

FLOOD CONTROL

All the four regions of the Union Territory of Puducherry are located on the sea coast traversed by major river estuaries. Puducherry region lies at the tail end of two major river basins viz. river Sankaraparani and river Pennaiyar. Karaikal region is situated at the tail end of Cauvery river basin. Yanam is located at the tail end of Godavari river basin and Mahe is situated at the tail end of river Mahe and river Ponniam.

Puducherry, Karaikal and Yanam receives an average rainfall of 1200mm and Mahe receives 3300mm as it is located on the rainfed region of western ghats.

Being located at the tail end of river valleys, the Union Territory suffers for want of utilizable water on the one hand while it has to bear the brunt of floods on the other. Out of the 4 regions, Puducherry, Karaikal and Yanam are worst affected by floods. Mahe is comparatively less affected.

Puducherry region being a flat country, there are no storage reservoirs in the region which would otherwise serve as flood moderators. There is a ridge of high land running along the northern and northwestern fringe of the urban area of Puducherry with average elevation of 35.40m above MSL which brings flash floods during high intensity rains through the ravines emanating from these high lands. These flash floods submerges the entire urban and sub urban residential areas over a radius of 6.50 Km.

In the rural areas, raise of flood levels in the rivers, overflowing minor irrigation tanks, canals and drains cause inundation of vast area of agricultural lands in addition to disrupting traffic thorough fares.

26 Km long coast line of the Union Territory is subjected to disturbance in its natural equilibrium due to absence of natural defence against sea erosion normally provided by adequate sandy beach. The sea erosion is of such magnitude that it warrants immediate protection to cultivable lands, public utilities, heritage buildings, fishermen habitats and sea side resorts bordering the coast line by engineering works such as sea walls, rock revetment and coastal bunds.

OUTLAY AT A GLANCE

Sector : FLOOD CONTROL

No. of Schemes : 2

Department : PUBLIC WORKS

(Rs. in lakh)

Tenth Plan 2002-07 Actual Expenditure	:	10050.76
Annual Plan 2006-07 Actual Expenditure	:	3813.51
Eleventh Plan 2007-12 Approved Outlay	:	14023.10
Annual Plan 2007-08 Approved Outlay	:	2328.68
Annual Plan 2007-08 Revised Outlay	:	2328.68
Annual Plan 2008-09 Proposed Outlay	:	3500.00

(Rs. in lakh)

Sl. No.	Name of the Scheme	Annual Plan 2006-07	Annual Plan 2007-08		Annual Plan 2008-09
		Actual Expdr.	Approved Outlay	Revised Outlay	Proposed Outlay
(1)	(2)	(3)	(4)	(5)	(6)
1.	Strengthening of Embankments and Channel improvements*	1315.47	1095.00	1095.00	2260.00
2.	Creation of infrastructural facilities in the Tsunami affected areas	2498.04	1233.68	1233.68	1300.00
Total		3813.51	2328.68	2328.68	3500.00 #

* Drainage Scheme, Embankment scheme and Improvements to Drainage channels are merged as Strengthening of Embankments and Channel improvements.

Rs.280.00 lakhs will be allocated in the Draft Annual Plan 2008-09 for the development of SCs. The programme will be finalised in co-ordination with Adi-Dravidar Welfare Department which has been declared as the Nodal Department for Monitoring the implementation of SCSP. Rs.175.00 lakhs have been allocated for the development of SCs in the Revised Annual Plan 2007-08.

Scheme No. 1

Sector : FLOOD CONTROL

Implementing : PUBLIC WORKS
Department

- 1. Name of the Scheme** : Strengthening of Embankments and Channel improvements
- 2. Objective of the Scheme** :

This scheme is mainly intended for protection of banks of rivers and channels to avoid flood erosion and to protect the fields from inundation by construction of retaining walls, revetments, side drains, masonry drains, protection walls, footbridges, culverts, causeways, flood regulators and bridges.

3.(a) Actual physical Achievement 2006-07 :

1. Protect, work of chl.bund by providing revet.on the US side of Kumurakoil odai regulator and the US side of surplus weir at Nathamedu voikal in Bahour
2. Protecting the LB & RB of Nettapakkam FC from regulator to road culvert at Nettapakkam
3. Impts to the Inspection path on the RB of bangaru Channel from Kuttiyankuppam bridge
4. Black taping the insp.track on the Eastern & northern portion of Bahour tank upto surplus weir in Bahour
5. Impts.to link chl. From confluence point (uppar drain & grand canal to feeder canal
6. Const. Of Masonry drain from Muthialpet Ravine bridge upto Venus theatre Pondicherry
7. Form & const. of side drain and road in Sh,puram vellavari
8. Protecting the left out portion by providing revetment in the Bangaru canal from Sornavur anicut to Kariyambuthur bridge
9. Constn. Of causeway across Bahour tank surplus course connecting seliamedu and Melazhinjipet road and formation of approach road and protection work to the causeway in Bahour commune
10. Const.of protection side wall in Mettupalayam voikal from Sanarapet to the infall point @ Sh.puram vellawari
11. Const.of causeway across Bahour tank surplus course connecting Seliamedu & Melezhipet rd.& format.of approach rd.& protct.work to the causeway in Bahour commune
12. Impts.to the link chl, from the confluence pt.(Uppar drain & grand canal junction) to the dredged canal

13. Formation & const.of side drain & road in the Sh.puram vellavari from Vazhudur road to Kanaganeri mouth
14. Const.of barrage with two lane road bridge connecting Uruviyur & Villianur across Sankaraparani river
15. Const. of drainage canal from sh.puram valudavur salai Annai street
16. Pitching the bed and side protection and const.of side drain in Therodum veedhi at Sh.Puram.
17. Desilting & regular cleaning of uppar drain from Sithanakudi to confluence point with grand cannal at Duprayapet.
18. Removal of shoal at Chunnambar below Cuddalore road bridge at Ariyankuppam.
19. Desilting the surplus course of Oussudu tank and providing two nos of pipe culvert at 800m and 170m at road course in surplus course
20. Impts to Krishna Nagar drain in Pdy. Phase-I const of masonry drain from ECR culvert to outfall pt into Karuvadikuppam.
21. Extension of Thengaithittu periyar Nagar drain upto Kanaganeri.
22. Impts. To krishna nagar drain phase.II. Constn. Of masonsry drain from ECR pipe culvert near Sankara Vidyalaya School to outfall into Rainbow nagar drain .
23. Const of masonry drain from Kurumbapet Housing Board to Pitchaveerampet
24. Desilting the maltar river frm DS Kumurazmangalam regulatr to cadulore road bridge
25. Const.of Masonry drain in Karupatti channel from NH 45 A to Thirukameswar Nagar Ch.2300-2835m.
26. Providing cart track on the LB of Bahour surplus weir to Muratupatrai regulator in Bahour.
27. Const.,of toe wall for Kanaganeri tank, Pondicherry.
28. Providing insp.track on the LB of Suthukeny chl from Katterikuppam village to state border in Mannadipet commune.
29. Const. Of retaining wall along the outer toe of Northern bund of Kirumampakkam periyaeri and chenneri of Kirumampakkam in Bahour commune.
30. Const.,of toe wall for Kanaganeri tank, Pondicherry.
31. Impts.to the balance portion of inspection track on right bank of Vidur channel.
32. Const.of masonry drain in Karupati chl Thirumal nagar to Villianur church.
33. Impts. to the road along the R.B. on the road upto Valudavur road in Mannadipet commune
34. Impts.to Kalingula surplus course from Manapet pudu thangal to Mullodai in Bahour

35. Extension of TP Nagar drain upto Kanaganeri Bride
36. Impts. To the drg.chl. From JJ Nagar to Vayalveli including const.of culvert
37. Impts.to the calingula surplus course from Manapet puthu thangal to Mullodai regulator
38. Constn. Of masonry drain from ECR road upto infall point at Phase IV of Krishna Nagar drain Pondicherry
39. Protecting both banks of Thalaganiyar(North) (left out portion) in Nedungadu Commune.
40. Providing inspection track in left bank of river Thirumalairajanar from Kaundatheru to Sanniyasi Vadigal in Karaikal.
41. Removal of shoal and formation of road in the Right Bank of rive Thirumalairajanar below Nagore Road Bridge
42. Formation of common bund between Arasalar and Nellivoikal and filling the low lying area proposed for the Water Treatment Plant at Melaoduthurai by removal of shoal along the river bund of Arasalar.
43. Improvements to Ellutha voikal at Kurumbagaram village in Nedungadu Commune.
44. Providing inspection path and approach culvert across Ambagarathur vadigal near Kollapuram voikal syphon.
45. Standardisation of Karukutthy channel from offtake point to infall point in Kottucherry.
46. Construction of foot bridge across Vanjiar river near Meerapalli Thottam at Kaziar Street, Karaikal
47. Protecting the right bank of river Arasalar at Agalancannu above reservoir in Vizhidiyur village, Karaikal.
48. Protecting the Left Bank of Arasalar below Agalancannu bed dam
49. Improvements to the Sellur drainage channel from Pettai road culvert to infall point at Arasalar.
50. Improvements to the Kovilpathu channel (1st Reach)

(b) Anticipated Physical Achievement 2007 - 08 :

1. Protecting the banks of Guduvaiyar river just down stream side of Kizhur anicut, Puducherry.
2. Const. of masonry drain at Natarajan Nagar, Pitchaveeranpet, Puducherry
3. Construction of barrage with two lane road bridge connecting Uruvaiyar and Villianur across Sankaraparani river at illianur,Pudhucherry

4. Lining of Karuvadikuppam drain from Muthialpet foot bridge to state broder in Puducherry –
5. Impts. to Krishna Nagar drain in Puducherry from Krishna Nagar road at 2nd cross street culvert to infall point at Rainbow Nagar drain (Phase – III) –
6. Conversion of the Gorimedu ravine into flood carrier cum road from Jeevanathapuram state border Priyadarshini street at Thattanchavady revenue village (Phase – I) –
7. Desilting & regular cleaning of Iyyanar koil drain –
8. Improvements to the Authuvoikal form Authuvoikal pet to V.Manaveli road Oulgaret on Villianur Commune
9. Const. of R.CC drain for Oulgaret Palla voikkal from Gundu salai culvert (Moolakulam) to NH 45A road culvert at Jaya Nagar, Puducherry –
10. Protection to the Korkadu feeding channel from Pudukuppam school culvert to Korkadu tank inlet regulator in Puducherry
11. Balance work for the improvements to drainage channel from J.J. nagar to Vayalveli including construction of Culvert.
12. Regrading the existing Shanmugapuram vellavari from Vazhudavour road culvert towards Kanakaneri in Puducherry.
13. Improvements to Krishna Nagar drain in Puducherry from ECR Pipe culvert near pump house to the infall point at the phase-I of Krishna Nagar drain.
14. Construction of cement concrete drain linking RC 24 Lawspet road from Vivekanantha School to the infall point at the Phase-I of Krishna Nagar drain in Puducherry.
15. Improvements to the authuvoikal from V.manavely main road to Thakkakuttai in Oulgaret Municipality
16. Construction of masonry drain from NH road 10-4 at Villianur to infall point into Sankaraparani river, Villianur, Puducherry
17. Strengthening the LB of Noolar river near Valathamangalam Melapet Road in Thirunallar Commune.
18. Improvements to the inspection track leading Serumavilangai Vadigal infall Sluice from Sorakudy Main Road in Karaikal.
19. Improvements to the Right Bank of Mullaiyar above Nagore Road to Kamarajpet in Karaikal.
20. Construction of culvert across Thalaganiyar North at Thondamangalam.
21. Improvements to the Right Bank of Nandalar from Thondamangalam Pet to Konnakaveli Pet in Karaikal.
22. Link road connecting Porayar Road to Pillaiteruvasal near CEO Office, Karaikal.
23. Improvements to the Left Bank of Thalaganiyar (North) from Athiadi Head Sluice to Mukkuttu regulator.
24. Improvements to Cholanodai drain from regulator to infall point in Karaikal.

25. Improvements to the inspection track and strengthening the Right Bank of Nandalar Thalaganiyar North from Kottagam road culvert to Thondamangalam Pet in Nedungadu Commune.
26. Restoration of Nana Voikal – III Reach from Porayar road culvert to Thiruvettakudy road culvert in Kottucherry Commune, Karaikal.
27. Standardisation of Left Bank and Right Bank of Noolar from Sethur to Valathamangalam Pet in Thirunallar Commune, Karaikal.
28. Improvements to the Kuthiraikutty channel from Mullipallam to Nallathur Road.
29. Improvements to the Sellur drainage channels.
30. Desilting of channels through Pasanatharar Sangam for the year 2007-08.
31. Improvements to Nallezhendur drainage channels.
32. Improvements to Kokkuterry Channel from Pologam road Culvert to infall point.
33. Improvements to Kuthirai Kutty channel in Nedungadu Commune-III Reach (Ch. 5150m to 6400m) from Nallathur road culvert to Pala Kattalai regulator.
34. Construction of Syphon Thalaganiar North near three vents regulator at Andoor for providing drainage arrangement to Sembinalgal village in Nedungadu Commune.
35. Improvements to Sadayan channel from Pandaravadai syphon to Saravana Irruppu Road culvert in Nedungadu Commune IV Reach
36. Improvements to Moongilkuthu channel from offtake point to CEO office , Karaikal.
37. Providing rough stone pitching for channel from Navodaya campus to Moolakkdavu bridge 2nd reach
38. Bank protection for channel along Palloor vayal at reaches
39. Constn.of a barrage at Moolakkadavu Pandakkal
40. Bank protection for channel starting from Koppalam to Vaylilpeedika
41. Protecting the bank and construction of footpath cum drainage system from Anavadukkal to Boulevard road at Thathakula
42. Protecting the bank and construction of drainage system from Sub jail to Puthalam on southern side of I.K.Kumaran Master Road at Mahe.
43. Bank protection of drainage channel from Palloor Substation to Aravilagath palam

(c) Programme envisaged for Annual Plan 2008-09 :

1. Const. of retaining wall of eastern side main bund of Allankuppam tank leading to Auroville –
2. Const. of masonry drain upland of Kurumpapet upto Vazhudavour road culvert
3. Providing Inspection tracks to the Western bund of Oussudu Tank, Puducherry
4. Construction of 2Nos. Of pipe culvert across branch channel of oulgaret Palla voikal at Paris Nagar, Puducherry

5. Reconst. of culvert in Karuvadiukppam culvert at Krishan Nagar road near Ambika theatre, Puducherry
6. Impts. to Krishna Nagar drain in Puducherry from Krishna Nagar road at 2nd cross street culvert to infall point at Rainbow Nagar drain (Phase – III)
7. Impts. to Thelarspet drain from Vazhudavour road to Saint Theresa street
8. Impts. to the Karuvadiukppam drain from Venus theatre bridge to Ajantha theatre bridge Puducherry
9. Const. of masonry channel at New colony, Pazhaya colony Thideer Nagar at Sedarapet Village
10. Raising the barrage structure and forming flood banks with earthen approach on both the banks of Sankaraparani river, Villianur
11. Const. of R.CC drain for Oulgaret Palla voikkal from Gundu salai culvert (Moolakulam) to NH 45A road culvert at Jaya Nagar, Puducherry
12. Improvements to Sarathy Nagar drain in Kamaraj salai from Ilango Nagar 1st cross to 2nd cross in Puducherry
13. Improvements to Oulgarate Mettuvoikkal from MGR Nagar, Moolakulam upto NH 45 A in Puducherry
14. Improvements to the petit canal
15. Construction of masonry drain for RB of second sluice supply channel at Murungapakkam
16. Construction of masonry drain for the supply channel of Olandai tank
17. Improvements to the Nettapakkam drainage channel for Hospital to Potharajan Kulam
18. Improvements to Pathakudy drain.
19. Improvements to the RB of Thirumalairajanar above tailend regulator from Pallivasal Pet to Anandanallur.
20. Improvements to the LB of Thalaganiyar from Thondamangalampet to Koozhkudicha Agraharam.
21. Formation of bund for inspection track from the LB of river Mullaiyar from Manjavazhipet Road Culvert in Neravy Commune.
22. Improvements to the RB of Nandalar from Nallathur Road to Nine vents regulator.
23. Construction of common retaining wall at RB of Noolar.
24. Improvements to the LB of Thalaganiyar (South) from Kuyavankulathupet Road to Kancheepuram Kovilpet.
25. Desiting of channels through Pasanatharar Sangam 2008-09.
26. Re-construction of regulator across Noolar at Nelli Voikal, Thirumalairajanar at Manampet, Pravadayananar at Nagore Road, Noolar at Patchoor and at Thiruvettakudy.
27. Re-construction of Keezhaveli regulator across Nattar.

28. Construction of a dream way cum drainage system from Gramathy to 110 KV Substation, Palloor (Spill over)
29. Bank protection of channel on the right bank from JN Vidyalaya upto Kunnnummal bridge Pandakkal
30. Bank protection of Chalakkara Pondayat channel in reaches.

4. Remarks : Continuing scheme

Scheme No. 2

Sector : FLOOD CONTROL

Implementing : PUBLIC WORKS
Department

- 1. Name of the Scheme** : Creation of infrastructural facilities in the Tsunami affected areas
- 2. Objective of the Scheme** :

Protection of Tsunami affected areas and creation of infrastructural facilities in the areas in order to avoid the future tsunami calamities.

3.(a) Actual physical Achievement 2006-07 :

1. Strengthening the existing rock revetment from 1970m to 2895 m towards North of New pier in Puducherry
2. Strengthening the existing road from chainage 1970 to 2895 m towards north of New Pier.
3. Constn. Of masonry drain and culvert at Pudavaikaran thoppe in Ariyankuppam.
4. Restoration of damages caused in the Tsunami attack in the Right Bank of Nandalar below tailend Regulator.
5. Restoration of damages caused in the Tsunami attack in the Left Bank and Right Bank of Vanjiar below Lingathady Regulator to Pillaitheruvasal in Karaikal
6. Restoration of damages caused in the Tsunami attack in Nattar from Thiruvettakudy Regulator to infall point in Kottucherry Commune
7. Restoration of damages caused in the Tsunami attack in Poovam channel from Offtake point to Yadhava Street in Kottucherry Commune
8. Restoration of damages caused in the Tsunami attack in Poovam channel from Yadhava Street to infall point in Nandalar in Kottucherry Commune
9. Restoration of damages caused in the Tsunami attack in the Left Bank and Right Bank of Arasapuram channel below Koviltheru

10. Restoration of damages caused in the Tsunami attack in the Left Bank and Right Bank of Thalatheru North Channel in Karaikal
11. Restoration of damages caused in the Tsunami attack in the Left Bank and Right Bank of Thalatheru South Channel in Karaikal
12. Reconstruction of the Keezhakasakudy tailend Regulator in Keezhakasakudy village washed off due to Tsunami attack
13. Urgent restoration to the 6 Vent and 3 Vent Regulator at Beach Road for the damages caused due to Tsunami attack
14. Urgent restoration to the Lingathady Regulator (Tailend Regulator of Vanjar) for the damages caused due to Tsunami attack
15. Restoration of damages caused in the Tsunami attack in the Right Bank of Vanjar below Lemaire bridge to confluence point and the confluence of Nellivoikal at Karaikal
16. Restoration of damages caused in the Tsunami attack in the Left Bank of Arasalar and Nellivoikal below tailend Regulator
17. Restoration of damages caused in the Tsunami attack in the Right Bank of Arasalar and Noolar confluence point
18. Restoration of damages caused in the Tsunami attack in the Right Bank of Arasalar below Nagore Road Bridge near Helipad
19. Restoration of damages caused in the Tsunami attack in the Right Bank of Thirumalairajanar below Nagore Road at Pattinacherry village
20. Restoration of damages caused in the Tsunami attack in the Left Bank of Thirumalairajanar below Nagore Road bridge by providing retaining wall in the river side
21. Restoration of damages caused in the Tsunami attack in the Left Bank of Thirumalairajanar below Nagore Road bridge by providing road and protection work
22. Restoration of damages caused in the Tsunami attack in the Right Bank of Pravadayanar below Nagore Road upto coastal bund
23. Restoration of damages caused in the Tsunami attack in the Left Bank of Pravadayanar below Nagore Road upto coastal bund
24. Restoration of damages caused in the Tsunami attack in Left Bank and Right Bank of Mullaiyar in Karukkalachery village
25. Restoration of damages caused in the Tsunami attack in the Grand Canal of By Pass Road
26. Filling the site proposed for the construction of residential building for the Tsunami affected people at Pattinacherry village in T.R. Pattinam, Karaikal
27. Improvements to inspection path of Noolar from Sethur road to Valathamangalam in Thirunallar Commune.
28. Protecting and strengthening both banks of Noolar left out portion from Nallambal regulator to Sethur road culvert in Thirunallar Commune.
29. Providing BT to the Left Bank of Thirumalairajanar below Nagore Road in Karaikal.
30. Providing the inspection track on the Left Bank of Noolar from Nallambal regulator to Madhur bed dam in Karaikal

31. Improvements to the inspection track on the Right Bank of Noolar from Ambagarathur road to Kumarakudy village in Thirunallar Commune.
32. Improvements to the inspection track on the Right Bank of Servari channel connecting Agaramangudy regulator from Nallathur village in Thirunallar Commune.
33. Forming metalling and BT in the inspection track in the Left Bank of Neravy channel from Kakamozhi road culvert to Alathur Iron Bridge.
34. Improvements to the inspection track of Thalatheru channel from Pillaitheeruvasal to Porayar Road culvert in Karaikal.
35. Improvements to the existing road in the left bank of Vanjiar from Lingathady regulator to Melakasakudy regulator in Karaikal region.

(b) Anticipated Physical Achievement 2007 - 08 :

1. Consultancy work for providing groynes at various places from Ch.1970m to 3770m towards North of New pier in Puducherry
2. Providing groynes at various places from Ch.1970m to 3770m towards North of New pier in Puducherry Coast, Puducherry
3. Providing Groynes at various places from Ch. 1970 to 3770m towards North of New pier in Puducherry Coast, Puducherry.
4. Construction of anicut cum low level cause way across the river Pennaiyar at Arachikuppam village in Bahour commune, Puducherry.
5. Providing coastal protection works towards the North of Arasalar in reaches. S/W:- Construction of coastal protection wall from Beach Road to Karaikalmedu
6. Providing coastal protection works towards the North of Arasalar in reaches. S/W:- Construction of coastal protection wall from Beach Road to Karaikalmedu
7. Providing coastal protection works towards the North of Arasalar in reaches. S/W:- Construction of coastal protection wall around Kottucherry and Akkampet in Karaikal.
8. Providing coastal bund along the coastal line of Karaikal from Kilingalmedu to Mandapathur in Karaikal.
9. Restoration of damages caused in the Tsunami attack in the Left Bank and Right Bank of Thalatheru North Channel in Karaikal
10. Improvements to Poovam Channel – II Reach from Yadava Street to infall point
11. Construction of coastal protection wall in Pattinacherry village in Karaikal.
12. Providing coastal protection towards the South of Arasalar in Reaches. S/W:- Construction of coastal protection wall in Vadakku Vanjore and Keezha Vanjore village in Karaikal.
13. Forming approach and strengthening the Left Bank of Oorsuthi Voikal from Cholan Kuruchi foot bridge to Thiru Kottaram in Thirunallar Commune.
14. Improvements to the inspection track in the Left Bank of Vanjiar from Melakasakudy regulator to Agramanangudy regulator in Karaikal.
15. Improvements to Mullipallam channel.

(c) Programme envisaged for Annual Plan 2008-09 :

1. Preliminary estimate for providing groynes for fighting harbour at Ganapathy Chettikulam, Periyakalpet, Chinnakalpet and Pillaichavady at Kalapet are in Puducherry
2. Construction of bed dam and protection work on the surplus course of Oussudu tank, Puducherry
3. Strengthening common bund of Murungapakkam and olandai tank bund at junction of Velrampet road in Mududhaliarpuducherry
4. Dregging the Thengaithittu lagoon and forming flood tank for laning fishing boats douring cyclone and tsunامي
5. Erecting Thiruvalluvar statue at chunnambar.
6. Construction of coastal bund – North & South – I & II Reach.
7. Construction of coastal wall from 3000m to 3800m, to Keezha Kasakudy medu and Karukkalcherry.
8. Groynes near Fishing Harbour, Thirumalairajanar Mouth, Nattar Mouth.
9. Construction of inspection track from the LB of Arasalar from Agalancannu to Athipadugai.
10. Construction of inspection track from the LB of Arasalar from Neivachery Road Culvert to tailend regulator.
11. LB & RB of Pravadayanar below Nagore Road to tailend regulator.
12. Improvements to the LB of Mullaiyar above Nagore Road to Kamarajpet.

4. Remarks : Continuing scheme