



PUBLIC WORKS DEPARTMENT  
WATER RESOURCES DEPARTMENT

PERFORMANCE BUDGET  
2016-2017

©

Government of Tamil Nadu

2017

1

**PUBLIC WORKS DEPARTMENT**  
**WATER RESOURCES DEPARTMENT**

**1.0. General**

Tamil Nadu being a water deficit State, located in the tail end of the country, has been facing growing water demands. Limited water resources, seasonal and uncertain rainfall, utilization of Ground water, increase in demand for various uses and protecting the interests of the farmers who depend on the water resources assume importance. The Government is closely monitoring the situation and taking appropriate action viz. dealing with inter-state issues, creating new irrigation facilities at feasible locations, modernizing, improving and rehabilitating the existing irrigation infrastructure and restoring the capacity of the existing water bodies by desilting and evicting the encroachments.

In addition, various periodic multidisciplinary studies are being conducted on ground water by maintaining and observing State-wide monitoring network of ground water, surface water and water quality, micro level ground water potential assessment and categorisation of Revenue Firkas.

**2.0. Performance during the year 2016-2017**

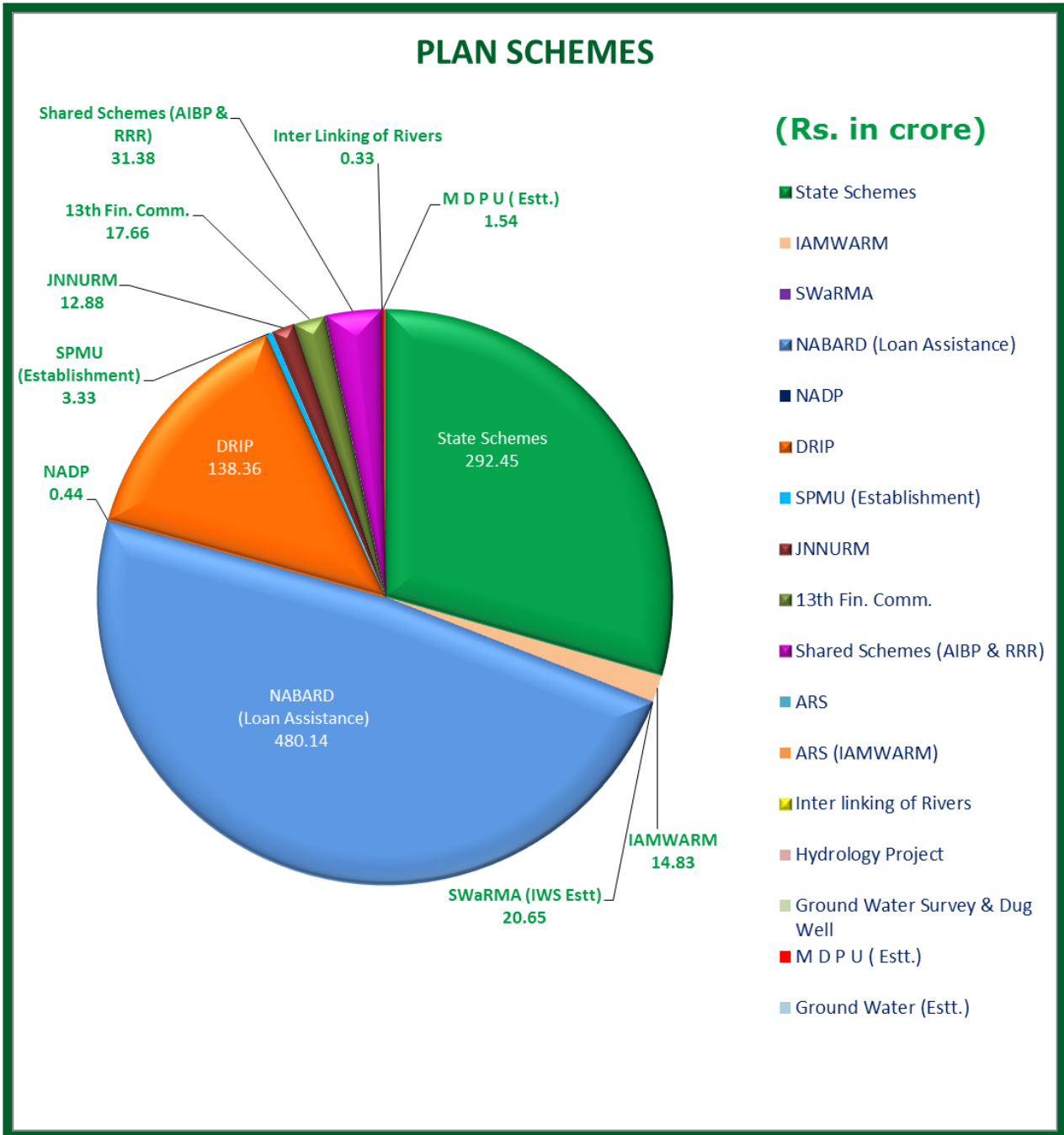
The financial achievement, details of various schemes completed and in progress and other activities taken up during 2016-2017 are as under:

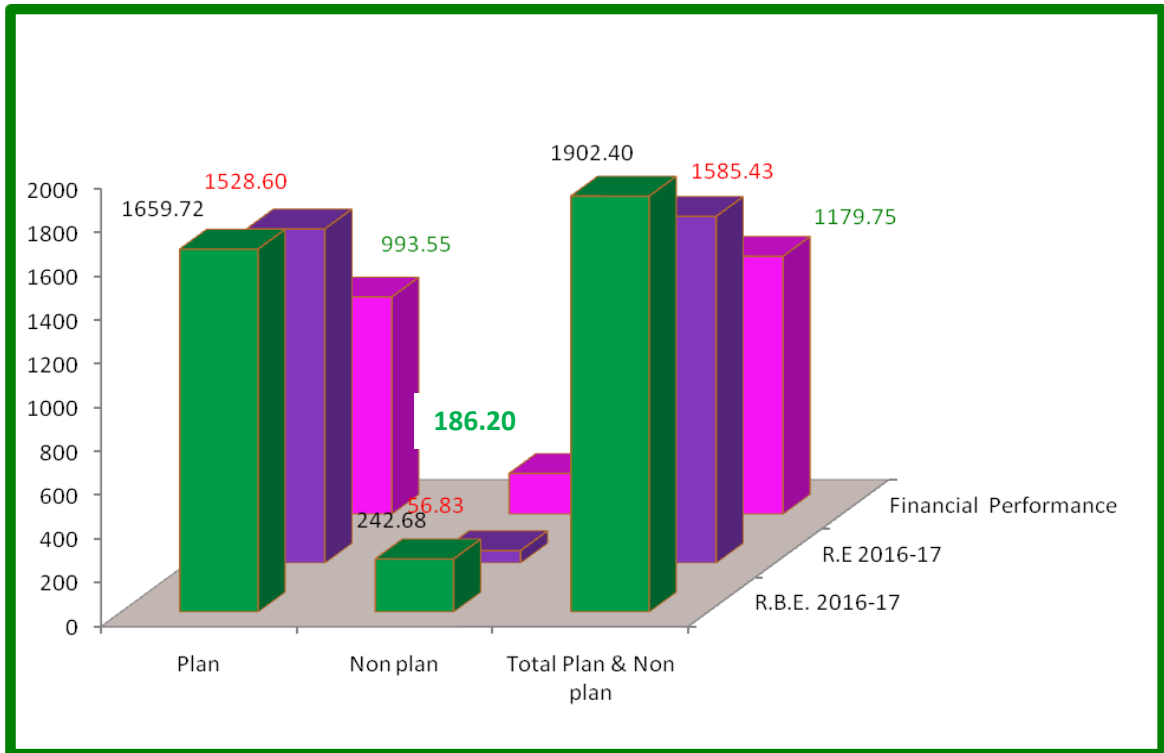
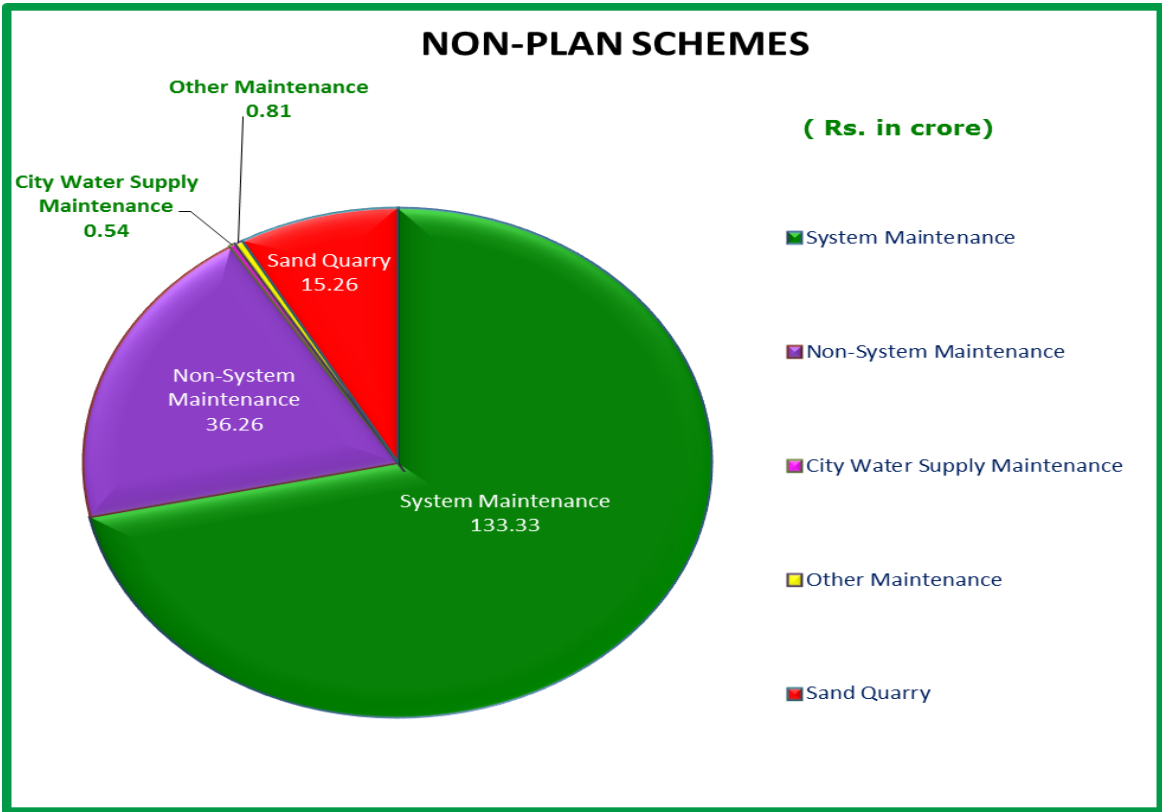
**(Rs.in crore)**

Sl. No.	Scheme	R B E 16 - 17	R E 16 - 17	Expenditure
<b>I</b>	<b>Plan schemes</b>			
	State Funded Schemes	610.31	511.09	292.45
	IAMWARM Project	10.01	18.12	14.83
	SWaRMA	1.51	0.88	0.21
	NABARD Loan Assistance	545.75	662.45	480.14
	NADP	0.00	0.44	0.44
	DRIP	255.01	197.30	138.36
	SPMU (Establishment)	3.45	4.64	3.33

	JNNURM	0.00	16.45	12.88
	Grants-in-aid of the 13 <sup>th</sup> Finance Commission	0.00	20.72	17.66
	Centre - State Shared Schemes (AIBP & RRR)	22.00	38.27	31.38
	Inter-linking of Rivers	205.89	55.89	0.33
	Ground Water Survey & Dug Well	3.12	0.00	0.00
	<b>Sub Total Plan schemes (Works)</b>	<b>1657.03</b>	<b>1526.25</b>	<b>992.01</b>
	M D P U (Estt.)	2.69	2.35	1.54
	<b>Total Plan schemes</b>	<b>1659.72</b>	<b>1528.60</b>	<b>993.55</b>
<b>II</b>	<b>Non-Plan</b>			
	Irrigation System Maintenance	176.79	35.39	133.33
	Irrigation Non-System Maintenance	49.21	4.76	36.26
	City Water Supply Maintenance	0.54	0.54	0.54
	Other Maintenance	0.84	0.84	0.81
	Sand Quarry	15.30	15.30	15.26
	<b>Sub Total (Non-Plan)</b>	<b>242.68</b>	<b>56.83</b>	<b>186.20</b>
	<b>GRAND TOTAL (Plan &amp; Non-Plan)</b>	<b>1902.40</b>	<b>1585.43</b>	<b>1179.75</b>

## FUNDS APPROVED UNDER DEMAND No. 40





■ R.B.E. 2016 - 17 
 ■ R.E. 2016 - 17 
 ■ Financial Performance

### **3.0. CREATION OF NEW IRRIGATION INFRASTRUCTURE**

#### **3.1. Formation of New Reservoirs**

##### **Works in progress**

Detailed investigation at an estimated cost of Rs.0.10 crore for formation of Shoolagiri Chinnar Reservoir across River Pennaiyar at the confluence point of Chinnar at Vanioddu near Sikalapalli Village in Hosur Taluk of Krishnagiri District is in progress, 45% of the works have been completed.

Formation of a New Reservoir across Marudaiyar River near Kottarai Village in Alathur Taluk of Perambalur District at an estimated cost of Rs.124.20 crore is in progress, 60% of the works have been completed.

Formation of a new reservoir at Kannankottai Village in Gummudipoondi Taluk of Tiruvallur District at an estimated cost of Rs.330.00 crore by merging Kannankottai Hissa Rajaneri tank and Thervaikandigai tank is in progress.

#### **3.2. Construction of New Barrage**

Detailed Project Report for construction of New Barrage across Kollidam near Adhanur and Kumaramangalam Villages in Cuddalore and Nagapattinam Districts at a cost of Rs.400.00 crore is under consideration.

#### **3.3. New Anicuts and Regulators**

##### **Works completed**

Anjanakarankulam Anicut across Thirumanimuthar River in Natham Village and Taluk of Dindigul District was reconstructed at an estimated cost of Rs.1.65 crore, benefiting an ayacut of 36 acre.

New Tail end Regulator across Nallur Uppanar Drain in Kodakkaramoolai Village of Sirkali Taluk of Nagapattinam District was constructed at an estimated cost of Rs. 1.78 crore, benefiting an ayacut of 600 acre.

New Tail end Regulator across Nallur Chinnar Drain in Puliyaundururai Village, Sirkali Taluk of Nagapattinam District was constructed at an estimated cost of Rs.1.33 crore, benefiting an ayacut of 400 acre.

Anicut across Vellar River near Athiyur Village of Kunnam Taluk of Perambalur District was constructed at an estimated cost of Rs.8.11 crore, benefiting an ayacut of 1,205 acre.

Construction of Anicut across South Vellar to feed Alapirandan Tank of Aranthangi Taluk of Pudukkottai District has been completed at an estimated cost of Rs.7.09 crore, benefiting an ayacut of 861 acre.

Construction of Anicut across Manimuthar River near Udhayachi Village to feed Kaikudi and its group of tanks in Devakottai Taluk of Sivagangai District at an estimated cost of Rs.10.60 crore was constructed, benefiting an ayacut of 1501 acre.

Construction of Anicut across Nariyar to feed Mudathani tank, Kothamangalam tank and Seethambalpuram tank and improvements to supply channels in Alivalam Village of Pattukottai Taluk of Thanjavur District at an estimated cost of Rs.3.73 crore has been completed, benefiting an ayacut of 420 acre.

New Regulator across Koraiyar at LS 130.00 in Paingattur Village of Mannargudi Taluk of Thiruvarur District was constructed at an estimated cost of Rs.3.00 crore, benefiting an ayacut of 6,042 acre.

Anicut across Cheyyar River near Arumbalur Village to feed Odhalavadi Tank in Polur Taluk of Tiruvannamalai District was constructed at an estimated cost of Rs.7.21 crore, benefiting an ayacut of 426 acre.

### **3.4. Formation of New Check dams / Bed dams / Grade walls**

#### **Works completed**

Check Dam across Nallar River in Arthanaripalayam Village in Pollachi Taluk of Coimbatore District was constructed at an estimated cost of Rs.1.67 crore.

Check dam across Senjerikarai Odai in Senjeriputhur Village of Sulur Taluk of Coimbatore District was constructed at an estimated cost of Rs.1.25 crore, benefiting an ayacut of 220 acre.

Check Dam across Vaniyar River in Paraiyapatty Pudur Village of Pappireddipatty Taluk of Dharmapuri District was constructed at an estimated cost of Rs.1.26 crore, benefiting an ayacut of 62 acre.

Check Dam across Yeamathirtha Odai in Pudintham Village near Mambadi in Harur Taluk of Dharmapuri District was constructed at an estimated cost of Rs.0.56 crore, benefiting an ayacut of 19 acre.

Check dam across Kodaganar River in Ayyampalayam Village of Dindigul Taluk and District was constructed at an estimated cost of Rs.5.65 crore, benefiting an ayacut of 450 acre.

Check dam across Odai in Perumugai Village in Gobi Taluk of Erode District was constructed at an estimated cost of Rs.1.94 crore, benefiting an ayacut of 120 acre.

Check dam across Odai in Avalpoondurai Village in Erode Taluk and District was constructed at an estimated cost of Rs.1.17 crore, benefiting an ayacut of 21 acre.

Check Dam across Pungar River near Pudupatti Village in Krishnarayapuram Taluk of Karur District was constructed at an estimated cost of Rs.2.83 crore, benefiting an ayacut of 396 acre.

Check dam across Nanganjiyar River at Sellivalasu Village in Aravakurichi Taluk of Karur District was constructed at an estimated cost of Rs.1.71 crore.

Check Dam across Kovaiaru (Gundumadahalla) in Anchetty Village in Denkanikottai Taluk of Krishnagiri District was constructed at an estimated cost of Rs.1.26 crore, benefiting an ayacut of 20 acre.

Check dam near Kookalthurai Village in Kothagiri Taluk of The Nilgiris District was constructed at an estimated cost of Rs.0.90 crore, benefiting an ayacut of 900 acre.

Check dam near Odayaratti Village in Udhagamandalam Taluk of The Nilgiris District was constructed at an estimated cost of Rs.0.71 crore, benefiting an ayacut of 200 acre.

Check Dam across Sarabanganathi in Muthunaickenpatti Village of Omalur Taluk of Salem District was constructed at an estimated cost of Rs.1.20 crore.

2 Check dams across Vaigai River at Valipparai and Govindanagaram Villages in Andipatti Taluk of Theni District were constructed at an estimated cost of Rs.4.95 crore, benefiting an ayacut of 1,150 acre.

Check Dam across Vaigai River near Ambasamudram Village of Theni Taluk and District was constructed at an estimated cost of Rs.2.34 crore, benefiting an ayacut of 434 acre.

Check Dam across Kottakudi River near Theerthathotti Murugan Temple at Kodangipatti Village of Bodinayakanur Taluk of Theni District was constructed at an estimated cost of Rs.1.55 crore, benefiting an ayacut of 72 acre.

Check Dam across Kottagudi River near Pattakkalam in Bodinayakanur Village and Taluk of Theni District was constructed at an estimated cost of Rs.1.09 crore, benefiting an ayacut of 150 acre.



Check Dam across Koothanatchiyar odai near Kamayagoundanpatti and Narayanadevanpatti Villages in Uthamapalayam Taluk of Theni District was constructed at an estimated cost of Rs.0.62 crore, benefiting an ayacut of 43 acre.

Check dam across Vaippar River in S.F.No.205 of Keelnattukurichi Village in Ettayapuram Taluk of Thoothukudi District was constructed at an estimated cost of Rs.9.20 crore, benefiting an ayacut of 959 acre.

Check Dam across Nandiyar River in Iruthayapuram Village in Lalgudi Taluk of Tiruchirappalli District was constructed at an estimated cost of Rs.3.00 crore, benefiting an ayacut of 171 acre.

Check Dam across Ayyar River near Thandalaiputhur Village in Musiri Taluk of Tiruchirappalli District was constructed at an estimated cost of Rs.2.59 crore, benefiting an ayacut of 547 acre.

Check dam across Kannuthu Odai near Kumaravadi Village of Manaparai Taluk of Tiruchirappalli District was constructed at an estimated cost of Rs.0.67 crore, benefiting an ayacut of 198 acre.

Check dam across Palar River near Valayapalayam Village in Udumalpet Taluk of Tiruppur District was constructed at an estimated cost of Rs.2.21 crore, benefiting an ayacut of 126 acre.

Check dam across Nelalikai Odai in Nelali Village near Ellapalayampudur in Kangayam Taluk of Tiruppur District was constructed at an estimated cost of Rs.2.19 crore, benefiting an ayacut of 676 acre.

Check dam across Uppar Odai near Kondampatti Village in Udumalpet Taluk of Tiruppur District was constructed at an estimated cost of Rs.1.92 crore, benefiting an ayacut of 60 acre.

Check dam across Suganadhi near Mummuni Village in Vandavasi Taluk of Tiruvannamalai District was constructed at an estimated cost of Rs.1.27 crore, benefiting an ayacut of 114 acre.

Check dam across Mamundiyar River in Samudram Village of Manaparai Taluk of Tiruchirappalli District was constructed at an estimated cost of Rs.2.09 crore, benefiting an ayacut of 493 acre.

Check dam across Vellar River near Vembanur Village of Marungapuri Taluk of Tiruchirappalli District was constructed at an estimated cost of Rs.1.15 crore, benefiting an ayacut of 90 acre.

Check Dam across Coom River near Putlur Village in Thiruvallur Taluk and District was constructed at an estimated cost of Rs.6.22 crore, benefiting an ayacut of 592 acre.

Check dam across Pambar River near old Aathikuppam Village in Thirupathur Taluk of Vellore District was constructed at an estimated cost of Rs.1.33 crore, benefiting an ayacut of 215 acre.

Check Dam across Nelvoy Maduvu near Nelvoy Village in Maduranthagam Taluk of Kancheepuram District was constructed at an estimated cost of Rs.1.00 crore.

Check Dam across Maduvu in Angampakkam Village in S.F.No.133 near Walajabad in Kancheepuram Taluk and District was constructed at an estimated cost of Rs.0.52 crore, benefiting an ayacut of 47 acre.

Grade wall across Cauvery River near Mathirimangalam Village in Kuthalam Taluk of Nagapattinam District was constructed at an estimated cost of Rs.1.49 crore, benefiting an ayacut of 1,183 acre.

Grade Wall across Kaduvaiyar near Kakkalani Village of Keevalur Taluk of Nagapattinam District was constructed at an estimated cost of Rs.1.46 crore, benefiting an ayacut of 808 acre.

Grade wall across Nattar River at mile 70/3 to feed Kanjivoi Channel, Nagambady Channel and Nallavur Channel in Kodimangalam Village of Kuthalam Taluk of Nagapattinam District was constructed at an estimated cost of Rs.1.33 crore, benefiting an ayacut of 1,537 acre.

Grade wall across Veeracholan River in Kothangudy Village of Tharangambadi Taluk of Nagapattinam District was constructed at an estimated cost of Rs.0.93 crore, benefiting an ayacut of 577 acre.

Grade wall across Mahimalaiyar River near Muruganthottam Village of Kuthalam Taluk of Nagapattinam District was constructed at an estimated cost of Rs.0.52 crore, benefiting an ayacut of 351 acre.

Check dam across Koraiyar River near Suriyur (Villarodai) Village in Kolathur Taluk of Pudukkottai District was constructed at an estimated cost of Rs.3.09 crore, benefiting an ayacut of 284 acre.

Check dam across Virusuliyar River in Kavanur Village in Thirupathur Taluk of Sivagangai District was constructed at an estimated cost of Rs.1.71 crore, benefiting an ayacut of 295 acre.

Check Dam across Agniar River near Neivelivadapathi Village in Orathanadu Taluk of Thanjavur District was constructed at an estimated cost of Rs.7.45 crore, benefiting an ayacut of 883 acre.

Check Dam across Vaigai River in Myladumparai Village in Andipatti Taluk of Theni District was constructed at an estimated cost of Rs.2.40 crore, benefiting an ayacut of 457 acre.

Check dam across Karumeniyar River near Kombankulam Village in Sathankulam Taluk of Thoothukudi District was constructed at an estimated cost of Rs.1.23 crore.

Bed dam across Cauvery River at Mananjeri Village of Kumbakonam Taluk of Thanjavur District was reconstructed at an estimated cost of Rs.1.47 crore, benefiting an ayacut of 984 acre.

Grade wall across Cauvery River at mile 37/6 to feed Thiruvaiyaru, Kalyanapuram and Oomai channels in Thiruvaiyaru Village and Taluk of Thanjavur District was constructed at an estimated cost of Rs.7.00 crore, benefiting an ayacut of 1,246 acre.

Grade wall across Pamaniyar River in Palaiyur Village of Mannargudi Taluk of Thiruvarur District was constructed at an estimated cost of Rs.1.68 crore, benefiting an ayacut of 253 acre.

Grade wall across Koraiyar at LS 128.540 km to maintain the theoretical bed level and to feed Kadaitheru channel in Kadaitheru Village of Mannargudi Taluk of Thiruvarur District was constructed at an estimated cost of Rs.1.04 crore, benefiting an ayacut of 1,284 acre.

Grade wall across Arasalar River in Nallicheri Village of Kudavasal Taluk of Thiruvarur District was constructed at an estimated cost of Rs.1.40 crore, benefiting an ayacut of 774 acre.

Grade wall across Koraiyar River at mile 62/1 to maintain the theoretical bed level and to feed A1 Hanumanthapuram channel in Needamangalam Village and Taluk of Thiruvarur District was constructed at an estimated cost of Rs.1.36 crore, benefiting an ayacut of 1,028 acre.

Grade wall across Kandaparichannar branch channel in Kumuttithidal Village of Mannargudi Taluk of Thiruvarur District was constructed at an estimated cost of Rs.0.86 crore, benefiting an ayacut of 410 acre.

Check dam across Vaippar River near Achankulam Village in Sivakasi Taluk of Virudhunagar District was constructed at an estimated cost of Rs.5.62 crore, benefiting an ayacut of 290 acre.

### **Works in progress**

Construction of a Check Dam across Vilangudi Odai in Vilangudi Village of Ariyalur Taluk at an estimated cost of Rs.0.995 crore is in progress.

Construction of Check Dam across Gadilam River near Maligampattu Village of Panruti Taluk of Cuddalore District at an estimated cost of Rs.5.00 crore is in progress.

Construction of Check dam across Amaravathi River near Periyar Nagar in Andankoil Village of Manmangalam Taluk of Karur District at an estimated cost of Rs.15.16 crore is in progress.

Construction of Check Dam across Thamirabarani River near Serndamangalam Village (Mukkani) in Srivaikundam Taluk of Thoothukudi District at an estimated cost of Rs.25.75 crore is in progress.

Construction of Check dam across Kosasthalaiyar River in Pattaraiperumpudur Village to channelise water to Arulmigu Veeraragavaperumal temple tank in Tiruvallur Taluk and District at an estimated cost of Rs.25.00 crore is in progress.

Construction of Check Dam across Naganadhi River near Kathalampattu Village in Vellore Taluk and District at an estimated cost of Rs.2.60 crore is in progress.

### **3.5. Formation of New Canals / Supply Channels**

#### **Works completed**

Excavation of Supply Channel from Senganbasuvanthalav tank to divert flood surplus water of Chinnar River to feed Endapatti tank, Kondasamanahallu tank and 8 other inter-mediate tanks in Palacode Taluk of Dharmapuri District was completed at an estimated cost of Rs.10.20 crore, benefiting an ayacut of 650 acre.

Formation of a channel for diverting the waters of Kumbakuzhi drain into Cauvery River, to the downstream portion of new Kattalai Barrage of Karur District was constructed at an estimated cost of Rs.9.00 crore, benefiting an ayacut of 300 acre.

New supply canal to divert the flood surplus water of Kelavarapalli reservoir through its left main canal to feed Marudandapalli Eri and Durai Eri in Hosur Taluk of Krishnagiri District was formed at an estimated cost of Rs.2.50 crore, benefiting an ayacut of 222 acre.

Feeder Channel for Aduthurai Channel in Ullikadai Village of Papanasam Taluk of Thanjavur District was formed at an estimated cost of Rs.0.45 crore, benefiting an ayacut of 85 acre.

## **Works in progress**

Detailed Surveying and Levelling operations at an estimated cost of Rs.0.10 crore for the scheme of diversion of surplus water of Chinnar River through Jerthalav Canal to feed Erranahalli tank, Pulikarai tank and 12 other tanks in Palacode Taluk of Dharmapuri District is in progress.

Detailed investigation at an estimated cost of Rs.0.10 crore for the scheme of diversion of flood water from Maniyachipallam Odai to Varattupallam Reservoir in Andhiyur Taluk of Erode District is in progress.

Detailed investigation and land acquisition at an estimated cost of Rs.14.00 crore for excavation of a supply channel at LS 15.95 km of Barur Tank East Main Canal to feed 33 tanks in Pochampalli and Uthangarai Taluks of Krishnagiri District are in progress.

Detailed investigation and levelling at an estimated cost of Rs.0.40 crore for the proposed excavation of new canal on the Right and Left side of the existing Ennekol Anicut in Krishnagiri Taluk and District to benefit the drought prone areas and excavation of Canal from the Left Main Canal of Vaniyar Reservoir to feed 16 tanks in Pappireddypatti and Harur Taluks of Dharmapuri District are in progress.

Formation of a new canal from Belur anicut to divert the excess flood water of Anaimaduvu reservoir from Belur Kissan supply channel to feed ponds and construction of check dams in Kumarasamiyur, Thukkiyampalayam, Mannayakanpatti and Vazhapadi Villages in Vazhapadi Taluk of Salem District at an estimated cost of Rs.3.68 crore are in progress.

Detailed investigation at an estimated cost of Rs.0.10 crore for the scheme of formation of a new tank across Ponni Odai near Chokkanur Agraharam Village in Gangavalli taluk of Salem District is in progress.

Detailed investigation at an estimated cost of Rs.0.10 crore for the scheme of diversion of flood surplus water by lift irrigation from Mettur Dam to Sarabanga River in Salem District is in progress.

Formation of a new flood carrier canal from Kanjampatti odai in Vilathikulam Taluk of Thoothukudi District to feed Sayalgudi and other tanks in Kamudhi and Kadaladi Taluks of Ramanathapuram District at an estimated cost of Rs.18.00 crore is in progress.

Extension of 18th canal upto Koovalingaaru which drains into Kottagudi River in Bodinayakkanur Taluk of Theni District at an estimated cost of Rs.52.80 crore is in progress.

Detailed investigation and land acquisition at an estimated cost of Rs.5.40 crore for diversion of surplus waters of Ramanadhi to Jambunadhi system in Kadayam Village of Ambasamudram Taluk of Tirunelveli District are in progress.

Construction of storm water and drainage channel parallel to the right side retaining wall along the road side from Thidiyur Village to downstream of Pachaiyar weir in Palayamkottai Taluk of Tirunelveli District at an estimated cost of Rs.2.20 crore is in progress.

Construction of a Weir at LS 2046 m across Kannadian channel to divert the drainage water of Kallidaikuruchi town in Ambasamudram Taluk of Tirunelveli District at an estimated cost of Rs.1.60 crore is in progress.

Linking of Parambikulam Aliyar Project system to Uppar Canal in Dharapuram Taluk in Tiruppur District at an estimated cost of Rs.8.10 crore is in progress.

### **3.6. Formation of New Tank**

Formation of New Tank across Nallathangal Odai near Kothayam Village of Oddanchatram Taluk of Dindigul District at an estimated cost of Rs.11.12 crore is in progress.

## **4.0. REHABILITATION OF IRRIGATION INFRASTRUCTURE AND SYSTEMS**

### **4.1. Rehabilitation of Dams**

**4.1.1.** The Dam Rehabilitation and Improvement Project (DRIP) with World Bank loan assistance is under implementation at a total project cost of Rs.745.49 crore. Rehabilitation works have been taken up by the Water Resources Department in 69 dams at an estimated cost of Rs.469.94 crore. The details of works completed and in progress during 2016 – 2017 are detailed below:

#### **Works completed**

Civil, Electrical, Hydro-Mechanical works and Rehabilitation works were completed in 36 dams viz. Mordhana dam in Vellore District, Gomukinadhi dam in Villupuram District, Thumbalahalli, Thoppiar and Chinnar dams in Dharmapuri District, Shoolagiri Chinnar, Krishnagiri and Kelavarapalli dams in Krishnagiri District, Poondi Reservoir in Thiruvallur District, Adavinainarkoil, Vadakkupachayar, Kodumudiyar, Nambiar and Karuppanadhi dams in Tirunelveli District, Poigaiyar Dam in Kanniyakumari District, Pilavakkal Periyar, Golwarpatti and Vembakottai dams in Virudhunagar District, Manjalar and Shanmuganadhi dams in Theni District, Marudhanadhi, Kodaganar, Kuthiraiyar and Palar

Porandhalar dams in Dindigul District, Siddhamalli dam in Ariyalur District, Anaimaduvu dam in Salem District, Ponnaniyar and Uppar (Trichy) dams in Tiruchirapalli District, Thirumurthy and Amaravathy dams in Tiruppur District, Noyyal Athupalayam dam in Karur District, Varattupallam dam in Erode District, Lower Nirar dam in Coimbatore District, Perubaripallam, Parambikulam and Thunakadavu Reservoirs in Palghat District (Kerala) at an estimated cost of Rs.103.30 Crore.

### **Works in progress**

Rehabilitation and Improvement works in Upper Nirar dam & Sholayar dam of Valparai Taluk and Aliyar dam of Pollachi Taluk of Coimbatore District at an estimated cost of Rs.28.00 crore are in progress.

Rehabilitation and Improvement works in Wellington Reservoir of Thittakudi Taluk and Veeranam Tank of Kattumannarkoil and Chidambaram Taluks of Cuddalore District at an estimated cost of Rs.14.50 crore are in progress.

Rehabilitation and Improvement works in Kesarigullihalla dam of Palacode Taluk, Vaniyar dam of Pappireddipatti Taluk and Nagavathy dam of Pennagaram Taluk in Dharmapuri District at an estimated cost of Rs.2.63 crore are in progress.

Rehabilitation and Improvement works in Gunderipallam dam of Gobi Taluk and Lower Bhavani dam of Sathyamangalam Taluk of Erode District at an estimated cost of Rs.22.69 crore are in progress.

Rehabilitation and Improvement works in Chembarambakkam tank of Sriperumpudur Taluk of Kancheepuram District at an estimated cost of Rs.3.85 crore is in progress.

Rehabilitation and Improvement works in Chittar-I and Chittar – II dams of Vilavancode Taluk and Perunchani dam of Kalkulam Taluk of Kanniyakumari District at an estimated cost of Rs.13.71 crore are in progress.

Rehabilitation and Improvement works in Pambar dam of Pappireddipatti Taluk in Dharmapuri District at an estimated cost of Rs.0.83 crore is in progress.

Rehabilitation and Improvement works in Kariakoil dam of Attur Taluk and Mettur dam of Mettur Taluk of Salem District at an estimated cost of Rs.13.56 crore are in progress.

Rehabilitation and Improvement works in Lower Anicut of Thiruvaidaimaruthur Taluk of Thanjavur District at an estimated cost of Rs.16.47 crore is in progress.

Rehabilitation and Improvement works in Vaigai dam of Andipatti Taluk and Sothuparai dam of Periyakulam Taluk of Theni District at an estimated cost of Rs.9.69 crore are in progress.

Rehabilitation and Improvement works in Manimuthar, Gadana and Ramanadhi dam of Ambasamudram Taluk of Tirunelveli District at an estimated cost of Rs.23.13 crore are in progress.

Rehabilitation and Improvement works in Redhills tank of Madhavaram Taluk and Cholavaram tank of Ponneri Taluk of Tiruvallur District at an estimated cost of Rs.4.79 crore are in progress.

Rehabilitation and Improvement works in Sathanur dam of Thandampattu Taluk of Tiruvannamalai District at an estimated cost of Rs.5.09 crore is in progress.

Rehabilitation and Improvement works in Manimukthanadhi dam of Sankarapuram Taluk and Vidur dam of Tindivanam Taluk of Villupuram District at an estimated cost of Rs.77.09 crore are in progress.

Rehabilitation and Improvement works in Pilavakkal Periyar dam of Srivilliputhur Taluk and Kullursandhai and Anaikuttam dams of Virudhunagar Taluk of Virudhunagar District at an estimated cost of Rs.12.87 crore are in progress.

**4.1.2.** Rehabilitation and improvement works in Baby Dam in Idukki District (Kerala), was sanctioned at an estimated cost of Rs.7.85 crore. Special permission granted on 18.10.2016 for transporting sand from Tamil Nadu to Periyar dam in Kerala. Raising the upstream parapet wall has been completed.

## **4.2. Rehabilitation of Anicuts/Check Dams / Bed Dams/ Grade walls**

### **Works completed**

Kalingarayan Anicut in Erode Taluk and District was rehabilitated at an estimated cost of Rs.7.80 crore benefiting an ayacut of 15,748 acre.

Kuzhithuraiyar Sub-path Check dam in Vilavancode Taluk of Kanniyakumari District was rehabilitated at an estimated cost of Rs.6.35 crore.

13 anicuts across Sarabanga River in Omalur Taluk of Salem District were rehabilitated and improved at an estimated cost of Rs.5.23 crore benefiting an ayacut of 2,280 acre.



Grade wall across Vennar to feed Regunatha Cauvery channel in Thiruvaiyaru Taluk of Thanjavur District was improved at an estimated cost of Rs.6.27 crore benefiting an ayacut of 4,997 acre.

Downstream side protection arrangements at VVR Head in Thenperambur Village of Thanjavur Taluk and District were rehabilitated at an estimated cost of Rs.1.95 crore benefiting an ayacut of 2,88,516 acre.

Athani Bed Dam and Koothur Bed dam in Panguni channel at Pachur and Kumarakudi Villages in Mannachanallur Taluk of Tiruchirappalli District were reconstructed at an estimated cost of Rs. 1.70 crore benefiting an ayacut of 511 acre.

Ernankulam anicut, Thambirankulam anicut, Ammakulam anicut, Eluppamarathu anicut, Chennaiyagoundan anicut and Posigoundan anicut in Sudhagangai odai in Pottipuram, Silamalai, Sillamarathupatti and Dombucheri Villages of Bodinayakkanur Taluk of Theni District were rehabilitated at an estimated cost of Rs.2.38 crore benefiting an ayacut of 993 acre.

Chinnamanur Anicut and its Channel in Uthamapalayam Taluk of Theni District were rehabilitated at an estimated cost of Rs.10.50 crore benefiting an ayacut of 1,022 acre.

Markayankottai Anicut and its Channel in Uthamapalayam Taluk of Theni District were rehabilitated at an estimated cost of Rs.2.25 crore benefiting an ayacut of 409 acre.

Veeranam Anicut across Malattar River in Villupuram Taluk and District was reconstructed at an estimated cost of Rs.4.18 crore benefiting an ayacut of 255 acre.

Sevalapurai Anicut and Channel in Gingee Taluk of Villupuram District were rehabilitated at an estimated cost of Rs.10.00 crore benefiting an ayacut of 2,064 acre.

### **4.3. Rehabilitation of Regulators**

#### **Works completed**

Muthur Barrage Shutters and its hoisting arrangements and the Head sluices shutters of Feeder canal leading to Athupalayam Reservoir in Kangeyam Taluk of Tiruppur District were rehabilitated at an estimated cost of Rs.7.00 crore.

Rehabilitation and repairs to Shuttering Arrangements in North Branch from Vent Nos.1 to 30 across Kollidam River at Lower Anicut in

Cuddalore District has been completed at an estimated cost of Rs. 10.00 crore.

### **Works in progress**

Extension of Perampattu Anicut as a Regulator across old Coleroon River in Chidambaram Taluk of Cuddalore District at an estimated cost of Rs.10.00 crore is in progress.

## **4.4. Rehabilitation of Canals, Supply Channels and Rivers**

### **Works completed**

Aliyar feeder canal from LS 0.000 km to 6.000 km in Pollachi Taluk of Coimbatore District was rehabilitated at an estimated cost of Rs.20.00 crore, benefiting an ayacut of 50,798 acre.

J.Krishnapuram Branch canal from L.S. 0.000 km to 3.470 km and Valasupalayam Distributory from L.S.0.000 km to 3.800 km in Coimbatore and Tiruppur Districts were rehabilitated at an estimated cost of Rs.5.00 crore, benefiting an ayacut of 220 acre.

Narasingapuram Rajavaikkal Supply Channel in Narasingapuram village of Athoor Taluk of Dindigul District was modernised at an estimated cost of Rs.10.20 crore, benefiting an ayacut of 2,037 acre.

Rajanerri Supply Channel in Samudrapatti village of Natham Taluk of Dindigul District was modernised at an estimated cost of Rs.7.42 crore, benefiting an ayacut of 1178 acre.

5th, 6th, 8th, 9th and 11th Branch Channels of Periyar Main Canal in Vadipatti, Madurai North, Madurai East and Melur Taluks of Madurai District were rehabilitated at an estimated cost of Rs.15.00 crore, benefiting an ayacut of 33,829 acre.

Kumarapalayam Vaikkal from Reach I to VI (LS 0m - 17400m) in Paramathivelur Taluk of Namakkal District was rehabilitated at an estimated cost of Rs.8.38 crore, benefiting an ayacut of 7017 acre.

Arabi surplus regulator in RB of Mahimalayar River at LS 147.860 Km in Thillayadi Village in Tharangambadi Taluk of Nagapattinam District was reconstructed at an estimated cost of Rs.2.00 crore, benefiting an ayacut of 1,948 acre.

Devanadhi River (Uppanar Drain) of Nagapattinam District was standardised and improved at an estimated cost of Rs.5.50 crore, benefiting an ayacut of 9,482 acre.

Mettur East Bank canal in Mettur, Edappadi and Thiruchengode Taluks of Salem and Namakkal Districts was rehabilitated at an estimated cost of Rs.30.00 crore, benefiting an ayacut of 27,000 acre.

Kunnur anicut supply channel near Kunnur Village of Andipatti Taluk of Theni District was modernised at an estimated cost of Rs.8.30 crore, benefiting an ayacut of 720 acre.

Vairavan anicut supply channel in Genguvarpatti Village of Periyakulam Taluk of Theni District was modernised at an estimated cost of Rs.6.50 crore, benefiting an ayacut of 315 acre.

Thanthai Periyar channel of Theni District from LS 0m to 12000m was rehabilitated and improved at an estimated cost of Rs.5.24 crore, benefiting an ayacut of 3,420 acre.

Gullapuram anicut supply channel in Gullapuram Village in Periyakulam Taluk of Theni District was modernised at an estimated cost of Rs.2.88 crore, benefiting an ayacut of 592 acre.

Moongil anicut channel in Genguvarpatti Village in Periyakulam Taluk of Theni District was modernised at an estimated cost of Rs.2.50 crore, benefiting an ayacut of 256 acre.

Alathur Regulator across Vanjiyar at mile 77/0 in Alathur Village of Nannilam Taluk of Thiruvarur District was reconstructed at an estimated cost of Rs.0.65 crore, benefiting an ayacut of 359 acre.

Vadamalayan channel and its tanks in Kodumudiyar system in Nanguneri and Radhapuram Taluks of Tirunelveli District were rehabilitated and improved at an estimated cost of Rs.5.90 crore, benefiting an ayacut of 3,232 acre.

Manur supply channel in Veerakeralampudur, Alangulam and Tirunelveli Taluks of Tirunelveli District was improved at an estimated cost of Rs.2.29 crore, benefiting an ayacut of 3,766 acre.

Pallamadai tank and Pallikottai supply channel in Tirunelveli Taluk and District were improved at an estimated cost of Rs.1.70 crore, benefiting an ayacut of 1,533 acre.

Modernisation of Thamaraikulam supply channel in Thamaraikulam Village in Periyakulam Taluk of Theni District was completed at an estimated cost of Rs.4.86 crore, benefiting an ayacut of 490 acre.

Rehabilitation and Modernization of Uyyakondan channel in Palakkarai area of Tiruchirappalli District was completed at an estimated cost of Rs.11.50 crore, benefiting an ayacut of 32,742 acre.

Kowsiganadhi from Vadamalaikurichi tank surplus to Kullursandai Reservoir in Virudhunagar Taluk and District was regraded at an estimated cost of Rs.3.00 crore, benefiting an ayacut of 2,891 acre.

### **Works in progress**

Protecting the side banks of Chunkan Odai and improvements to Erappaiyar to feed Poigai dam in Thovalai Taluk of Kanniyakumari District at an estimated cost of Rs.3.25 crore are in progress.

Rehabilitation of 1st to 4th Branch channels, 12th Branch channel and Periyar Extension canal and its distributories of Periyar Main canal of Madurai District at an estimated cost of Rs.40.00 crore are in progress.

Lining and Improvement to sluices of the Tirunelveli channel of Tirunelveli District at an estimated cost of Rs.15.00 crore is in progress.

Rehabilitation and Improvements to Thanipadi anicut supply channel in Thandarampattu Taluk of Tiruvannamalai District at an estimated cost of Rs.0.82 crore is in progress.

## **4.5. Renovation of Tanks**

### **Works completed**

Repair, Renovation and Restoration works under RRR scheme were completed in 19 tanks in Devakottai, Karaikudi and Sivagangai Taluks of Sivagangai District at an estimated cost of Rs.7.60 crore, benefiting an ayacut of 2660.19 acre.

Repair, Renovation and Restoration works under RRR scheme were completed in 48 tanks in Arcot, Tiruppathur, Vellore and Vaniyambadi Taluks of Vellore District at an estimated cost of Rs.18.99 crore, benefiting an ayacut of 9421.36 acre.

Repair, Renovation and Restoration works under RRR scheme were completed in 22 tanks in Paramakudi and Ramanathapuram Taluks of Ramanathapuram District at an estimated cost of Rs.15.26 crore, benefiting an ayacut of 4318.88 acre.

Modernisation of Sirukulam tank in Seelayampatti Village and Narayanasamudram tank in Kottur Village of Theni Taluk and District was completed at an estimated cost of Rs.0.75 crore, benefiting an ayacut of 347 acre.

Rehabilitation and Restoration of 33 Ex-Zamin tanks in Ramanathapuram District has been completed at an estimated cost of Rs.8.20 crore.

## **Works in progress**

Modernisation of Tholikkampatti tank in Kilavarai Village of Kodaikanal Taluk of Dindigul District at an estimated cost of Rs.1.10 crore is in progress.

Repair, Renovation and Restoration works under RRR scheme in 11 tanks in Paramakudi and Ramanathapuram Taluks of Ramanathapuram District at an estimated cost of Rs.10.73 crore are in progress.

Rehabilitation and Restoration of 4 Ex-Zamin tanks in Ramanathapuram District at an estimated cost of Rs.1.06 crore are in progress.

Civil works have been completed in 4 drinking water supply tanks of Chennai viz. Cholavaram, Nemam, Porur and Ayanambakkam tanks in Kancheepuram and Tiruvallur Districts at an estimated cost of Rs.130.00 crore. Other Works are in progress in Porur and Nemam tanks.

Repair, Renovation and Restoration works under RRR scheme in 4 tanks in Arcot and Vellore Taluks of Vellore District at an estimated cost of Rs.1.73 crore are in progress.

## **5.0. Flood Protection Works Works completed**

Improvements to Veerangal Odai and Short cut Diversion Drainage for Velachery Tank in Kancheepuram District at an estimated cost of Rs.112.24 crore were completed under JNNURM Scheme.

## **Works in progress**

Rehabilitation and restoration of the flood damaged Adyar River and its tributaries by widening, desilting and standardization of the river regime in Kancheepuram District at an estimated cost of Rs.19.00 crore is in progress.

Rehabilitation and restoration of the flood damaged Vegavathy River in the Kancheepuram town limit in Kancheepuram District at an estimated cost of Rs.4.00 crore is in progress.

## **6.0. Coastal Protection Works**

### **Works in progress**

Rehabilitation of the Rubble Mound Sea wall in Eraviputhanthurai Village of Vilavancode Taluk in Kanniyakumari District at an estimated cost of Rs.3.00 crore is in progress.

Coastal Regulation Zone clearance has been obtained for construction of Groynes at Mandaikaduputhur in Kalkulam Taluk of Kanniyakumari District at an estimated cost of Rs.7.82 crore. The State Level Environment Impact Assessment Authority clearance is awaited.

Construction of Groynes at Vembar, Veerapandiapattinam, Periyathalai, Kallamozhi and Keelavaippar in Thoothukudi District at an estimated cost of Rs.69.49 crore is in progress.

Construction of series of 10 Nos. of Groynes at LS 15/200 Km to 19/000 Km from Ernavoorkuppam to Ennore in Madhavaram Taluk of Tiruvallur District at a cost of Rs.31.82 crore is in progress.

## **7.0. Formation of Roads and Construction of Bridges**

### **Works completed**

Black topping to the existing jeep track in the left and right main canals of Vaniyar Reservoir Project in Pappireddipatti Taluk of Dharmapuri District was provided at an estimated cost of Rs.1.40 crore.

Bridge across Pamboorivoikkal near Patharai in Colachel Village, Kalkulam Taluk of Kanniyakumari District was reconstructed at an estimated cost of Rs.0.64 crore.

Construction of Causeway across Therkar River below Vadakarai anicut in Thirumangalam Taluk of Madurai District at an estimated cost of Rs.0.95 crore.

Construction of Causeway across Therkar River near Venkatasamudram Village in Thirumangalam Taluk of Madurai District was completed at an estimated cost of Rs.0.90 crore.

Construction of Causeway across surplus vari of Perumanadu Tank in Perumanadu Village of Illupur Taluk of Pudukkottai District was completed at an estimated cost of Rs.1.00 crore.

Formation of Service Road on the Left side of Vaigai River in Paramakudi Taluk of Ramanathapuram District was completed at an estimated cost of Rs.4.03 crore.

Construction of bridge across Varaganadhi near Aadupalam in Thenkarai village of Periyakulam Taluk of Theni District was completed at an estimated cost of Rs.3.75 crore.

Improvements to the approach road to the Sathyamoorthy Sagar Dam in Poondi Village, Thiruvallur Taluk and District was completed at an estimated cost of Rs.1.31 crore.

### **Works in progress**

Construction of 2 lane bridge across North Buckingham Canal connecting the residential areas in Dr.Radhakrishnan Nagar in Tondiarpet Taluk of Chennai District at an estimated cost of Rs.5.00 crore is in progress.

Reconstruction of Single lane bridge across the Buckingham Canal in Paramankeni Village of Cheyyur Taluk of Kancheepuram District at an estimated cost of Rs.9.97 crore is in progress.

## **8.0. Buildings and other infrastructural facilities**

### **Works completed**

Construction of building with section offices for the Planning and Designs Sub-Division, Cuddalore, in the Public Works Department campus at an estimated cost of Rs.0.28 crore.

Conversion of AC sheet roofing into RCC Roofing for Assistant Executive Engineer and Assistant Engineer Quarters at Parambikulam Dam was completed at an estimated cost of Rs.0.30 crore.

Section office building for Mettur Canal Section in Namakkal District was constructed at an estimated cost of Rs.0.07 crore.

Sub-Division office building with Section offices for Sarabanga Basin Division in Namakkal Taluk and District was constructed at an estimated cost of Rs.0.28 crore.

### **Works in progress**

Water supply arrangements for the Quarters and office buildings in the Amaravathy dam in Tirupur District at an estimated cost of Rs.0.30 crore are in progress.

Construction of Sub-Division office building with section offices for the Planning and Designs Sub-Division in Pudukottai Taluk and District at an estimated cost of Rs.0.28 crore is in progress.

Repairs to Project Planning and Designs Division and Sub-Division offices at Tirunelveli at an estimated cost of Rs.0.10 crore are in progress.

## **9.0. Development of Parks**

### **Work in progress**

Rehabilitation and improvements to the main entrance of the LBS Park at downstream of Mettur Dam of Salem District at an estimated cost of Rs.1.00 crore is in progress.

## **10.0. Climate Change Adaptation Programme in Cauvery Delta with the assistance of Asian Development Bank (ADB)**

The Climate Change Adaptation Programme in Cauvery Delta is under implementation at a cost of Rs.1,560 crore, out of which the assistance of Asian Development Bank (ADB) is Rs.1,092 crore and the State Share is Rs.468 crore.

As a first stage of this project, works in 6 rivers / drains viz. Harichandranathi, Adappar, Vellaiyar, Pandavaiyar, Valavanar Drain, Vedharanyam Canal and 13 pumping schemes of the part of Vennar system in Cauvery Delta are in progress at an estimated cost of Rs.960.66 crore.

## **11.0. Improvements and Rehabilitation of Irrigation Systems in Cauvery Basin for Efficient Irrigation Water Management**

In principle clearance for the concept Paper for this project at an estimated amount of Rs.11,420 crore was accorded by the Central Water Commission.

As a Phase-I, the Detailed Project Report for "ERM of Grand Anicut Canal Sub-basin" at an estimated cost of Rs.2,298.75 crore has been approved by the Government of India on 30.09.2016. The detailed package wise estimates have been prepared.

The proposal for investment clearance placed in the Investment Clearance Committee meeting held on 05.05.2017 has been recommended.

The Detailed Project Report for 'Improvements and Rehabilitation of Kattalai High Level Canal Irrigation system' for an amount of Rs.270 crore is under consideration.

For the remaining packages, the Government of India has extended the validity period for preparation of DPR till 31.12.2017.

The preparation of Detailed Project Reports for the remaining irrigation systems viz. Lower Coleroon, Noyyal sub basin, Raja Voikkal Project Lower Bhavani Project, Cauvery, Vennar sub basin and Artificial



Recharge Scheme as per Central Water Commission (CWC) guidelines have been completed.

As regards the proposal for "Improvements and Rehabilitation of Irrigation Systems in Cauvery Basin for efficient Irrigation Management" at a cost of Rs.14,500 crore under "National Project", the Government of India has requested to send the proposal after preparation of remaining 8 Detailed Project Reports (DPR).

## **12.0. Linking of Tamiraparani - Karumeniyar - Nambiyar Rivers in Tirunelveli and Thoothukudi Districts**

Inter-linking of Tamiraparani – Karumeniyar - Nambiyar Rivers, by excavating a new flood carrier canal from LS 6.50 km of existing Kannadian canal near Vellankuzhi Village to ML Theri near Thisayanvilai for a length of 75.175 km as per the revised alignment at a cost of Rs.369.00 crore is in progress.

In Stage I, out of 18 Packages, 9 Packages were completed, Agreement for 2 Packages were foreclosed and 7 Packages are partially completed. In Stage II, out of 18 Packages, 7 Packages were completed, 1 Package is in progress, Agreement for 1 Package was foreclosed and 9 Packages are partially completed. Land Acquisition is also in progress.

The Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India have accorded "Investment clearance" on 19.4.2016 for Rs.872.45 crore at 2014-2015 SOR price level.

Revised Administrative Sanction for the Part of the scheme of Rs.543.32 crore was accorded on 13.04.2017, in which Rs.310.62 crore for excavation of flood carrier canal works in Stage I & II and Rs.232.70 crore for land Acquisition works in Stage I to IV has been provided.

## **13.0. Desilting of Dams and Water Bodies**

### **13.1. Desilting of Vaigai, Pechipparai, Mettur, Amaravathy Reservoirs and Srivaikundam Anicut**

Preparation of Detailed Project Report and Rapid Environment Impact Assessment Study for 4 reservoirs and 1 anicut was entrusted to M/s. WAPCOS Limited at a cost of Rs.8.35 crore.

The Detailed Project Reports for desilting of Vaigai Reservoir, Amaravathy Reservoir and Srivaikundam Anicut have been prepared.

The Detailed Project Reports for desilting of Pechipparai Reservoir and Mettur Reservoir are under preparation.

Rapid Environmental Impact Assessment Study are under preparation for desilting of Vaigai, Pechipparai, Mettur and Amaravathy Reservoirs.

Restoration of Srivaikundam Anicut to its original capacity at an estimated cost of Rs.5.93 crore was taken up as per the directions of the National Green Tribunal which is temporarily stopped due to pending judgement.

### **13.2. Desilting of Parappalar Reservoir**

It is proposed to restore the capacity of Parappalar reservoir by taking up desilting works at an estimated cost of Rs.19.50 crore. Desilting will be commenced after obtaining pathway permission from the Ministry of Environment, Forest and Climate Change of Government of India.

### **13.3. Desilting of Veeranam tank**

The work of desilting the Veeranam tank to restore its designated capacity of 1,465 Mcft. including rehabilitation and increasing the carrying capacity of the Vadavar channel at an estimated cost of Rs.40.00 crore is in progress.

### **13.4. Sedimentation Study of Dams / Reservoirs**

During the year 2016-2017, Sedimentation study for the following 12 Dams / Reservoirs were taken up at a cost of Rs.0.54 Crore under DRIP :-

1. Aliyar Dam (Coimbatore District)
2. Kuthiraiyar Dam (Dindigul District)
3. Gomukinadhi Dam (Villupuram District)
4. Willington Reservoir (Cuddalore District)
5. Chittar -1 Reservoir (Kanniyakumari District)
6. Gadana Reservoir (Tirunelveli District)
7. Manimuthar Reservoir (Tirunelveli District)
8. Vennirar Dam (Theni District)
9. Manalar Dam (Theni District)
10. Eravangalar Dam (Theni District)
11. Parson's Valley (The Nilgiris District)
12. Porthimund Dam (The Nilgiris District)

#### **14.0. State Ground and Surface Water Resources Data Centre (SG & SWRDC)**

Micro level Groundwater Potential Assessment taking Revenue Firka as a unit has been approved by the Government on 9.6.2016. Accordingly, 1,129 Firkas in Tamil Nadu are categorised into 5 categories viz. 374 Firkas as Over Exploited, 48 Firkas as Critical, 235 Firkas as Semi Critical, 35 Firkas as Poor Quality / Saline and 437 Firkas as Safe.

Collection and analysis of data for Firka wise Groundwater Assessment as on March 2013 is completed and the approval of the MoWR, Government of India is awaited.

Water level is regularly monitored on monthly basis and water samples are collected bi-annually from 284 observation wells and analyzed in the Geo-Chemical laboratories to assess sea water, fresh water interface along the coast of Tamil Nadu.

The Geological, Geophysical and Hydro geological surveys are conducted every month. The data are analyzed and documented for identification of Aquifer boundaries.

#### **15.0. Institute for Water Studies (IWS)**

The Micro Level Re-appraisal Study for Paravanar River Basin has been completed.

Satellite data pertains to Pennaiyar River Basin has been studied and various thematic maps have been prepared. Reports connected with Remote Sensing studies were finalized for Pennaiyar River Basin.

The study on Paravanar River Basin has been completed with field verification.

Collection of database on Irrigation structures have been continued for the development of GIS based Database and assigning unique code.

Validation of the GIS based database of 14,098 tanks under the control of Water Resources Department has been continued.

Project proposal for improving the Special Area Development Project has been formulated.

Identified the potential water collection spots in the hills of Dharmapuri, Krishnagiri, Tiruvannamalai, Salem and Namakkal Districts using Remote

Sensing and GIS techniques for Integrated Tribal Development Programme (ITDP) to Adi Dravidar and Tribal Welfare Department.

#### **16.0. Irrigation Management Training Institute (IMTI)**

During the year 2016-2017, training programmes such as latest techniques in Rehabilitation of Irrigation structures, Challenges in Tank Management and River Management, Environment and Dam Safety have been organised to the officers by this Institute. Besides computer trainings have been organised.

Study Tour Programme within the State has also been conducted to the officers. Special courses on "Improvements of Minor Irrigation Tanks" for officers of Rural Development and Panchayat Raj Department under Tamil Nadu Habitations Improvement Scheme II (THAI II) have been organised in 47 batches.

Two training programmes on "Water & Soil Conservation and Integrated Farming" have been conducted with NABARD assistance for the Farmers.

During the year 2016-2017, 42 training programmes have been conducted under Government Grant. Overall 93 training programmes have been conducted under Government Grants, THAI II Scheme and Other Deposit Funds, benefitting 2,557 participants (144 farmers & 2,413 officers).

#### **17.0. Sand Quarry**

Sand quarries are operated after getting environmental clearance from the State Environmental Impact Assessment Authority (SEIAA). To prevent shortage of sand in the State, the Government is directly operating the sand quarries and also more number of sand quarries are being identified. The number of machineries have now been increased in sand quarry operations, with the permission of SEIAA to meet out the demand. At present, sand is being sold at the rate of Rs.800/- per Lorry load (2 units) excluding tax and loading charges. The revenue generated through 48 sand quarries during 2016-2017 is Rs.86.33 crore.

#### **18.0. Directorate of Boilers**

During the year 2016-2017, tests were conducted in different types and process of welding such as pipe welding, tube welding and plate welding in Carbon Steel and Alloy Steel and certificates were issued to 270 successful candidates.

During the year 2016-2017, this Directorate cleared installation of 248 new Boilers and their connected pipelines and completed the Registration process in various existing and new Industries in the State. Inspection of 4,925 Active Boilers, out of 5,276 Boilers was completed in scheduled time without loss of production.

In addition, this Directorate has cleared about 4,42,098 High Pressure Valves, 70,331 High Pressure Piping Components and 6,188 Tubular Components manufactured by various units and issued certificates. Nearly 398 Data Booklets and 428 Design Documents for fabrication of various types of Boiler and Boiler components have been approved.

A revenue of Rs.6.50 crore has been earned by way of collecting inspection fees for the manufacture of Boilers and Boiler Components, conducting annual inspection of installed Boilers, scrutinizing of various design drawings, conducting tests and issuing certificates to the welders and conducting Examinations for Boiler Attendants and Boiler Operation Engineers.

## **19.0. INTER-STATE ISSUES**

### **19.1. Cauvery Water Dispute**

The publication of the Final Order of the Cauvery Water Disputes Tribunal in the Gazette of India on 19.02.2013 is a historic achievement which is due to the efforts taken by the Government, and the cases filed in the Supreme Court. This has established the livelihood of the Cauvery Delta Farmers and their rights.

The Government of India has been continuously urged to constitute the Cauvery Management Board and the Cauvery Water Regulation Committee as recommended by the Cauvery Water Disputes Tribunal in the Final Order for effective implementation. In the Memorandum presented by the Hon'ble Chief Minister to the Hon'ble Prime Minister on 27.2.2017, it has again been urged for the constitution of the Cauvery Management Board and Cauvery Water Regulation Committee.

During the course of hearing of the I.A. filed by Tamil Nadu for release of water due to Tamil Nadu from Karnataka for the year 2016-2017, the Supreme Court on 20.9.2016 directed the Government of India to constitute the Cauvery Management Board within four weeks. On 30.9.2016, this order was reiterated. However, on a petition filed by the Government of India on 03.10.2016, the Supreme Court on 04.10.2016 deferred its orders for the constitution of the Cauvery Management Board.

The Supreme Court heard the arguments of the party States on 18.10.2016 and 19.10.2016 regarding the maintainability of the Civil Appeals. The Supreme Court on 09.12.2016 ordered that the Civil Appeals are maintainable to be heard by it. The preliminary hearing on these Appeals was held on 7.2.2017. The Supreme Court has ordered that these Appeals would be heard continuously from 11.07.2017.

When the Civil Appeals are taken up by the Supreme Court, it would again be urged to constitute the Cauvery Management Board.

## **19.2. I.A. filed to restrain Karnataka from taking up two reservoirs at Mekedatu**

When a news item appeared on 12.11.2014, stating that the Government of Karnataka has proposed to construct two reservoirs at Mekedatu and that the State has invited Global Expression of Interest for the technical feasibility study, on 12.11.2014 the Hon'ble Prime Minister was requested to intervene and advise the Government of Karnataka to withhold the Expression of Interest called for by the Government of Karnataka for the technical feasibility study and advise it not to take any steps to execute any irrigation, hydro power, lift irrigation schemes or any other scheme in the guise of drinking water supply in the Cauvery Basin of Karnataka without the consent of the Government of Tamil Nadu. Further, in that letter it was requested to instruct the Ministry of Environment & Forests and Ministry of Water Resources, Government of India, not to accord clearance to any project proposed by Karnataka without obtaining the consent of the Government of Tamil Nadu. A similar letter was issued to the Government of Karnataka on 12.11.2014 and to the Ministry of Water Resources on 13.11.2014.

Since there was no response either from the Government of Karnataka or the Government of India, Tamil Nadu filed an I.A. in the Supreme Court on 18.11.2014 in this matter.

The Government of Karnataka on 18.11.2014 informed that it has no plan to execute this scheme without informing the Supreme Court.

The Union Minister for Water Resources, River Development & Ganga Rejuvenation, on 8.1.2016 informed that the DPR on the Sivasamudram hydro project received from Karnataka was returned with instructions to obtain views of the co-basin States. Regarding Mekedatu project, the DPR as and when received, would be examined with reference to the Final Order of the Tribunal and that the Government of Karnataka had been urged to share the project report with the Cauvery co-basin States and obtain their concurrence.

The Government of Karnataka in its letter dated 08.03.2016, reiterated that it has no plan to proceed with the construction of dam at Mekedatu without first informing the Supreme Court in the I.A. filed by Tamil Nadu.

In the Memorandum presented by the Hon'ble Chief Minister to the Hon'ble Prime Minister on 27.2.2017 it was urged that the Government of Karnataka should be advised not to execute Mekedatu Project or any other project. It was also requested that the Government of India should not accord clearance to any of the projects of the Government of Karnataka until the Cauvery dispute is settled.

### **19.3. Action taken to restrain Kerala from taking up the construction of Dam at Pattisserry across the River Pambar**

Based on news item appeared in newspapers on 06.11.2014 stating that the Government of Kerala commenced works for a new dam across Pambar at Pattisserry, for which the Chief Minister of Kerala was reported to have laid foundation on 03.11.2014 through video conferencing, the Hon'ble Chief Minister on 08.11.2014 wrote to the Hon'ble Prime Minister requesting to advise the Government of Kerala to furnish full details of the schemes proposed by Kerala in the Pambar sub-basin and not to proceed with the proposed construction of the dam or any other project in any manner in the Pambar sub-basin, till the Cauvery Management Board is constituted and the concurrence of the Government of Tamil Nadu is obtained. A similar letter was issued to the Government of Kerala on 08.11.2014 and to the Ministry of Water Resources on 13.11.2014.

Since there was no response either from the Government of Kerala or the Government of India, on 28.11.2014 Tamil Nadu filed an I.A. in the Supreme Court.

In the Memorandum presented by the Hon'ble Chief Minister to Hon'ble Prime Minister on 27.2.2017, it has been urged to advise the Government of Kerala to forthwith stop the construction activities across Pambar and also not to take up any new works in the Cauvery basin of Kerala till the Cauvery Management Board comes into force and judicial references are finally settled.

The I.A. filed by Tamil Nadu was heard by the Supreme Court on 21.03.2017, when the Senior Counsel for Kerala stated that the constructions which are being raised would be only for the purpose of utilization of the water that has been allocated to Kerala in the Final Order of the Tribunal. The Court directed Kerala to send a communication in this regard. Accordingly, Government of Kerala has sent a communication in the regard. Since, the Government of Kerala has not furnished all the details of the schemes, the Hon'ble Chief

Minister wrote to Hon'ble Prime Minister on 24.05.2017 requesting to advise the Government of Kerala to furnish all the details to Tamil Nadu.

#### **19.4. Construction of a Dam by Government of Kerala at Attappady Valley across the river Bhavani**

The Cauvery Water Disputes Tribunal in its Final Order dated 5.2.2007, has allocated 2.87 TMC. ft. of water for Attappady Irrigation out of the total allocation of 6 TMC ft. to Kerala in the Bhavani Basin.

When newspapers published reports in February, 2012 regarding the Attappady Irrigation Project, the Government of Kerala and the Government of India were continuously informed that the Government of Kerala should not execute any project like Attappady Dam construction till the Final Order of the Cauvery Water Disputes Tribunal dated 05.02.2007 is notified in the Gazette of India and the Civil Appeals filed in the Supreme Court and the Petitions filed before the Cauvery Water Disputes Tribunal seeking clarification are disposed of and the Cauvery Management Board and Cauvery Water Regulation Committee are constituted and become functional.

The Government of Kerala unilaterally approached Expert Appraisal Committee functioning under the Ministry of Environment, Forest and Climate Change for grant of Standard Terms of Reference for conducting Environmental Impact Assessment Study for this project.

The Expert Appraisal Committee in its meeting held on 11.08.2016 and 12.08.2016, decided to recommend the grant of Standard Terms of Reference with certain conditions, without obtaining the views of Tamil Nadu.

The Hon'ble Chief Minister wrote to Hon'ble Prime Minister on 27.8.2016 for withdrawal of the recommendation.

The unanimous resolution passed by the Tamil Nadu Legislative Assembly on 2.9.2016 was forwarded by the Hon'ble Chief Minister to the Hon'ble Prime Minister.

The Ministry of Environment, Forest and Climate Change in its letter dated 10.10.2016 informed that the recommendations of the Expert Appraisal Committee has been kept in abeyance, till the references filed in the Supreme Court are settled.

The Government of India, Ministry of Water Resources, River Development and Ganga Rejuvenation in its letter dated 16.11.2016 has informed that no preliminary report or detailed report of this project has been received in Central Water Commission and as and when such report



is received it would be examined as per extant Central Water Commission guidelines and as per the Cauvery Water Disputes Tribunal Final Order.

The I.A. filed by Tamil Nadu was heard by the Supreme Court on 21.03.2017, when the Senior Counsel for Kerala stated that the constructions which are being raised would be only for the purpose of utilization of the water that has been allocated to Kerala in the Final Order of the Tribunal. The Court directed Kerala to send a communication in this regard. Accordingly, Government of Kerala has sent a communication in the regard. Since, the Government of Kerala has not furnished all the details of the schemes, the Hon'ble Chief Minister wrote to Hon'ble Prime Minister on 24.05.2017 requesting to advise the Government of Kerala to furnish all the details to Tamil Nadu. Further, it was also requested that the Government of Kerala should be advised not to go ahead with any construction activities until the Cauvery Management Board is formed and becomes functional.

#### **19.5. Construction of Check Dams by Kerala across the river Bhavani**

The newspapers carried reports about the attempt of Government of Kerala to construct Check Dams in Attappady Valley of Bhavani river and its tributaries.

The Government of Tamil Nadu on 01.02.2017 filed an I.A. in the Supreme Court.

In the Memorandum presented by the Hon'ble Chief Minister to the Hon'ble Prime Minister on 27.2.2017 it was urged to advise the Government of Kerala to forthwith stop the construction activities across river Pambar and Bhavani and also not to take up any new works in the Cauvery basin of Kerala till the Cauvery Management Board comes into force and judicial references are finally settled.

When the I.A. was heard by the Supreme Court on 21.03.2017, the Counsel for Kerala stated that the construction activities are being carried out for utilization of water with reference to the allocation made to Kerala in Bhavani Basin. The Supreme Court directed to send a communication to the Government of Tamil Nadu in this regard. Accordingly, the Government of Kerala sent a communication to Tamil Nadu. Following this, the Government of Kerala has been addressed to furnish all the details of the schemes proposed by it.

In the letter written by the Hon'ble Chief Minister to Hon'ble Prime Minister on 24.5.2017, it was requested to advise the Government of Kerala to furnish all the details about the projects already completed or

under construction or proposed to be constructed. Further, it was also requested that the Government of Kerala should be advised not to go ahead with any construction activities until the Cauvery Management Board is formed and becomes functional.

**19.6. Mullai Periyar Dam - Balance Strengthening works to be carried out to restore the water level to + 152 ft**

Works suggested by the Central Water Commission, recommended by the Expert Committee 2001, Order of the Supreme Court dated 27.02.2006, and thereafter the recommendation of the Empowered Committee and then the order of the Supreme Court dated 07.05.2014 state about strengthening the Baby dam and earthen bund including instrumentation, laying wearing coat over the walk way, protecting the upstream side of the Island between main dam and spillway and reservoir, pitching work extended to the downstream side of the dam upto the abutments and Raising the upstream parapet wall from + 158 ft. to 160 ft. of the Main dam in the remaining length of 20 m. to be carried out by Tamil Nadu.

Working drawings and specifications for carrying out the strengthening works of Baby Dam have been prepared. Concurrence of CWC for instrumentation of the Baby dam has been obtained. Detailed estimates have been prepared and the Government have accorded Administrative Sanction for an amount of Rs.7.85 crores, vide G.O. (Ms) No 122 PW dated 16.06.2015, for RCC backing in the downstream of Baby Dam, instrumentation in Main Dam and Baby Dam, and other strengthening works. Further, the works have been split into 8 packages as per the orders issued on 17.7.2015. In furtherance to this, tenders have been received in respect of 4 works which do not require the clearance from the Wild Life and Environment and action is pursued for taking up these works early. Of the above works, the work of raising the parapet wall from 158 ft to 160 ft in the Main Dam is completed on 08.04.2017. To strengthen the Baby Dam, 23 trees have to be felled down. Necessary proposals were uploaded through online on 29.05.2015 for Wildlife clearance & Environmental Clearance and it is under consideration in the respective Department. In this regard, efforts are being made continuously to obtain the clearance from the Government of India.

In the Memorandum presented by the Hon'ble Chief Minister to the Hon'ble Prime Minister on 27.02.2017, it has been urged to advise the

Government of Kerala to expedite the necessary clearances, to enable Tamil Nadu to carryout the remaining works.

Further to this, the Government of Tamil Nadu on 10.05.2017 has requested the Government of India, Ministry of Environment, Forest and Climate Change and the Government of Kerala to accord early clearance of the Forest Department.

Eventhough the Government of Tamil Nadu has been seeking the co-operation of the Government of Kerala and the Government of India for completion of the remaining works, and as it is not forthcoming, the Government of Tamil Nadu on 01.03.2017 filed an Execution Petition in the Supreme Court. When this petition came up for hearing on 04.05.2017, the Supreme Court ordered to issue notice to the Government of Kerala and to list the matter in the 2<sup>nd</sup> week of July, 2017.

#### **19.7. Construction of a Dam and Check Dams across the river Palar by the Government of Andhra Pradesh**

When the Government of Andhra Pradesh proposed to construct a dam at Ganeshapuram in Kuppam Taluk in Chittoor District, the Government of Tamil Nadu on 10.02.2006 filed a Suit in the Supreme Court.

The cross-examination of Tamil Nadu witness has been concluded on 20.01.2017. The cross examination of Andhra Pradesh witness is to take place.

When it was learnt that the Government of Andhra Pradesh has unilaterally proposed to increase the height of the Check dam across Palar River at Perumpallam Village, in Chittoor District near the Andhra Pradesh-Tamil Nadu border, from the existing height of 5 ft. to 12 ft., a letter was sent to Hon'ble Chief Minister of Andhra Pradesh on 01.07.2016. Further, the Government of India, Ministry of Water Resources, River Development and Ganga Rejuvenation, was requested to intervene and to advise the Government of Andhra Pradesh appropriately in the matter.

As there was no response to the requests from the Government of Andhra Pradesh and the Ministry of Water Resources, the Government of Tamil Nadu, filed a Suit along with an Interlocutory Application (I.A.) in the Supreme Court on 18.7.2016.(O.S.No.3/2016). In this Suit is has been prayed to order that the height of the check dams which have been

increased should be brought back to the original level, water should not be stored additionally, ensure that the natural flow of the river to Tamil Nadu, construction of new check dams will be against the law and will violate the basic rights of people of Tamil Nadu.

On 3.3.2017, the Government of Tamil Nadu filed an Application in the Supreme Court for amendment.

The Suit came up for hearing in the Supreme Court on 27.3.2017. The Supreme Court has directed the Government of Andhra Pradesh to file its reply in 6 weeks.

**Edappadi K. Palaniswami**  
**Chief Minister**