by 2011-12 (June-2012). After the funding period of World Bank, the project will be continued and will be operated under a separate organization "Union Territory of Puducherry Hydrology Organization" which was established under Societies Act.

PUBLIC WORKS (SURFACE WATER)

Puducherry region mostly depends on tank irrigation and underground water resource, while Karaikal, Mahe and Yanam regions depend on river water for the purpose of irrigation. There are about 84 tanks in Puducherry region and the total Ayacut covered is 6456 Hectares. Karaikal region mainly depends on the surface water of Cauvery river distributaries and the total Ayacut covered is 10,974 Hectares. Yanam and Mahe regions, the irrigation system is in micro level only.

It is proposed for construction of Bed Dams/Check Dams in order to save more surface water and recharge the depleted ground water to avoid the adverse situation arising out of continuous drawl of ground water resulting intrusion of salinity in the coastal region. Further proposed to improve the tanks, channels and survey works wherever necessary. The tanks such as Oussudu, Karasur tank, Kanaganeri tank, Olandai, Murungapakkam tank, Thondamanatham chinnaeri, Kodathur tank, Korkadu tank, surplus weir at Bahour tanks are proposed to be improved during 2012-13. Survey works will be carried out at Karishna Nagar drain, Karuvadikuppam drain, Uppar drain and supply channels of Kunichampet Pazhayaeri & Pudueri, Mettuvoikal and Pallavoikal channels etc. Also to improve the ground water recharge the following important works are proposed to be carried out on priority basis:

- 1. Strengthening & improvements to Ayeekulam
- Construction of bed dam across Sankaraparani river U/S side of railway line near Koonerikuppam

- 3. Construction of check dam at Chettipet in Sankaraparani river and at Aratchikuppam in Pennaiyar river.
- 4. Strengthening the bed dam at Sitheri anicut.
- 5. Improvements to the Nanal Kulam at west street Thondamangalam pet in Nedungadu commune
- 6. Construction of box culvert acoss the channel at various places in Dariylathippa village in Yanam.

AGRICULTURE

ACHIEVEMENTS DURING 2007-11

- > Observation tube wells have been constructed.
- > River gauging sites have been finalized and the estimates have been prepared.
- Establishment of a Wide Area Network through BSNL has been finalized.
- ➤ The required infrastructural facilities including vehicles for transportation have been created for the project.
- Construction of Data Centre and Level H+ lab building is under progress.
- ➤ Arc GIS and geotechnical softwares have been procured and being utilized for creation of digital layers.

LIKELY ACHIEVEMENTS DURING 2011-12

- ➤ Construction of observation tubewells
- Establishment of Wide Area Network (WAN)
- ➤ Construction of Data Centre and Level II + Lab
- > Establishment of Automatic Weather Station
- ➤ GW equipments, level H+ lab equipments will be purchased.
- ➤ It is anticipated to construct 23,000 meters of underground pipelining, 20 nos. of recharge tube wells, 46 nos. of sprinkler / drip irrigation structures and 14 nos. of medium / deep tube wells will be established under the scheme "Minor Irrigation".

PROPOSED TARGETS FOR 2012-13

- ➤ It is proposed to continue programmes of rain water harvesting, water conservation measures like drip / sprinkler irrigation, stabilization of existing irrigable command area by extending subsidy assistance to farmers as was done in the 10th and 11th plan periods.
- > Drilling machineries will be hired out at subsidized hire rates to the needy farmers towards construction of tube wells.
- ➤ One new high range of power rig and compressor units will be procured to strengthen the drilling unit of the State Ground Water Unit.
- ➤ Control and Regulation of ground water exploitation will be undertaken through Pondicherry Ground Water Authority.
- ➤ The Hydrology Project Phase-II, which is being implementing is coming to an end during the financial year 2012-13.
- In order to sustain the project after the funding period of World Bank, it will be continued under a separate organization titled "Union Territory of Puducherry Hydrology Organization (UTOPHo)" which has been created under Societies Act. This organization will undertake the creation of "Water Resource Information System" for future better water resources planning and management and will undertake water research studies to improve the potential and quality of ground water by adopting the latest innovative techniques. The funds required for operating the society will be extended in the form of Grant-in-aid.
- ➤ The Hydrology Project Phase-II has to be implemented during the financial year 2012-13.

PUBLIC WORKS

ACHIEVEMENTS DURING 2007-11

- Providing recharge borewell in front of Senthanatham madagu of Oussudu tank, Puducherry.
- > Providing recharge borewell at South East corner at Oussudu tank, Puducherry.

- ➤ Sinking one number of recharge borewell at Sudhanthira pon vizha Nagar, Puducherry.
- ➤ Providing protection work in the existing anicut at Suthukeny Puducherry.
- ➤ Construction of check dam cum foot bridge across river Pambaiyar at Sorapet village, in Mannadipet commune, Puducherry.
- Construction of check dam across Pambaiyar at Sagadepet village in Mannadipet Commune, Puducherry
- Construction of protection wall on the right bank of Pambaiyar in down stream side of the check dam at Sorapet, Puducherry.
- Construction of bed dam across Guduvaiyar upstream side at uruvaiyar road bridge, Puducherry
- Construction of bed dam with foot bridge across the river malatar ch.2220m at Nettapakakm village, Puducherry.
- ➤ Sinking of one number of recharge borewell near Ellaipillai chavady, Villupuram NH 45 A junction, Puducherry.
- Sinking one number of recharge borewell at the Indira Gandhi square at Natesan Nagar, Puducherry
- ➤ Construction of protection wall for the inspection track on left bank of Mettupalayam drain from RC4 Vazhudavur road upto Annai Street at Shanmugapuram, Puducherry.
- ➤ Construction of box culvert on left bank of Sankarabarani river at infall point of Vazhudavour surplus course in Puducherry.
- Reconstruction of culvert across branch channel of Oulgaret Palalvoikal at Thiru Nagar in Oulgaret Municipality, Puducherry.
- Construction of masonry drain at Podavaikaranthoppu Erapallam kuttai to the drain running from Petrol Bunk end to chunnambar river at Manvely in Ariyankuppam commune, Puducherry.
- Reconstruction of Ramanathapuram cuvert across Suthukeny channel in Villianur Commune, Puducherry
- Construction of two culverts across the supply channel at Thattanchavady village,
 Villianur Commune, Puducherry
- ➤ Providing WBM and surface dressing to the inspection track laid over the Kunitchempet Pazhaya eri and Manndipet tank bund, Puducherry

- ➤ Providing metal road on the foreshore bund connecting Nallathur village and construction of pipe culvert at the inlet point of Embalam Vannan Eri, Puducherry
- Forming gravel road on the Suthukeny tank bund at Suthukeny in Mannadipet Commune, Puducherry
- Augmentation of Oussudu tank water to Ayeekulam by providing pipe line from Oussudu tank to Ayeekulam at Muthirapalayam, Puducherry.
- Forming WBM road on the left bank of Veedur voikal from ch.0m to 1200m in Santhai Pudukuppam, Puducherry.
- ➤ Construction of surplus weir in the common bund of Olandai tank and Murungapakkam tank to divert the supply water of Olandai tank to Murungapakkam surplus course, Puducherry
- ➤ Providing gravel road at Murungapakkam tank from Velrampet road to Murungapakkam surplus in Murungapakkam, Puducherry
- Construction of retaining wall on the outer toe of Sitheri tank in Nettapakkam Commune, Puducherry.
- > Providing revetment to the Bahour tank in side from suplus weir to Aranganur sluice in Puducherry
- Augumentation of Oussudu water to Ayeekulam by providing pipe line from Ousteri for recharging the ground water of Ayeekulam Phase II.
- Reconstruction of Box culvert across Putherivoikal at Mailam Road in Sandaipudukuppam, Puducherry.
- ➤ Regrading of the channels in Sivaganapathy Nagar in Villianur Commune, Puducherry.
- Reconstruction of head sluice of Melakottucherry, Senthilery and Paruthikudy
- > Strengthening the RB of Thalaganiyar North near Thondamangalampet
- ➤ Raising the existing barrage weir level on the northern & southern side of sluice gate Sankaraparani river Villianur Uruvaiyur Bridge.
- ➤ Construction of barrage with two lane bridge connecting NH 45 A and RC 30 across Guduvaiyur river at Sivaranthagam village Puducherry.
- Construction of bed dam cum bridge across Pambaiyar at confluence point Sellipet Village, Puducherry.
- ➤ Widening the surplus weir of the Kirumampakkam Periyaeri & Cinnaeri in Bahour Commune.

- ➤ Protection work to the right bank of Poranthotti thangal surplus course in Irulanchandi village in Bahour Commune, Puducherry.
- ➤ Construction of revetment in Pallivasal kulam at Nallambalm, revetment and bathing ghat at Vadakattalaipet at T.R. Pattinam.
- ➤ Construction of revetment of LB & RB of Arasalar near Agalancannu
- Construction of revetment and bathing ghat in LB of Thirumalairajanar
- ➤ Interlinking of French channel with Advipolam channel and strengthening and existing earthern channel with RCC lining from Pillanka off-take point at Bank canal to Artikayalanaka border limits of Yanam Consultancy charges cost.
- ➤ Construction of RCC retaining wall to the drainage channel water works at Dariylathippa village Yanam
- > Urgent restoration of west side for supplying and placing to sand bags using to the French channel of various places ie pillanka to Artikayalanka border.

LIKELY ACHIEVEMENTS DURING 2011-12

- ➤ Construction of Kondam and protection wall to the link channel in PS Nallur tank feeder canal at Sambadapet in Nettapakkam, Puducherry.
- Reconstruction of slab culvert across PS Nallur feeder canal near Sanarapet in Nettapakkam Puducherry
- Forming WBM road on the left bank of Mettu voikal from ch.0m to 1200m in Sandai pudukuppam, Puducherry.
- Reconstruction of damaged culvert in the inspection track of Alankuppam tank in Puducherry.
- ➤ Construction of RCC pipe culvert at inlet of Murungapakkam tank and providing gravel road to the foreshore bund of Murungapakkam tank,
- ➤ Construction of pipe cuvert at down stream of newly constructed surplus course in the common bund of Olandai tank and Murungapakkam ta
- Reconstruction of surplus weir at Maducrai tank in Nettapakkam Commune, Puducherry
- ➤ Protection work to the foreshore bund of Sadakulam thangal from inlet regulator at Aratchikuppam in Bahour Commune, Puducherry

- ➤ Sinking 3 Nos of recharge borewell on the upstream side of bridge cum bed dam across river Guduvaiyar in Sivaranthagam, Puducherry
- ➤ Sinking one number of recharge borewel on the upstream side of Viilianur Guduvaiyar bridge (behind Kannagi scholol) Puducherry
- Providing BT over the existing WBM Sudalai road in Sellipet on right bank of Sankarabarani river, Puducherry
- ➤ Reconstruction of slab culvert across Vikravandy main channel at ch.9300m in Kunichempet in Puducherry
- Providing WBM road to the Sudalai road on right bank of Sankararabanir river near anicut at Sellipet in Puducherry
- ➤ Formation of WBM road from Ural kulam opposite to Madagadipt sandhai branching from NH 45A upto ural kuttai in Thirubuvanai, Puducherry
- ➤ Construction of a barrage with two lane bridge connecting NH 45A and RC-30 across Guduvaiyar River at Sivarandagam Village in Villanur Commune, Puducherry.
- ➤ Improvements to the Mettuvaikal from Down Stream of NH 45A to Ellaipillaichavady in Puducherry.
- ➤ Improvements to the Pallavaikal from Down Stream of NH 45A to Thengaithittu, Marapalam in Puducherry.
- ➤ Construction of regulator cum bridge across River Vanjiar, Agaramangudy in Karaikal.
- ➤ Construction of regulator cum bridge across River Vanjiar at Subburayapuram in Karaikal.
- > Construction of regulator across river Thirumalairajanar at Manampet Village in Karaikal
- ➤ Reconstruction of Nallambal regulator across river Noolar @ Nallambal village in Thirunallar Commune in Karaikal
- > Improvements to the bed dam across Noolar river near madam in Thirunallar Commune in Karaikal
- Reconstruction of Karukkangudy regulator to Noolar river in Karukkangudy village

- Reconstruction of Patchoor Two vent regulator across Noolar in Patchoor village at Karaikal
- Reconstruction of inlet shutters of Abishegapakkam tank.
- ➤ Providing outer toe wall on the Sathamangalam tank Villianur commune, Puducherry.
- > Providing metal road on the foreshore bund of Vannaneri Embalam,
- Providing metal road on the western bund of Vannan leading to Northen Embalam, Puducherry.
- Providing revetment inside the Bahour tank from Karaimedu Madhagu to Valla Madhagu at Karaimedu village in Bahour Commune, Puducherry.
- ➤ Protection work to the foreshore bund [Northern side] in the Sadakulam Thangal at Arachikuppam village in Bahour Commune, Puducherry.
- Protection work to the entry point culvert of Bangaru channel at Bahour Commune, Puducherry.
- Protection to the entry point culvert of Nathamedu channels in Bahour Commune, Puducherry.
- ➤ Desilting the Sevittu voikkal from Alagulakshmi Road culvert to Kariamanickam kuttai, Nettapakkam commune.
- Acquisition of lands in Korkadu & Vannaneri tanks, Puducherry.
- ➤ Construction of the old damaged culvert across Arachikuppam tank feeding channel in Mullodai Kuruvinatham road in Bahour Commune, Puducherry.
- Construction of the old damaged culvert across Kizparikkalpet tank feeding channel in Mullodai Kuruvinatham road in Bahour Commune, Puducherry.
- Lighting facilities to Manampet Thirumaliarajanar and Ananthanallur regulators.
- Reconstruction of Tail end regulator at patchoor.
- Strengthening the Common bank of Thirumalairajanar and Neravy channel of Mulliyar from Oduthurai bridge to Keezhamani bridge.
- Reconstruction of Nattucanni Head sluice at Nalathur
- Construction of 5 out fall sluices in LB of Mullaiyar between Manjavazhi road and Nagore road bridge .

- ➤ Desilting of Suthukeny channel from Suthukeny head regulator to Kunimudakku shutter in Puducherry.
- ➤ Construction of barrage with two lane bridge connecting NH 45 A and RC 30 across Guduvaiyur river at Sivaranthagam village Puducherry.
- > Sinking recharge bore wells on various rivers beds Sub Division III of ID, PWD.
- Construction of bed dam across river Guduvaiyur at Sathamangalam village.
- ➤ Desilting Sankaraparani river from Ariyapalayam bridge DS to Villianur Uruyaiur bridge.
- ➤ Protection work in the left bank of River Pennaiyar at Manamedu village in Bahour Commune, Puducherry.
- ➤ Protection work in the left and right bank of River Pennaiyar at U/s of Sitheri Anicut in Kuruvinatham village in Bahour Commune, Puducherry.
- ➤ Protection work in the right bank of River Pennaiyar at D/s of Sitheri Anicut in Kuruvinatham village in Bahour Commune, Puducherry.
- ➤ Construction of two lane road bridge connecting NH 45 A & RC 30 across Guduvaiyar River at Sivaranthagam Village, Villianur commune, Puducherry.
- Reconstruction of the surplus weir of the Panayadikuppam village in Bahour Commune, Puducherry.
- ➤ Augmentation of Storage capacity of Nandalar Phase-I.
- Forming Mini Lake at Paduthatkollai.
- Providing down stream apron at Agalancannu regulator.
- > Protecting the RB of Arasalar at Pump House, Vizhidiyur.
- ➤ Providing RR revetments in the place of damaged portions in Adivipolam channel and French channel at Yanam.
- ➤ Interlinking of French channel with Advipolam channel & strengthening existing earthen channel with RCC lining from Pillanka to Artikayalanaka border of Yanam.
- ➤ Formation & providing revetment inside the ground level reservoir in newly acquired land & providing protection wall along border of newly acquired land near NH 214 road & junction of Yanam.

PROPOSED TARGETS FOR 2012-13

- ➤ Construction of anicut with High Level Bridge across Sankaraparani river connecting Kaikalapet and Suthukeny in Mannadipet Commune, Puducherry.
- Construction of drain from Gopalan Kadai (State Border) to Thiru Nagar pump house, Moolakulam, Puducherry.
- ➤ Construction of RCC drain for Oulgaret Pallavoikal from Pitchaveeranpet road culvert to Gundu salai culvert at Moolakulam in Oulgaret, Puducherry.
- ➤ Const of retaining wall and black tapping the road on the right band of Vidur voikkal from Ch.0 to 1200m
- Construction of regulator at Uruvaiyar tank at Uruvaiyar.
- > Reconstruction of regulator arrangement in common bund of Perungalore china eri.
- Reconstruction of inlet arrangements in Abishegapakkam tank, Puducherry.
- ➤ Construction of inlet arrangements in the foreshore bund of Abishegapakkam tank, Ariyankuppam commune, Puducherry.
- ➤ Construction of inlet arrangements in Thirukanchi tank, Villianur commune, Puducherry.
- ➤ Modernisation of inlet arrangements & Madhagu in various tank, ISD-3, PWD, Puducherry.
- ➤ Improvements to the Ural voikkal channel from Thirubuvanai surplus upto Ural kulam, Thirubuvanai Village.
- ➤ Lining the bed of diversion works near Sembadapet Village, Nettapakkam, Puducherry.
- ➤ Construction of diversion structure at Savarimadai voikkal, near Nettapakkam tank, Nettapakkam commune, Puducherry
- Providing gravel over the form road branching from northern bund of Kunitchempet pudueri at Kunitchempet
- ➤ Improvements to Oulgaret Mettu voikkal @ K.V.K. Complex, Puducherry.
- Providing WBM & BT to the inspection traqck on the RB of Vikkaravandy channel from Kunitchempet feeding channel
- ➤ Providing WBM and BT to the Vannan Eri tank bunds and raising the toe wall, Embalam, Puducherry.

- ➤ Improvements to the western bund of Korkadu tank from Thanikuppam to tank inlet near siphon.
- > Improvements to road over earthen bund of Nallur tank
- ➤ Construction of supply channel from Nallur tank Mettu madhagu
- ➤ Desilting the Poornankuppam voikkal from Angalamman koil to back water logon, Ariyankuppam commune, Puducherry.
- Regrading the surplus coarse of Abishegapakkam tank, Ariyankuppam commune Puducherry.
- Reconstruction of Bridge with regulator across Malatar river at Kumaramangalam, Pudhucherry
- ➤ Construction of a barrage with two lane bridge connecting NH 45A and RC-30 across Guduvaiyar River @ Sivarandagam Village, in Villianur Commune, Puducherry
- ➤ Construction of bed dam across river Guduvaiyar at Sathamangalam village in Villianur Commune, Puduchery.
- Strengthening both the banks of Guduvaiyar upstream side of Sivarandagam bridge cum bed dam, Villianur Commune, Puducherry
- ➤ Improvement to the Manglam Anicut and providing foot path across Guduvaiyar, Puducherry.
- Reconstruction of Bridge with regulator across Malatar river at Kumaramangalam, Pudhucherry
- ➤ Construction of a barrage with two lane bridge connecting NH 45A and RC-30 across Guduvaiyar River @ Sivarandagam Village, in Villianur Commune, Puducherry
- > Providing revetment to Adivipolam Irrigation channel from water works

 Dariylathippa village, Yanam
- Construction of box culvert across the channel at Various places in Dariylathippa village in Yanam
- ➤ Improvements to the lift irrigation pump house at Seetharamanagar in Darihylathippa village, Yanam

- ➤ Construction of diversion channel from French Channel at NH 214 junction to GLR in 55 acres land and town water works in Yanam 1st phase to 4th Phase
- Reconstruction of Box cuvlert across Putherivoikal at Mailam Road in Sandaipudukuppam, Puducherry
- ➤ Urgent repairs to the screw gearing shutters system for 8 vent regulator at Panayadikuppam periyeri feder channel in Panayadikuppam
- > Improvements to Mariyamman Koil Kulam at Nallambal main road
- ➤ Protecting the LB of Thirumalairajanar from Pannankatankudy bridge in Karaikal.
- > Providing Retaining wall to the left out reaches of Semion Kulam in Karaikal.
- ➤ Protection works to eastern side Iyyanar Kovil tank near Ammaiyar Nagar, Karaikal.
- Imps to Sembiyankal Kulam at Keezhaparithikudy pet in Nedungadu commune
- Reconstruction of syphons (3 Nos.) in Ammaivoikal in Thirunallar commune.
- Reconstruction of bed dams at various places in Athipadugai village.
- Survey and investigation for construction of bridge across river near tail regulator at Kazhugumedu.
- ➤ Modernization of Nana voikal from NH road culvert to Arasapuram channel syphon at Kottucherry
- Reconstruction of Vadakattalai Paigal channel head sluice at Vadakattalai in Nedungadu commune
- ➤ Removal of shoals in the river Vanjiar from Serumavilangai road bridge to Melakasakudy regulator
- Improvements to Pillaiyar koil kulam near Ambagarathur health Centre
- > Improvements to the Thalatheru channel from off take point to Keezhatheru road culvert
- Formation of mini lake at Padutharkollai in T.R. Pattinam.
- ➤ Removal of shoals in the river Nandalar in the up steam side of Agaramangudy regulator
- Improvements to Sivan Koil Kulam at Pathakudy.
- > Standardization and strengthening the LB of Arasalar from Athipadugai to Thennangudy via Pettai, Agalancannu. Chettikottagam in Thirunallar.

- > Improvements. to the Inspection track on the RIGHT BANK of Thalatheru channel from Lingathady to Keezhatheru road culvert
- ➤ Augmentation of Water Storage capacity in the river Nandalar near Tail end Regulator at Kazhugumedu
- ➤ Construction of surplus arrangement and strengthening the banks including development of park at tail end regulator Melavely, Karaikal.
- > Improvements works to around Chettikottagam lake in Agalancannu.
- ➤ Improvements. to the Inspection track on the RIGHT BANK of Thalatheru channel from Lingathady to Keezhatheru road culvert
- Removal of shoals in the rive Nandalar near infall point of grand canal at Kazhugumedu
- > Imps to Muhundanoor drainage channel in Ned. Commune
- ➤ Protection works to the Karukuthi channel near infall point at Kazhugumedu in Kottucherry commune
- Reconstruction of Nattu canni head regulator at Nallathur
- Removal of shoals in the river Nandalar from Muhundanoor drainage infall point to Kulakudy road bridge
- > Standardization and strengthening the LB of Arasalar from Athipadugai to Thennangudy via Pettai, Agalancannu. Chettikottagam in Thirunallar.

OUTLAY AT A GLANCE

No. of Schemes: 4 Sector: MINOR IRRIGATION

Department: 1. AGRICULTURE 2. PUBLIC WORKS

		(₹ in lakh)
Eleventh Five Year Plan 2007-12 Approved Outlay	:	17474.94
Annual Plan 2007-10 Actual Expenditure	:	3844.41
Annual Plan 2010-11 Actual Expenditure	:	1336.16
Annual Plan 2011-12 Approved Outlay	:	5015.00
Annual Plan 2011-12 Revised Outlay	:	1527.75
Twelfth Five Year Plan 2012-17 Tentative Outlay	:	31522.14
Annual Plan 2012-13 Proposed Outlay	:	4638.86

(₹ in lakh)

Sl. No.	Name of the Scheme	Plan Plan	Plan Anı	Annual Plan	Twelfth Plan 2012-17 (Tentative Outlay)	Annual Plan 2012-13
		Actual Expdr.	Approved Outlay	Proposed Outlay	Proposed Outlay	
(1)	(2)	(3)	(4)	(6)	(7)	

AGRICULTURE

	1101110011101111				
1.	Integrated Scheme for Development, Harvesting, Recharging and Conservation of Ground Water	109.05	215.00		
2.	Hydrology Project – II with World Bank Loan Assistance (EAP)	200.00	400.00		
	Sub-Total	309.05	615.00	0.00	0.00
	PUBLIC WORKS				
3.	Augmentation of Surface Water and Strengthening of Infrastructure	649.03	459.80		

(₹ in lakh)

	Total	1336.16	5015.00	31522.14	4638.86
	Negotiated Loan Sub-total	 	 	3500.00 28187.14	310.00 3907.86
4.	Accelerated Irrigation Benefit Programme			0.00	1397.00
3.	Augmentation of surface water and ground water potential recharge scheme including strengthening of infrastructure			24687.14	2200.86
	Sub-Total PUBLIC WORKS	0.00	0.00	3335.00	731.00
2.	Hydrology Project – II with World Bank Loan Assistance (EAP)			1800.00	500.00
1.	Integrated Scheme for Development, Harvesting, Recharging and Conservation of Ground Water			1535.00	231.00
	Schemes for 2012-13 and 2012-AGRICULTURE	<u>17 after Zer</u>	o Based Bud	geting Exercise	<u>e</u>
	Sub - Total	1027.11	4400.00		
	Negotiated Loan	99.33	700.00		
5	Accelerated Irrigation Benefit Programme	0.00	3000.00		
4	Augmentation of Ground water recharge scheme	278.75	240.20		
(1)	(2)	(3)	(4)	(6)	(7)
		Actual Expdr.	Approved Outlay	Proposed Outlay	Proposed Outlay
Sl. No.	Name of the Scheme	Annual Plan 2010-11	Annual Plan	Twelfth Plan 2012-17 (Tentative Outlay)	Annual Plan 2012-13

Note: The number of schemes indicates with reference to Draft Annual Plan 2012-13.