

KERALA WATER AUTHORITY



ANNUAL ADMINISTRATIVE REPORT 2018-19

**JALA BHAVAN, THIRUVANANTHAPURAM-695033
PHONE: 91 471 2328654 FAX: 91 471 2324903**

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CHAPTER -I

KERALA WATER AUTHORITY – A PROFILE

- 1.1 The Kerala Water Authority (KWA) was constituted by the Government of Kerala through the Kerala Water Supply and Waste Water Ordinance 1984 converting the then existing Public Health Engineering Department. The ordinance was replaced by the Kerala Water Supply and Sewerage Act 1986 (Act 14 of 1986) and the organization was deemed to have come into force on the 1st day of March 1984. The Act provides for the establishment of an autonomous Authority for the development and regulation of water supply and wastewater collection and disposal in the State of Kerala and for matters connected therewith.
- 1.2 The Authority was established by vesting the properties and assets of the erstwhile Public Health Engineering Department under section 16 of the Act and the assets, rights and liabilities of the Local Bodies and the Kerala State Rural Development Board in so far as they pertain to the execution of water supply and sewerage schemes under Section 18 of the Act.
- 1.3 The main functions of the Authority are
- (i) Preparation, execution, promotion, maintenance and financing of the schemes for the supply of water and disposal of waste water.
 - (ii) Planning for the State's water supply and sewerage requirements.
 - (iii) Preparation of State plans for water supply and collection and disposal of wastewater on the direction of the Government.
 - (iv) Establishment of standards for water supply and waste water services.
 - (v) Carrying out applied research for efficient discharge of the functions of the Authority.

Making provisions for the supply of wholesome water and efficient sewerage services to the people in the state.

CHAPTER -II CONSTITUTION

2.1 The Authority consists of the following members.

- 1 Chairman – Appointed by the Government.
- 2 Managing Director – Appointed by the Government.
- 3 Secretary to Government, Water Resources Department, Government of Kerala.
- 4 Secretary to Government, Finance Department, Government of Kerala.
- 5 Secretary to Government, Local Administration Department, Government of Kerala.
- 6 Secretary to Government, Rural Development Department, Government of Kerala.
- 7 Two members representing the Local Bodies in the state, appointed by Government.
- 8 Two members appointed by the Government, one of whom shall be a member belonging to the schedule caste / schedule tribe.
- 9 A Technical Member, appointed by the Government.
- 10 An Accounts Member, appointed by the Government

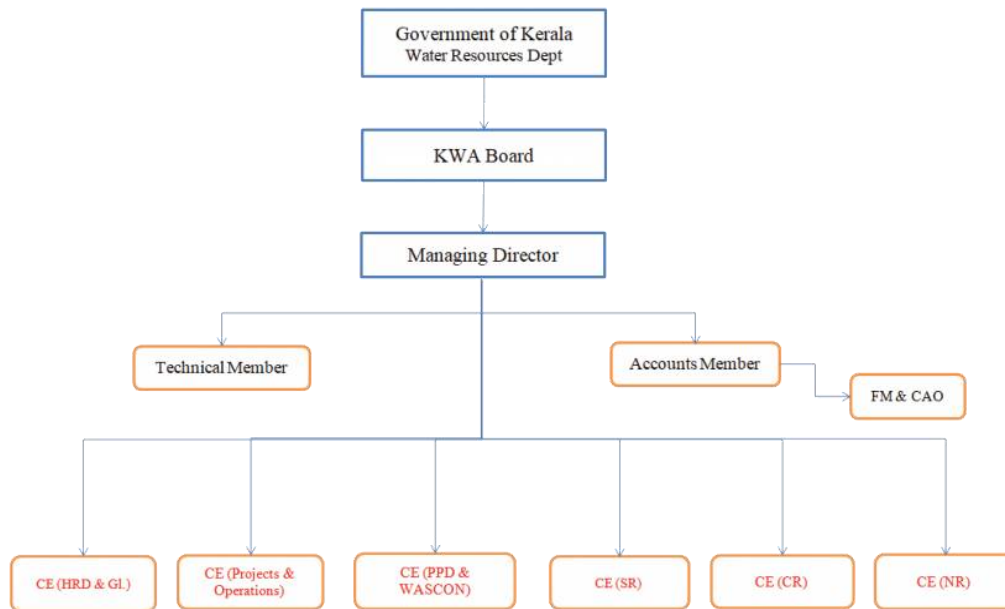
2.2. THE BOARD OF DIRECTORS

BOARD OF DIRECTORS	NAME	TERM
Chairman KWA & Additional Chief Secretary, Water Resources Department	Sri. Tom Jose IAS	01/04/2018 to 05/07/2018
Chair Person KWA and Secretary Water Resources Department	Smt. Tinku Biswal IAS	06/07/2018 to 30/01/2019
Chairman KWA & Additional Chief Secretary Water Resources Department	Dr. Vishwas Mehta IAS	31-1-2019 to Present
Secretary, Water Resources department (Ex-Officio)	Smt. Tinku Biswal IAS	04/05/2018 to Present
	Smt. A Shainamol IAS	01/04/2018 to 10/05/2018
Managing Director, Kerala Water Authority	Sri. A R Ajayakumar IAS	11/05/2018 to 03/06/2018
	Dr. A Kowsigan IAS	04/06/2018 to Present
Secretary to Government Finance (Expenditure) (Ex-officio)	Smt. Sharmila Mary Joseph IAS	
Principal Secretary (LSGD) (Ex-officio)	Sri. T K Jose IAS	
	Sri. A R Ajayakumar IAS	01/04/2018 to 03/06/2018
Executive Director (KRWSA) (Ex-officio)	Dr. A Kowsigan IAS	04/06/2018 to 04/08/2018
	Sri.K Gopala Krishnan IAS	15/08/218 to Present
Non-Official Members	Sri.Chettachal Sahadevan	05/04/2017 to Present
	Sri.T V Balan	05/04/2017 to Present
	Sri.Alex Kannamala	05/04/2017 to Present
	Sri.Murugadas	05/04/2017 to Present
Technical Member, Kerala Water Authority	Sri. T Raveendran	
Accounts Member, Kerala Water Authority	Vacant	

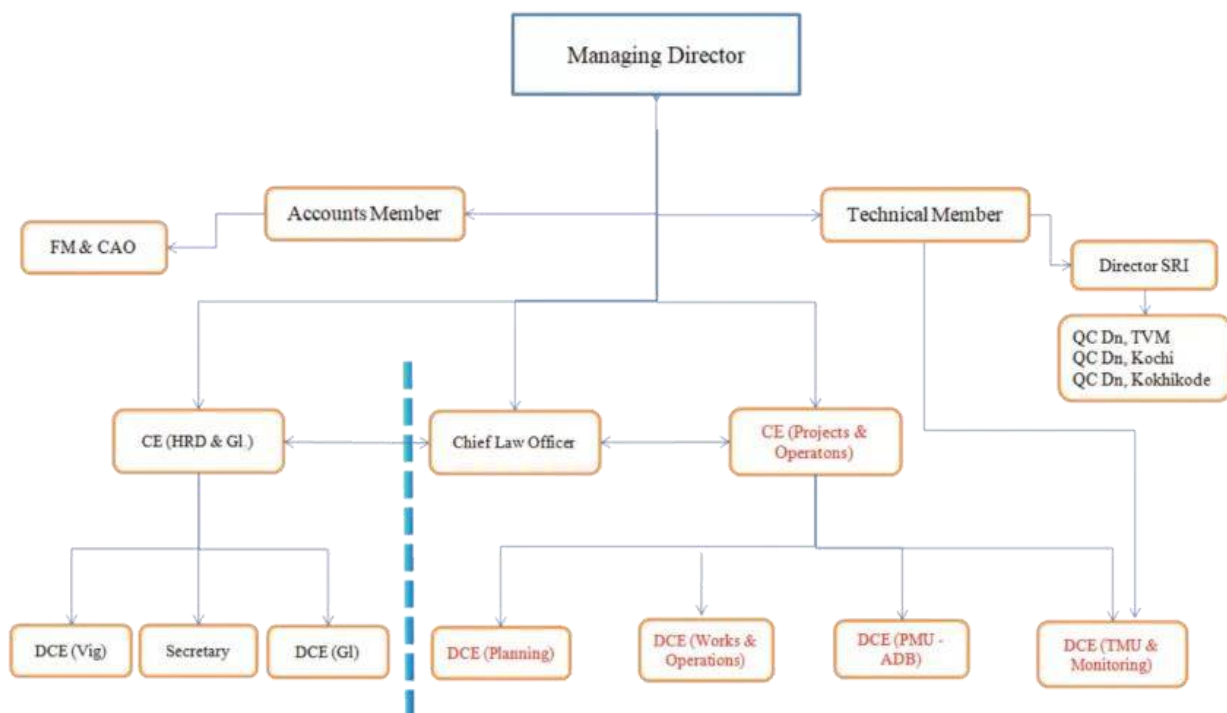
CHAPTER –III

ORGANIZATIONAL STRUCTURE

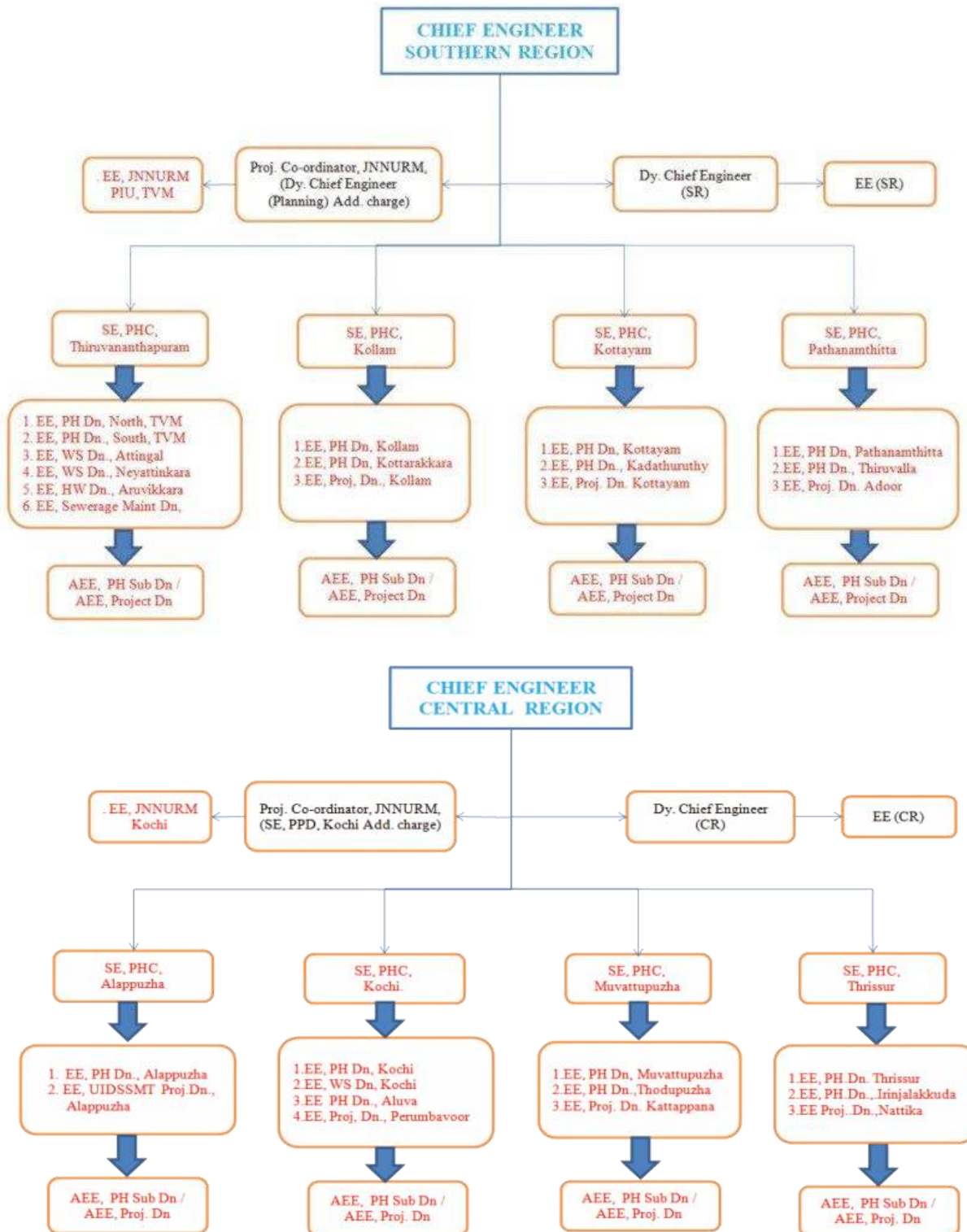
Basic Structure

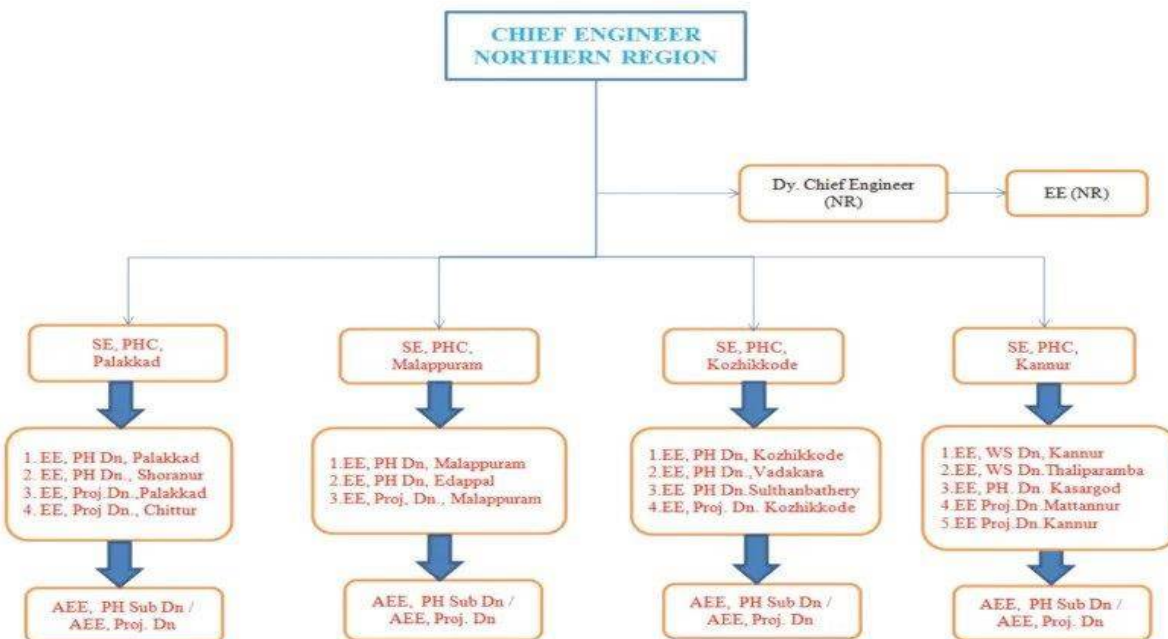


Head Office



Regional Offices





3.1. Organisational Structure

The KWA has its headquarters at Jalabhavan, Vellayambalam, Thiruvananthapuram. It has 4 Chief Engineer offices, 16 circle offices, 3 PPD Regional Offices, 48 Division offices, 104 Sub Division offices and 245 Section offices spread across Kerala. The major functional units are:

- Operation & Maintenance
- Projects
- Project Planning and Development
- Quality Control
- Consultancy (WASCON)

The KWA has elaborate water quality control setup with a State Referral Institute at Kochi and has 14 district labs and 33 sub divisional labs.

In head office the operations of existing schemes including O&M, Revenue Collection, Non Revenue Water loss, etc. are also been monitored in addition to the on - going schemes progress. By close monitoring and reviews, many schemes could also be commissioned in the financial year increasing the coverage and benefitting more population in the state. The objective is improved customer satisfaction through better service delivery.

Although the number of connections, coverage, schemes has increased manifold times, the staff strength and organizational pattern has not changed much. To give more quality output, it is proposed to re-structure the organization by optimizing the manpower and functions. However, taking into consideration the workload and magnitude of projects being executed by KWA, the sanctioned strength of staff has to be increased.

3.2. Major units of KWA

3.2.1. Administrative Wing

Administrative Wing in Head Office is mainly dealing with Human Resource Management. The database regarding all categories of employees and officers (Ministerial & Technical) and its sanctioned post and promotion avenue as per special rules in force are kept almost up to date and tidy.

3.2.2. Training Centre.

A centralized training centre headed by an Executive Engineer is functioning at Trivandrum with ample training facilities. The unit carries out in-house trainings, workshops, refresher courses etc. Training Centre also facilitates the deputation of officers for higher studies and external training

3.2.3. Vigilance Section

There is a Vigilance Wing headed by a Deputy Chief Engineer, and consisting of one Executive Engineer, two Asst. Executive Engineers and a Junior Superintendent functioning under the Technical Member. They are entrusted with the task of detailed enquiry of allegations against officers and on the execution of different works and other enquiries entrusted to it in respect of any matter affecting the Authority. The report submitted will be scrutinized by a committee headed by the Technical Member and based on the recommendation, further action would be taken in every case.

3.2.4. Internal Audit Wing

Kerala Water Authority is having an Internal Audit Wing with a section at headquarters and two teams headed by Internal Auditors. These audit teams are deployed for the yearly audit of the accounts and other records of the Division Offices. They are also responsible for the follow up action with regard to the audit findings of the Accountant General, Stock Verification Reports, Internal Audit Reports, Special Audit Reports, etc. They report directly to the Accounts Member.

3.2.5. Chief Engineer Offices

1. Chief Engineer (Southern Region)
2. Chief Engineer (Central Region)
3. Chief Engineer (Northern Region)
4. Chief Engineer (WASCON & PPD)

Under the control of a Chief Engineer, WASCON & PPD the consultancy wing of KWA and is authorised to undertake consultancy and construction works in Civil Engineering, provide services to LSGs while taking up infrastructure projects in water and sanitation sector.

3.2.6. Circle Offices

There are 16 Circle Offices. The Circle offices are headed by Superintending Engineers.

3.2.7. Division offices.

The major activities (operation, management, and execution of Water supply & sewerage schemes) of Kerala Water Authority are centered on the Divisions. 48 Division Offices, 104 Sub-Division Offices and 245 Section Offices under the regional offices

The various Divisions and their functions are:

i. Water Supply / P.H. Divisions.

These divisions are dealing with the operation & maintenance of water supply schemes which are run by Kerala Water Authority. Execution of deposit works of Local Bodies and other agencies are also carried out by these Divisions. Revenue collection of KWA is also done by these Divisions.

ii. Project Divisions.

Project Divisions have formed for implementing Water Supply Projects in time. The responsibilities of Project Divisions are:

Preparation of DPR, Obtaining AS and execution of newly sanctioned projects. Once the project is completed, the same will be handed over to the respective maintenance divisions for Operation and Maintenance

iii Quality Control Divisions.

The Quality Control Divisions under State Referral Institute are engaged in water quality surveillance / monitoring and act as a referral agency to guide the public as well as the Government in all cases of drinking water quality problems.

3.2.8. Stock Verification Unit

There are two Stock Verification Sub Divisions functioning under Accounts Member for the physical verification of materials stored in different stores. The Sub Division

situated in Trivandrum has jurisdiction upto Ernakulam and the second one situated in Kozhikode verifies the stores beyond Ernakulam.

3.2.9. JICCA Assisted Kerala Water Supply Project

The JICCA Assisted Kerala Water Supply Project headed by a Chief Engineer is for implementation of five major water supply schemes assisted by Japan International Co-operation Agency. Its function is to augment and rehabilitate water supply systems of two urban regions viz. Thiruvananthapuram and Kozhikode and to construct water supply systems for three rural regions viz. Meenad, Cherthala and Pattuvam

3.2.10. Formation of Project Management Unit (PMU)

KWA is implementing the Kerala Urban Water Supply Improvement projects with the loan assistance from the ADB for 24 x 7 water supply system in the 3 major cities viz, Thiruvananthapuram, Kochi and Kozhikode. The ADB Consultation Mission has emphasised the need of Establishing a Project Management Unit (PMU) and it was agreed to establish the same immediately. As per the KWA Board Resolution No. 10725 Dated: 27/07/2018 resolved to approve the proposal for converting the existing JICA project office as PMU for ADB project and also to deploy the existing staff in the JICA Project Office as PMU for ADB project. The PMU is functioning as separate wing under the DCE.

CHAPTER- IV SCHEMES UNDER EXECUTION

4.1. Water Supply Coverage

There are 1058 water supply schemes in operation as on 31.8.19, with a total utilized capacity of 2838.45 mld. The average per capita availability of piped water is 84.76 litres per day. However, the lpcd is varying in different habitations in the all districts. But after accounting for the high percentage of Non-revenue water, industrial and non domestic demand the per capita availability is much less. Action has been initiated to have a ring fenced analysis of schemes so that necessary remedial actions could be taken to make the systems and schemes more viable.

During the financial year 2018-19, about 35 schemes were commissioned thereby increasing coverage and the population benefitted. Many new projects were sanctioned under KIIFB, AMRUTH, State plan and NABARD to cover the uncovered areas. KWA distributes water through House Service Connections (HSC) and street taps. As on 31.8.19, from the existing KWA schemes, 56.38% population of Kerala has been covered with piped water supply - 52.10% in rural sector and 70.33% in urban. KWA has given 23,59,359 Domestic connections, 1,75,170 Non domestic connections and 2190 Industrial connections in addition to 2,03,627 street taps as on 31.8.19. In the financial year 2018-19, 1,60,364 new house service connections have been given. In this financial year 96,650 new connections were also given upto 31.8.19.

As part of implementation of Jal Jeevan Mission, it is intended to have more Functional households tap connections (FHTC) in the rural sector. KWA aims to cover 100 % population with 100 lpcd for rural and 150 lpcd for urban areas.

4.2 Habitation Coverage

As per Integrated Management Information System (IMIS) data being maintained by Government of India, as on 1.4.18, out of 21520 rural habitations (there is some discrepancy in the figures), 5966 habitations were fully covered, 15227 habitations were partially covered and 327 were quality affected habitations. During the financial year 2018-19, 178 habitations were also fully covered with piped water supply by commissioning the schemes. There is no arsenic affected habitations in Kerala presently The total numbers of fluoride affected habitations to be covered have been reduced to 32 as on 31-03-2019.

4.3 Sewerage

The coverage of sewerage in the state is negligible. Thiruvananthapuram city has about 39% coverage with about 53000 connections. Ernakulam has a small system with 1200 connections. Although sewerage projects were taken up in Kollam and Kozhikkode under KSUDP, both could not be implemented due to public protest, non – availability of land in Kollam and NGT case in Kozhikkode. In Guruvayoor in Trichur District, it is expected

that the sewerage scheme will commission in this financial year itself. The need for more focused attention in sewerage sector is essential. The fund required, public protest against sewage plants / pumpouses, delay in getting land, sanctions for road cutting etc are some issues that has to be looked into for taking up sewerage projects. New projects / works are being sanctioned under AMRUT for executing the sewerage project in the cities.

Wastewater collection and disposal are of equal importance to that of protected water supply in maintaining public health and much attention is needed in this sector.

4.5. Capital Works

Currently the KWA undertakes projects under various heads. During the financial year 2018-19, 35 projects were completed and thereby increasing the coverage and benefitting about 15 lakhs more people with safe drinking water.

New projects have been sanctioned under KIIFB, AMRUT in addition to projects being taken up under State plan and NABARD. During the financial year 2018-19 no new project was sanctioned under NRDWP. The main heads sanctioned under State Plan and the budget outlay in each head in 2018-19 is listed below.

SI No	Scheme Code	Scheme Name	Outlay (Rs. Lakh)
1	SWS 001	Survey and investigation-XX-2215-01-190-99(1)	200
2	SWS 028	NABARD Assisted Rural Water Supply Schemes Rural Infrastructure Development Fund-XX-4215-01-102-98(1)	10000
3	SWS 043	Manufacturing units for bottled water-XX-2215-01-190-96	500
4	SWS 072	Renovation of Existing Civil Structures owned by KWA-XX-2215-01-190-92	500
5	SWS 124	INNOVATIVE TECHNOLOGIES AND MODERN MANAGEMENT PRACTICES-XX-2215-01-101-97(1)	2000
6	SWS 125	HUMAN RESOURCE DEVELOPMENT, RESEARCH & DEVELOPMENT AND QUALITY CONTROL-XX-4215-01-190-99	275
7	SWS 126	SEWERAGE SCHEMES OF KERALA WATER AUTHORITY-XX-4215-02-190-99	5000
8	SWS 127	REHABILITATION/IMPROVEMENT WORKS OF URBAN WATER SUPPLY SCHEME-XX-4215-01-101-97	5000
9	SWS 128	RURAL WATER SUPPLY SCHEMES-XX-4215-01-102-97	8000
10	SWS 129	WATER SUPPLY SCHEME TO SPECIFIED INSTITUTIONS/LOCATIONS-XX-4215-01-190-98	250

11	SWS 131	OPTIMISATION OF PRODUCTION AND TRANSMISSION-XX-4215-01-190-97	14000
12	SWS 132	Kerala Water Supply Project, JICA (One time sustenance support under the state plan)-XX-4215-01-190-96	7500
13	SWS 133	MODERNISATION OF ARUVIKKARA PUMPING STATION-XX-4215-01-101-96	1
14	SWS 135	Drinking water - Drought mitigation-XX-2215-01-800-47	3000
15	SWS 137	COMPLETION OF ON-GOING NATIONAL RURAL DRINKING WATER (NRDWP) PROGRAMME-XX-4215-01-102-95	10000
16	SWS 138	SOURCE IMPROVEMENT AND WATER CONSERVATION-XX-4215-01-800-92	500
17	SWS 142	ENTERPRISE RESOURCE PLANNING (ERP), E-GOVERNANCE, GIS AND INFORMATION MANAGEMENT-XX-2215-01-190-87	917
		GRAND TOTAL	67643
CENTRALLY SPONSORED SCHEMES (NRDWP)			
1A	SWS 063	ACCELERATED RURAL WATER SUPPLY SCHEME (50 % CSS)-STATE SHARE	10000
1B	SWS 063	ACCELERATED RURAL WATER SUPPLY SCHEME (50 % CSS)-CENTRAL SHARE	10000
1	TOTAL	ACCELERATED RURAL WATER SUPPLY SCHEME (50 % CSS)-XX-2215-01-190-99-(18)	20000

A summary of projects being executed / works undertaken in the various above heads during the financial year 2018-19 are given below. The status of works is also mentioned.

- **State Plan Works**

Under State Plan an amount of Rs.67643 lakhs was provided as budget outlay during 2018-19 under various heads. For Centrally sponsored Schemes the total outlay was Rs.200 crores with 50% sharing of Rs.100 crores each by State and Central. The expenditure incurred and booked in plan space in 2018-19 does not reflect the actual performance as funds were not released by the Government for making payment of pending bills. As on 31.3.19, there were pending bills amounting to Rs.327.27 crores in various heads. Although the utilisation of Plan expenditure for 2018-19 was only 45.42% in the event of release of plan funds to pay pending bills in hand as on 31.3.2019 the percentage expenditure would have been 87.57%. For GoI Schemes, (50% CSS NRDWP) 100% fund has been utilised.

- **Survey and investigation**

The aim of KWA is to supply water to all parts of Kerala within five years from 2016. For this detailed surveys are to be conducted for preparing the shelf of projects. In the financial year 2018-19 an amount of Rs 200 lakhs has been allotted under this subhead for preparation of detailed project reports. During 2018-19, 68 DER / PER were prepared and a total expenditure of Rs 102.87 lakhs has been booked

- **NABARD Assisted Rural Water Supply Schemes Rural Infrastructure Development Fund**

With the loan assistance from NABARD, KWA implement water supply schemes in the rural areas of Kerala. The summary of schemes sanctioned under various ongoing Tranches (XVIII to XIV) is shown in the table below.

Year of Sanction	Name of Tranche	No of Schemes	No of completed schemes / dropped	Total Project Cost (Crores)
2013	XVIII	9	5	206.39
2014	XIX	8	5	128.54
2015	XX	9	6	93.39
2016	XXII	6	1	57.26
2017	XXIII	3	0	85.55
*2018	XXIV	4	0	165.52
Total		39	17	736.65

The outlay for 2018-19 was Rs.100 crores. Claims amounting to Rs.92.39 crores were submitted to Government during the period and a total expenditure of Rs.75.48 crores has been booked with the fund released. Out of the total 39 projects sanctioned, only 22 projects are to be completed. It is expected that 9 projects more will be commissioned in this financial year. Tranche XVIII and XIX will be closed in this financial year.

Some important works such as CWSS to Sulthan bathery, Noolpuzha and Muttill panchayath in Wayanad, WSS to Othukkungal and Ponmala in Malappuram, Cherthala – Distribution network in Alleppey, WSS for proposed Konni Medical College in Pathanamthitta District, Comprehensive Water Supply Scheme (CWSS) to Agali & adjoining Panchayats in Palghat, WSS to Seethathode Pt. & Nilakkal Plappally area in Perunad Panchayat etc were sanctioned under NABARD

- **Manufacturing units for bottled water**

The aim of this project is to set up the bottled water plant at Trivandrum for providing good quality packaged/ bottled water through KWA at reasonable price to public. The total budget allocation for this head in the financial year 2018-19 was Rs 500 lakhs. The project which has not taken off in full swing was completed during the period by resolving the bottlenecks. Now the civil, mechanical and electrical works has been completed. BIS/Food and safety departments sanction is awaited and it is expected to launch the project in this financial year. The total expenditure for the financial 2018-19 year was Rs. 517.03 lakhs.

- **Renovation of Existing Civil Structures owned by KWA**

The major aim of this head is to renovate the structures which in dilapidated condition due to lack of timely repair, protection and renovation. Annual maintenance of various civil structures like office buildings, treatment plants, intake, water tanks, pump houses staff quarters etc are not being done for the past several years throughout the State due to lack of sufficient funds. So the maintenance of the civil structures is proposed to be done in a phased manner for protecting the assets created and to improve the quality of service.

The total budget allocation for this head in the financial year 2018-19 was Rs 500 lakhs. With this budget allocation, 59 works including maintenance of some office buildings, guest houses, tanks, staff quarters, pump houses etc located in various districts has been completed. The total expenditure made for the financial 2018-19 year with the fund released was Rs. 259.73 lakhs.

- **Innovative technologies and modern management practices**

The major aim of this head is to improve the services delivery and quality by adoption of new technologies and modern management practices. Some issues which cannot be solved or optimized can be resolved or improved by practicing innovative ideas. For example, water treatment units with adopting appropriate technology could solve problems like salinity, iron, fluoride, organic pollution. By installation of automated networks installing flow meters, smart meters etc. action for reduction in Non-Revenue Water (NRW) could be taken up.

The total budget allocation for this head in the financial year 2018-19 was Rs.2000 lakhs. With the works sanctioned under this head, installation of AMR flow meters for major schemes in KWA is being carried out. By this we can monitor the real time flow and take decision for managing the NRW. The work of setting up of electromechanical units, solar plants in selected locations is also ongoing. The total expenditure for the financial 2018-19 year was Rs. 279.98 lakhs.

- **Human resource development, research & development and quality control**

KWA is having staff strength of over 8000 and is managing 1058 schemes with more than 25 lakh consumers. With the existing staff KWA is also executing projects costing over Rs.7000 crores at any point of time. The engineers and other staff need to be updated and equipped with modern Project Management practices and tools for the timely execution of these large projects and subsequently maintain new high-tech systems. KWA is planning ahead with plans for NRW management, 24*7 water supply in three cities, automation etc. KWA is aspiring to be customer friendly, quality conscious, sustainable water utility and change management initiatives are underway. Continuous training is a key requirement to equip the entire cross section of KWA employees for the times ahead and to face challenges.

The total budget allocation for this head in the financial year 2018-19 was Rs.275 lakhs. A major achievement in the financial year 2018-19 is that 113 training courses were conducted in which 2877 participants participated. The total expenditure for the financial 2018-19 year was Rs. 44.61 lakhs.

- **Sewerage schemes of Kerala Water Authority**

Kerala Water Authority has the mandate for collection and disposal of waste water. The same has been carried out only in Thiruvananthapuram and in Kochi Corporations to some extent. As fund for taking up new projects and to cover new areas are limited presently the main activities taken up under this head include enhancement of undersized lines to the desired size, to repair damaged manholes so as to avoid overflow of sewage, to provide sewerage facility to areas by minor extensions where no other source of sewerage disposal system exists. In order to overcome the threat of environmental damages, adequate attention is essential for strengthening the existing sewerage system. The need for more focused attention in sewerage sector is essential. The fund required, public protest against sewage plants / pump houses, delay in getting land, sanctions for road cutting etc are some issues that has to be addressed for taking up sewerage projects.

The total budget allocation for this head in the financial year 2018-19 was Rs.5000 lakhs. Thiruvananthapuram Sewerage Division maintains the sewerage network of Thiruvananthapuram Corporation in addition to the maintenance work. In Guruvayoor in Trichur District, it is expected that the sewerage scheme will commission in this financial year itself. During 2018-19, 1679m of new sewer pipe lines were laid and 201 manholes were constructed. The total expenditure for the financial 2018-19 year was Rs.30.46 lakhs.

- **Rehabilitation / Improvement works of urban water supply scheme**

The major aim of this head is to repair/ replacement of pump sets or connected accessories, replacement of worn out and aged pipelines including pumping mains, gravity mains, distribution lines etc and execute important works in urban schemes. Also under this head it is targeted to complete all ongoing UWSS taken up under SAARK. To have 100%

coverage in urban areas more funds need to be allocated in this head for taking up new projects.

The total budget allocation for this head in the financial year 2018-19 was Rs.5000 lakhs. In 2018-19, 2 Urban schemes were completed, namely UWSS to Ollur - Edakkunni census Town Villages in Thrissur Corporation and Augmentation of Kochi WSS-Improvement of Water Supply to divisions 13,14,15 & 16 of Edakochi area in Kochi Corporation benefitting the people of that area. The total expenditure for the financial 2018-19 year made with the fund available was Rs. 532.22 lakhs.

- **Rural Water Supply Schemes**

At present many grama panchaythas still do not have treated water supply or ongoing proposal at present. Only about 34% of rural households are having piped water supply presently. More emphasis has to be given in this sector with the launch of Jal Jeevan Mission which aims to provide piped water supply to all households by 2024. Completion of ongoing rural schemes is also proposed under this head. An amount of Rs 8000 lakhs was provided during 2018-19.

The major works carried out during 2018-19 are completion of 24 minor works for rehabilitation of the Rural water supply scheme. The performance of some main schemes RWSS to WSS to Chithara and adj.pts, WSS to Adoor and adj. Panchayaths, RWSS to Anakkara, WSS to Onchiyam, Chorode etc. were improved on completion of works such as replacement of old pipes, pump set undertaken in this head during the period. The total expenditure made with allotted fund for the financial 2018-19 year was Rs. 1675.18 lakhs.

- **Water Supply Scheme to Specified institutions/locations**

This scheme is intended for providing uninterrupted water supply to some Specified Institutions / locations. This is for ensuring uninterrupted water supply to Institutions such as medical colleges by improving the water supply schemes and also to provide sufficient quantity of drinking water to pilgrims to visiting centers such as Sabarimala etc. An amount of Rs 250 lakhs has been provided during 2018-19. During the year RO plants of capacity 2000 lph (2 Nos.). 1000 lph (1no) for drinking water supply to Sabarimala and Pampa was installed in addition to other works.

- **Modernization of Aruvikkara pumping station**

The major aim of this head is to modernize the old schemes functioning according to traditional methods and to improve water supply and reduce power charges to KWA. Modernization of Aruvikkara pumping station taken up under this head is on progress and 40% physical progress has been made. The budget allocation of Rs.1 lakh has been fully utilized during the period.

- **Optimization of Production and Transmission**

The main objective of the works taken up under this head is to optimize the output in the existing schemes. It is intended to ensure uninterrupted water supply, reduction of water loss due to leakage and breakage and energy conservation. Main works executed include

- Renovation and capacity enhancement of old water treatment plants
- Reducing the distributional loss and to improve performance
- Replacement of old pipes including pumping mains and transmission mains of existing water supply schemes
- Prevent loss of water due to leakage and breakage in various components
- Energy conservation measures
- Rehabilitation of obsolete pumps, motors and Electrical Installations
- Provide pipeline extension to water stressed areas from existing WSS

An amount of Rs.14000 lakhs was provided during the year 2018-19. The major achievement during the period include renovation of 33 number of old water treatment Plants, Replacement of 194 Km of old pipes of existing water supply schemes, rehabilitation of 53 obsolete pumps and motors, extension of pipe line from existing scheme to cater more people. The performances of the schemes were improved and the output was enhanced by such works. The total expenditure for the financial 2018-19 year was Rs.5536.39 lakhs.

- **Source improvement and water conservation**

The objective of works undertaken in this head is to ensure that the sufficient water is available in the source in summer / drought season. During the period many works for strengthening the source and increasing the storage capacity were done which mainly include construction of check dams and regulators. By this activity the water stress in this summer could be mitigated to a large extent. An amount of Rs.500 lakhs has been provided in the year 2018-19 for this head.

- **Drinking water - Drought mitigation**

For meeting drought relief activities and unforeseen emergency interventions an amount of Rs 3000 lakhs was provided in the budget 2018-19. But during 2018-19- due to flood, the budget outlay for drought has been utilized for flood relief works. Out of 624 flood relief work were sanctioned under state plan. The total expenditure for the financial 2018-19 year is Rs. 2912.88 lakhs.

- **JICA Assisted Kerala Water Supply Project**

JICA Assisted Kerala Water Supply Project envisages the implementation of five water supply schemes in Thiruvananthapuram, Meenad, Cherthala, Kozhikkode and Pattuvam for a total estimated cost of Rs.1787.45 crores. The project cost has been

subsequently revised to Rs. 2987.40 crores. All the projects except part of the Distribution System in Meenad and Kozhikkode and Rehabilitation of WTP at Thiruvananthapuram have been completed and commissioned.

Thiruvananthapuram, Cherthala and Pattuvam scheme have already been completed and commissioned. For Kozhikkode scheme and Meenad Schemes, all components except part of distribution system have been completed and partially commissioned. By commissioning the above 5 schemes under JICA, the production has been enhanced by 516 mld. It benefits a population of about 41 lakhs in the scheme areas in the 5 districts viz- Thiruvananthapuram, Kollam, Alappuzha, Kozhikkode and Kannur. The details are given below.

Scheme	Water Treatment Plant capacity (MLD)	Envisaged total population benefitted on completion (in lakhs)	Benefitted area
Thiruvananthapuram	74	10.7	Thiruvananthapuram Corporation
Meenad	71	5.26	Paravoor Municipality and 13 Panchayath
Cherthala	107	6.53	Cherthala Municipality and 18 Panchayath
Kozhikkode	174	13.03	Kozhikkode city and 13 Panchayaths
Pattuvam	90	5.30	Thaliparamba Municipality and 11 Panchayaths
TOTAL	516	40.82	

The work of Distribution System in Meenad and Kozhikkode are in progress and is expected to complete shortly. A Budget provision of Rs.75 crores is provided for 2018-19 for the completion of balance works under this project.

- **National Rural Drinking Water Programme (NRDWP)**

The main activities under this head is given below

- a) **ARWS Schemes**

During the financial year 2018-19, no water supply schemes were sanctioned under Centrally Sponsored ARWSP/NRDWP due to shortage of allocation. The central assistance is showing a diminishing trend, the release for the year 2018-19 being Rs.82.74 crores. The State had utilized 100 % fund released under ARWSP/NRDWP during 2018-19. The progress of ongoing schemes is also affected by reduced allotment of funds for schemes

under NRDWP. Due to the reduction in NRDWP allocation, an amount of about Rs. 135 crores are pending to be paid towards the completed NRDWP works as on March 2019.

During the above period 10 schemes were completed (fully /partially) in various districts benefiting a population of about 3.82 lakh. There are 133 ongoing schemes (including financially incomplete) as on 31.03.19 under this head.

b) Support Activities

5% of the NRDWP fund is provided for support Activities. The funding pattern of support activity is 60:40 between Central and State. Under support activity, training, MIS etc. are taken up. In Kerala CDDU (Water) and Suchitwa Mission are also implementing various awareness activities utilising the support fund. From the year 2018-19 there is no specific allocation for support activities under NRDWP. Hence 5% (max) of total NRDWP fund can be utilized for the purpose. During the year 2018-19 state had utilized an amount of Rs.160.18 lakhs for support activities.

c) Water Quality Monitoring and Surveillance Programme (WQM&SP)

3% of the NRDWP fund is provided for Water Quality Monitoring and Surveillance Programme (WQM&SP). Under WQM & SP water quality monitoring of drinking water sources, formation and modernisation of water quality testing labs, water quality test using Field Test Kit by CCDU (Water) etc. are taken up. The funding pattern is 60:40 between Central and State. During the year 2018-19 an amount of Rs.245.04 lakhs had been utilized for the above programme.

d) NITI Ayog

NITI Ayog has allotted Rs.19.73 crores to Kerala for providing interim water supply to 95 Fluoride affected habitations in the state as one time additional (OTA) central assistance. It is envisaged to ensure 8 to 10 lpcd safe drinking water by installing Community Water Purification Plants (CWPP) in the Fluoride / Arsenic affected habitations as an interim measure. In Kerala there are no Arsenic affected habitations.

Kerala water Authority has proposed R.O Plants and feasible pipeline extension from nearby safe sources in the affected habitations utilising NITI Ayog allocation. Accordingly, Kerala Water Authority has provided safe water on a permanent basis in 63 Fluoride affected habitations by providing pipeline extension from treated sources. As per the status as on 31.03.2019, 32 Fluoride affected habitations are remaining to be covered. Now NITI ayog accorded permission for laying pipe line extension to the fluoride affected habitations remaining to be covered. Based on the above, action is being taken to implement proposals to cover remaining habitations.

e) Jal Jeevan Mission (JJM)

Hon'ble Prime Minister announced a new programme named "Jal Jeevan Mission (JJM)" on 15th August 2019. The existing NRDWP will be subsumed in to Jal Jeevan Mission. Jal Jeevan Mission envisages providing Functional Household Tap Connections (FHTC) ensuring a minimum supply of 55 lpcd to all the rural households in the country by 2024. The Guidelines of JJM is yet to be announced by the Government of India.

As per the current status, the percentage of rural households with piped water connection in the State is about 33 % which includes the household connection provided by KRWSA (Jalanidhi) and Local bodies. It is estimated that about 50 lakh rural households need to be covered under JJM in the next five years. The detailed action plan and institutional mechanism for the JJM will be finalized based on the Guidelines from Government of India. As 50% share is to be borne by the State, adequate fund should be embarked for achieving the objective.

4.6. WORKS UNDER OTHER HEADS

In addition to above, KWA executes projects under KIIFB and AMRUT also. Most of the works taken up under JnNURM and UIDSSMT with GoI funds earlier has almost been commissioned. The JICA loan assistance has also been closed. The possibility of taking up projects under RKI, with ADB loan, World bank loan etc are also being explored so as to increase the coverage of piped water supply to the people of Kerala. More allotment from the State is required for commissioning the projects as per schedule, as fund flow in projects is affecting the progress.

The works being undertaken other than State Plan schemes are KIIFB, AMRUT, UIDSSMT and JnNURM. In addition, KWA also executes water supply projects of various departments as deposit works. A brief note on works under taken in the above heads is given below.

4.6.1. KIIFB

Government of Kerala had accorded In-principle sanction for 72 drinking water projects of KWA and KIIFB had so far accorded sanction and approval for funding for 69 projects for an amount of Rs. 4351.553 crores.

Under KIIFB funding projects are being implemented in packages and are in various stages of execution. Some works have already been completed.

There are 11 projects proposals under 'Replacement of old Transmission mains in 11 circles out of which 10 projects have been approved by KIIFB for an amount of Rs.382.64 cr and the project 'Replacements in Kochi' circle is under appraisal by KIIFB Appraisal Division. The works are under various stages of execution.

4.6.2. AMRUT (Atal Mission for Rejuvenation and Urban Transformation)

Kerala Water Authority is the implementing agency to execute water supply and sewerage works under Atal Mission for Rejuvenation and Urban Transformation (AMRUT), which is funded jointly by Central, State and ULBs. Ministry of Urban Development (MoUD) Gol, has selected 9 (nine) cities in Kerala, viz., Thiruvananthapuram, Kollam, Kochi, Thrissur, Kozhikode, Kannur Municipal Corporations and Alappuzha, Guruvayoor, Palakkad Municipalities for the programme. An Administrative sanction of Rs.1254.22 Crores has been accorded to KWA for executing water supply and sewerage projects (total 283works) in the above cities. The funding pattern is such that the total project fund is divided among Central, State and respective ULBs, as 50: 30: 20 share respectively. The works are under various stages of execution.

4.6.3. Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) was launched for improvement in urban infrastructure including water supply in towns and cities in a planned manner. The implementation of the scheme is done by the respective Urban Local Bodies (ULB) – Municipalities for which the funds will be released to Urban Local bodies according to requirement. In order to execute the projects smoothly a Tri-partite agreement is signed between the respective Municipality, Kerala Water Authority, and Department of LSGD. As per this MOU a city level Technical Advisory Group is formed for respective Municipalities.

Funding pattern is Central: 80%, State 10% and ULB 10%. The schemes executed under this head are listed below.

Sl. No.	Name of Schemes	Municipality	AS amount in lakhs
Schemes sanctioned during 2007			
1	WSS to Alappuzha & adj. Panchayaths	Alappuzha	19351
2	WSS to Payyannur	Payyannur	4019
Schemes sanctioned during 2009			
1	WSS to GuruvayoorEbrima	Guruvayoor	3144.33
2	WSS to Chavakkad	Chavakkad	1900.67
3	WSS to Thalassery	Thalassery	4120.00
4	WSS to Vadakara	Vadakara	2091.75
5	WSS to Kalpetta	Kalpetta	3217.00
6	WSS to Perinthalmanna	Perinthalmanna	811.00

7	WSS to Chittur-Thathamangalam	Chittur-Thathamangalam	650.00
8	WSS to Changanassery	Changanassery	391.90
9	WSS to Thiruvalla	Thiruvalla	627.90
10	WSS to Ottappalam	Ottappalam	3000.00
11	WSS to Malappuram	Malappuram	1976.00

All the works has been commissioned / partially commissioned. For the works WSS to Payyannur, WSS to Vadakara, WSS to Thalassery and WSS to Kalpetta some works are to be completed.

4.6.4. Jawaharlal Nehru national Urban Renewal Mission (JNNURM) Projects

Government had accorded Administrative Sanction for four projects for Rs. 699.70 crores, one each in water supply and sewerage sector for Thiruvananthapuram and Kochi Corporations of Kerala under JNNURM. In order to execute the projects a Tri-partite agreement between the respective Corporation, Kerala Water Authority (KWA), Department of LSGD was signed on 01/11/07. The implementation of the scheme is done by KWA on behalf of the respective Urban Local Bodies (ULB), for which the funds will be released to ULBs according to requirement. A city level Technical Advisory Group was formed for both Corporations. The abstract of work undertaken under JNNURM is given below.

Sl. No.	Name of City and Scheme	AS in Crores of Rupees	Project Components
Thiruvananthapuram (Capital City) Funding: Central: 80%; State: 10%; ULB: 10%			
1	JNNURM-Water supply scheme to Trivandrum	87.16	Distribution Lines, Rehabilitation of distribution system
2	JNNURM-Sewerage scheme to Trivandrum	215.41	Sewage treatment plant, pump house and sewer mains
3	Rehabilitation of Sewerage system Phase II	121.15	Rehabilitation of main pumping stations, extension of pumping main, replacement of pumpset, providing 4 mld STP at Govt. Medical College.
Kochi (City with One million plus population) Funding: Central: 50%; State: 30%; ULB: 20%			
1	JNNURM – Water Supply Scheme to Kochi (Part-I)	201.17	Intake well, WTP, Sump, Tank, Transmission mains

2	JNNURM – Sewerage-Scheme to Kochi city – Central Zone (Part-I)	74.81	Sewage Treatment Plant, Pump house and sewer mains
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The JNNURM water supply project in Kochi has been commissioned and in Thiruvananthapuram the work has almost been completed. The ADB assisted sewerage works being executed in Kollam, Kozhikode, Kochi and Thiruvananthapuram has not been completed and the funding agency has withdrawn from the project. As the schemes have not been commissioned fully and the funding agency has withdrawn / wind up, it is necessary to evolve procedure for future course of actions.

4.6.5. Deposit works

Under decentralized planning Kerala Water Authority undertakes deposit works from local bodies and other departments. Most of these works are line extension proposals and mini schemes.

KWA also execute works based on the funds received from Kerala State Coastal Area Development Corporation, Minority Department, SC / ST departments, MLA-ADS fund, MP fund and other agencies for supplying water to more areas and benefiting more population.

DISTRICT WISE AND CATOGORY WISE NUMBER OF WATER SUPPLY SCHEMES IN OPERATIONS AS ON 31-03-2019

SI No	Name of District	No. of Urban Water Supply Scheme	Rural Water Supply Schemes		Total
			Multi Panchayath	Single panchayath	
1	Thiruvananthapuram	11	30	68	109
2	Kollam	4	9	58	71
3	Pathanamthitta	4	10	60	74
4	Alappuzha	6	6	44	56
5	Kottayam	7	9	59	75
6	Idukki	6	4	73	83
7	Ernakulam	13	21	64	98
8	Thrissur	12	25	77	114
9	Palakkad	6	12	42	60
10	Malappuram	10	16	26	52
11	Kozhikode	17	4	52	73
12	Wayanad	2	6	19	27
13	Kannur	6	4	76	86
14	Kasaragod	8	6	66	80
	Total	112	162	784	1058

DISTRICT WISE POPULATION COVERED BY WATER SUPPLY SCHEMES AS ON 31-03-2019

Sl No	Name of District	Rural Population Covered	% of Total Rural Population	Urban Population Covered	% of Total Urban Population	Total Population Covered	% of Total Population	No. of Schemes
1	Thiruvananthapuram	1166139	54.81	920039	78	2086178	63.08	109
2	Kollam	1252639	59.3	422863	81.74	1675502	63.71	71
3	Pathanamthitta	646930	62.44	126482	79.33	773412	64.69	74
4	Alappuzha	1357740	76.71	286220	81.3	1643960	77.47	56
5	Kottayam	940714	56.74	250631	77.97	1191345	60.19	75
6	Idukki	400386	39.5	58492	62.35	458878	41.44	83
7	Ernakulam	1716628	80.78	1042888	90.3	2759516	84.14	98
8	Thrissur	1190870	49.62	573494	78.5	1764363	56.36	114
9	Palakkad	1323698	53.87	285529	80.73	1609227	57.25	60
10	Malappuram	1320555	39.89	452496	56.5	1773051	43.13	52
11	Kozhikode	805877	41.34	523459	42.9	1329336	41.94	73
12	Wayanad	292698	42.27	93231	75.12	385929	47.26	27
13	Kannur	630671	34.27	432174	63.06	1062844	42.08	86
14	Kasaragod	309540	27.15	57229	35.22	366769	28.16	80
	Total	13355085	52.1	5525227	70.33	18880310	56.38	1058

List of completed schemes 2018-19- RURAL

Sl. No.	District	Division	Name of Scheme	Catogery	Population Benifited	AS Amount in Lakhs
1	TVPM	Project Dn, TVPM	CWSS to Panavoor Pullampara and Vembayam Pt. Disribution system Zone I,II,III.IV & V	NABARD	38126	571
2	Kollam	Project Dn, Kollam	WSS to Karyara in Vilakkudy Pt.	STATE PLAN	5000	295
3	Pathanamthitta	Project Dn, Adoor	WSS to Ayiroor – Kanjettukara – Ph I	NRDWP	21797	1400
4	Kottayam	Project Dn, Kottayam	ARWSS to Kanjirappally, Elikulam and Chirakkara Pt. Distribution	NRDWP	33550	1722
5	Kottayam	Project Dn, Kottayam	Rural water supply to Udayanapuram (Vadakkemuri and Naduvile part villages) in Kottayam Dist.	NRDWP	22972	800
6	Idukki	Project Dn, Kattappana	Providing water supply arrangements to hilly areas in Peerumedu and Vandiperiyar Pt.	NRDWP	39721	900

7	Idukki	Project Dn, Kattappana	NABARD aided WSS to Edavetty villages	NABARD	15787	1700
8	Idukki	Project Dn, Kattappana	RWSS to T V Puram Pt. (Vaikom Part) village in Kottayam Dist	NRDWP	33708	253
9	Idukki	Project Dn, Kattappana	NABARD aided WSS to Udumbannoor, Karimannoor, Kodukul am and Vannappuram Villages	NABARD	110000	1200
10	Idukki	Project Dn, Kattappana	WSS to Purappuzha and Manakkadu Pt.	NRDWP	27024	3000
11	Idukki	Project Dn, Kattappana	2017-18 Optimization of Production and Transmision – extension of WS to Kumily	STATE PLAN	14366	800
12	Palakkad	Project Dn, Palakkad	CWSS to Peringottukurissi – Kuthannur Ph II	STATE PLAN OPTIMIZATI ON	58353	600
13	Palakkad	Project Dn, Palakkad	Aug. of Nenmara Ayilur and Melarcode – Ph I	NRDWP	52400	1100
14	Palakkad	Project Dn, Palakkad	WSS to Kuzhalmannam, Kannadi and Thenkurriissi Ph I	NRDWP	25000	1500
15	Palakkad	Project Dn, Palakkad	WSS to Kuzhalmannam, Kannadi and Thenkurriissi Ph II	NRDWP		700
16	Malappuram	Project Dn, Malappuram	Rehabilitation and moderisation of WSS to Urakam Vengara Pt.	Jalanidhi- II	81500	1956
17	Kannur	Project Dn, Kannur	NABARD – Tranche – 22 Mini WSS to Pattuvam and adj. Villages Balance works in Ph -I	NABARD	101000	1495
18	Kannur	Project Dn, Kannur	WSS to Belur and adj. Villages	SAARK	35538	1700
19	Kannur	Project Dn, Kannur	WSS to Chengala Muliar Madhur Morgal Puthur Pt. PH - I	NRDWP	126246	1980

List of completed schemes 2018-19- URBAN

Sl. No.	District	Division	Name of Scheme	Catogery	Population Benifited	AS Amount in Lakhs
1	Kottayam	Project Dn, Kottayam	UWSS to Kottayam Municipality – Replacing existing dilapidated AC pipe	STATE -PLAN		3515
2	Thrissur	Project Dn, Nattika	UIDSSMT – Guruvayoor – Chavakkad	UIDSSMT	109291	5055
3	Thrissur	Project Dn, Nattika	UWSS to Ollur – Edakkunni Census Town	UWSS 105	33473	1150
4	Palakkad	Project Dn, Palakkad	Aug. of UWSS to Shornur Municipality and Vaniyamkulam Pt.	KIIFB	131791	3500
5	Palakkad	Project Dn, Palakkad	WSS to AmbalapparaPt. In Ottappalam Taluk – Ph II	KIIFB	50472	1000
6	Kannur	Project Dn, Kannur	WSS to Kuthuparamba Municipality	SAARK	24269	5300
7	Kannur	Project Dn, Kannur	WSS to Pattiyam & Kottayam census town	SAARK	44000	2700
8	Kannur	Project Dn, Kannur	Aug.of WSS to Dharmadam	KIIFB	38812	1650

State Plan - Ongoing Works in the year 2018-19 (above 1 Cr)- URBAN

Sl. No.	District	Division	Name of Work	AS Amount in Lakhs	Population
1	TVPM	TVPM (S)	Renovation of Guest House, Thiruvananthapuram	100.00	Floating population
2	TVPM	HW Division, Aruvikkara	Modernisation of Aruvikkara Pumping Station	1000.00	500000
3	TVPM	W.S.Division, Attingal	CWSS to Varkala municipality and adjoining villages - Supplying and laying 350mm DI K9 pumping main from Thettikulam booster pump house to Chemmaruthy and Ottur tanks and supply and erection of pumpset at Thettikulam pump house (3200m) Pump - 120HP CF - 2 nos.	296.15	50000

4	Kottaya m	Kaduthuruthy	Construction of sump cum office building at kaduthuruthy- Phase I	105.00	1200
5	Alappu zha	Project Division, Alappuzha	Jica Assisted Kerala Water Supply project to cherthala Municipality and adjoining villages – Replacing of existing GRP Raw water transmission line with MS pipe at maravanthuruth panchayath	2,175.00	510000
6	Alappu zha	Project Division, Alappuzha	CWSS to Harippad and adjoining ten panchayaths-Phase II	3500.00	225553
7	pathana mthitta	Pathanamthitta	UWSS to Adoor & Adj. Panchayaths - Replacing old and damaged 300mm AC DM & DL with 300mm DIK9 from Parakodu to HS Junction Adoor (10000m)	404.00	148883
8	pathanamthitta	Pathanamthitta	UWSS to Adoor & Adj. Panchayaths - Replacing old and damaged 300mm AC DM & DL with 300mm DIK9 from Parakodu to Kilkodu, Parakodu to Paruthipara, Parakodu to Ezhamkulam (7500m)	170.00	148883
9	Pathanamthitta	Thiruvalla	Improvements to the existing scheme - Providing 160mm PVC line at various places along Ambalappuzha - Thiruvalla main road between Kochammanam Junction to Kalathilpalam (160mm PVC 6kg/cm ² - 10400m, 150mm GI pipe - 530m)	280.60	Work not executed
10	Pathanamthitta	Thiruvalla	UWSS to Thiruvalla - Replacing old distribution pipeline in Thiruvalla town (laying 300mm/450mm/500mm DI) along MC road from Ramanchira to Mazhuvangaduchira 80mm/100mm AC with 160mm PVC - 2400m 250mm AC with 300mm DI - 500m 400mm Premo with 450mm DI - 210m	169.73	30000
11	Ernakulam	W.S. Division, Kochi	Water supply scheme to Marad municipality - Strengthening distribution system	2316.00	44704

12	Ernakulam	Aluva	UWSS to Aluva - Replacement old damaged 500/400mm premo Pipe with 500mm DI K9 from pump junction to bye pass and 100mm AC pipe with 160mm PVC pipe Premo - 1.46km AC - 4.00km	575.00	30378
13	Thrissur	Irinjalakkuda	CWSS to KPCTA - Replacing the damaged 250 mm AC pumping main with 350 mm DI K9 pipes from Illickal pump house to Chazhur plant	390	79676
14	Thrissur	Project Division, Nattika	Completion of Ongoing UWSS special package UWSS to Ollur - Edakkunni census Town Villages in Thrissur Corporation	1150.00	58734
15	Thrissur	Thrissur	CWSS to Wadakkanchery and adj Pt. -Replacing and old damaged 250mm AC Gravity main and 150mm AC distribution line by DI and PVC pipes	500.00	30000
16	Palakkad	Palakkad	Augmentation of Nenmara Aylloor & Melarcode Water Supply Scheme in Chittur and Alathur taluk in Palakkad district.	1460.00	86469
17	palakkad	Palakkad	Puthussery Water Supply Scheme- Shifting of pumping main passing through railway coach factory palakkad -350 mm DI K9 - 2000m	200.00	20000
18	palakkad	Palakkad	Puthussery Water Supply Scheme- Shifting of Distribution main passing through railway coach factory palakkad -160 mmPVC - 3000m	100.00	20000
19	Palakkad	Project Division, Palakkad	CWSS to Chittoor – Thathamangalam Municipality and Vadavathoor Panchayath in Palakkad district (Green Book)	1500.00	49424
20	Malappuram	Malappur am	2015-16-UWSS to Perinthalmanna Municipality - Replacing damaged AC pipe With DI pipes in Zone II & III (4465 M)	280.00	40000
21	Kozhikode	Vatakara	JICA assisted Kerala water supply project Kozhikode - Balusseri Future phase - Booster zone area - ward 2,16 & 17 110mm PVC 6kg - 11.60km	300.00	2150

22	Ernakulam	SRI,Nettoor	Procurement of EZ-fluo rapid detection system with accessories such as Vacuum pump , Manifold (filter assembly), Coliform Agar Reagents, Membrane and Digital Colony counter.etc. for SRI, QC Division, Trivandrum and QC Division, Kozhikode.-(PART C: Additional Proposal for Instruments required at SRI, Nettoor-Microbiological)-Kozhikode, Kochi, Thiruvananthapuram	105.00	3.34 Crore Floating population - Sabarimala pilgrims
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State Plan - Ongoing Works in the year 2018-19 (above 1 Cr)- RURAL

Sl. No.	District	Division	Name of Work	AS Amount in Lakhs	Population
1	TVPM	Project Division, TVPM	Augmentation of Water Supply Scheme to Kunnathukal Panchayath - Phase - II - Design, Construction and Commissioning of 9.15 LL capacity OHSR at Kottukonam , Supplying and Laying of 400 mm DI K9 pipe for Inter connection with existing Distribution lines at Kottukonam	380.00	16637
2	TVPM	Project Division, TVPM	CWSS to Kalliyoor, Venganoor Panchayaths in Thiruvananthapuram District-Phase III	1466.00	25714
3	Kollam	Kollam	RWSS to Perinad Replacement from OHSR Nanthirikkal to elampallor and OHSR Nanthirikkal to Vellimon mukku & from starch to kaithakodi 140/90mm PVC with 200mm DIK9/160/110/90mm PVC - 5800m	107.90	4000
4	Kollam	Kottarakkara	BAWSS to Kundara and adjoining panchayaths - Replacement of frequent leaking 500mm CI TM	396.00	230000
5	Kottayam	Kottayam	ARWSS to Lalam - Vallichira - Laying 200mm DI pumping main from Kadappattoor (New well cum pumphouse) to Nelliyan GL tank	218.00	20986

6	Kottayam	Kottayam	ARWSS to Ettumanoor & adjoining villages - Replacing frequently bursting 250mm PVC conveyance main from OH tank at Medical College to OH tank at Villunni using 250mm DI K9 pipe - 4000m	200.00	23000
7	Kottayam	Project Division, Kottayam	WSS to Manarcadu panchayath (Aug)	108.00	25233
8	Alappuzha	Project Division, Alappuzha	CRWSS to Kurattissery, Mannar, Chennithala and Thripperunthura village - Providing additional distribution to uncovered areas 110mm PVC 6kg/cm ² (2000m), 90mm PVC 6kg/cm ² (2500m), 75mm PVC 6kg/cm ² (15000m)	105.00	10210
9	Alappuzha	Project Division, Alappuzha	SAGY: WS Augmentation of RWSS in Aryad Panchayath	499.00	5000
10	Pathanamthitta	Pathanamthitta	Providing safe drinking water at Sabarimala - Installation of RO plants	345.50	1 Crore
11	Pathanamthitta	Project Division, Adoor	CWSS to Ayroor-Kanjettukara in Pathanamthitta-Phase II	2800.00	22596
12	Pathanamthitta	Project Division, Adoor	Water supply at sabarimala during pilgrim season (november 2018 to january 2019) urgent works to be executed at nilakal	470.00	130000 (Floating population - Sabarimala pilgrims)
13	pathanamthitta	Thiruvalla	RWSS to Vazhappally- Augmentation of water supply to Thuruthy	360.00	25000
14	Pathanamthitta	Thiruvalla	RWSS to Mallappally - Replacing old and damaged 200mm, 100mm, 80mm, 50 mm AC, GI PM and DM with 160mm, 110mm PVC and GI from Mallappally bridge to Paduthodu in Mallappally - Pullad road (13000m)	330.00	3000

15	Pathanamthitta	Thiruvalla	RWSS to Puramattam, RWSS to Ezhumattoor and RWSS to Koipram - Replacing old and damaged 250mm, 200mm, 150mm, 100mm, 80mm, 50 mm AC, GI, PVC PM, GM and DM with 250mm, 200mm, 160mm, 110mm, 90mm DI, PVC and GI from Paduthodu to Pullad in Mallappally - Pullad road (17000m)	412.00	3750
16	Idukki	Project Division, Kattappan a	Extension of water supply to hilly areas of Kumily gramapanchayath for additional coverage	800.00	34558
17	Ernakulam	Muvattup uzha	RWSS to Nellikkuzhy-Replacing damaged pumping main 250 mm AC with 250 mm DI from Thrikkariyoor to Nellikkuzhi OH tank	175.00	17780
18	Thrissur	Project Division, Nattika	Water Supply Scheme to Pavartty Mullassery Panchayaths - Supplying,laying,testing and commissioning 300mm/250mm/200mm DI K9 gravity main from Chattukulam to Pavartty and Mullassery OHSR - Package-I.	561.76	52071
19	Thrissur	Thrissur	RWSS to Adat Pt - Replacing existing Gravity main from Chaithannya Junction at Sankaraya Road to Puzhakkal Sump	194.00	23441
20	Palakkad	Project Division, Palakkad	XX th SLSSC 2014- C WSS to Vandazhy,Kizhakkenchery, Vadakkenchery and Kanambra panchayath Water quality affected habittation-Phase I-Part-I	1795.00	127526
21	Palakkad	Project Division, Palakkad	XXIth SLSSC 2016 - CWSS to Elappully , Nalleppully , Perumatty and Pattenchery panchayath. Phase-I	1166.00	128208
22	Palakkad	Project Division, Palakkad	XXIth SLSSC 2016 - CWSS to Perungottukurissi , Kuthannur . Phase II	600.00	47883

23	Palakkad	Shornur	CWSS to Anakkara & Pattithara - Replacing old and damaged 100/80mm AC with 110mm PVC from Kokkad to Othallur (20000m)	300.00	28250
24	Palakkad	Shornur	CWSS to Mannarkkad and Thenkara Grama Panchayaths in Mannarkkad Taluk	240.00	25000
25	Palakkad	Shornur	ARWSS to Pottassery I & II Villages in Mannarkkad Taluk- Replacing existing old and damaged pipe lines (Distribution system)	315.00	10000
26	Malappuram	Malappur am	RWSS to Kalikavu – Replacement of old pipe Reach I - Replacing 400mm AC CI10 with 300mm DI K9 pipe for a length of 1700m from Mathumala to Krishibhavan - Kalikavu	125.00	14000
27	Malappuram	Malappur am	Improvements to RWSS to Manjeri - Water Supply to Veetikunnu Ward No. 28,29,30,31 and 32 of Manjeri Municipality	280.00	10267
28	Malappuram	Malappur am	2015-16-CRWSS to Tirurangadi / Parappanangadi / Vallikkunnu- Replacing of existing 110 mm AC class 10 for a length of 400 m with 110 mm PVC 6kg/cm ² along Parappanangadi-putharikkal road	180.00	40000
29	Kozhikode	Kozhikod e	RWSS Mavoor - Providing 250mm DI DM extension from Koolimadu to GL tank of Mavoor (1600m)	103.00	13750
30	Kozhikode	Project Division, Kozhikod e	WSS to Ambalavayal by laying distribution line from ARWSS to Krishnagiri, Purakkady and Ambalavayal villages	500.00	30410
31	Kannur	W.S. Division, Kannur	WSS to Anjarakandy, Peralassery and adjoining panchayaths - Replacement of old distribution pipe system of Chembilode village in Chembilode Pt.(26565m)	242.00	20301

32	Kannur	W.S.Division, Thaliparamba	Water supply scheme to Pattuvam and adjoining villages	5250.00	149051
33	Kasargod	Kasargod	ARWSS to Vorkady and adjoining villages - Extension of pipe line using 160mm to 110mm PVC (12.5 / 10 / 6 kg/cm ²) from Guvedapadavu to Morathana (rider main) (12000m)	100.00	24000

NRDWP Ongoing Schemes – 2018-19-RURAL

Sl. No	District	Division	Scheme	AS amt	Population
1	Trivandrum	Project Dn, TVPM	CWSS to Iroorpara village- Balance works	840.00	38126
2	Trivandrum	Project Dn, TVPM	Augmentation of water supply scheme to Pallickal and Madavoor Panchayaths	980.00	Dropped
3	Trivandrum	Project Dn, TVPM	CWSS to Manoorkkara Veeranakavu & Perumkulam villages	2075.00	109963
4	Trivandrum	Project Dn, TVPM	Water Supply Scheme to Kallara, Pangodu Villages - Balance works	907.00	70556
5	Trivandrum	Project Dn, TVPM	Source sustainability -RWSS to kakkakuzhy in Vettoor pt	291.50	1476
6	Trivandrum	Project Dn, TVPM	CWSS to Anadu, Palode & Kurupuzha villages - phase I	1500.00	56916
7	Trivandrum	Project Dn, TVPM	CWSS to Kanjiramkulam, Thirupuram and Karumkulam panchayaths	1462.00	75105
8	Kollam	Project Dn, Kollam	WSS to Thevalakkara and Thekkumbhagam Panchayaths- Part II	600.00	80738
9	Kollam	Project Dn, Kollam	RWSS to Kulathupuzha & adj. Villages - Phase II	1815.00	145479
10	Kollam	Project Dn, Kollam	CWSS to West Kallada, Sooranad South and Sasthamcotta Pt. (ARP)- Phase-II	1115.00	95015
11	Pathanamthitta	Project Dn, Adoor	Providing water supply to Quality affected habitations - Wards 3,4,7 & 8 of Peringara Pt	372.75	24758
12	Pathanamthitta	Project Dn, Adoor	WSS to Perunadu & Athikkayam Phase 1	1400.00	22121

13	Pathanamthitta	Project Dn, Adoor	RWSS to Ezhumattur Ph -I	591.00	19659
14	Pathanamthitta	Project Dn, Adoor	RWSS to Elanthoor Mallapuzhasserry Villages - Phase 2 Laying disribution system and construction of water treatment plant	867.00	27128
15	Pathanamthitta	Project Dn, Adoor	RWSS to Elanthoor and Mallappuzhasseri Villages - Source sustainability - improvement works for source and intake well cum pump house	58.50	1414
16	Pathanamthitta	Project Dn, Adoor	RWSS to Kollamula Area-Vechoochira Panchayat (Part) Perunadu Panchayat (Part) & Naranamoozhy panchayat (Part.)	800.00	25700
17	Pathanamthitta	Project Dn, Adoor	WSS to Kozhenchaery - Phase I	950.00	12021
18	Pathanamthitta	Project Dn, Adoor	CRWSS to Nedumbram, Niranam, Kadappra and Peringara Pts - Phase I	2700.00	64754
19	Alappuzha	Project Dn, Alappuzha	CARWSS to Bharanikkavu and adjoining villages Phase I & II (Phase-I -Rs. 397.78L + Phase -II -Rs. 1007.02L)	1404.80	29000
20	Alappuzha	Project Dn, Alappuzha	CWSS to Harippad and adjoining 5 panchayaths - Phase I	3500.00	149625
21	Kottayam	Project Dn, Kottayam	Manimala phase I & phase III SLSSC 18.06.1999	1833.00	74819
22	Kottayam	Project Dn, Kottayam	ARWSS to Kanjirappally, Elikkulam and Chirakkadavu Panchayaths. SLSSC 09.07.2007	1430.00	103730
23	Kottayam	Project Dn, Kottayam	WSS to Vakathanam panchayath	3000.00	33550
24	Kottayam	Project Dn, Kottayam	CWSS to Puthupally and Meenadon Panchayths- Phase I	1815.40	43177
25	Kottayam	Project Dn, Kottayam	WSS to Manarkadu panchayath (Aug)	1475.00	27579
26	Kottayam	Project Dn, Kottayam	ARWSS to Akalakunnam & Mutholi Panchayath - Phase I	1547.00	49979
27	Kottayam	Project Dn, Kottayam	ARWSS to Ayarkunnam, Kooroppada and Pampady panchayths - Phase I	1946.00	92793
28	Kottayam	Project Dn, Kottayam	Aug. of WSS to Vijayapuram pt.	4300.00	Dropped
29	Kottayam	Project Dn, Kottayam	RWSS to Thalayolaparaambu pt (Vadayar Village)	840.00	22810
30	Kottayam	Project Dn, Kottayam	Completion of Water Supply	3250.00	96951

			scheme to Manimala and adjoining 4 panchayats		
31	Idukki	Project Dn, Kattappana	ARWSS to Vandanmedu and Anakkara Villages	529.00	48250
32	Idukki	Project Dn, Kattappana	CARWSS to Kattappana & Ayyappancovil Village	2314.00	112000
33	Idukki	Project Dn, Kattappana	ARWSS to Vellathooval & Konnathady Villages	2524.00	55425
34	Idukki	Project Dn, Kattappana	NRDWP- XVI SLSSC 03-10-2011 VARSHA-for Rain Water Harvesting Scheme 487 units under P H Division Thodupuzha	175.32	1928
35	Idukki	Project Dn, Kattappana	Providing Water Supply Arrangements to the Hilly Areas of Kanchiyar Panchayath.	308.90	32200
36	Idukki	Project Dn, Kattappana	Providing Water Supply Arrangements to the Hilly Areas of Ayyappancovil Panchayath.	76.97	3764
37	Idukki	Project Dn, Kattappana	Providing Water Supply Arrangements to the Hilly Areas of Kattappana Panchayath.	711.63	57530
38	Idukki	Project Dn, Kattappana	Water Supply Scheme to Kumaramangalam Panchayath in Idukki District Phase I	1000.00	14025
39	Idukki	Project Dn, Kattappana	NRDWP - 2013- WSS to Velliyamattom	2000.00	21557
40	Idukki	Project Dn, Kattappana	WSS to Muttom and Karinkunnam Panchayaths in Idukki District	4000.00	34173
41	Ernakulam	Project Dn. Piravom	Improvement of RWSS to Manajalloor panchayat- Construction of 2 Nos GLSR and providing distribution system zone I & IV balance work.	32.00	26843
42	Ernakulam	WS Dn. Kochi	Construction of Check Dam across Muvattupuzha river downstream of Ramamangalam bridge near Puthumana lift Irrigation Scheme for improving WSS to Thripunithura municipality and adjoining panchayath – Sustainability	1100.00	226900
43	Thrissur	Project Dn. Thrussur	Augmentation of Pavaratty Regional WSS -covering 10 panchayaths in Thrissur & Palakkad districts	1725.00	325218
44	Thrissur	Project Dn. Thrussur	WSS to Thalikkulam Pt by augmenting Nattika Firka	2200.00	279367

			scheme (PURA scheme) Phase I		
45	Malappuram	Project Dn. Malappuram	WSS to Kannamangalam Panchayat	1000.00	68240
46	Malappuram	Project Dn. Malappuram	CRWSS to Thiruvalli and adjoining villages Phase I - Thiruvalli village	1450.00	41580
47	Malappuram	Project Dn. Malappuram	CARWSS to Moorkanad & adj. Villages Phase-V Mankada village laying Distribution system	600.00	62637
48	Malappuram	Project Dn. Malappuram	CARWSS to Thirunavaya and adjoining villages - Laying distribution s/s in Marakkara Pt.	800.00	62734
49	Malappuram	Project Dn. Malappuram	WSS to Valavannur & Kalpakancheri Pt by enhancing the capacities of ongoing ARWSS to Thirunavaya and adjoining villages	1250.00	107580
50	Malappuram	Project Dn. Malappuram	WSS to Thazhekod and Aliparambu panchayaths in Malappuram district - phase 1	750.00	137550
51	Malappuram	Project Dn. Malappuram	WSS to Kavannoor	700.00	58720
52	Malappuram	Project Dn. Malappuram	WSS to AR Nagar Grama Panchayath	700.00	58720
53	Malappuram	Project Dn. Malappuram	Water supply projects for 7 panchayats in Nilamboor Constituency	1400.00	223690
54	Malappuram	Project Dn. Malappuram	WSS to Kavannoor pts.- phase II	1000.00	58720
55	Malappuram	Project Dn. Malappuram	WSS to Thirurangadi Pt. (PURA scheme) - Phase 1	1000.00	87980
56	Malappuram	Project Dn. Malappuram	WSS to Valavannur and Panchayaths - By enhancing the capacity of on going WSS to Thirunavaya and adjoining villages - phase II - Distribution system	1455.00	61878
57	Malappuram	Project Dn. Malappuram	CRWSS to Thiruvalli & adjoining Villages Phase-II- Wandoor Village- Part-2-(Eastern side of railway line)	593.00	20550
58	Malappuram	Project Dn. Malappuram	Water Supply Scheme to Kannamangalam Village – Phase-II- laying distribution lines	1400.00	39850
59	Palakkad	Project Dn. Palakkad	CWSS to Mannarkkad and Thenkara villages in Mannarkkad Thaluk.	571.30	2727

60	Palakkad	Project Dn. Palakkad	Augmentation of WSS to Peruvembu Pt. in Palakkad Dist.	500.00	28066
61	Palakkad	Project Dn. Palakkad	WSS to Karimpuzha in Palakkad district - Replacing existing old and damaged AC pipe line with DI pipes, gap linking in the PM for Zone II	480.00	51248
62	Palakkad	Project Dn. Palakkad	WSS to Anakkara, Pattithara & Kappur Pts. - Phase II	1000.00	80892
63	Kozhikkode	Project Dn. Kozhikode	Augmentation of WSS to Unnikulam -Sivapuram	430.00	44420
64	Kozhikkode	Project Dn. Kozhikode	WSS to Kayakodi village - Laying distribution system	1563.15	23173
65	Wayanad	Project Dn. Kozhikode	CWSS to Thariyode, Pozhuthana, Kottathara, Vengappally and Padinjarathara Panchayats PHASE - I (quality affected)	1500.00	75611
66	Wayanad	Project Dn. Kozhikode	WSS to Kalliyottukunnu (Ward No. 03) in Mananthavady Panchayath	128.00	1750
67	Kasaragod	Project Dn. Kannur	WSS to Munnad, Bedadukka, Kuttikkol	700.00	32237
68	Kasaragod	Project Dn. Kannur	WSS to East Eleri	1212.00	19581
69	Kasaragod	Project Dn. Kannur	Construction of 6.50m height RCC weir across Kariankode river for the WSS to Naval Academy Ezhimala, Endosulphan WSS to Kayyur Cheemeni Hozdurg Taluk of Kasaragod District	1000.00	22609
70	Kasargode	Project Dn. Kannur	WSS to Munnad Bedaduka & Kuttikkole villages-Balance work in Kasargod district	600.00	32237

NABARD Ongoing schemes (2018-19)- RURAL

Sl. No.	Year of sanction (Tranche No.)	Division	District	Name of Scheme	AS Amount (Rs. In lakhs)	Population
1	2011 (RIDF XVII)	Project Division, Nattika	Thrissur	WSS to Kattur, Padiyur & Poomangalam village	2789.00	68092
2		Project Division, Kozhikode	Wayanad	WSS in Mananthavady, Edavaka & Nallooradu villages	2368.00	33086
3	2013 (RIDF XVIII)	Project Division, Trivandrum	Trivandrum	RWSS to Kalliyur, Vengannur villages, Vizhinjam, Kovalam Tourist Area - Rural component Phase - I	2223.00	114903
4		Project Division, Kollam	Kollam	WSS to Vilakkudy, Vettikkavala & Melila panchayath in Kollam Dist. Phase-I	2415.00	91430
5		Project Division, Kottayam	Kottayam	CWSS to Manjoor & Kanakkary grama panchayats in Kottayam Dist.	2622.00	50860
6		Project Division, Malappuram	Malappuram	WSS to Othukkungal & Ponmala	3440.00	63677
7		Project Division, Kozhikode	Wayanad	WSS to Moopainad, Mappady (1st Phase) and Vythiri panchayath in Wayanad Dist. (Well, RW, CW Pumping main, Treatment Plant, Reservoirs and pumpsets) with pumpsets	3260.00	84075
8		Project Division, Kozhikode	Wayanad	CWSS to Sulthan bathery, Noolpuzha and Muttill panchayath in Wayanad Dist. - Phase I (Well, TP, RW, CW Pumping main, Bal Reservoir, Gravity Main)	4220.00	99470
9		P.H.Division, Kasaragod	Kasaragod	WSS to Chengala, Muliya, Madhur & Mogralputhur Pts. in Kasargod panchayath Ph-II	2350.00	126246

10	2014 (RIDF XIX)	Project Division, Trivandrum	Trivandrum	CWSS to Panavoor, Pullampara & Vembayam Pts. – distribution network	571.00	38126
11		Project Division,Adoor	Pathanamthitta	WSS to Seethathode Pt. & Nilakkal Plappally area in Perunad Pt.	909.00	146396
12		Project Division,Adoor	Pathanamthitta	CRWSS to Mallappally, Anicadu & Kottangal (P) Pts. – Phase I	798.00	42558
13		UIDSSMT, Alappuzha	Alappuzha	Cherthala – Distribution network	6055.40	150000
14		Project Division, Kattappana	Idukki	WSS to Edavetty Panchayath	1700.00	15787
15		Project Division, Nattika	Eranakulam	Coverage of NC/PC habitation – Providing WS to uncovered habitations in Parakadavu Pt.	610.00	38043
16		Project Division, Nattika	Thrissur	Combined AUWSS to Pudukkad CT and ARWSS to Parappukara and adjoining villages – supply,erection and commissioning of micro filter and pumping main/ gravity main	957.00	53849
17		Project Division, Malappuram	Malappuram	WSS to Cheekkode & adj. pts. – Providing balance distribution network	1254.00	83707
18	2015 (RIDF XX)	Project Division, Trivandrum	Trivandrum	RWSS to Edakode, Keezhethonnackal, Melethonnackal, Veyiloor, Pallippuram Panchayaths	735	91643
19		Project Division, Trivandrum	Trivandrum	RWSS to Kottapani in Edava Grama Panchayat	62.95	DROPPED.
20		Project Division,Adoor	Pathanamthitta	WSS for proposed Konni Medical College in Pathanamthitta Dist.	1398.00	10000
21		Project Division,Kottayam	Kottayam	RWSS to Vadakkemala in Parathodu Grama Panchayath-Laying Distribution system	53.00	DROPPED.
22		Project Division,Kottayam	Kottayam	RWSS to Vadakkemala in Parathodu Grama Panchayath-Laying of Pumping main, Erection of Pumpset and Power allocation	39.90	DROPPED.

23		Project Division, Palakkad	Palakkad	WSS to Koppam and Vilayur Pt. in Pattambi taluk	2000.00	53558
24		Project Division, Palakkad	Palakkad	WSS to Ongallur and Vallappuzha	1500.00	74374
25		P.H.Division, Vadakara	Kozhikkode	RWSS to Kallanode in Koorachundu Panchayath	50	500
26		Project Division, Kannur	Kannur	RWSS to Payyavur and Eruvessi Pt. in Thaliparamba taluk Phase - I	3500	DROPPED.
27	2016 (RIDF XXII)	Project Division, Trivandrum	Trivandrum	CWSS to Pallichal, Balaramapuram and Vilavoorkal Pts. - Balance works	1024.00	53000
28		Project Division, Kattappana	Idukki	WSS to Valliyamattom and Alakkode villages	558.63	23070
29		Project Division, Kattappana	Idukki	WSS to Karimannoor, udumbannoor, Kodukulam and Vannapuram Pts.	1200.00	110000
30		Project Division, Piravom	Eranakulam	RWSS to Arakuzha & Palakuzha Pts.	1350.00	33350
31		Project Division, Piravom	Eranakulam	Mini WSS to Inchathotty in Kuttampuzha Pt.	92.00	1750
32		Water Supply Division, Kannur	Kannur	Mini WSS to Pattuvam & adj. villages - Balance works in Phase I	1495.00	101000
33	2017 (RIDF XXIII)	Project Division, Palakkad	Palakkad	Comprehensive Water Supply Scheme (CWSS) to Mannur, Keralasery & Manakara Panchayaths (Phase-I)	2530.00	70636
34		Project Division, Palakkad	Palakkad	Comprehensive Water Supply Scheme (CWSS) to Agali & adjoining Panchayaths in Mannar Taluk.	2500.00	84813
35		Project Division Kannur	Kannur	WSS to Kottiyoor, Kelakam and Kanichar in Iritty Taluk. (Phase-1).	3525.00	58150
36	2018 (RIDF XXIV)	Project Division, Kollam	Kollam	WSS to Thrikkovilvattom and Nedumpna Panchayaths-Phase I- Part 1 Distribution system to Thrikkovilvattom Panchayath	1292.00	61296

37		Project Division,Adoor	Pathnamthitta	CRWSS to Nedumbram,Niranam,Kadappa&Peri ngara Panchayaths-laying distribution system in Niranam &Kadappa Panchayaths	2000.00	21640
38		Project Division Kottayam	Kottayam	WSS to Erumeli-Laying distribution system in Zonel & Zone VI	1260.00	11621+80000 Pilgrims
39	2019(RIDF XXIV)	Project Division,Adoor	Pathnamthitta	WSS to Seethathode,Panchayat hand Nilackkal-Plappally area in Perunad Panchayath in Pathnamthita District.	12000.00	17320+2.2lakhs floating
				TOTAL	78706.88	

AMRUT- KWA- WATER SUPPLY & SEWERAGE WORKS A.S DURING 2018-19

ULB wise No:	SAAP YEAR	NAME OF WORK	AS DATE	AS AMOUNT (in Crores)
SEWERAGE SECTOR				
TRIVANDRUM				
SEWERAGE SECTOR				
1	17-18	Supplying and erection of pumpsets, transformer and electrical accessories in the Block- L, Edathara Pumping Station (Revised A.S - Rs. 1.8 Cr increased to 4.00 Cr)	30/3/2019	2.20
		TOTAL		2.20

**AMRUT- KWA- WATER SUPPLY & SEWERAGE WORKS
WORK IN PROGRESS DURING 2018-19**

ULB wise No:	SAAP YEAR	NAME OF WORK	AS DATE	AS AMOUNT (in Crores)
TRIVANDRUM				
WATER SUPPLY SECTOR				
1	15-16, 16-17	Improvement of water supply scheme - Construction of 75mld Water Treatment Plant at Aruvikkara	23/2/2017	70.00
2	16-17	Construction of smart office in Thiruvananthapuram - Kowdiar, Pongmoodu, Vellayambalam 2016-17	15/08/2017	1.75
3	16-17	Supplying and Installation of smart meters	27/9/2017	2.29
4	17-18	Replacement of the existing damaged pipe lines & Alteration of house connections of Thiruvananthapuram water supply scheme	13-11-17	15.00
5	17-18	Replacement of old and damaged pipelines of Trivandrum water supply scheme & alteration of house connections -Phase II	22-02-18	2.50
		TOTAL		91.54
KOLLAM				
WATER SUPPLY SECTOR				
1	15-16	Replacement of contaminated AC pipe lines in Kollam Corporation - Laying distribution main from Pazhayattukuzhy OHSR to Ammannada Division in Kollam Coporation(250mm DI K9 pipe -2500m).	26/3/2016	1.37
2	15-16	Replacement of contaminated AC pipe lines in Kollam Corporation - Laying distribution main from Andamukkam, Thamarakulam, Contonment area from OH tank near Parvathy mill, Chinnakada to Mundakkal beach area from no: 3/4 (250mm DI K9 pipe -3500, 110mm PVC - 2500m, 63mm ASTM pipe - 750m).	26/3/2016	2.73
3	15-16, 16-17, 17-18	Augumentation of water supply scheme Kollam Corporation	28/09/2017 & 21st SHPSC held on 27/02/2019	80.71
4	16-17	Providing new water connection in Kollam Corporation 2016-17.	15/08/2017	7.00
		TOTAL		91.81
ALAPPUZHA				
WATER SUPPLY SECTOR				
1	15-16	Augmentation & Modernization of Water Supply Distribution System in Alappuzha Municipality (Phase-I)	23-02-17	33.9
2	16-17	Water Supply Sector- Augmentation & Modernization of Water Supply Distribution System in Alappuzha Municipality (Phase-II)	02-11-17	56.87

3	17-18	Augmentation and modernization of water supply distribution system in Alappuzha Municipality (Phase-3)	02-11-17	58.13
		TOTAL		148.90
KOCHI				
WATER SUPPLY SECTOR				
1	15-16	Replacement of existing 525mm distribution cum pumping main with 600mm rider pumping main from Karuvelippady to Koovappadam in Kochi Corporation.	23/2/2017	3.65
2	15-16	Construction of 15L Ltrs. capacity GL tank at Karuvelippady in Kochi Corporation.	23/2/2017	3.20
3	16-17	Replacement of old 250mm CI pipe by 300mm DI K9 pipe along Konthuruthi road of Kochi Corporation.	01-01-18	0.82
4	16-17	Replacement of 100mm AC pipe by laying rider line of 160mm PVC CL 5 along both side at Pandit Karupan road of Kochi corporation.	15/08/2017	1.61
5	16-17	Replacement of 100mm CI pipe by laying 160mm and 110mm PVC pipes from Valanjambalam to Ravipuram in Kochi corporation 2016-17.	15/08/2017	0.66
6	16-17	Laying of 450mm DI K9 pipe from north end of Aroor Edakochi bridge to KWA water tank site at Edakochi, Kochi corporation 2016-17.	15/08/2017	1.52
7	16-17	Laying pumping main of 500mm DI pipe from JnNURM WTP at Maradu to Pumphouse at Thammanam for additional pumping of water (upto 18 MLD) to Kochi city in Kochi Corporation 2016-17.	28/9/2017	16.50
8	16-17	Laying rider main from Kathrikadavu to Elamkulam, Chettichira, Ponnurunni areas and distribution lines in Chakkaraparambu, Chalikkavattom areas 2016-17	1/1/2018	3.25
9	16-17	Construction of 17LL OHSR and CWR at Pachalam.	27/9/2017	7.75
10	16-17	Construction of 15LL OHSR and 2LL CWR at Vadathode, Cheranalloor.	27/9/2017	7.75
11	16-17	Construction of 10L Ltrs capacity OHSR at Thevara.	27/9/2017	5.60
12	16-17	Water supply sector - Kochi Corporation - Laying 500mm DI line from pumphouse at Thammanam to OHSR at Kadavanthara.	02-11-17	7.65
13	16-17	Laying of 500mm transmission line from Karthikadavu to proposed Pachalam CWR	02-11-17	10.70
14	17-18	Construction of 13 LL Capacity OHSR at Edakochi	02-11-17	6.00
15	17-18	Construction of 25 LL OHSR at Karuvelppady	02-11-17	11.65
16	17-18	Laying 400 rnm DI K9 pipeline from Perumanoor to Ravipuram for a length of 1270m	2/11/2017	4.40
17	17-18	Replacement of 5000 damaged Service water connections	02-11-17	5.00
		TOTAL		97.71
THRISSUR				

WATER SUPPLY SECTOR				
1	15-16	Survey and Replacing of Faulty water meters and fixing new water meters at various service connections in Thrissur Corporation area.	26/3/2016	3.00
2	15-16	Supply and installation of bulk flow water meters in transmission main and distribution system.	26/3/2016	1.00
3	15-16	Strengthening the existing distribution system to Thrissur Corporation area - Replacement of very old 80/100/125/300 AC and 700mm PREMO pipes with 110/140 PVC and 200/300/350mm DI pipes at various places in Thrissur Corporation .	23/2/2017	14.40
4	15-16	Renovation of existing damaged pump houses in Thrissur Corporation.	23/2/2017	0.55
5	15-16	Rehabilitation of Thrissur Corporation WSS to Koorkancherry Zone - Supply and laying separate branched gravity main of 400mm DI K9 and replacement of 700mm PREMO with 700mm DI K9 pipe, and supply erection and commissioning of 65HP centrifugal motor pumpset for replacing of existing old pumpsets - 2nos at Koorkancherry sump allied works.	23/2/2017	3.41
6	15-16	Completion of ongoing schemes - UWSS to Ollur and Edakkunni census town villages in Thrissur Corporation - Construction of 20L Ltrs capacity OHSR at Ollur and supplying , laying distribution lines and construction of retaining wall at WTP Arattupuzha.	23/2/2017	11.40
7	16-17, 17-18	Construction of new treatment plant of 20MLD WTP at Peechi	28/9/2017	17.30
8	16-17	Replacement of very old 80/100/125/200/300 AC pipes with 160PVC and 200/300/mm DI pipes at various places in Thrissur corporation	02-11-17	12.95
9	16-17	Zoning and mapping of water supply system of Thrissur Corporation- Supply and Laying of various dia pipes-Part-1	01-01-18	8.00
10	17-18	Zoning and mapping of water supply system of Thrissur Corporation- Supply and Laying of various dia pipes-Part-2	01-01-18	17.00
11	17-18	Laying of distribution lines from existing OHT at Kizhakumpattukara to Nellikunnu area for around 15 km with varying dia pipelines-(Dia 200 mm DI to 110 mm PVC	13/11/2017	6.00
12	17-18	Providing Dedicated Feeder from 33KV Pattikkad Sub station to Pumping Water Treatment Plant.	02-11-17	3.00
13	17-18	Construction of 10LL OHSR at Anappara with pumping system and pumping main from Cherur to Anappara- Improvements of water supply system in Dn. 6, 7 and 8 of Thrissur Corporation- Part -1	02-11-17	8.00

14	17-18	Supplying and laying distribution lines for Anappara Villadom area improvement of water Supply System in Dn.6,7 and 8 of Thrissur corporation- Part 2	02-11-17	5.80
15	17-18	Construction of 5LL OHSR at Kuttanallur with gravity main and distribution network	02-11-17	8.00
16	17-18	Floating intake structure at Peechi Reservoir	01-01-18	5.00
TOTAL				124.81
GURUVAYUR				
WATER SUPPLY SECTOR				
1	15-16	Improvements of coverage in Guruvayur Municipality - Laying distribution network for improvement of coverage in Guruvayur town area & Pookode zone.	28/9/2017	13.72
2	16-17	Construction of 10 LL OHSR and pumping main to Guruvayur, and balance distribution network to the Municipality.	28/9/2017	15.50
3	16-17, 17-18	Improvement of water supply system for Guruvayur (Package II)	28-09-17	77.18
4	16-17	Laying distribution networks in Thykkad zone - Guruvayur Municipality	22/2/2018	10.00
5	17-18	Construction of 10LL OHSR and Pumping Main to Guruvayur including distribution network(continuation project), Location: OHSR at Pookode, pumping main and distribution at Municipal area.	23/12/2017	19.68
TOTAL				136.08
PALAKKAD				
WATER SUPPLY SECTOR				
1	15-16	Providing new pumping main 600mm DI-K9 - 3400m from Puthur Jn. to Moothanthara OHSR (Part-1)	23/2/2017	5.44
2	15-16	Providing new pumping main 450mm DI-K9 - 4650m from Mattumantha to Kalmandapam.	23/2/2017	4.56
3	16-17	600mm DI K9 New pumping main - From Malampuzha WTP to Mattumantha DI- K9 pipe 600 mm – 2850 m.	15/08/2017	6.25
4	16-17	Construction of 16L Ltrs OHSR at Kalmandapam KWA and demolishing the existing OHSR.	15/08/2017	3.00
5	17-18	Replacement of raw water and clear water pump set, transformers and electrification	23/12/2017	13.00
6	17-18	Constuction of OHSR 2 Nos , total 76.5LL capacity		
7	17-18	Augmentation of Water Supply Scheme to Palakkad Mauncipality - Part III- Package II - Providing Rider main, changing of water connections and replacement of existing AC Pipelines to DI/PVC pipelines in Palakkad Municipality.		54.33
TOTAL				86.58
KOZHICODE				
WATER SUPPLY SECTOR				
1	15-16	Rehabilitation of old pipes, valves, interconnections with existing lines and providing water meters	23-02-17	17.87

2	16-17	Rehabilitation of existing old pipes, valves and interconnection with the existing lines (Phase II)	02-11-17	14.63
3	16-17	Strengthening of existing infrastructure facilities, and quality improvement of CWSS in Kozhikode Corporation	02-11-17	17.27
4	17-18	Integrated Calicut Water Supply Project - phase 2 - Laying of distribution Lines in 10 zones	01-01-18	46.55
TOTAL				96.32
KANNUR				
WATER SUPPLY SECTOR				
1	15-16	Laying Gravity Main from JICA project at Mangattuparamba to Pallikkunnu OHSR for Pallikkunnu & Puzhathi Villages.	23/2/2017	23.50
2	15-16	Construction of 24LL OHSR at Pallikkunnu for Pallikkunnu & Puzhathi Villages.	23/2/2017	4.05
3	15-16	Construction of 14LL capacity OHSR Thottada at Edakkad zone III in Kannur Corporation.	15/08/2017	3.00
4	15-16	Rehabilitation of old distribution networks, valves, house service connections and inter-connections in Kannur Corporation SAAP 2015-16	28/9/2017	16.90
5	16-17	Rehabilitation of existing old distribution network, valves, house service connection and inter-connections with existing lines and providing flow meters etc., including road reformation charges-Phase II at Pallikkunnu.	28/9/2017	15.00
6	16-17	Laying of gravity main from water supply system to Kannur at Melechowda to sump at Avera to OHSR at Thottada including erection of pumpsets at Avera in Kannur Corporation 2016-17	15/08/2017	6.80
7	16-17	Enhancing capacity of treatment plant from 30 MLD to 40 MLD including modernisation of existing treatment plant.	02-11-17	7.80
8	17-18	Supplying and Laying new distribution lines in Pallikkunnu and Puzhathi area providing new service connection and inter connection with existing lines.	02-11-17	3.77
9	17-18	Laying new distribution line and providing new service connection at Elayavoor zone	23/12/2017	8.00
10	17-18	Laying new distribution line 385km and providing new service connection at Edakkad zone	23/12/2017	5.70
11	17-18	Rehabilitation of existing old distribution network, valves, house service connection and inter-connections with existing lines and providing flow meters etc., including road reformation charges (PWD/ NH/ Corporation)at Elayavoor zone	23/12/2017	11.35

12	17-18	Rehabilitation of existing old distribution network, valves, house service connection and inter-connections with existing lines and providing flow meters etc., including road reformation charges (PWD/ NH/ Corporation)at Edakkad zone	23/12/2017	8.60
		TOTAL		114.47
		TOTAL - WATER SUPPLY		988.22

SEWERAGE SECTOR

TRIVANDRUM				
SEWERAGE SECTOR				
1	15-16	Laying 900mm dia DI pumping main at Muttathara Sewage Treatment Plant.	26/03/2016	3.72
2	15-16	Rehabilitation of existing pump and machineries-Kannammoola pump		
3	15-16, 16-17	Decentralized 5MLD sewerage treatment plant (STP) at Medical College including water recycling plant and reuse	23/02/2017	19.16
4	15-16	Supplying and Laying 600mm dia DI Pumping main from Pump at Edathara to STP at Muttathara in Thiruvananthapuram Corporation.	23/2/2017	17.29
5	16-17	Rehabilitation of existing networks in various blocks of Thiruvananthapuram sewerage scheme	02-11-17	3.84
6	16-17	Providing new network in the missing areas of the core city in Thiruvananthapuram	02-11-17	7.98
7	16-17	Laying transmission main and sewer networks in Block L (Edathara) -Collection and Conveyance system	02-11-17	25.00
8	17-18	Construction of Pumping station at Akkulam (Block K)	02-11-17	4.00
9	17-18	Supplying and laying 450mm DI K9 pumping main for a length of 1800m(Block K - Akkulam pumping station on Pulayanarkotta stilling chamber)	02-11-17	2.28
10	17-18	Supplying and laying Transmission main in Block K (Akkulam) to connect stilling chamber at Bypass junction to pumping station at Akkulam collection and conveyance system	02-11-17	7.00
11	17-18	Construction of Pumping station at Karimanal (Block J)	02-11-17	4.00
12	17-18	Supplying and laying 350mm DI K9 pumping main (Karimanal pump station to stilling chamber at Bypass junction)(Block J)	02-11-17	1.30
13	17-18	Laying Transmission main and sewer networks in Block J (Karimanal) - Collection & Conveyance system	02-11-17	15.02

14	17-18	Providing Sewer trunk from Kazhakootam area to Pumping station of I Block through the bank of Thettiyar Thodu - Collection & Conveyance system and pumping station, pumps and electrical installation, Pumping mains (Block I)	02-11-17	9.80
15	17-18	Providing new network in the missing areas of core city		9.95
16	17-18	Providing sewerage facility to newly constructed residential colony at Karimadom- Part II	22/2/2018	0.35
		TOTAL		130.69
		TOTAL - SEWERAGE		130.69
		GRAND TOTAL		1118.91

AMRUT- KWA- WATER SUPPLY & SEWERAGE WORKS
WORK COMPLETED DURING 2018-19

ULB wise No:	SAAP YEAR	NAME OF WORK	AS DATE	AS AMOUNT (in Crores)
TRIVANDRUM				
WATER SUPPLY SECTOR				
1	17-18	Replacement of the existing damaged pipe lines & Alteration of house connections of Thiruvananthapuram water supply scheme (Part of AS amount of Rs. 15 Cr)	13-11-17	2.64
		TOTAL		2.64
KOLLAM				
WATER SUPPLY SECTOR				
1	15-16	Replacement of contaminated AC pipe lines in Kollam Corporation - Laying distribution main from Pazhayattukuzhy OHSR to Ammannada Division in Kollam Coporation(250mm DI K9 pipe -2500m).	26/3/2016	1.37
		TOTAL		1.37
ALAPPUZHA				
WATER SUPPLY SECTOR				
1	15-16	Augmentation & Modernization of Water Supply Distribution System in Alappuzha Municipality (Phase-I) - (Part of AS amount of Rs. 33.90 Cr)	23-02-17	0.5
		TOTAL		0.50
THRISSUR				
WATER SUPPLY SECTOR				
1	15-16	Supply and installation of bulk flow water meters in transmission main and distribution system.	26/3/2016	1.00
		TOTAL		1.00
KOZHIKODE				

WATER SUPPLY SECTOR				
1	15-16	Rehabilitation of old pipes, valves, interconnections with existing lines and providing water meters (Part of AS amount of Rs.17.87 Cr)	23-02-17	1.03
2	16-17	Rehabilitation of existing old pipes, valves and interconnection with the existing lines (Phase II) (Part of AS amount of Rs. 14.635 Cr)	02-11-17	1.34
		TOTAL		2.37
		TOTAL - WATER SUPPLY		7.88
		SEWERAGE SECTOR		
TRIVANDRUM				
SEWERAGE SECTOR				
1	16-17	Rehabilitation of existing networks in various blocks of Thiruvananthapuram sewerage scheme (Part of AS amount of Rs. 3.84 Cr)	02-11-17	1.77
2	16-17	Providing new network in the missing areas of the core city in Thiruvananthapuram (Part of AS amount of Rs. 7.98 Cr)	02-11-17	1.95
3	17-18	Supplying and laying 350mm DI K9 pumping main (Karimanal pump station to stilling chamber at Bypass junction)(Block J)	02-11-17	1.30
4	17-18	Providing new network in the missing areas of core city (Part of AS amount of Rs. 9.98 Cr)	02-11-17	0.94
		TOTAL		5.96
		TOTAL - SEWERAGE		5.96
		GRAND TOTAL		13.84

KIIFB - Ongoing Works in the year 2018-19 - URBAN & RURAL

Sl No	District	Division	Name of Work	AS Amount in Lakhs	Benefitted Areas (Names of Local bodies)		Population		
					Urban	Rural	Total	Urban	Rural
1	Kollam	Project Division, Kollam	Augmentation of Water Supply Scheme to Kollam Corporation Phase –II	235	Kollam Corporation	Kottamkara Panchayath	458822	411366	47456
2	Ernakulam	Water Supply Division Kochi	Water supply Distribution strengthening of Varappuzha Panchayath	16.5		Varappuzha Panchayath	22514		22514

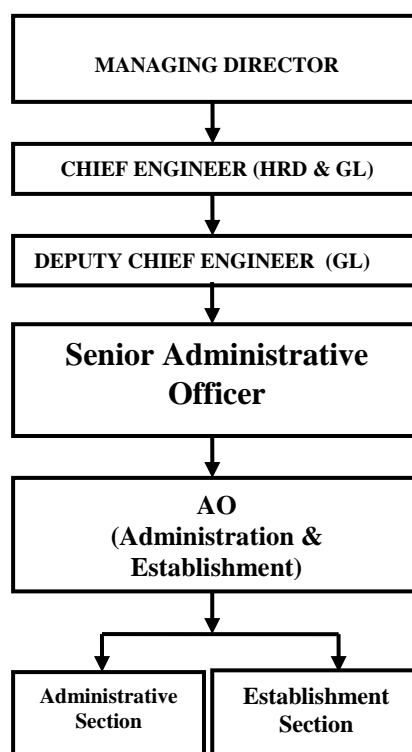
KIIFB - Completed Works in the year 2018-19 - URBAN & RURAL

Sl.No.	District	Division	Name of Work	AS Amount in Cr.	Benefitted Areas (Names of Local bodies)		Population		
					Urban	Rural	Total	Urban	Rural
1	Palakkad	Project Division, Palakkad	Augmentation of Urban Water Supply to Shornur Municipality and Vaniyamkulam Panchayath -	35	Shoranur Municipality	1) Vaniyamkulam Panchayath 2) Chalavara Panchayath (addl 30 lpcd)	131791	57923	73868
2	Kannur	Water Supply, Division Kannur	Augmentation of WSS to Dharmadam panchayath in Dharmadam Constituency	16.5		Dharmadam Panchayath	38812		38812
3	Kannur	Project Division Kannur	WSS to Kottayam Census Towns - Strengthening of Distribution system in Thalassery Taluk of Kannur District	12		Kottayam Grama Panchayath (Kannur)	22829		22829
4	Wayanad	Project Division Kozhikode	Distribution Line Extension from ongoing WSS to Mananthavady, Edavaka and Nallooradu	18		1) Mananthavady Panchayath 2) Edavaka Panchayath	96307		96307

			villages in Wayanad District						
5	Palakkad	Project Division Palakkad	WSS to Ambalappara Panchayath in Ottapalam Taluk, Palakkad District - Phase I	10		Ambalappara Panchayath	49762		49762
			Total	91.50					

CHAPTER V

Administrative Wing



Administrative Wing in Head Office is mainly dealing with Human Resource Management. The database regarding all categories of employees and officers (Ministerial & Technical) and its sanctioned post and promotion avenue as per special rules in force are kept almost up to date and tidy.

The normal functions include

- 1 Formulation and amendment of Act, Rules, Regulations, Duties & Responsibilities, Delegation of powers of Employees etc.
- 2 Effect changes in organizational structure as and when needed for efficient hierarchical management. This also include formation of new offices and abolition or merger of existing offices as resolved by the KWA Board.
- 3 Reporting vacancies of entry cadre posts to the Kerala PSC and identifying posts for in service promotion as per provisions in rules

- 4 Issuing appointment orders as per advice of PSC as well as By Transfer appointments as per Rules
- 5 Regularisation of appointments after obtaining Police Verification report and PSC Certificate Verification in respect of each candidate as per Government Orders in force.
- 6 Extension of period of probation in deserving cases and issuing orders of declaration of completion of probation with respect to designated posts.
- 7 Preparing seniority lists in each cadre, Higher Grade ratio promotions and non-cadre promotions to designated posts as per existing rules and Government Orders.
- 8 Effecting promotions in each cadre in two ways
 - A. According to seniority and eligibility as per rules to the superior posts of same cadre.
 - B. According to merit and ability ascertained by the Departmental Promotion Committee after scrutiny of Confidential Reports of candidates to the posts borne in Officer cadre
- 9 The most important tool in managerial control is the allocation of employees to different posts according to suitability of incumbent to particular post. Transfer and postings are done in a transparent manner strictly adhering to the general transfer norms issued by Government and public interest.
- 10 Communication with government on all policy matters affecting the institution is being dealt by Administrative Wing.
- 11 Preparation and submission of agenda before the KWA Board related with Administration and Establishment matters in respect of the firm and employees.
- 12 High Court cases, Human Right Commission cases, Industrial dispute cases and Right to Information Act etc. regarding establishment matters are dealt with by Administrative Wing.
- 13 The service and wage conditions of employees and officers are being managed by the authority through this establishment in accordance with Rules and Government Orders

Administrative Wing in Head Office Constituted under Accounts Officer (Administration & Establishment) includes four Parts

1. Administrative Matters of all category of employees in KWA

2. Establishment Section (Employees under Head Office)
3. Accounts Section (All Accounting procedure in HO)
4. Fair Copy Section

Administrative Wing comprise One Senior Superintendent, One Junior Superintendent and Twelve Clerks, Two Office Attendants

Establishment and Accounts Section comprise One Senior Superintendent, One Junior Superintendent and Six Clerks Two, Office Attendants

Fair Copy Section Comprise Two Fair Copy Superintendents, Six Typists and Inward & Despatch Section Comprise Four Clerks, Two Office Attendants.

CHAPTER VI

JICA Assisted Kerala Water Supply Project

The JICA assisted Kerala Water Supply Project (KWSP) being implemented by Kerala Water Authority comprises of following 5 schemes:

1. Augmentation and Rehabilitation of Water Supply Scheme to Thiruvananthapuram city Region.
2. Water Supply Scheme to Meenad and adjoining Panchayaths in Kollam District.
3. Water supply scheme to Cherthala Municipality and adjoining Panchayaths in Alappuzha district.
4. Augmentation and Rehabilitation of water Supply Scheme to Kozhikkode City and adjoining Panchayaths.
5. Water Supply Scheme to Pattuvam and adjoining Panchayaths in Kannur district.

Key features of the project

Scheme	WTP (MLD)	Transmission Main (km)		Distribution Main (km)	Service Reservoirs (No.)
		Raw Water	Treated Water		
TVM	74	0.30	41.32	388	11
Meenad	71	1.58	80.40	963	14
Cherthala	107	20.88	81.00	663	18
Kozhikkode	174	0.44	123.31	1853	20
Pattuvam	90	11.54	82.00	623	13
Total	516	34.74	408.03	4490	76

The project is nearing completion. The major components of all the five schemes under the project have been completed for production, transmission and storage of treated water viz, intake, raw water pumping/gravity mains, transmission systems and service reservoirs. The installed capacity of all the schemes is 516 MLD, for raw water pumping and production of treated water. The treatment plants are based on state-of-the- art design, using either lamella plate clarifier technology or sludge blanket clarifiers and equipped with automatic control and operational features. For raw water pumping from source to Water Treatment Plant, 34 km of pipe lines and for clear water transmission 408 km of pipe lines have been laid for the five schemes overall. There are 76 new Ground Level or Over Head Service reservoirs constructed for the five schemes with an overall capacity of 232.96 Million litres for the distribution of treated water.

The schemes are operational now except for the following

- (i). portion of distribution networks of Meenad and Kozhikode schemes
- (ii). rehabilitation works of existing water treatment plants of Thiruvananthapuram and
- (iii) a few components of Institutional Strengthening.

Out of 4490 km of distribution lines envisaged in the five schemes, about 3985.82 km has been laid and remaining to be laid is 504.18 km (Kozhikode:388 km and Meenad:116.18 km). The distribution networks envisaged for Cherthala and Pattuvam have been completely laid.

The project when fully completed is expected to benefit 41 lakh people. The revised estimated cost of the project is Rs. 2987.40 crores,

The Institutional Strengthening component of KWSP covers various aspects such as Central Control Unit, procurement of equipments, procurement of services, network & connectivity, servers & storage infrastructure. The work of Central Control Unit which comprise of a 10 storeyed building is completed and made functional. The main components pending completion under IS are ERP, Asset Management and installation of flow meters.

Project Progress

Sl. No.	Schemes	Planned Progress	Achieved Progress %
1	Thiruvananthapuram Scheme	100	96
2	Meenad Scheme	100	95.5
3	Cherthala Scheme	100	100
4	Kozhikkode Scheme	100	96
5	Pattuvam Scheme	100	100

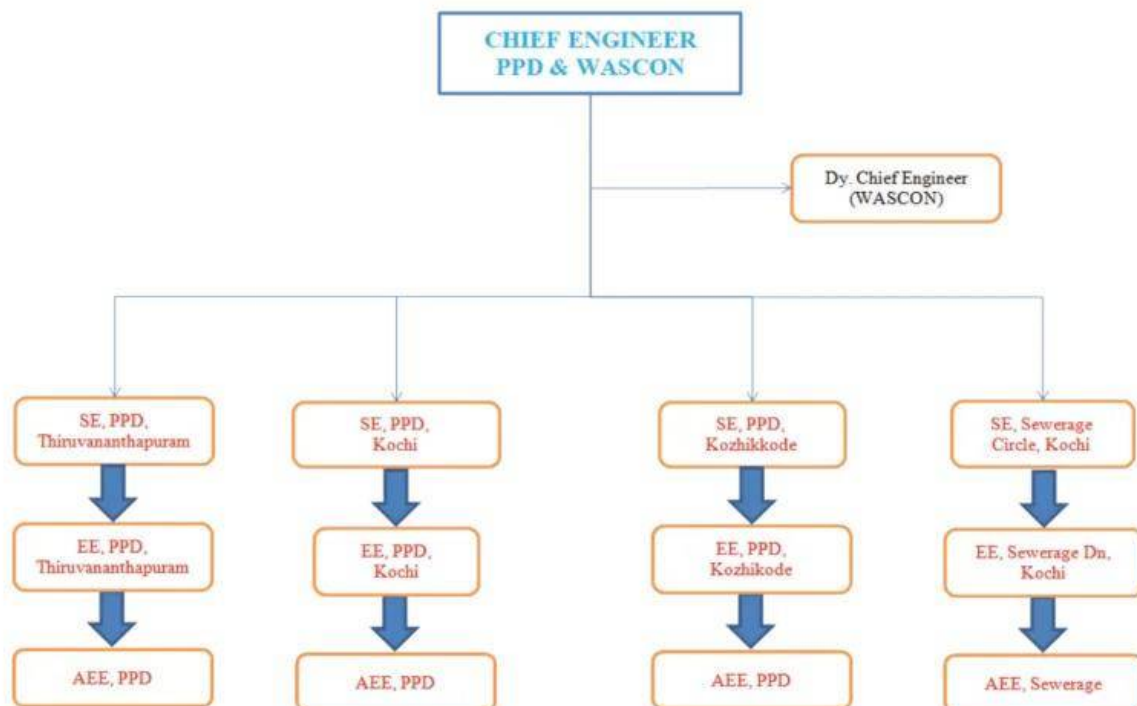
Physical progress achieved as on 31/03/2019

Trivandrum	I	Intake, Raw Water Pipeline and WTP	100%	Completed
	II	Treated Water Transmission Pipeline	100%	Completed
	III	Distribution Systems	Work Terminated and Contract closed	Contract terminated and rearranged as PIII –R1
	III-R1	Distribution Systems (Balance Work)	100%	Balance length under the scope has been covered by pipe laying works under other programmes.
	IV	Service Reservoirs	100%	Completed
	V	Rehabilitation Works of Existing System	85%	Work terminated and revoked the termination by the MD vide proceedings dated : 02/03/2019
Meenad	I	Intake, Raw Water Pipeline and WTP	100%	Completed
	II	Treated Water Transmission Pipeline	100%	Completed
	III	Distribution Systems	work terminated and Contract closed	Contract terminated and rearranged as PIII –R1
	III-R1	Distribution Systems Balance Works	43.15%	Terminated due to poor progress .Balance work retendered and arranged as new contract P3 RR1
	III-R1	Distribution Systems Balance Works	14%	Work in progress. Expected work to be completed by April 2020
	IV	Service Reservoirs	100%	Completed
Cherthala	I	Intake, Raw Water Pipeline and WTP	100%	Completed
	II	Treated Water Transmission Pipeline	100%	
	III	Distribution Systems	100%	
	IV	Service Reservoirs	100%	

Kozhikode	I	Intake, Raw Water Pipeline and WTP	100%	Completed
	IIA	Treated Water Transmission Pipeline	100%	Completed
	IIB	Treated Water Transmission Pipeline	100%	Completed
	III	Distribution Systems	work terminated	Contract terminated and rearranged as PIII –R1 & R2
	III-R1	Distribution Systems	73.40%	Work in progress. Expected work to be completed by December 2019
	III-R2	Distribution Systems	82.60%	Work in progress. Expected work to be completed by December 2019
	IV	Service Reservoirs	100%	Completed
	IV-R1	Service Reservoirs at Thalikulathur	100%	Completed
	IV-R2	Service Reservoirs at Kakkur	100%	Completed
	IV-R3	Service Reservoirs at Narikunni	100%	Completed
	V	Rehabilitation Works of Existing System	98%	All works completed except power allocation
Pattuvam	I	Intake, Raw Water Pipeline and WTP	100%	Completed
	II	Treated Water Transmission Pipeline	100%	Completed
	III	Distribution Systems	Work Terminated and Contract Closed	Contract terminated and rearranged as PIII –R1 , R5 & R6
	III-R1	Distribution Systems	100%	Completed
	III-R5	Distribution Systems	100%	Completed
	III-R6	Distribution Systems	100%	Completed
	IV	Service Reservoirs	100%	Completed

CHAPTER VII

PPD & WASCON



WASCON, the consultancy wing of Kerala Water Authority was setup as per GO(Rt.)45/2008/WRD dated 08/01/2008 with intention of providing Engineering Consultancy services for inhouse works and outside works. Since its inception, WASCON has taken up many design works as well as preparation of project reports for many Water Supply Schemes.

Later on Project Preparation and Development Unit was formed vide proceedings no. KWA/JB/E2(A)/18977/2015 of Managing Director dated 27-02-2016 by reorganizing WASCON to PPD & WASCON so as to take up preparation of well planned and well designed projects, after proper investigation and consultation, on a water shed basis.

The Unit is headed by a Chief Engineer and has 3 regional offices at Thiruvananthapuram, Kochi and Kozhikkode which are headed by Superintending Engineers. In addition, there are Camp offices in each district which is under the control of Assistant Engineer. Survey works are done by the Camp offices and engineering reports are prepared and submitted to the higher offices for approval.

List of works of PPD&WASCON during 2018-19

SL No	<u>CE's Office PPD&WASCON, Thiruvananthapuram</u>
1	CWSS to Chittur Thattamangalam municipality and Vadavannur panchayath-annual Plan - 2017-18 - vetting of 9.5LL OHSR at Pokunni, Vadavoor panchayath
2	NABARD - RWSS to Arakkuzha and Palakkuzha panchayaths Package I - vetting of 2LL OH tank at Kumbalathumala
3	NABARD - RWSS to Arakkuzha and Palakkuzha panchayaths Package I - vetting of 0.7 LL OH tank at Achakottimala
4	AMRUT 2015-16- Kannur WSS - laying gravity main from Mangattuparamba to Pallikunnu for Pallikunnu and Puzhathi villages - sleeve design for 500mm (OD) HDPE pipe for river crossing.
5	WSS to Amara in Thrikkodithanam Panchayath - vetting of 2LL OHSR
6	KIIFB - WRD 002-11- Special investment package - WSS to Mattanur and Iritty municipalities - Package II - vetting of 15LL OHSR at Kotheri
7	KIIFB - Augmentation of UWSS to Thodupuzha municipality in Idukki distict - Package II -vetting of 0.9LL GLSR at Uravappara and 6LL OHSR at Konnackamala
8	NRDWP - XX SLSSC 2014 (State Plan) - CWSS to Vandazhy, Kizhakkencherry, Vadakkancherry and Kannambra panchayath in Alathur Taluk - vetting of 24.5LL OHSR
9	NRDWP - XX SLSSC 2014 (State Plan) - CWSS to Vandazhy, Kizhakkencherry, Vadakkancherry and Kannambra panchayath in Alathur Taluk - vetting of 24.5MLD WTP
10	AMRUT 2016-17- vetting of 10LL OHSR at Thevara
11	Deposit work - WSS to Theviyarkunnu in Aryanad panchayath - vetting of 6m dia well and 1.5LL OHSR
12	KIIFB -Augmentation of UWSS to Thodupuzha municipality in Idukki distict - Package II - vetting of 15LL OHSR at Bangalamkunnu.
13	KIIFB - WSS to Koyilandy municipality and adjoining panchayaths - vetting of 17LL OHSR at Kottakunnu
14	AMRUT - Augmentation and modernization of water supply distribution system in Alappuzha municipality - vetting of 28LL OHSR at Allissery

15	Augmentation and Modernization of Water supply distribution system in Alappuzha municipality under KIIFB - vetting of 5 nos OHSRs- 16LL at Chudukadu, Chathanadu, Vadicadu, 12LL at Chandanakavu and 6LL Vazhicherry
16	State Plan - 16-17 - vetting of security watch tower.
17	AMRUT -construction of 10LL OHSR at Anappara with pumping system and pumping main from Chirror to Anappara- vetting of OHSR
18	AMRUT 2017-18, Augmentation of WSS to Pallakkad Municipality - Phase III Package I - vetting of 23.5 LL OHSR at Moothanthara
19	CWSS to Pallichal, Balarampuram and Vilavoorkal Panchayath - vetting of 4.3 L GLSR and 4 L OHSR at Pidaram, 8.7 LL OHSR at Poovada
20	AMRUT Project - SAAP - 2016-17 - Kochi Corporation - Cheranalloor Vadathodu - 15 LL OHSR and 2 LL Sump
21	NABARD -RIDF XXIII - CWSS to Mannur, Keralassery and Mankara panchayath in Palakkad district - vetting of 10 MLD WTP.
22	NABARD -RIDF XXIII - CWSS to Mannur, Keralassery and Mankara panchayath in Palakkad district - vetting of 11 LL OHSR and 2.6 LL Sump at Thazhathupura.
23	Deposit work of ST Development - Providing water connection to Post Metric Hostel, Mannanthala - Furnishing of mix and steel design - 25000 litres Sump.
24	KIIFB - Augmentation of WSS to Kollam Corporation, Phase I - Package IV - vetting of 100 MLD WTP at Vasoorchira
25	KIIFB-WSS to Mattanur and Iritty Municipality -Package I - vetting of Pumpset and surge analysis report
26	KIIFB-Augmentation of 24 mld WTP at Kallissery & Renovation of 33 mld WTP at Thiruvalla for Thiruvalla & Changanassery Municipalities & adjoining pts - Package I - Layout plan
27	UIDSSMT- Augmentation of Water Supply Scheme to Alappuzha municipality and adj pts - 1000mm(OD)HDPE raw water pumping main from intake well cum pump house at Kadapra to WTP at Karumadi - Longitudinal Section submitting
28	Design,construction, trial running, commissioning, operation and maintenance of 10 mld WTP in Vilapil Pt - Design approval.
29	Improvement of TSS-Sewerage scheme for Sreevaraham area - Preparation of design and DER through PPD

30	Supplying, Laying, 350mm DI K9 pumping main from Thettikulam booster pump house to Chemmaruthy and Ottoor O H tank - Request for design of Surge arrester - vetting
31	WSS to Erumeli pt-250mm DI K9-Clear water pumping main from WTP at MES junction to GLSR at Pallikunnu.
32	AMRUT-Improvement of Thiruvananthapuram WSS-75 mld Lamella Type WTP at Aruvikkara.
33	KIIFB-Augmentation of WSS to Kollam corporation-Phase II-Package II-construction of 20LL OHSR at Vasoorichira.
34	AMRUT-WSS to Guruvayur Municipality - 15 MLD WTP
35	KIIFB- WSS to Kasargod Municipality & Chemnad Panchayath-vetting of 55MLD WTP at Bovikkanam
36	AMRUT-Aug of WSS to Palakkad Municipality - 45 MLD WTP at Malapuzha
37	NABARD -RWSS to Arakuzha and Palakuzha - 5.5 MLD WTP in Arakuzha
38	WSS to Kinfra park at Kanjikode-Steel Bridge across Malampuzha River & across Canal at KSEB quarters
39	NABARD -WSS to Vilakkudy, Vettikavala and Melila Pts-Phase I-Package II - construction of 5.5 LL OHSR at Plant site, Manjamunkala and 10LL GLSR at Chiyode
40	CWSS to Parassala and adj villages and Marukil Maranallur villages -Package for Kanjiramkulam, Thirupuram villages.
41	AMRUT -Kannur WSS - Construction of 24LL OHSR at Pallikkunnu for Pallikkunnu and Puzhatti villages - Remarks on structural drawing and design.
42	AMRUT-WSS to Kannur corporation-construction of 14 lakhs litre capacity OHSR at Thottada - Structural drawings, design and soil investigation report.
43	WSS to Vijayapuram - construction of 50 mld WTP
44	AMRUT - Phase I - new OHSR, 10LL, at Pazhavangadi in Alappuzha District.
45	AMRUT-Aug & Modernisation of WS distribution system in Alapuzha Municipality - Phase I - Construction of 2LL OHSR and allied works at Kommady

46	NABARD - WSS to Ongalloor - Vallapuzha pt., Pattambi Taluk in Palakkad district - Design, construction of 10 mld WTP and 32 LL GLSR.
47	120 mld WTP at Neyyardam - Layout
48	Kasargod Development package for Kasargod District as per Dr.Prabhakaran Commission - Improvement to Uppala and adjoining villages - Design and drawings of RCC retaining wall and RR masonry retaining wall - for approval.
49	State Plan - Construction of office building near Aryanadu - Request for reinforcement design details

PPD Thiruvananthapuram Region Survey work

1	CWSS to Vamanapuram, Nellanadu and Manichal Grama Panchayath - Survey work of Production components - 43.84 Km
2	CWSS to Karakulam and Aruvikkara Panchayath - Survey work of Production Components - 32.95 Km
3	CWSS to Pulimath, Nagaroor and Karavaram Grama panchayath - Survey work of distribution components - 147.405 km
4	CWSS to Pallichal Panchayath - Survey work of distribution components - 95.13 km
5	CWSS to Aryanadu and Uzhamalakkal Grama panchayaths - Survey work of distribution components - 69.62 km
6	WSS to Airenalloor Village - Survey work of production and distribution network of Yeroor panchayath - 74.15Km
7	WSS to Kalluvathukkal, Parippally and Velinalloor (Part) Villages - Survey work of distribution network - 394.164 Km
8	CWSS to Enadimangalam, Ezhamkulam, Erathu and Kalanjoor(part) - Survey of production component and distribution Network 17.45 km
9	CWSS to Aranmula, Kulanada, Chennerkkara and Mezhuveli panchayaths - Survey of production components - 8 km
10	WSS to Seethathodu, Nilakkal, Plappally and Laha - Survey of production component and distribution network 60 km.
11	WSS to Cherukole Naranganam panchayaths - Survey of production components - 8 km

12	RWSS to Erattupetta and adjoining panchayaths - Survey work of Erattupetta Municipality, Teekoy, Poonjar, Melukavu panchayaths - 27 km.
13	RWSS to Erumeli panchayaths - Survey work of distribution network - 1.75 Km.

Detailed Engineering Report (DER)

1	Augmentation of WSS to Varkala Municipality and Edava, Elakamon, Chemmaruthy, Vettoor, Cherunniyoor, Manaboor, Ottoor, Navaikulam and Karavaram pts - DER of production components
2	CWSS to Pallickal Panchayath-DER of production component-Phase 1
3	CWSS to Aryanadu and Uzhamalakkal grama panchayaths-production component - Phase I
4	CWSS to Peringamala Panchayath-DER of production component-Phase I
5	Augmentation to Kollam corporation /WSS to Kottamkara pt- DER of distribution network phase II
6	WSS to Kottarakara Municipality and Neduvathoor Pt-DER of production components - Phase I
7	WSS to Mundakayam & Koruthodu Pt - DER of production component -Phase I
8	KIIFB-WSS to Ettumanoor-DER of Phase I & II benefitting Ettumanoor Municipality

PPD Kochi region

1	WSS to Zoo at Puthoor, Thrissur-Preparation of DER
2	WSS to Ollukkara zone in corporation of Thrissur - Hydraulic design of 3 mld WTP
3	WSS to Chelakkara, Panjal and Mulloorkkara-Survey and hydraulic design-25 km out of 45.00 km survey completed. Design is under preparation.
4	WSS to Kadalayikkulam-Survey and hydraulic design-Length of Survey 3.00km - Survey and design completed
5	WSS to Madakkathara GP ward no:8,12,13,14-Survey and hydraulic design - Survey completed
6	New project proposal for Kochi Corporation and adjoining LSGs in Ernakulum dist-Hydraulic design and preparation of DER- completed

7	Improvements to WSS to Muppathandam WTP-Survey, hydraulic design and structural design - Survey completed
8	Augmentation of UWSS to Chengannur Municipality and Mulakkuzha Panchayath of Alappuzha district - Design work of networks-Design completed.
9	WSS to Ala, Budhanoor, Pulivoor and Pandanadu of Alapuzha district-Design work of networks-Length of survey 300.00 km -Survey and design completed.

PPD Kozhikode Region

Survey work

1	26.50 kms of survey work in Kasargod district
2	534.876 kms of survey work of Kozhikode district
3	171.85 kms, 60 cents & 15098 m ² of survey work, 211.71kms of geotrack survey of Malappuram district.
4	101.786 kms of survey work, 1009.11 kms of geotrack survey and 431.50 cents of contour survey.

Preliminary Engineering Report (PER)

1	PER of WSS Vadakara region
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Detailed Engineering Report (DER)

1	Deign of production components of BSF Chekiad from the existing Service Reservoir at Niruvammal of Kozhikode district
2	Deign of production components of WSS to Malabar Medical College, Atholi from JICA of Kozhikode district
3	Design of production components of WSS to coastal area, Payyoli of Kozhikode district
4	Design of production components of WSS to MCPT of Malappuram district.
5	Design of Production components of WSS to Thanur and adj pts of Malappuram district
6	Dssign of production components of WSS to Thrikkalangode & Porur pts of Malappuram district.
7	Design of production components of WSS to Karimba & Kongad in Palakkad district

8	Design of production components of WSS to Vandazhy and adj.pts of Palakkad district.
9	Design of production components of WSS to Pallassana and adj pts of Palakkad district.
10	Design verification of production components of WSS to Kanjikode to IIT permanent campus at Kanjikode of Palakkad district
11	WSS to Kunnumel and adj pts of Kozhikode district-Distribution design
12	WSS to Mavoor and adjoining pts of Kozhikode district -Distribution design
13	WSS to Koyilandy and adj pts of Kozhikode district - Distribution design
14	Distribution network of Thurayur pt from Kaduvancherykunnu OHSR in Kozhikodu district - Distribution design.
15	Distribution network of Koyilandy municipality -Zone I, II ,III of Kozhikode district - Distribution design
16	WSS to Thannur and adj Panchayaths of Malappuram district- Distribution design.
17	WSS to Mannarkad& Thenkara pts of Palakkad district- Distribution design
18	WSS to Elapully, Nallepilley, Perumatty and Pattanchery pts of Palakkad district - Distribution design.
19	WSS to Koppam Vilayur pts of Palakkad district- Distribution design.

Vetting of design

1	Urban WSS to Mangatidam Zone 3 of Kannur district - vetting.
2	WSS to Eruvatti village in Pinarayi Pt of Kannur district -vetting
3	Design of distribution network of Eruvetty Panchayath of Kannur district-vetting
4	WSS to Mankara Grama Panchayath of Palakkad district -vetting
	<u>River mapping</u>
1	River mapping of Kadalundi river in Malappuram district
2	River mapping of Bharathapuzha river in Malappuram district.
3	River mapping of Thoothapuzha river in Malappuram district.
4	River mapping of Chaliyar river in Malappuram district.
5	River mapping of Kalpathy river in Palakkad district.

CHAPTER VIII

COMPUTERISATION AND IT-INITIATIVES (2018-2019)

During 2016 –2017 Kerala Water Authority brought in 4,00,000 more connections to Centralized Spot Billing System – e-Abacus. Achieving 93% of Consumer Population (ie more than 1960630 out of 21,00,000 Water Connections). Development and Integration of State Service Delivery Gateway (SSDG) project, formulated under the National e-Governance Plan (NeGP), is to fulfill the vision of providing easy and convenient services to the citizens through remote access primarily through Common Service Centers (CSCs), thereby enabling the State Portal by implementing the key components State Portal viz. SSDG, electronic Form (e-Forms), Application and Computing Infrastructure was completed.

KWA integrated 5 new services to SSDG Portal. Also Mobile apps for service delivery developed as a part of SSDG Project which is a major foot step in MGovernance. KWA revamped its website to up to date standard and cutting edge technology. KWA developed software for monitoring of consumer complaints which has a provision for consumers to register complaints online. The speciality of the system is that higher management can easily give immediate direction related to complaint redressal to the concerned official and they can involve if there is any delay in the process and can have a chat like discussion in each case separately. Kerala Water Authority integrated with SWIFT- Single Window Interface for Fast and Transparent clearance, an initiative by KSIDC to deliver fast services to entrepreneurs while starting a new industry. KWA bagged the following awards during 2016-17 for its achievements in e-Governance.

SKOCH Order of Merit National Award for e-Governance for implementation of Janamithra- The Consumer Redressal and Complaint Monitoring Software of KWA.

SKOCH Order of Merit National Award for e-Governance for implementation of LIMS-The Laboratory Information Management System.

SKOCH Order of Merit National Award for e-Governance for implementation of MARCH-HR BILL Monitoring Software of KWA.

SKOCH Order of Merit National Award for e-Governance for implementation of

O&M Bill Monitoring Software of KWA.

- **Enterprise Resource Planning (ERP), E-governance, GIS and information Management**

The main activities under this head are listed below

eAbacus-the Enterprise Billing Application having Online Transaction Processing System used for Consumer Management of Kerala Water Authority have been rolled out to almost all Subdivisions and currently holding a consumer population of 26 Lakhs Consumers. 29 Divisions, 74 Subdivisions and 135 Sections have been covered so far. 98 % Consumers of KWA is brought under the system. It is a remarkable mile stone. As a part of revamping the existing Billing Application, a URS has been prepared after collecting feedbacks, requirements from all levels of staffs from field staff up to Chief Engineers.

As part of ring fenced analysis of schemes, to assess the functioning of schemes, the scheme mapping facility to existing connections has been brought to the system. 98 % of connections were mapped to list of schemes. This enables the analysis of production vs distribution, quantum of losses in schemes, calculation of Non Revenue Loss, Break Even Analysis, Costing etc based on water supply schemes.

KWA implemented Quickpay facility which enables consumers to pay water charges with ease. This increased the number of customers paying online. KWA has invited EOI to incorporate more payment aggregators to its payment site which bring healthy competition in reducing gateway charges. 10 more banks, PayTM, BILLDESK etc has been selected as payment gateways. It is expected to onboard the 12 new gateways by the end of December2019. KWA decided to associate with BBPS of National Payment Corporation of India which enable customers to pay from all payment apps like UPI, google pay, Bank Apps etc. It is expected to bring more revenue and increase the cashless transactions. KWA has implemented Point of Sales (POS) machines at Revenue collection counters for collecting water charges through Debit / Credit cards in 100 locations. Balance locations will be also provided with POS machines shortly.

It has been decided to develop mobile applications for Meter reading and Billing of Consumers. This envisages more accurate billing with QR code based bills. Also capturing of location and Images of meter dials while capturing meter readings. The payment also can be collected using wallet system. This will bring a new perspective (Service at Door steps) in consumer services in KWA. In addition, KWA has developed many IT based applications for various functions. KWA is also planning to implement ERP shortly as part of initiative to computerize the functions.

CHAPTER –IX

FINANCIAL PERFORMANCE

9.1. Kerala Water Authority is a Service Sector organization and autonomous body of Government of Kerala, entrusted with supply of potable water in Kerala and collection and treatment of sewage. The main source of income of Kerala Water Authority is collection of water charges. From the formation of Kerala Water Authority, it has never earned any surplus Income and is continuously running at deficit. Due to the deficit, Water Authority is unable to pay the power charges, regular payment of operation and maintenance to the contractors, pay revision arrear of employees and commutation to the retired employees etc...

Kerala Water Authority is undertaking water supply schemes based on the budgetary allocation of Government of Kerala and Government of India. The major heads of Capital Receipts of Kerala water Authority comprises of the following:

a. Grant in Aid from Government of Kerala under the following heads

- i. State plan schemes
- ii. NABARD schemes
- iii. JICA(Now under State)
- iv. NRDWP(State Share)

b. Grant in Aid from Government of India (for NRDWP schemes)

In addition to the above Water Supply Schemes are also undertaken under Deposit Works, KIIFB, AMRUT etc.

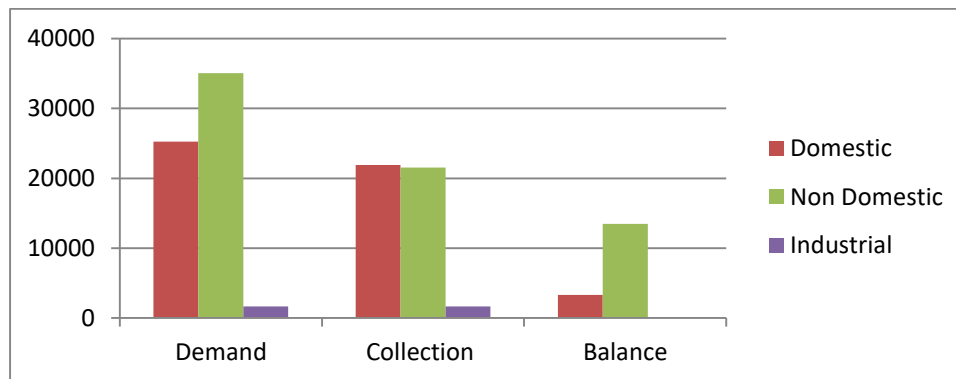
9.2. PROVISIONAL INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2019

		Schedule Reference	CURRENT YEAR (Amount in ₹)	PREVIOUS YEAR (Amount in ₹)
<u>INCOME</u>				
1	Operating Income	L		
	a. Consumers	M	6,53,29,22,793	6,22,32,82,041
	b. Others		9,18,01,376	3,20,16,667
			6,62,47,24,169	6,25,52,98,708
2	Grants & Subventions - Government of Kerala		3,59,02,31,800	2,80,97,47,800
3	O&M Grant from Government of India		-	3,65,69,000
4	Interest Income	N	25,48,90,312	27,01,78,211
5	Other Non-Operative Income	O	1,82,05,23,545	2,28,42,41,869
	Total Income		12,29,03,69,826	11,65,60,35,588
<u>EXPENDITURE</u>				
1	Operating & Maintenance Expenses	P	4,08,48,94,725	3,70,25,03,084
	Less: Current year Power charges absorbed by GoK		1,67,13,00,000	-
	Net Operating & Maintenance Expenses		2,41,35,94,725	3,70,25,03,084
2	Payment & Provision to Employees	Q	8,95,04,76,923	8,23,54,03,725
3	Office expenses	R	20,13,68,066	17,88,36,224
4	Travelling & Conveyance Expenses		5,32,91,536	4,98,77,141
5	Administrative Expenses	S	2,02,49,162	1,51,39,376
6	Debtors written off		19,79,80,770	93,98,85,343
6	Assets and losses written off	T	-	-
7	Provision for Doubtful Debts	U	-	-
8	Interest on	V		
	a. Secured Loans		5,27,70,877	6,14,13,690
	b. Government of Kerala Loans		2,52,72,96,000	2,52,80,18,000
	c. GPF		31,07,14,000	22,95,09,175
			2,89,07,80,877	2,81,89,40,865
9	Depreciation	E	1,37,55,16,747	1,27,42,55,277
	Total Expenditure		16,10,32,58,806	17,21,48,41,035
10	Transferred to Capital Work-In-Progress	W	37,97,40,700	61,44,68,967
	Excess of Income over Expenditure		15,72,35,18,106	16,60,03,72,068
11	Prior Period Adjustments	X	(3,43,31,48,280)	(4,94,43,36,480)
	Excess of Income over Expenditure after prior period adjustments		9,69,22,96,637	2,46,85,414
			6,25,91,48,357	(4,91,96,51,066)

9.3. REVENUE MONITORING CELL

Consolidated statement showing the Demand, Collection and Balance of water charges from the domestic, non-domestic and industrial consumers for the year 2018-19.

Catagory	Demand Amount in Lakhs	Collection Amount in Lakhs	Balance Amount in Lakhs
Domestic	25226.92	21895.87	3331.05
Non Domestic	35051.47	21551.63	13499.84
Industrial	1686.76	1660.8	25.96
Total	61965.15	45108.3	16856.85



Arrear of Revenue 2018-19

2018-19	Water Charge arrears (in lakhs)
Arrear at the beginning of the year	99336.61
Arrear at the end of the year	116651.38

Collection details of Local Bodies 2018-19

Local Bodies	2018-19 (Amount in Lakhs)
Grama Panchayath	7516.98
Municipality	1200.55
Corporation	711.75

LSGD's Amount Received from the GOK	8860.00
TOTAL	18289.28

Local Bodies	Total No. of Street Taps as on 31/03/2019
Panchayath	153993
Municipality	31209
Corporation	19239
TOTAL	204441

Written off/Waived Amount

Period	Written off/Waived Amount (in Rupees)
2018-19	9,76,146,856

Connection Provided during the Year 2018-19

Category	Connection provided
Domestic	161711
Non Domestic	13980
Industrial	162
Total	175853

Total No. of Water Connection as on 31.03.2019

Category	Numbers
Domestic	2275696
Non Domestic	162414
Industrial	1959
Total	2440069

Total numbers of sewerage connections - 53806 nos

- (a) A Special revenue adalath conducted in P H Sub Division Chavara, Kollam in February 2019. Total no. of complaints received 1347, settled 826 complaints and amount remitted Rs.3972917/-

- (b) In order to increase the revenue collection and for clearing the arrears, steps are taken to disconnect the water connection of all major defaulters and revenue recovery proceeding initiated through Revenue Department
- (c) All sub divisions of Kerala Water Authority are registered under new Revenue Recovery Portal of Government of Kerala and initiated Revenue Recovery proceedings.
- (d) State level revenue meeting conducted from Managing Director office to review the progress of revenue collection. Revenue Task Force meeting conducted in Circle and division level in every months and necessary directions and guide lines given in section/Sub division officers.
- (e) Blue Brigade is currently in operation to address pipe fractures very quickly. The Government has allocated Rs 280 lakh from the State Plan Fund in 2018 for the implementation of the Leak Detection and Surveyance Squad, Anti Water Theft Squad and Blue Brigade. Subordinate Offices have been instructed to implement the extension of the Blue Brigade system.
- (f) The Anti theft squad in each division office are to identify the water theft and the loss of revenue due to unknown leaks and to find out any theft or unauthorized activities

Chapter-X Establishment

Head Office	1
Regional Office	3
PPD & WASCON	1
Circle Offices	16
Division Offices	48
Sub Division Offices	104
Section Offices	245
TOTAL	

DETAILS OF REGIONAL OFFICES , CIRCLE OFFICES AND DIVISION OFFICES 2018-19

SI No.	NAME OF OFFICES	OFFICE TYPE		
1	CE, CENTRALREGION, KOCHI	REGIONAL OFFICES		
2	CE, NORTHERN REGION, KOZHIKODE			
3	CE, SOUTHERN REGION, TRIVANDRUM			
4	CE, WASCON, TRIVANDRUM			
SI No.	NAME OF OFFICES	OFFICE TYPE	DISTRICT	PARENT OFFICE
1	PPD REGIONAL OFFICE, TRIVANDRUM	PPD REGIONAL OFFICES	TRIVANDRUM	CE, WASCON, TRIVANDRUM
2	PPD REGIONAL OFFICE, KOCHI		ERNAKULAM	CE, WASCON, TRIVANDRUM
3	PPD REGIONAL OFFICE, KOZHIKODE		KOZHIKODE	CE, WASCON, TRIVANDRUM
SI No.	NAME OF OFFICES	OFFICE TYPE	DISTRICT	PARENT OFFICE
1	JNNURM PROJ CIRCLE KOCHI	CIRCLE OFFICE	ERNAKULAM	CE, CENTRALREGION, KOCHI
2	SRI NETTOOR	CIRCLE OFFICE	ERNAKULAM	CE, CENTRALREGION, KOCHI
3	P H CIRCLE KOCHI	CIRCLE OFFICE	ERNAKULAM	CE, CENTRALREGION, KOCHI
4	P H CIRCLE MUVATUPUZHA	CIRCLE OFFICE	ERNAKULAM	CE, CENTRALREGION, KOCHI
5	P H CIRCLE THRISSUR	CIRCLE OFFICE	THRISSUR	CE, CENTRALREGION, KOCHI

6	PH CIRCLE ALAPPUZHA	CIRCLE OFFICE	ALAPPUZHA	CE, CENTRALREGION, KOCHI
7	P H CIRCLE KANNUR	CIRCLE OFFICE	KANNUR	CE, NORTHERN REGION, KOZHIKODE
8	P H CIRCLE KOZHIKODE	CIRCLE OFFICE	KOZHIKODE	CE, NORTHERN REGION, KOZHIKODE
9	P H CIRCLE MALAPPURAM	CIRCLE OFFICE	MALAPPURAM	CE, NORTHERN REGION, KOZHIKODE
10	P H CIRCLE PALAKAD	CIRCLE OFFICE	PALAKKAD	CE, NORTHERN REGION, KOZHIKODE
11	JICA PROJECT CIRCLE TRIVANDRUM	CIRCLE OFFICE	TRIVANDRUM	CE, SOUTHERN REGION, TRIVANDRUM
12	JNNURM PROJ CIRCLE TRIVANDRUM	CIRCLE OFFICE	TRIVANDRUM	CE, SOUTHERN REGION, TRIVANDRUM
13	P H CIRCLE KOLLAM	CIRCLE OFFICE	KOLLAM	CE, SOUTHERN REGION, TRIVANDRUM
14	P H CIRCLE KOTTAYAM	CIRCLE OFFICE	KOTTAYAM	CE, SOUTHERN REGION, TRIVANDRUM
15	P H CIRCLE TRIVANDRUM	CIRCLE OFFICE	TRIVANDRUM	CE, SOUTHERN REGION, TRIVANDRUM
16	P H CIRCLE THIRUVALLA	CIRCLE OFFICE	PATHANAMTHITTA	CE, SOUTHERN REGION, TRIVANDRUM
SI No.	NAME OF OFFICES	OFFICE TYPE	DISTRICT	PARENT OFFICE
1	P H DIVISION PATHANAMTHITTA	DIVISION OFFICE	PATHANAMTHITTA	P H CIRCLE THIRUVALLA
2	P H DIVISION THIRUVALLA	DIVISION OFFICE	PATHANAMTHITTA	P H CIRCLE THIRUVALLA
3	PROJECT DIVISION ADOOR	DIVISION OFFICE	PATHANAMTHITTA	P H CIRCLE THIRUVALLA
4	PROJECT DIVISION KANNUR	DIVISION OFFICE	KANNUR	P H CIRCLE KANNUR
5	PROJECT DIVISION MATTANNUR	DIVISION OFFICE	KANNUR	P H CIRCLE KANNUR
6	W S DIVISION KANNUR	DIVISION OFFICE	KANNUR	P H CIRCLE KANNUR
7	WS DIVISION THALIPARAMBU	DIVISION OFFICE	KANNUR	P H CIRCLE KANNUR
8	P H DIVISION KASARGOD	DIVISION OFFICE	KASARAGOD	P H CIRCLE KANNUR
9	P H DIVISION ALUVA	DIVISION OFFICE	ERNAKULAM	P H CIRCLE KOCHI
10	P H DIVISION KOCHI	DIVISION OFFICE	ERNAKULAM	P H CIRCLE KOCHI
11	PROJECT DIVISION PERUMBAVUR	DIVISION OFFICE	ERNAKULAM	P H CIRCLE KOCHI
12	PROJECT DIVISION PIRAVOM	DIVISION OFFICE	ERNAKULAM	P H CIRCLE KOCHI
13	WS DIVISION KOCHI	DIVISION OFFICE	ERNAKULAM	P H CIRCLE KOCHI

14	P H DIVISION KOLLAM	DIVISION OFFICE	KOLLAM	P H CIRCLE KOLLAM
15	P H DIVISION KOTTARAKKARA	DIVISION OFFICE	KOLLAM	P H CIRCLE KOLLAM
16	PROJECT DIVISION KOLLAM	DIVISION OFFICE	KOLLAM	P H CIRCLE KOLLAM
17	P H DIVISION KADUTHURUTHY	DIVISION OFFICE	KOTTAYAM	P H CIRCLE KOTTAYAM
18	P H DIVISION KOTTAYAM	DIVISION OFFICE	KOTTAYAM	P H CIRCLE KOTTAYAM
19	PROJECT DIVISION KOTTAYAM	DIVISION OFFICE	KOTTAYAM	P H CIRCLE KOTTAYAM
20	KSUDP PROJECT DIVISION, KOZHIKODE	DIVISION OFFICE	KOZHIKODE	P H CIRCLE KOZHIKODE
21	P H DIVISION KOZHIKODE	DIVISION OFFICE	KOZHIKODE	P H CIRCLE KOZHIKODE
22	P H DIVISION VADAKARA	DIVISION OFFICE	KOZHIKODE	P H CIRCLE KOZHIKODE
23	PROJECT DIVISION KOZHIKODE	DIVISION OFFICE	KOZHIKODE	P H CIRCLE KOZHIKODE
24	P H DIVISION SULTHANBATHERY	DIVISION OFFICE	WAYANAD	P H CIRCLE KOZHIKODE
25	P H DIVISION EDAPPAL	DIVISION OFFICE	MALAPPURAM	P H CIRCLE MALAPPURAM
26	P H DIVISION MALAPURAM	DIVISION OFFICE	MALAPPURAM	P H CIRCLE MALAPPURAM
27	PROJECT DIVISION MALAPURAM	DIVISION OFFICE	MALAPPURAM	P H CIRCLE MALAPPURAM
28	P H DIVISION MUVATUPUZHA	DIVISION OFFICE	ERNAKULAM	P H CIRCLE MUVATUPUZHA
29	P H DIVISION THODUPUZHA	DIVISION OFFICE	IDUKKI	P H CIRCLE MUVATUPUZHA
30	PROJECT DIVISION KATTAPANA	DIVISION OFFICE	IDUKKI	P H CIRCLE MUVATUPUZHA
31	P H DIVISION PALAKKAD	DIVISION OFFICE	PALAKKAD	P H CIRCLE PALAKAD
32	P H DIVISION SHORNUR	DIVISION OFFICE	PALAKKAD	P H CIRCLE PALAKAD
33	W S PROJECT DIVISION PALAKKAD	DIVISION OFFICE	PALAKKAD	P H CIRCLE PALAKAD
34	P H DIVISION IRINJALAKUDA	DIVISION OFFICE	THRISSUR	P H CIRCLE THRISSUR
35	P H DIVISION THRISSUR	DIVISION OFFICE	THRISSUR	P H CIRCLE THRISSUR
36	PROJECT DIVISION NATTIKA	DIVISION OFFICE	THRISSUR	P H CIRCLE THRISSUR
37	H W DIVISION ARUVIKARA	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM
38	P H DIVISION (NORTH) TRIVANDRUM	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM

39	P H DIVISION SOUTH TRIVANDRUM	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM
40	PROJECT DIVISION TRIVANDRUM	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM
41	SEWERAGE DIVISION TRIVANDRUM	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM
42	W S DIVISION ATTINGAL	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM
43	W S DIVISION NEYYATINKARA	DIVISION OFFICE	TRIVANDRUM	P H CIRCLE TRIVANDRUM
44	P H DIVISION ALAPUZHA	DIVISION OFFICE	ALAPPUZHA	PH CIRCLE ALAPPUZHA
45	UIDSSMT PROJECT DIVISION ALAPPUZHA	DIVISION OFFICE	ALAPPUZHA	PH CIRCLE ALAPPUZHA
46	QUALITY CONTROL DIVISION KOCHI	DIVISION OFFICE	ERNAKULAM	SRI NETTOOR
47	QUALITY CONTROL DIVISION KOZHIKODE	DIVISION OFFICE	KOZHIKODE	SRI NETTOOR
48	QUALITY CONTROL DIVISION TRIVANDRUM	DIVISION OFFICE	TRIVANDRUM	SRI NETTOOR

11. Number of Promotions

a.	Plumbing Inspector to Senior Plumbing Inspector	:	3 Nos
b.	Plumber to Plumbing Inspector	:	9 Nos
c.	Lower Division Clerk to Upper Division Clerk	:	25 Nos
d.	Senior Grade Driver to Selection Grade Driver	:	1 No.
e.	Driver Grade 1 to Senior Grade Driver	:	3 Nos
f.	Driver Grade II to Driver Grade I	:	4 Nos
g.	D'man Grade II to D'man Grade-I	:	68 Nos
h.	Overseer Grade-III to D'man Grade-II	:	16 Nos
i.	Meter Reader to Meter Inspector	:	8 Nos
j.	Draughtsman Grade I to Assistant Engineer	:	57 Nos
k.	Operator to Head Operator	:	107 Nos
l.	Last Grade Servants to Lower Division typist	:	2 Nos
m.	Internal Auditor to Senior Accounts Officer	:	1 No.

n.	Accounts Officer to Internal Auditor	:	2 Nos
o.	Senior Superintendent /Revenue Officer to Accounts Officer	:	6 Nos
p.	Junior Superintendent to Divisional Accounts Officer	:	7 Nos
q.	Junior Superintendent / Divisional Accounts Officer to Senior Superintendent/ Revenue Officer	:	13 Nos
r.	Head Clerk to Junior Superintendent	:	35 Nos
s.	Assistant Engineer to Assistant Executive Engineer	:	25 Nos
t	Deputy Accounts Manager to Accounts Manager	:	1 Nos
u.	Assistant Executive Engineer to Executive Engineer	:	22 Nos

III. Appointment in various cadres by Kerala Public Service Commission

1.	Lascar	:	68 Nos
2.	Legal Assistant	:	1 No.
3.	D'man Grade.II	:	40 Nos
4.	D'man Grade.I	:	51 Nos
5.	Assistant Engineer	:	25 Nos
6.	Deputy Accounts manager	:	1 Nos
7.	Operator	:	333 Nos
8.	L D Typist	:	2 Nos.
9.	Divisional Accounts Officer	:	5 Nos
10.	LDC	:	63 Nos
11.	Confidential Assistant	:	5 Nos
12.	Driver	:	4 Nos

1	Total employee strength of Kerala Water Authority	6986 Nos
2	No. of employees working on contract basis	09 Nos
3	Dismissals during the year	Nil
4	Disciplinary proceedings against employees	29 Nos
5	No.of Vigilance Committee conducted 2018-19	11 Nos

Retirement during the year 2018-2019.

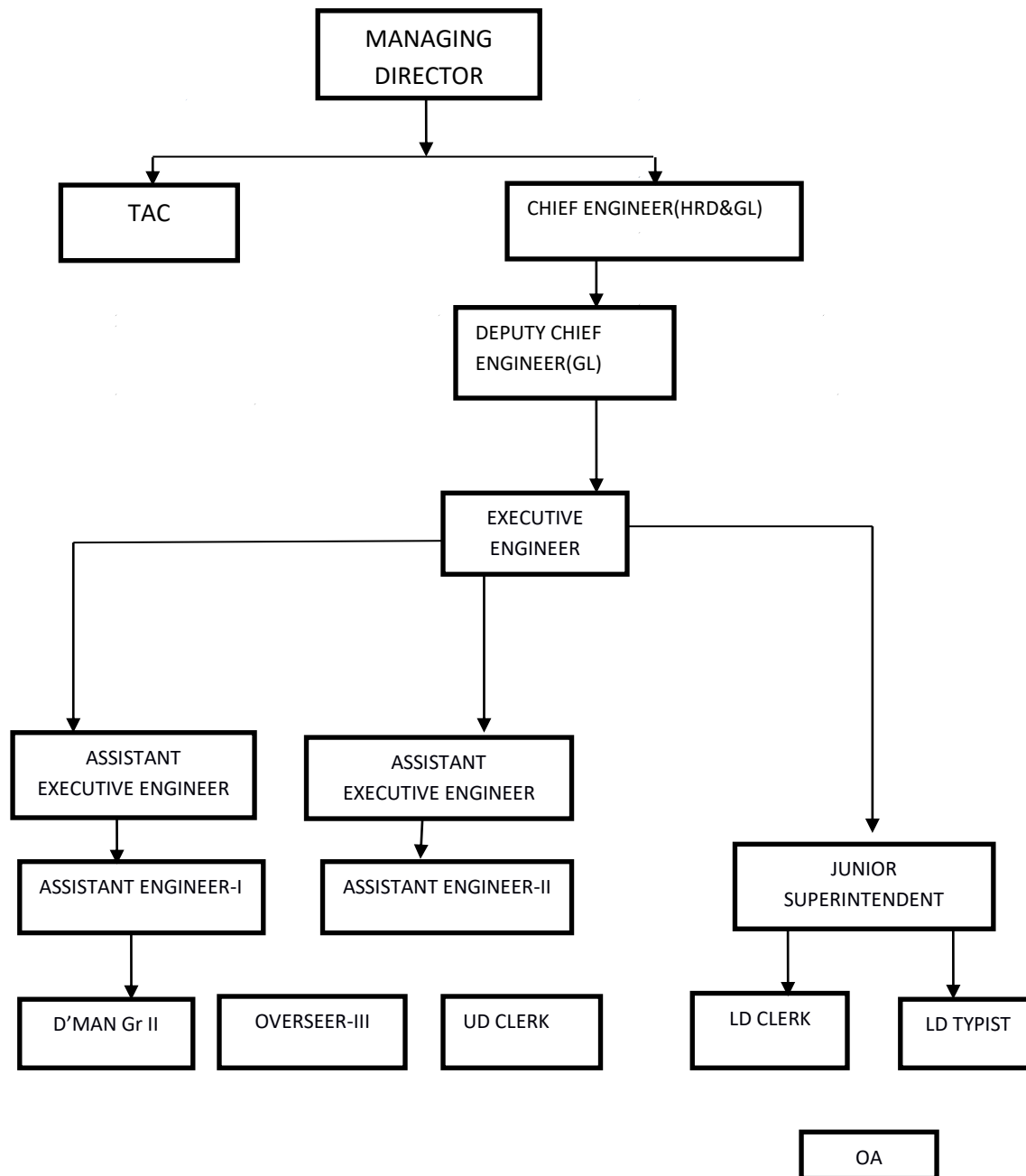
a.	Chief Engineer	:	1 Nos
b.	Superintending Engineer	:	2 No.
c.	Head Clerk	:	1 Nos
d.	Head Operator	:	82 Nos
e.	Junior Superintendent	:	13 Nos.
f.	Driver	:	6 Nos
g.	Fitter	:	3 Nos
h.	Plumbing Inspector	:	6 Nos
i.	D'man Grade.I	:	8 Nos
J.	Surveyor	:	3 Nos
k.	Assistant Executive Engineer	:	7 Nos
l.	Executive Engineer	:	14 Nos
m.	Assistant Engineer	:	24 Nos
n.	Accounts Officer	:	4 No.
o.	Internal Auditor	:	1No.
p.	Senior Superintendent	:	3 Nos
q.	Meter Reader	:	14 Nos
r.	Head Surveyor	:	4 Nos
s.	Operator	:	23 Nos
t.	Office Attendant	:	21 No.
u.	Typist	:	5 Nos.
v.	Lower Division Clerk	:	3 Nos
w.	Divisional Accounts Officer	:	9 Nos
x.	Watchman	:	4 Nos
y.	Upper Division Clerk	:	15 Nos

VI. Post Created/Abolished during the year - NIL

Chapter-XI

TRAINING ACTIVITIES

11.1 ORGANISATIONAL CHART OF TRAINING CENTRE



11.2 . Review of Training Activities during 2018-2019

a. Details of Inhouse trainings, Workshops, seminars, external Trainings and MTech programs conducted during 2018-2019 are shown in Annexure 1 (i.e., from Tables 1 to 7)

A total of 2663 KWA officials were trained in the inhouse training programmes during 2018-2019 as per Table 1 & 2.. Also 2 work shops/Seminars were conducted participating 137 employees during the year (Table 3). During the year, 4 persons were given training through the CPHEEO sponsored refresher courses at various states. (Details attached in table 4). 55 Officers were nominated for attending the trainings conducted by external agencies outside the state as detailed in Table 5. We have also sent 66 officers for attending programs conducted by other agencies within the state as detailed in Table 6. Also 2 officers were deputed for doing M. Tech program. Thus in total 2799 employees were given training through 110 programmes.

b. Financial Performance

The plan fund available for Training, Quality Control, Research and Development was Rs.270 lakhs as per the budget provision 2018-2019. The total expenditure (during 2018-19) incurred up to March 2019 for training activities is Rs. 54,60,573/-. This is excluding the TA and DA paid for outside trainings and inhouse trainings which were disbursed from the respective offices to which the participants belong. This would come to approximately Rs. 50 lakhs, which can be booked under the Training head 3461. Thus the total expenditure for training activities was Rs. 105 lakhs approximately. Including the Reimbursement claim of Rs. 62,800/- for M. Tech tuition fees and Exam fees during the year 2018-19 the expenditure incurred is Rs. 106 lakhs. Apart from this, the expenditure incurred in connection with PLE was Rs. 83,481/-. Thus the total expenditure incurred is Rs. 107 lakhs.

During the last year, we have generated an income of Rs. 12,96,750/-from external agencies both private and Government and as rent for Training halls and hostel rooms. An amount of Rs. 1,80,200/- which is pending as arrears during 2016-17 from ASAP mission is not received. We have addressed them so many times and reminded for clearing the dues at the earliest. But no response has received till date.

ANNEXURE -1

Table 1. Details of in house trainings conducted as per Calender 2018-2019					
Sl. No.	Title of Course	No of Batches proposed	No of Batches conducted	No.of Participants proposed	No. of participants attended
1	Training on Computer Awareness - MS office based on KWA requirements	4	3	120	95
2	Training on Orientation to D'man	1	1	30	34
3	Computer aided design of Pipeline network-Training on - Epanet & Sewer Network Design	1	2	30	50
4	Induction Level Training to Overseers/D'man	3	3	90	103
5	Training on Networking and Trouble shooting	1	1	25	25
6	Training on water Supply Act, Regulations, Connection Rules and Revenue Management	2	5	70	187
7	Training on Stress Management	1	1	35	39
8	Training on e-Abacus	4	1	120	29
9	Training on Material Management and Purchase Rules	1	1	35	22
10	Training on Team Building and Interpersonal relationship	1	1	30	35
11	Training on Feasibility Study and Preparation of Project Report	1	1	30	34
12	Training on Design and selection of Pumpsets	2	1	60	42
13	Training on O & M of Sewerage Systems	1	1	40	31

14	Tenders and Contract- Tendering Procedures	1	1	35	37
15	CPHEEO sponsored Total Quality Management	2	2	60	29
16	Water Transmission and Distribution Engineering	1	1	30	26
17	Training for Head Operators with Supervisory Charges	3	2	120	56
18	Estimation with DSR and PRICE	8	7	240	198
19	Workshop on Energy Conservation and savings in Pump Houses of TCC Aluva	5	1	125	36
20	Training on PRICE Software for Assistant Executive Engineers	3	1	90	27
21	Training on Induction Level Training to Operators	8	9	320	333
22	Training on Induction Level Training to Meter Readers	2	2	70	43
23	Training on e-Tendering	1	2	30	61
24	Training on Operation and Maintenance of Pumps & Motors	2	1	60	39
25	Training on NRW and Leak Detection Management	2	1	60	23
26	Training on Improving Revenue Best Practices	1	1	30	34
27	Training on water Treatment Plant Operation	1	1	35	35
28	Training on Measurement and Preparation of Bills	1	1	35	26

29	Water Quality Monitoring	1	1	30	41
30	Training of Handling of Chlorine and using of Breathing Apparatus	16	3	400	102
31	Workshop on Energy Conservation and savings in Pump Houses of TCC Aluva	5	1	125	31
32	Tally Accounting Software System	2	2	60	57
33	Training on Right to Information	1	1	30	36
34	Training on Bill Audit	1	1	35	39
35	Induction Level Training to LD Clerks	1	2	30	56
36	Training on Bharana Bhasha Mathrubhasha	1	1	30	33
37	Refresher to Last Grade Servants	1	1	25	41
38	Training on GST	1	1	30	41
39	Training on KSR	1	1	1	43
	Total		70		2249

Table 2. Training Outside Calender 2018-2019

Sl .No	Name of Training	No of Batches conducted	Venue	Duration in days	No of Participants attended
1	Training on attendance Management system	1	CWEd	1	29
2	Training on Geographical Information System	1	CWEd	1	29
3	Training on Internal Audit	1	CWEd	1	32

4	Training on Laboratory Accreditation and Internal Audit quality	1	CWEd	4	16
5	Training on Plumbing	2	CWEd	1	59
6	Training on Plumbing	1	Govt. Guest House Ernakulam	1	65
7	Training on Material Management Software	1	CCU Building, Auditorium , Thiruvananthapuram	1	115
8	Training on Digital Document Filing System	1	CWEd	2	39
	Total	9			384

Table 3. Details of Workshops/Seminars

Sl. No	Name of Workshop	No of Batches	Venue	Duration in days	No of Participants
1	Meeting on Modification of NIT	2	CWEd	2	93
2	Consultation Meeting on Rebuild kerala Initiative	1	CWEd	1	44
	Total	3			137

Table 4. CPHEEO sponsored Outside state trainings

Sl. No	Name of Course	Conducted by	No of Officers sponsored		
1	Computer Aided Design of Pipe lines and pipe network for water supply of sewerage systems	VNIT, Nagpur	2		
2	Water Treatment Plant Design	VNIT, Nagpur	2		
	Total		4		

Table 5. Outside State Trainings By Various External Agencies

Sl.No	Name of Course	Conducted by	No of officers sponsored		
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1	Water Transmission and Distribution Engineering	Fluid control Research Institute, Palakkad	9		
2	Global Technology challenge for Identifying and promoting suitable technology for cleaning of sewers and septic tank with the object of eliminating need for human entry	CPHEEO & NIUA, Delhi	1		
3	Continuing Professional Development programme on IT enabled application in Water Supply and sewerage Project	ESCI, Hyderabad	3		
4	Compatibility of admixtures with different types of cements in different concrete Mixes.	NCB, Hyderabad	4		
5	Course on Water Re-use	Singapore Water Academy	2		
6	Modern Safety Practices	HMG Group, Mumbai	3		
7	International Water conference	Aqua foundation , Habitat Centre, New Delhi	2		
8	Workshop on Auditing standards	ICAI, Chennai	1		
9	Clear Solution to clean Water Recycling	Exhibition Centre, Mumbai	2		
10	Workshop on Construction Management and Civil Contract Management	HMG group, Kolkata	5		

11	Complete program on ETP/STP Design, Operation and Maintenance of Water Reuse Recycling and zero liquid discharge	EA Water, Hotel Ramada, Bangalore	6		
12	visit to "24x7" Coimbatore Water Supply Scheme	Coimbatore	15		
13	Two day workshop on Grey Water Management & Arsenic & Fluoride Remediation	IIT Madras, Research Park, IIT, Chennai	2		
	Total		55		

Table 6. Inside State Trainings/Workshops/Seminar by External Agencies

Sl. No	Name of course	Conducted by	No of Engineers Sponsored		
1	Intensive Training Programme on Energy efficiency for Energy Managers/ engineers in public sector undertaking	Energy Management Centre, Trivandrum	2		
2	File Management System	C-DIT Thiruvananthapuram	17		
3	Workshop on Special Performance Audit by LSGD	LSGD, Trivandrum	1		
4	National Seminar on Contract Management Dispute Resolution	Mascot Hotel, Trivandrum	6		
5	Workshop on Information Security	CDAC, Technopark, Trivandrum	2		
6	Internal Cyber Security Briefing Coccon	Grand Hyatt Hotel, Bolgatty, Kochi	2		
7	Advanced Ubuntu system Administration and Security	KSITM, ICFOSS, Technopark, Trivandrum	7		
8	Water and waste Water Treatment Technologies	CWRDM, Kunnammangalam	6		

9	Workshop on Water Quality and surveillance Program	CCDU, Trivandrum	5		
10	Workshop on Train the Trainer	Institute of Labour Management, Hotel Apollo Dimora, Trivandrum	2		
11	CM's Web Portal Hands on Training for Nodal officers of Field Departments	HITMK, Technopark, Thiruvananthapuram	3		
12	National Seminar on sustainable Lake Rejuvenation	TPLC, Hotel Hyacinth by sparsa, Thampanoor, Thiruvananthapuram	1		
13	Training on Ubuntu, Libre Office and Malayalam Typing	Green Field Stadium, Karyavattom	2		
14	Awareness raising campaign under National Hydrology project	Government Guest House, Thycaud, Thiruvananthapuram	10		
Total			66		

Table 7: M.Tech Program

Sl No.	Name of course	No. of seats proposed	No. of participants attended		
1	M Tech Govt. Colleges(College of Engineering, Trivandrum , Govt. Engg College, Thrissur & Barton Hill, Trivandrum)	7	2		
2	CPHEEO sponsored	2	0		
Total		9	2		

Total no. of Participants trained -**2897 Nos**

Chapter XII

National Pension System Cell

National Pension System (NPS) is a defined contribution based Pension Scheme launched by Government of India with the following objectives

- To provide old age income
- Reasonable market based returns over long run
- Extending old age security coverage to all citizens

It is based on a unique Permanent Retirement Account Number (PRAN) which is allotted to each Subscriber upon joining NPS.

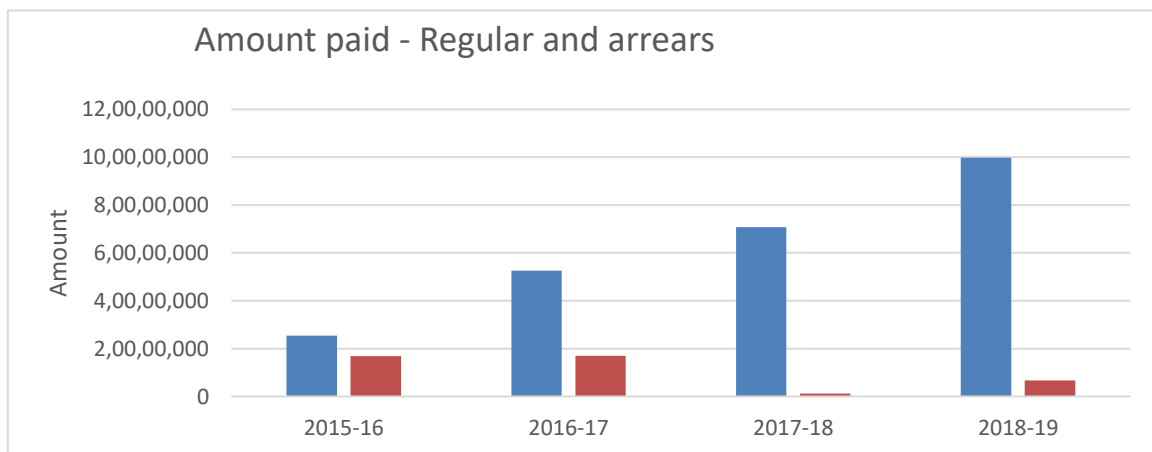
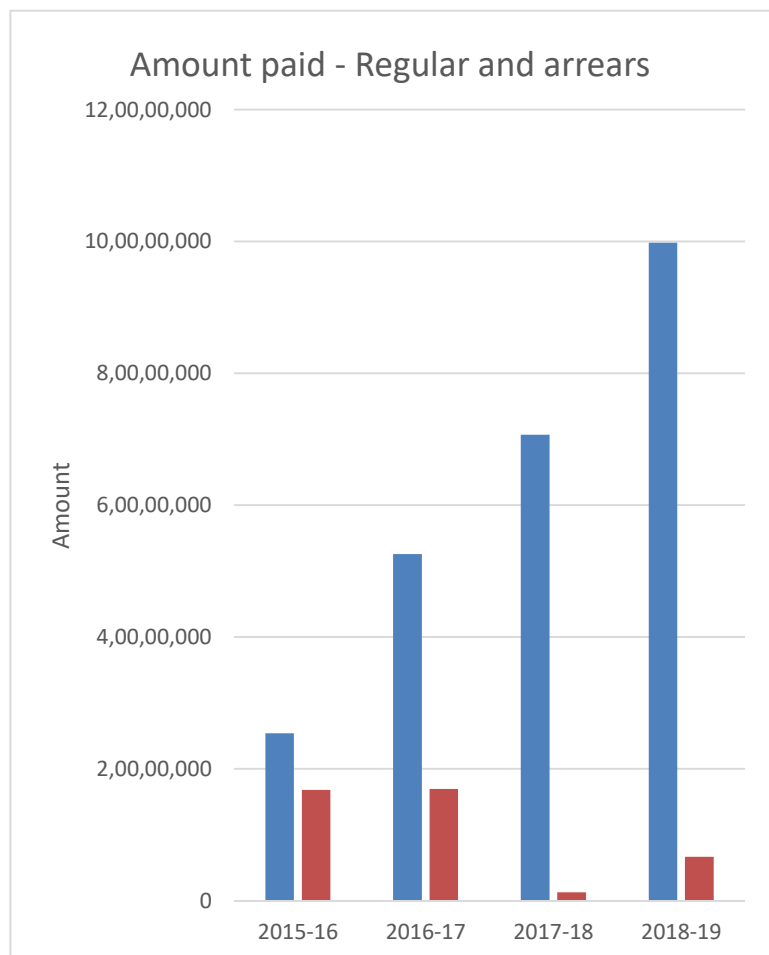
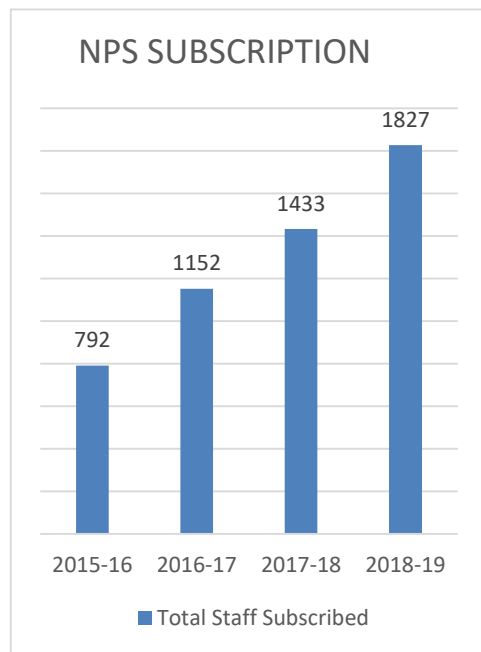
The Government of India in exercise of their executive powers adopted '[National Pension System](#)' (NPS) based on defined contributions in respect of all new entrants to Central Government services, except the Armed Forces, with effect from 1st January 2004. Most of the State Governments have since notified a similar pension system for their new entrants. NPS accumulates savings into subscribers PRA while he is working and use the accumulations at retirement to procure a pension for the rest of his life.

The Pension Fund Regulatory & Development Authority Act was passed on 19th September, 2013 and the same was notified on 1st February, 2014. PFRDA is regulating NPS, subscribed by employees of Govt. of India, State Governments and by employees of private institutions/organizations & unorganized sectors.

Government of Kerala vide G.O.(P) 20/ 2013/Fin dated 07-01-2013 decided in principle that National Pension system shall be introduced with effect from 01.04.2013 which shall be applicable to all appointments made thereafter.

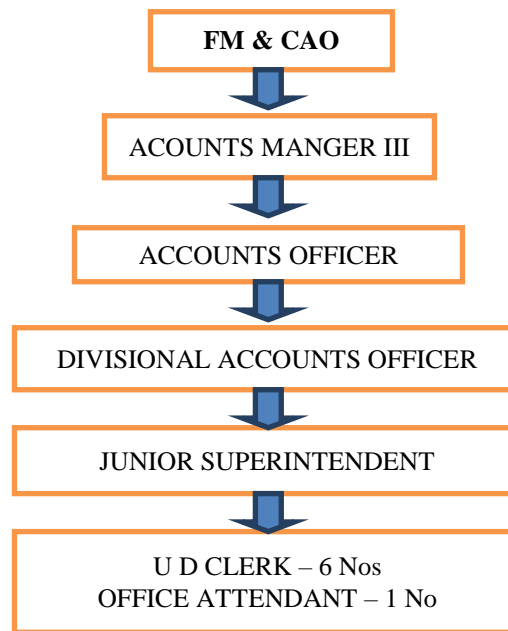
NPS Cell was constituted in Head office of KWA for the implementation of NPS Vide order No. KWA/JB/E20/O&M/7307/2006 dated 18/04/2015. In response to the application submitted to the Finance Wing, Government of Kerala for operationalization of NPS in KWA, the NSDL e-Governance Infrastructure Ltd vide Letter No: CT/SS/VH/MT/201531655 dated 7-5-2015 informed that the registration of KWA in the CRA system of NPS is completed. The deduction of NPS subscriptions was effected from the salary of June 2015 and the recovery of subscription for the backlog period were started from salary of August 2015 onwards. The centralised mode of payment is executed in KWA for NPS. All account rendering units of KWA forward the details of deduction of NPS subscriptions done in their offices through the NPS Recovery Schedule(PA 30) to NPS Cell of Head Office for payment. Based on this, KWA contribute matching share of subscription. For the year 2018-19 , KWA remitted Rs. 10,64,88,816/- for NPS purpose which includes Rs. 9,98,16,432/- as regular subscription and Rs. 66,72,384 /- as backlog arrears. For the year 2018-19 , 417 number of new subscribers were registered for NPS from Kerala Water Authority.

	2015-16	2016-17	2017-18	2018-19
Total Staff Subscribed	792	1152	1433	1827
New Staff Added	792	360	281	417
Amount (Rs.)	253,90,044	5,25,90,430	70708704	99816432
Arrears (Rs.)	168,29,154	1,69,80,588	1281662	6672384*
Total Paid(Rs.)	423,18,198	6,95,71,018	71990366	106488816



Chapter XIII

PENSION DISBURSEMENT CELL (PENSION THROUGH BANK)



Kerala Water Authority started pension payment through Bank in December 1992 with the objective of providing retirement benefits to all the pensioners without approaching the Accounts Rendering Units and to inculcate the habit of saving. Initially, the system of pension being made through the bank was under the control of FM&CAO started with 5 pensioners, who opted for pension through Bank. Pre-printed cheques of Syndicate Bank were used then for disbursement of pension. The cheques for pension with 1st date of coming month were prepared and sent to the concerned pensioner by certificate of posting. The operational procedure of pension disbursal through Bank was populated as a booklet and was sent to all Divisions inviting options from the pensioners who wish to receive pension by way of Bank disbursement. The number of pensioners who opted for pension through Bank increased gradually. From 2002 April 1st M/s. SBI, the then SBT was also included in the bank's and a new system was introduced i.e., transfer of funds was made directly from the bank to the pensioners account. For this purpose, Demand Draft was given branch wise for State Bank and Syndicate Bank. Both SBI & Syndicate banks charged for the demand draft and were debited from the pensioners equally who opted payment of pension through bank. Due to pensioner's complaints, and also there was a case filed against the demand draft charges which was being debited from the pensioners account in which the pensioner won the case. Since SBT has agreed to waive off the charges for DD, SBT alone was allowed for the disbursement of pension through

the Bank and Syndicate Bank was avoided from disbursement of pension. The pension payment being processed through FOXPRO Software. From October 2005 core banking was introduced and the account number of the pensioners was changed to 11 digits and the system continued till 2014.

In May 2014 Centralized Pension Disbursement Cell was constituted as per the direction of the Managing Director under the control of FM&CAO for payment through Bank. After collecting all PPO's from Division offices where the pension payments were being disbursed, with effect from May 2014 the centralised disbursement of pension through bank from Head Office, Pension Disbursement Cell came in to effect. All other modes of payment of pension except money order was stopped and payment being made only from Head office through Bank. Money order commission charges for those who opted for money order above 80 years of age are being paid by KWA.

Number of Pensioners as on 31-03-2019

There are 8863 pensioners as on 31-03-2019. The details are as follows,

Service pensioners	– 6648 nos.
Family pensioners	- 2198 nos.
Other type pensioners	- 17 nos.

TOTAL	- 8863 Nos.
	=====

Chapter XIV

INTERNAL AUDIT WING

Kerala Water Authority had formed an Internal Audit Wing from its inception headed by Two Internal Auditors and two teams were formed for the conducting regular audit in various Accounts Rendering Units. Besides the regular audit, Special Audits are also being conducted as and when the various misappropriation cases informed by the KWA authorities.

At present there are two stock Verification Sub Divisions headed by Asst. Exe. Engineers functioning for the stock verification of stores and materials. One Sub Division with jurisdiction upto Ernakulam and other upto Kasaragod. These Offices were located in Thiruvananthapuram and Kozhikode respectively. The stock verification are conducted based on the pre approved programme.

I. Stock Verification conducted during the year 2018-19	
Name of Sub Division	Number of offices Verification conducted
Stock Verification Sub Division, Thiruvananthapuram	9
Stock Verification Sub Division, Kozhikode	19

II. Details of Audit conducted by the IA wing during the year 2018-19	
Name of Sub Division	Number of loffices Verification conducted
Regular	4
Special	2

III. Details of report given and replies obtained during the year 2018-19	
No. of reports given	26
No. of reply obtained	Nil
No. of objection dropped	Nil

IV. Details of LAR pending paras and paras dropped during the year 2018-19	
Pending paras	1878
Paras dropped	407

Chapter XV

QUALITY CONTROL WING

Quality Control wing of KWA is doing the surveillance and monitoring of drinking water being supplied through various Water Supply Schemes. In addition to this water quality monitoring and surveillance of other water supply sources like open well, bore well etc in rural habitations are also being done under National Rural Drinking Water Programme(NRDWP). The Quality Control Wing of KWA comprises of

- State Referral Institute (SRI)
- District Labs – 14 Nos (one in each district)
- NRDWP Sub District Labs – 32 Nos

The 14 District labs are having a regular staff pattern which is entrusted for the water quality monitoring and surveillance of all water supply schemes of KWA. There is a three tier system with a definite protocol exists for conducting water sample analysis in stipulated frequency at AE/AEE/EE level. For this purpose, the schemes are classified into 5 categories. The scheme category and frequency of monitoring are shown in Table1.

Table 1: Scheme Category and Frequency of Monitoring				
Category of KWA schemes	Benefitted population	Surveillance/Monitoring conducted by		
		AE	AEE	EE
Category A	Population above 1 lakh	Monthly	Once in 2 months	Once in 3 months
Category B	Population above 50,000 to 1 lakh	Once in 2 months	Once in 4 months	Once in 6 months
Category C	Population above 20,000 to 49,000	Once in 3 months	Once in 6 months	At random and when required
Category D	Population above 5000 to 19000	Once in 6 months	Yearly	At random and when required
Category E	Population less than 5000	Yearly	At random / as and when required in case of problem	

At present in district Labs, drinking water are tested for 17 parameters Physico-Chemical parameters and 2 Bacteriological parameters. The details of parameters tested are shown below.

Table 2: Water Quality Parameters tested in District Labs	
Physico-Chemical parameters	<ol style="list-style-type: none"> 1. Colour 2. Odour 3. Turbidity 4. pH 5. Electrical Conductivity* 6. Acidity * 7. Alkalinity 8. Sulphate 9. Total Dissolved Solids (TDS) 10. Total Hardness 11. Calcium 12. Magnesium 13. Chloride 14. Fluoride 15. Iron 16. Nitrate 17. Residual Chlorine <p style="text-align: right;">* not in BIS</p>
Bacteriological parameters	<ol style="list-style-type: none"> 18. Total Coliform 19. E.Coli

At each district lab approximately 100 No. of KWA scheme samples and an average of 200 No. of Private samples (which may hike up to 700 in certain labs) are analysed per month.

The results of water sample analysis of KWA schemes are forwarded to the concerned officers of Maintenance wing in charge of the schemes for taking corrective measures.

Moreover, chemicals such as Alum, Lime & Bleaching Powder used for water treatment in KWA schemes are also being tested in labs to ensure quality.

Under National Rural Drinking Water Programme (NRDWP), District labs and 32 Sub District labs were formulated for Conducting quality analysis and sanitary inspection of drinking water sources like open well, bore well etc in rural habitations. Each Sub district lab covers 250 sources per month. The results of water samples are uploaded in IMIS website of Govt of India. Lab personnel are engaged on contract basis for the functioning of Sub District Labs.

The state wide apex body, State Referral Institute, which is functioning at Nettoor has got the facility for testing heavy metals and pesticides in addition to the routine parameters as mentioned above. The metal analysis including toxic elements is being done with Atomic Absorption Spectroscopy (AAS). Pesticide are analysed using Gas Chromatography. Raw water samples from intake point of schemes are tested for heavy metals & pesticides in pre-monsoon & post monsoon. The heavy metals and pesticides tested in SRI are shown in Table 3 below.

Table 3: Heavy Metals and Pesticides tested at SRI		
Toxic Substances		Other Metals
Pesticides	Metals	
1. Aldrin/Dieldrin	1. Lead	1. Manganese
2. Alpha HCH	2. Total Chromium	2. Copper
3. Beta HCH		3. Aluminium
4. Delta HCH		4. Zinc
5. DDT		
6. Endosulfan		
7. Gamma HCH		

The State Referral Institute got NABL accreditation during March 2017 for testing 7 water quality parameters is still sustaining its accreditation status.

During the flood in August 2018, the Quality wing of KWA conducted free testing of around 25,000 private samples in KWA labs and in seven temporary labs set up for the purpose. Quality Control Wing actively participated in the distribution of Mobile chlorination units and water purification units provided by NGOs and given technical support for the installation of units. Moreover, Quality Control wing extended its service for post flood water quality analysis of well water organised by Kerala State Pollution Control Board.

List of Divisions, Subdivisions and Labs under Quality Control Wing

Division	Subdivision	District Labs
Thiruvananthapuram	Thiruvananthapuram	Thiruvananthapuram
Kochi	Thiruvalla	Kollam
Kozhikkode	Aluva	Alappuzha
	Thrissur	Thiruvalla
	Kozhikkode	Kottayam
	Kannur	Aluva
		Painavu
		Thrissur
		Palakkad
		Kozhikkode
		Kalpetta
		Malappuram
		Kannur
		Kasargod

Chapter XVI

IMPLEMENTATION OF RIGHT TO INFORMATION ACT 2005

Right To Information Act is the Act which gives the right to all people to know the public information, passed by the Indian Parliament in 2005. This Act is one of the mile stones in the history of India. This rule was implemented all over India in the same year.

The Kerala Water Authority took initiative to implement the Act in the same year itself by issuing necessary Orders and Circulars. Accordingly, seven officers have been deputed as Public Information Officers in Jala Bhavan, the headquarters of Kerala Water Authority. The Deputy Chief Engineers in all Regional Offices, PA to Superintending Engineer in Circle Offices, Technical Assistant to Executive Engineer in Division offices and Assistant Executive Engineer in Sub Division offices respectively are also deputed as Public Information Officers. In the absence of Public Information Officers, the Assistant Public Information Officers will be the responsible person. The Administrative Officer of Regional Offices, the Administrative Assistant of Circle Offices, the Divisional Accounts Officer of Divisional Offices and all Assistant Engineers under the purview of Sub Divisional Offices are deputed as Assistant Public Information Officers.

The complaints raised by the applicants against the information given, those which are not satisfactory or not within stipulated period will be heard and redressed. For this purpose, an Appellate Authority is required and nominated the Chief Engineer (HRD & GL) in Jala Bhavan, Chief Engineers in all Regions and Chief Engineer, JICA as Appellate Officers.

SUO MOTO DISCLOSURE UNDER SECTION 4(1)(b) REPORTING YEAR: 2018-19

Sl.No.	Department	No. of Public Authorities	No. of Public Authorities which published the 17 Manuals under Section 4 (1)(b)	No. of Public Authorities which updated the 17 Manuals during the year	No. of Public Authorities which displayed the 17 Manuals Online
(1)	(2)	(3)	(4)	(5)	(6)
1.	Kerala Water Authority	1	1	0	1

DESIGNATION OF PUBLIC INFORMATION OFFICERS/APPELLATE AUTHORITIES REPORTING YEAR: 2018-19 (Form-II)

Sl.No.	Department	No. of Public Authorities	No. of Public Information Officers Designated	No. of Assistant Public Information Officers Designated	No. of Appellate Authorities Designated
(1)	(2)	(3)	(4)	(5)	(6)
1.	Kerala Water Authority	1	412	337	54

DISPOSAL OF INFORMATION REQUESTS BY PUBLIC INFORMATION OFFICERS REPORTING YEAR 2018-19(Form-III)

Name of the Department	No. of Requests pending at the end of Last Year	No. of Requests Received during the Year	Total No. of Requests	No. of Requests Disposed	No. of Requests Rejected	No. of Requests deemed to be Refused under Section 7 (2) Received during the Year	% of Cases Access to information Denied
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Kerala Water Authority	5	2280	2285	2242	37	2	1.62%

**INFORMATION REQUESTS REJECTED BY PUBLIC INFORMATION OFFICERS REPORTING
YEAR: 2018-19 (Form-IV)**

Name of the Department	No. of Requests Rejected	No. of Requests Rejected under Section 8	No. of Requests Rejected under Section 9	No. of Requests Rejected under Section 11	No. of Requests Rejected under Section 24	No. of Requests Rejected under Sections (Fee not remitted as per rule)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kerala Water Authority	37	-	-	-	-	37

**DISPOSAL OF FIRST APPEALS BY DESIGNATED APPELLATE AUTHORITIES REPORTING
YEAR: 2018-19 (Form-V)**

Name of the Department	No. of First Appeals pending with Appellate Authorities on 01.04.2016	No. of First Appeals preferred during the year	No. of First Appeals with Appellate Authorities (2+3)	No. of First Appeals Disposed	No. of First Appeals Rejected	% of First Appeals Rejected	No. of First Appeals pending for more than 45 days
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Kerala Water Authority	3	127	130	130	-	-	-

**PENALTIES IMPOSED & COLLECTED REPORTING YEAR: 2018-19
(Form-VI)**

Name of the Department	Penalties imposed in previous year pending for collection	Details of Penalties imposed by information Commission under Section 20(1)	Total	Details of Penalties Collected in RS
(1)	(2)	(3)	(4)	(5)
Kerala Water Authority	-	1000	1000	1000

**DISCIPLINARY ACTION TAKEN AGAINST OFFICERS IN RESPECT OF
ADMINISTRATION OF RTI ACT REPORTING YEAR 2018-19 (Form VII)**

Name of the Department	Details of Disciplinary Action Recommended by information Commission under Section 20(2)	Details of Disciplinary Action Taken based on Recommendation of Information Commission	Other Disciplinary Actions Taken (other than those Recommended by Information Commission)
Kerala Water Authority	Nil	Nil	Nil

**SUMMARY COSTS, FEES & CHARGES COLLECTED BY PUBLIC AUTHORITIES
REPORTING YEAR: 2018-19 (Form-VIII)**

Name of the Department	Cost Collected Section 4 (4)	Fee Collected Section 6(1)	Fee Collected Section 7 (1)	Fee Collected Section 7(5)	Other charges collected (Specify)	Total Collection
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kerala Water Authority	2338	16114	2928	3342	14575	39297

Chapter XVII

IMPLEMENTATION OF RIGHT TO SERVICE ACT 2012

The Kerala State Right to Service Act, 2012 came into force on 1st November 2012 as per G.O.(P)No.55/2012/P&ARD. Kerala Water Authority implemented the Right to Service Act 2012 on 08.04.2013 onwards. The Act provides for effective, time bound redressal of grievance of citizens, delivery of services to the public and making Government servants liable in case of default. Through the introduction of bill, the Government servants are made answerable in terms of their functions, duties commitments and obligations towards the people.

The bill provides two tier appellate system to redress grievances. The bill underlines the duty of the designated officer who on receipt of an application for service will provide it or reject the application within the time limit, counted from the day the application is received. In case of rejection, the officer should justify it in writing.

Section 3 of the Kerala State Right to Service Act, 2012(18 of 2012) empowers, every departments of the Government, Heads of Departments, Local Self Government Institutions and Statutory Bodies to notify in the Gazette, the services, that will be rendered by each of them along with details of stipulated time limit, Designated Officers, First Appellate Authority and the Second Appellate Authority. The Government have decided to notify the services to be rendered by the Kerala Water Authority and the officers in respect of such services as stipulated in the said Section.

In connection with the implementation of Right to Service Act in Kerala Water Authority, the Managing Director issued a notification vide No. KWA/JB/E1/9387/2012 Dt: 08/04/2013 in which the designated officers as First Appellate Authority, Second Appellate Authority, and the stipulated time limit in respect of such services were notified.

The details of services rendered by the Authority are as follows.

Sl. No.	Service		Stipulated time limit	Designated Officer	1 st Appellate Authority	2 nd Appellate Authority
1	2		3	4	5	6
1.	Providing Water Connection	Urban Area	15 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
		Rural Area	30 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
2.	Sewerage Connection		60 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer

3.	Shifting of Domestic Connection		15 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
4.	Disconnection of domestic/non domestic connection (on request of consumer)		15 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
5.	Reconnection of domestic/non domestic connection		15 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
6.	Change of ownership/changing of category of connection		15 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
7.	Meter reading/ complaint redressal		30 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
8.	Sewerage connection change of ownership		15 days	Assistant Executive Engineer	Executive Engineer	Superintending Engineer
9.	Water sample of private wells quality test (physical and chemical)		10 days	Assistant Executive Engineer	Executive Engineer/ Quality Control Division	Chief Engineer

Chapter XVIII

COMPLAINT REDRESSAL CENTRE

As part of enhancing customer services, a Complaint Redressal Centre with a toll free number 1800 425 5313 was started functioning in the Head Office, Thiruvananthapuram from 22/3/12 onwards. The complaints/calls related to water supply and drainage from anywhere in Kerala will be attended in this centre. The details of the complaint will be transmitted to the respective Divisions over telephone. A nodal officer was made responsible in each division to attend the complaints and for follow up action of the complaints which are forwarded from the Complaint Redressal Centre. The Technical Assistants of the concerned Divisions are nominated as the nodal officers for attending the complaints. All complaints forwarded from this centre will be entered in a register and action taken are being recorded. The Technical Assistants reports the action taken regarding the complaints which are forwarded to them to the Complaint Redressal Centre in a time bound manner.

The phone numbers to which the complaints are forwarded are listed below:

1. P.H Division, North, Thiruvananthapuram	-	0471 2322798	85476 38175
2. P.H Division, South, Thiruvananthapuram	-	0471 2321379	85476 38290
3. Head Works Division, Aruvikkara	-	0472 2888239	94000 67878
4. W.S Division, Neyyattinkara	-	04712223447	85476 38093
5. Sewerage Division, Pattoor	-	04712303170	85476 38212
6. W.S Division, Attingal	-	04702620574	85476 38355
7. P.H Division, Kollam	-	0474 2748857	85476 38530
8. P.H Division, Pathanamthitta	-	0468 2222687	85476 38344
9. P.H Division, Alappuzha	-	0477 2242372	85476 38221
10. P.H Division, Tiruvalla	-	0469 2701267	85476 38241
11. P.H Division, Kottayam	-	0481 2563711	85476 38556
12. P.H Division, Kochi	-	0484 2360816	85476 38133
13. W.S Division, Kochi	-	0484 2394155	85476 38145
14. P.H Division, Aluva	-	0484 2626948	85476 38156
15. P.H Division, Muvattupuzha	-	0485 2832350	85476 38436
16. P.H Division, Thodupuzha	-	04862 222812	85476 38427
17. P.H Division, Thrissur	-	0487 2333070	85476 38362
18. P.H Division, Irinjalakuda	-	0480 2826608	85476 38374
19. P.H Division, Palakkad	-	0491 2545027	85476 38307
20. P.H Division, Shornur	-	0466 2223264	85476 38315
21. P.H Division, Kozhikode	-	0495 2370095	85476 38211
22. P.H Division, Vadakara	-	0496 2512474	85476 38060
23. P.H Division, Malappuram	-	0483 2734891	85476 38171
24. P.H Division, Edappal	-	0494 2680215	85476 38410
25. P.H Division, Sulthan Bathery	-	04936 220422	85476 38495
26. P.H Division, Kannur	-	0497 2706837	85476 38273
27. P.H Division, Kasaragod	-	04994 256411	85476 38250
28. W.S.Division, Thaliparambu	-	0460-2203230	8547638301
29. PH Division, Kottarakkara	-	0474-2450787	9400002040
30. PH Division, Kaduthuruthy	-	04829-285052	8547638081

ABBREVIATIONS

1.	ADB	Asian Development Bank
2.	ARP	Accelerated Rural Project.
3.	ARWSS	Accelerated Rural Water Supply Scheme.
4.	AS	Administrative Sanction
5.	ASAP	Additional Skill Acquisition Programme
6.	AUWSS	Accelerated Urban Water Supply Scheme.
7.	CPHEEO	Centre for Public Health Engineering & Environmental Organization
8.	CARWSS	Centrally Sponsored Accelerated Rural Water Supply Schemes
9.	CSC	Common Service Center
10.	CW	Clear Water
11.	CWEd	Center For Water Education
12.	CWPM	Clear Water Pumping Main
13.	CWPS	Clear Water Pumping Station
14.	CWSS	Comprehensive Water Supply Scheme.
15.	DER	Detailed Engineering Report.
16.	DRW	Drought Relief Work.
17.	DBA	Data Base Administrator.
18.	EABACUS	Enhanced Advanced Billing, Accounting & Collection Utility System
19.	GIS	Geographic Information System
20.	GoI	Government of India
21.	HUDCO	Housing & Urban Development Corporation.
22.	IMIS	Integrated Management Information System.
23.	IPD	Investigation, Planning and Design.
24.	JICA	Japan International Co-operation Agency
25.	JBIC	Japan Bank for International Cooperation
26.	JNNURM	Jawaharlal Nehru National Urban Renewal Mission
27.	KIIFB	Kerala Infrastructure Investment Fund Board
28.	KWSP	Kerala Water Supply Project
29.	KRWSA	Kerala Rural Water Supply and Sanitation Agency
30.	KSIDC	Kerala State Industrial Development Corporation
31.	KSUDP	Kerala Sustainable Urban Development Project
32.	LAC	Legislative Assembly Constituency
33.	LAC ADF	Legislative Assembly Constituency Asset Development Fund
34.	LCS	Low Cost Sanitation.
35.	LIC	Life Insurance Corporation
36.	LSGD	Local Self Government Department
37.	MARCH	Monitoring Accounting & Reporting By Centralized HR System
38.	MLD	Million Litres per Day
39.	NABARD	National Bank for Agriculture and Rural Development
40.	NC / PC	Not Covered / Partially Covered
41.	NeGP	National e-Governance Plan
42.	NRDWP	National Rural Drinking Water Programme
43.	NIT	Notice Inviting Tender
44.	NPS	National Pension System
45.	O&M	Operations and Maintenance
46.	OD	Overdraft
47.	OHSR	Over Head Service Reservoirs

48.	ORWS	Other Rural Water Supply.
49.	PER	Preliminary Engineering Report.
50.	PHD	Public Health Division
51.	PMU	Project Management Unit.
52.	PPD	Project Planning and Development
53.	PS&GL	Personal & General.
54.	PRA	Permanent Retirement Account
55.	PFRDA	Pension Fund Regulatory and Development Authority
56.	PURA	Provision of Urban Amenities to Rural Area
57.	PVC	Polyvinyl chloride
58.	RCC	Reinforced Cement Concrete
59.	RIDF	Rural Infrastructure Development Fund
60.	RW	Raw Water
61.	RWPM	Raw Water Pumping Main
62.	RWSS	Rural Water Supply Scheme
63.	SAAP	State Annual Action Plan
64.	SAARK	Special Assistance Against Recession in Kerala
65.	SAGY	Saansad Adarsh Gram Yojana
66.	S&P	Store and Purchase
67.	SCP	Special Component Plan.
68.	SDC	Sector Development Cell
69.	SLSSC	State Level Schemes Sanctioning. Committee
70.	SSDG	State Service Delivery Gateway
71.	STP	Sewage Treatment Plant
72.	TAC	Training Advisory Committee
73.	TCC	Total Cash Compensation
74.	TSP	Tribal Sub Plan
75.	TSS	Trivandrum Sewerage Scheme
76.	TW	Treated Water
77.	TWSS	Trivandrum Water Supply Scheme
78.	UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
79.	ULB	Urbal Local Bodies
80.	UWSS	Urban Water Supply Scheme
81.	WASCON	Water And Sanitation Consultancy Wing
82.	WB	World Bank.
83.	WBP	World Bank Project.
84.	WGDP	Western Ghat Development Programme.
85.	WS	Water Supply
86.	WSS	Water Supply Schemes.
87.	WTP	Water Treatment Plan