

**6<sup>th</sup> State Level Technical Committee**

**Atal Mission for Rejuvenation and Urban  
Transformation (AMRUT)**

**AGENDA NOTE**

**Date :** 23<sup>rd</sup> February 2017

**Time :** 10.30 am

**Venue:** Chamber of the Principal Secretary

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## Agenda No. 1

### APPROVAL OF MINUTES OF THE 5<sup>TH</sup> MEETING OF STATE LEVEL TECHNICAL COMMITTEE (SLTC)

Approval of minutes of 5<sup>th</sup> State Level Technical Committee held on 24.01.2017(*Annexure I*)

#### Decision to be taken

*The Committee may take note of the minutes and approve the same.*

## Agenda No. 2 :

### ACTION TAKEN REPORT ON THE DECISIONS OF 5<sup>TH</sup> MEETING OF SLTC

#	Agenda Item and Action Taken
1	<p><b>Item :2</b>  <b>Constitution of Technical Expert Committee for Issuing Technical Sanction.</b>                      It was decided to constitute technical committees for two Regions viz. North and South for vetting and for according Technical Sanction to the DPRs that have obtained Administrative Sanctions.</p> <p><b>Action Taken:</b>  <i>List of experts have been consolidated based on the decisions taken in the 5<sup>th</sup> SLTC. The list to be submitted for the approval of the Government on 22<sup>nd</sup> February 2017.</i></p>
2	<p><b>Item :3</b>  <b>Administrative sanction of DPRs</b>                      The SLTC decided to recommend 21 DPRs for obtaining the Administrative Sanction from SHPSC.</p> <p><b>Action Taken :</b>  <i>The Projects will be placed in next SHPSC (9<sup>th</sup> SHPSC) for obtaining the Administrative Sanction.</i></p>
3	<p><b>Item: 4</b>  <b>Strategies to support Mission cities for smooth implementation of AMRUT</b></p> <p>The 7<sup>th</sup> SHPSC held on 21 Dec 2016 directed the Mission Management Unit to seek the willingness and support of reputed engineering colleges for quality monitoring of the projects under AMRUT. Further the 5<sup>th</sup> SLTC held on 24 Jan 2017 directed the Mission Management unit to enquire with the Engineering colleges on their willingness to associate with AMRUT on Project Monitoring also.</p>



**Action taken**

*The State and City Mission Management team held discussions with the Head of Departments of the Govt. Engineering Colleges present within the Mission cities and details are below.*

	<b>Discussion held with</b>	<b>Quality Monitoring</b>	<b>Project Monitoring</b>
<b>Thiruvananthapuram</b>	HoD , Dept of Civil Engineering, CET	The Department have expressed willingness in principle to take up monitoring for Thiruvananthapuram and Kollam. Have sought more details on the requirements before arriving at a final decision.	Willingness in principle granted. Have sought details on management requirements.
<b>Kollam</b>	HoD, Dept of Civil Engineering, TKM Engg College	Willingness in principle granted. Have sought detailed requirements.	
<b>Alappuzha</b>	, HoD Civil Engg Dept, Cooperative Academy of Professional Education ( CAPE)	Expressed inability for regular association due to busy academic schedule.	
<b>Kochi</b>	HoD, Dept of Civil Engineering CUSAT	Not willing to take up quality monitoring or project monitoring due to shortage of staff.	
<b>Palakkad</b>	HoD- Dept of Civil Engineering , NSS College of Engg	Willing to take up quality monitoring	Expressed inability to take up project monitoring due to time constraints
<b>Thrissur &amp; Guruvayur</b>	HoD - Dept of Civil Engineering, Government Engg College	Willingness in principle granted. Need further discussion within the department to formally give consent. Have asked for details from AMRUT Mission	Expressed inability to take up project monitoring due to time constraints
<b>Kozhikode</b>	HoD Dept of Civil Engineering, NIT, Calicut	Not willing to take up quality monitoring or project monitoring due to time constraints	
<b>Kannur</b>	HoD Dept of Civil Engineering, Kannur Engg College	Not willing to take up quality monitoring or project monitoring due to shortage of staff.	



4 *Item 5*

**UTILISATION OF REFORM INCENTIVES**

SLTC decided not to recommend preparation of CMPs as part of utilisation of reform incentives and also to place revised proposals in the next SLTC.

**Action taken :**

*Revised proposal for utilization of reform incentives will be discussed in Agenda no:3*

5 *Item 6*

**APPROVAL OF STATE ACTION PLAN - Formulation of GIS based Master Plan for AMRUT mission cities in Kerala**

The SLTC decided to approve and recommend the State Action Plan (SAP) to the SHPSC subject to the condition that the SAP should be reworked and the master plans for all the remaining eight AMRUT Mission cities except Thiruvananthapuram should be prepared and published by 31st December 2017. Parallel teams should be engaged in all the cities and the work should be taken up as a challenge and completed successfully

**Action Taken :**

The SAP will be placed in 9<sup>th</sup> SHPSC for obtaining the *approval for forwarding the same to MoUD from SHPSC. Also, the TCPD has initiated the process for the preparation of GIS based city maps.*

**Decision to be taken:**

*The committee may take note of the action taken report of SLTC meeting held on 24.01.2017*

**Agenda No. 3**

**UTILISATION OF REFORM INCENTIVE**

The State of Kerala was awarded with an incentive for obtaining a score more than 70 for implementing mandatory reforms under AMRUT for 2015-16. Vide MoUD OM No K-16012/3/2016- AMRUT II, the Ministry has released Rs 15 Crs for the achievement of the reform milestones. As per the general guidelines regarding reform incentive from MoUD, the SHPSC can decide upon the utilization of the incentive amount.

Incentives may be distributed to the ULBs based on their performance in achieving the reform milestones so that the amount may be utilized as ULB share of the project cost.

**Decision to be taken:**

*The committee may discuss and recommend the proposal for the consideration of SHPSC*

## Agenda No.4

### PROJECTS PROPOSED UNDER SEWERAGE/ SEPTAGE MANAGEMENT, SAAP 2017-18

The 8<sup>th</sup> SHPSC held on 24<sup>th</sup> January 2017 has suggested to revisit the projects proposed under Sewerage/ Septage management for SAAP 2017-18. Therefore it was decided to discuss with the Mission cities about the rationale for proposing various projects and to further select the most feasible project in each of the mission cities. The prioritised projects proposed by Mission Cities for SAAP 2017-18 & the list of approved projects under SAAP 2015-16 & 16-17 are attached as *Annexure II*

#### Decision to be taken:

*The committee may discuss and recommend the appropriate projects for consideration of SHPSC.*

#### ANNEXURES ■

1. Minutes of the 5<sup>th</sup> SLTC Meeting
2. List of Projects Proposed – Sewerage and Septage Management

*Minutes of the 5<sup>th</sup> SLTC - AMRUT*

**Minutes of the 5<sup>th</sup> State Level Technical Committee (SLTC) of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) held on 24<sup>th</sup> January 2017 at 10.30 am in the Chamber of the Principal Secretary (LSGD), Government of Kerala.**

**Members Present:**

1. Shri. T K Jose IAS, Principal Secretary, Local Self Government Department
2. Sri. P S Mohammed Sagir IAS, Project Director, Kerala Sustainable Urban Development Project & Nodal Officer, AMRUT
3. Shri. Raveendran T, Technical Member, Kerala Water Authority
4. Shri. P R Sajikumar, Chief Engineer, Local Self Government Department.
5. Shri. Shaji Joseph, Chief Town Planner ( Planning)
6. Shri. Binu Francis, Programme Officer, Kudumbashree Mission
7. Shri. J.Bency, Additional Secretary, Revenue Department
8. Shri. Anil N.T, DCE, R&B, PWD

The meeting of the 5<sup>th</sup> State Level Technical Committee (SLTC) of AMRUT chaired by Sri. T.K Jose IAS, Principal Secretary, LSGD, Government of Kerala, commenced at 10.30 AM.

**Agenda No1.Approval of Minutes of the 4<sup>th</sup> meeting of SLTC**

The Committee approved the minutes of the 4<sup>th</sup> meeting of SLTC held on 14<sup>th</sup> December 2016.

**Agenda No1.a.Review of Action Taken Report on the decisions of the 4<sup>th</sup> SLTC**

**Item No 2.** The SLTC reviewed the status of Government Order (GO) related to the Administrative Sanction of 19 DPRs submitted in 4<sup>th</sup> SLTC.

The Chairman directed that one member of SMMU team should take the responsibility to follow up the GO with the concerned section at the Government Secretariat.

Action by	Time Limit	Monitoring by
Sri. Priyalal Joseph Urban Infrastructure Expert SMMU-AMRUT	4.02.2017	Smt. Bhagavathy Iyer Team Leader (i/c) SMMU-AMRUT



#### **Item No 4. Strategies for implementation of AMRUT projects.**

The SLTC took note of a few decisions taken by earlier SHPSC meetings and upheld the same.

- The decision No. 2 of State Level High Powered Steering Committee held on 3<sup>rd</sup> July 2016 that Technical Sanction of all projects will be issued by an external Committee of independent sectoral experts of outstanding calibre constituted for the related sector.
- The decision No.3 of the State Level High Powered Steering Committee held on 21st December 2016 to seek the support of Water Resources Department for preparation of DPRs in the Storm water drainage sector and to seek the assistance of KMRL for Urban Transport sector.

#### **Agenda No 2.**

##### **Constitution of Technical Expert Committee for Issuing Technical Sanction.**

The SLTC discussed in detail over the list of experts proposed at the meeting and decided on the following;

2.1. It was decided to constitute technical committees for two Regions viz. North and South. AMRUT cities Thiruvananthapuram, Kollam, Alappuzha & Kochi will come under Southern region and Thrissur, Guruvayur, Palakkad, Kozhikode & Kannur will come under the Northern region. 1/3<sup>rd</sup> members of the committees will be serving officers of the concerned departments, 1/3<sup>rd</sup> members will be independent sectoral experts and the remaining 1/3<sup>rd</sup> will be from the academic institutions.

<b>Sector</b>	<b>Regional Committees</b>	<b>Department officials</b>	<b>Skilled experts</b>	<b>Academicians</b>
<b>Water Supply</b>	One each for North & South (6 members for each committee)	4 officers from KWA	4 nos (independent professionals/retired hands)	4 nos. (from Engineering colleges like CET, / GEC, Thrissur/ NIT, Kozhikode / Institution of Engineers (Civil – Water Resources/ Hydraulics)



<b>Sewerage / Septage management</b>	One Committee * (7 Members)	2 from KWA and 2 from LSGD Engg. dept. (Skill upgradation of serving staff to be provided)	-	1 each from CET, NIT and GEC (Civil Dept_ Environmental Engineering / Sanitation Engg)
<b>Storm Water Drainage</b>	One each for North & South ( 6 members for each committee)	2 senior Officials and 2 young Officers from LSGD Engineering Dept	4 nos (independent professionals/ retired hands)	4 Academic Experts from CET, NIT and GEC (Civil Dept)
<b>Urban Transport &amp; Open Spaces</b>	One Committee ( 6 members)	2 Officials from NATPAC & KMRL	2 nos (independent professionals/ retired hands)	2 Experts CET Planning Department * (Civil -Transport Planning/ Urban Planning)  (Architecture – Urban Planning / Urban Design)
<ul style="list-style-type: none"> <li>• Since quantum of work is less compared to Water Supply sector</li> </ul>				

2.2. KWA and LSGD shall nominate their officials who are technically qualified and experienced to support the ULBs where ever necessary.

<b>Action by</b>	<b>Time Limit</b>	<b>Monitoring by</b>
Shri. Raveendran T, Technical Member, Kerala Water Authority & Shri. P R Sajikumar, Chief Engineer, LSGD.	10. 02.2017	Sri. P.S. Mohammed Sagir, Mission Director, AMRUT

2.3. SMMU will facilitate identifying sectoral experts from Engineering Colleges like NIT, GEC and CET and Institutions like KMRL, Irrigation Department and NATPAC who can render necessary support in AMRUT projects.

<b>Action by</b>	<b>Time Limit</b>	<b>Monitoring by</b>
Sri Sreekumar, Environment Expert & Smt Bhagavathy Iyer, Team Leader (i/c), SMMU	10.02.2017	Sri. P.S. Mohammed Sagir, Mission Director, AMRUT

**Agenda No. 3****Administrative sanction of DPRs**

The Mission Directorate has received the DPRs for 10 projects from Kerala Water Authority

1. Augmentation of Water Supply Scheme Kollam - Rs 78.35 Cr
2. Laying distribution network for improvement of coverage in Guruvayur and Pookode Zone - Rs13.72 Cr
3. Rehabilitation of existing distribution networks, valves, house service connections and inter connections with existing lines of Pallikkunnu zones , Kannur - Rs1.50 Cr
4. Providing new water Connection in Kollam Corporation - Rs 7.00 Cr
5. Construction of 20 MLD WTP Peechi, Thrissur - Rs 17.30 Cr
6. Construction of 10 L OHSR & Pumping main to Guruvayur and distribution network of balance portion in Guruvayur Municipality - Rs 15.50 Cr
7. Water Supply System to Guruvayur Municipality-Package II-Rs 77.18 Cr
8. Construction of 14 LL Capacity OHSR Thottada at Edakkad Zone \_III, Kannur - Rs 3.00 Cr
9. Laying of Gravity main from Water Supply System to Kannur at Melechovva to Sump at Avera to OHSR at Thottada- Rs 16.90 Cr
10. Rehabilitation of existing old distribution networks, valves, House service connections and inter connections - Rs 6.80 Cr.

Also, a list of 11 projects (Annexure -1) with their DPRs received on the previous day was put up as additional agenda for Administrative sanction.

Sl no	Name of Work	DPR Amount (Rs. In Cr.)
11	Replacement of 250 mm CI pipe by 300 mm DI K9 pipe along Konthuruthi road of Kochi Corporation.	0.405
12	Replacement of 100 mm AC pipe by laying rider line OF 160 mm PVC CL-5 along both side of PanditKuruppan road of Kochi Corporation.	1.61
13	Replacement of 100 mm CI pipe by laying 160 mm & 110 mm PVC pipe from Valanjambalam to Ravipuram.	0.66
14	Replacement of 450 mm DI K7 pipe from North end of Aroor Edakochi bridge to KWA water tank site Edakochi.	1.52
15	Laying pumping main of 500 mm DI pipe from JNNURM WTP at Maradu to pump House at Thammanam for additional pumping of water ( up to 18 MLD) toKochi city.	16.50

16	Laying rider line from Kathrikkadavu to Elamkulam Chettichira, Ponnurunni areas & distribution lines in Chakkarapparambu Chalikkavattom areas	0.90
17	Supplying and laying 600 mm DI K9 clear water pumping main from 45 MLD Water Treatment Plant to Mattumantha OHSR and other Raw water & clear water pumping main linking works.	6.25
18	Construction 45 MLD WTP at Malampuzha KWA compound and Booster station and demolishing of old Booster & Sump	22.25
19	Supply and Erection of Electro Magnetic Flow Water.	0.50
20	Construction 16LL OHSR at Kalmandapam KWA & demolishing existing 15LL OHSR	3.0
21	Construction of Smart Offices in Thirvananthapuram-Kowdiar, Pongumoodu, Vellayamabalam	1.75

The projects were part of SAAP 2015-16 and 2016-17 and the SLTC decided to recommend all the 21 DPRs for obtaining the Administrative Sanction from SHPSC.

Action by	Time Limit	Monitoring by
Sri Priyalal Joseph Urban Infrastructure Expert, SMMU	To be placed in the next SHPSC	Smt Bhagavathy Iyer Team Leader (i/c), SMMU

**Agenda No. 4 : Strategies to support mission cities for smooth implementation of projects under AMRUT.**

The SLTC took note of the decision of the 7<sup>th</sup> SHPSC held on 21<sup>st</sup> Dec 2016 to explore various options of implementation without a Project Development and Management Consultant (PDMC) and decided to unbundle the functions of the Project Development and Management Consultants into three major tasks as follows.

- A. PROJECT DEVELOPMENT
- B. QUALITY ASSURANCE
- C. PROJECT MONITORING

4.1. The SLTC decided to support the decision taken by the 7<sup>th</sup> SHPSC in this regard for the various sectors and added that interaction between Government and Academic Institutions should be promoted and strengthened. Also, the expertise of the academicians in these reputed



Engineering Colleges should be utilised for the project development, quality check and monitoring.

Action by	Time Limit	Monitoring by
Sri Sreekumar Environmental Expert, & Sri Priyalal Joseph Urban Infrastructure Expert-SMMU	5.02.2017	Smt Bhagavathy Iyer Team Leader (i/c), SMMU

The SLTC emphasised that there should be clarity on what, how and who to monitor. Prioritising the projects/activities and policy level issues will be settled at SLTC ensuring smooth progress of AMRUT. The website of SMMU should reflect the details of each project city-wise, its summary, present status, expected date of completion and persons involved so as to ensure transparency and update the information periodically.

Action by	Time Limit	Monitoring by
Smt Bhagavathy Iyer Team Leader (i/c), SMMU	5.02.2017	Sri. P.S. Mohammed Sagir, Mission Director, AMRUT

#### Agenda No. 5 Utilization of reform incentive.

The State of Kerala was awarded with an incentive for obtaining a score of more than 70% marks for implementing mandatory reforms under AMRUT for the year 2015-16 and the Ministry of Urban Development has released Rs 15 Cr for the achievement of the reform milestones. The 4<sup>th</sup> SLTC directed to put up viable proposals with detailed notes. Accordingly, a proposal to develop Comprehensive Mobility Plan (CMP) for 6 Mission Cities ( Kollam, Alappuzha, Thrissur , Guruvayur , Palakkad and Kannur) for an average fee of Rs.15 lakh per city was placed before the SLTC. The Committee deliberated on the need of CMP and its usability for AMRUT projects.

SLTC decided not to recommend preparation of CMPs as part of utilisation of reform incentives and also to place revised proposals in the next SLTC.

Action by	Time Limit	Monitoring by
Smt. Riby Mathew, Urban Planner & Smt. Nisha Habi, Finance Expert -SMMU	To be placed in next SLTC	Smt. Bhagavathy Iyer Team Leader, SMMU

**Agenda No. 6 APPROVAL OF STATE ACTION PLAN** - Formulation of GIS based Master Plan for AMRUT mission cities in Kerala

6.1. The SHPSC meeting held on 04-07-2016 nominated the Department of Town and Country Planning, Kerala as the Nodal Agency for implementation of this Sub-Scheme of AMRUT in Kerala and Sri. Shaji Joseph, Chief Town Planner (Planning) was nominated as the Nodal Officer and the work of Preparation of Master Plans for AMRUT Cities will be done by the Department of Town and Country Planning.

6.2. The Senior Town Planner of the Town and Country Planning Department presented the salient features of State Action Plan which had three major components - Geo database preparation, Master Plan Preparation and Capacity Building. The details regarding the resource requirement for each city was included in the presentation.

The Committee discussed the Department's plan to formulate the GIS based Master Plan for AMRUT mission cities in Kerala and noted that the Master Plan preparation of Thiruvananthapuram was already moving forward with the a target to publish the same by December 1st 2017.

6.3. The SLTC decided to approve and recommend the State Action Plan (SAP) to the SHPSC subject to the condition that SAP to be reworked and the master plans for all the remaining eight AMRUT Mission cities except Thiruvananthapuram should be prepared and published by 31st December 2017. Parallel teams should be engaged in all the cities and the work should be taken up as a Challenge and completed successfully. Each Mission city should have a team with a dedicated Town Planner leading the task and ensuring the progress of work. Supervision of Master Plan Preparation progress in Northern and Southern regions to be done by Sri. Shaji Joseph and Smt. Girija K.S. Outsourcing of work and utilising students as project interns may be considered to expedite the process by the said date of 31<sup>st</sup> Dec 2017. GIS maps available with KWAs also may be used if necessary.


Action by	Time Limit	Monitoring by
Sri Shaji Joseph , CTP ( Planning), TCP Department	31.12.2017	Sri. P. S. Mohammed Sagir, Mission Director, AMRUT

**Agenda No. 7. Other Items**

The 7th SHPSC has directed to take the support of KMRL for Urban Transport Projects and Water Resources department for Storm Water Drainage DPRs. But the 4th SLTC had recommended entrusting consultants empanelled for Urban 2020 for DPR preparation by AMRUT ULBs. Accordingly, some Mission cities have informed that they have identified consultants empanelled under Urban 2020 for DPR preparation. To this, the Chairman clarified and directed that cities may identify consultants from the Urban 2020 empanelled list or otherwise through a transparent and competitive bidding process only and strictly follow the norms of payment for DPR preparation as per approved Government rates specified in GO(Rt) 413/13/LSGD dtd 15/2/2013 for Urban Local Bodies. In the case of Urban Transport projects for Kochi, support must be sought from KMRL and SMMU to facilitate the same.

Action by	Time Limit	Monitoring by
Sri Priyalal Joseph Urban Infrastructure Expert, SMMU	31.01.2017	Smt Bhagavathy Iyer Team Leader (i/c), SMMU

The meeting concluded at 3.30 p.m.

  
**Principal Secretary (LSGD) &  
Chairman, SLTC - AMRUT**



SN	Project	Cost in Cr	Total cost (Cr)
<b>THIRUVANANTHAPURAM</b>			
1	Supplying and erection of pumpsets , transformer and electrical accessories in the Edathara Pumping Station	5	
2	Construction of Pumping station at Akkulam( Block K)	4	
3	Supplying and laying 500mm DI K9 pumping main for a length of 3000m	4	
4	Supplying and laying Transmission main in Block K (Akkulam) to connect Stilling chamber at bypass Jn to Pumping station at Akkulam	4	
5	Supplying and erection of pumpsets , transformer and electrical accessories in the Akkulam Pumping Station	3	
6	Construction of Pumping station at Karimanal ( Block J)	4	
7	Supplying and laying 400mm DI K9 pumping main for a length of 1300m (karimanal pumping station to stilling chamber at bypass junction)	2.5	
8	Laying Transmission main and sewer networks in Block J (Karimanal)	10	
9	Providing Sewer trunk from kazhakootam area to Pumping station of Block J (Karimanal) through the bank of Thettiyar Thodu	8	
10	Supplying and erection of pumpsets , transformer and electrical accessories in the Karimanal Pumping Station	4	
11	Providing mechanical Sludge drying unit at muttathara 107 Mld STP	5	
12	Providing new network in the missing areas of core city	10	
	1)TSS- Laying 150mm SW pipe at Vadayakkadu road beside Govt eye hospital for of a length 200m to the nearby existing manhole		
	2)TSS- Laying 150mm SW pipe at Aiswariya lane ,Poornima Lane,Bharath lane,Mythrilane, and Kavuvila lane -		
	3) Tss Block E supplying and laying 200mm dia SW pipe b/s line from existing konathukulangara lane towards padayani Road(PRA-lane-10),konathukulangara lane towards padayani Road association lane no-05 (PRA-lane-16-20),towards dhvani lane (PraNo-07),from padayani road towards padayani gardens lane no 8A ( PRA G1 to G17),From Arappura line towards LMS nagar at Muttada,From Elangamvila to kairalinagar at muttada,From Malloor lane towards Alathara ,vellayambalam,From Chalakuzhy to Kappil road,Vellayambalam towards Forest office vazhuthacaud		
	4) supplying and laying 200mm dia SW pipe b/s line from existing manhole towards binoy lane at kizhakke pattom Residents association		
	5)TSS- Laying 150mm SW pipe at existing MH towards melekuzhivila		
	6)TSS- Laying 200mm SW pipe b/s in Anand lane residence association A lines (A 31-2 to A33-1) (A24 to A280 and C lane near forest office at maruthumkuzhyat existing MH towards melekuzhivila		

13	Rehabilitation of existing network	10	
	1) TSS-Mace Dismantling existing damaged 100mm dia Sewerline and relaying 200mm dia SW pipe and construction of manhole at Madathuvila lane and Edapazhinji, at Thamarakulam (TRA53-61A) at Kumarapuram, Vadayakkara road beside eye hospital		
	2) Reconstructing damaged brick manholes with RCC manhole at Jawaharnagar areas, Kanakanagar areas, Nathancode-nalanda areas, Poojappura-Thirumala road areas, Lenin Nagar and nearby areas, Peroorkada Ambalammukku in Rightside area and nearby areas-		
	3) Increasing size of existing sewer main by using 400mm dia RCC NP3 pipe from edapazhinji towards CSM nagar		
	4) Increasing size of existing sewer main by using 400mm dia RCC NP3 pipe from CSM nagar 1 <sup>st</sup> reach, 2nd reach, 3rd reach-0m to 379m, 379m to 817, 817m to 1191m		
	5) TSS- Rehabilitation of ex 150mm Branch sewer with 200mm dia S W pipe and allied works in Poojappuraj to Kunjalummoodujn, Thelunku Chetty street in poojappura, Thailal mahadeva Temple and sathanagar, MN Nagar, Soorya nagar, Anil Nagar, Kunnukuzhy vadayakadu Goureesapattom, Majalikulam towards india hospital gandharianman covil,		
14	Providing Sewerage facility in the Kalladimugham Housing Colony	1.97	75.47
<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>			
15	Decentralised community septic tank system for households (around 200 to 250 families)	25	
16	Decentralised sewerage treatment plant at Medical College campus including water recycling	13.85	
17	Providing new network in core city & Rehabilitation of networks	11.84	
18	Supplying conveying Laying and extending the 900mm DI pumping main from Muttathara sewerage treatment plant and construction of new bridge with pile foundation and allied works	2.5	
19	D block Zone II Supplying conveying Laying and Jointing 700mm dia RCC NP3 Trunk main-II from Murinjapalam to Kannammoola chainage 952m to 1728m	1.33	
20	Rehabilitation of existing pump and machineries	1.21	
21	Sewerage treatment plant (5 mld) for Medical College Trivandrum	5.31	
22	Construction of pumphouse at Edathara	5.87	
23	Supplying and laying pumping main from Edathara pump house to STP at Muttathara	17.43	84.34

<b>KOLLAM</b>		
1	Sewer network- Replacement of damaged network and laying of balance network, Construction of Pumping Station at Sarpakuzhi sub Zone of A1 Part 1 Continuation	7
2	Planning, Design and Construction of Uliyakovil sub Zone in Zone A1 Part 2 ( construction of sewerage network, pumping mains & stations)	24.39
		<b>31.39</b>
<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
3	Sewage Treatment Plant-Zone A1 Phase 1	25
4	Septage Treatment Plant	6.42
5	Sewage Treatment Plant-Zone A1-Phase 2	16.6
6	Sewer network-Replacement of Damaged Network and Laying of Balance Network, Construction of Pumping Station at Sarpakuzhi sub Zone of A1 Part 1	8.34
		<b>56.36</b>
<b>ALAPPUZHA</b>		
1	Decentralized treatment system for septage/sewage management.(Phase-2)	6
		<b>6</b>
<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
2	Decentralized treatment system for septage treatment.	2.1
3	Decentralized treatment systems for septage management in Alappuzha Municipality(2nd phase).	2
		<b>4.1</b>
<b>KOCHI</b>		
1	Decentralized sewerage system for Divisions 1 to 5	40
		<b>40</b>
<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
2	Implementation of decentralised sewerage sysytem-phase I	13.78
3	Rejuvenation of Sewerage Treatment Plant at Elamkulam, Kochi	20
4	Decentralised sewerage system for three divisions(15,16 & 17)	30.78
		<b>64.56</b>
<b>THRISSUR</b>		
1	Construction of waste water treatment plant Phase- II	23.6
		<b>23.6</b>
<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
2	Decentralised Waste water Treatment Plant Phase- I (A)	5
3	Septage Plant	6
4	Decentralised Waste water Treatment Plant Phase- I (B)	26.4
		<b>37.4</b>
<b>GURUVAYUR</b>		
Nil		
<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
1	Making additional arrangements such as collection sump, pump set, piping arrangements etc for treatment of septage at the ongoing STP at chakkumkandam	4.5
2	Laying of sewerage network for 15km in Guruvayoor municipality	10
		<b>14.5</b>



PALAKKAD			
	Nil		
	<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
1	De centralised septage and sewage treatment facilities	9.76	32.36
2	Septage treatment plants, Decentralized sewerage treatment plants, Sewer lines Pump houses Septic tank suction units	22.6	
KOZHIKODE			
1	Construction of decentralised sewerage system in zone A- part B- phase 2	34.06	34.06
	<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
2	Construction of decentralised sewerage system in zone A- part B	27.03	72.63
3	Construction of decentralised sewerage system in zone A	45.6	
KANNUR			
1	Providing decentralised sewerage network with STP in old kannur municipal area.	28.00	28.00
	<b>Projects already approved in SAAP 15-16 &amp; 16-17</b>		
2	Providing septage Collection and Septage Treatment Plant at Edakkad & Providing decentralised sewerage system in Pallikunnu area.( Zone 2)	22.23	22.23

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