SUCHITWA MISSION PROGRESS REPORT 2018-19

Introduction

Suchitwa Mission, the Technical Support Group (TSG) in Waste Management sector under the Local Self Government Department, Government of Kerala is responsible for providing technical and managerial support to the Local Self Governments of the State. Also responsible for conceptualizing, action planning, conducting creative workshops, organizing training programmes, initiating sector related studies, bringing out occasional papers, initiating action research, conducting monitoring and such other activities in Waste Management Sector. The Mission is also the Nodal agency for implementing Swachh Bharat Mission (Urban), Swachh Bharat Mission (Rural) and Communication and Capacity Development Unit (CCDU) in the State

Projects

During the year 2018-19, Suchitwa Mission undertook implementation of 4 major schemes namely Suchitwa Keralam (Rural), Suchitwa Keralam (Urban), Swachh Bharat Mission (Rural) and Swachh Bharat Mission (Urban). In addition, it has functioned as the implementing agency for Haritha Keralam Mission.

1. Suchitwa Keralam (Rural)

The Scheme has the following components.

- 1. Pre-Monsoon cleaning campaign (Arogya Jagratha)
- 2. Solid Waste Processing Plant and its modification
- 3. Source Level Treatment of waste
- 4. Liquid Waste Management including Septage Treatment Plant
- 5. Intensive IEC activities including workshop, R&D and capacity building
- 6. Solid waste collection, transportation facilities and equipment for waste handling
- 7. Initial handholding support for SHGs/small scale entrepreneurs involved in waste management supporting services
- 8. Study, Research on Material use and Waste, Policy Standards and guidelines for Solid and liquid waste management & other innovations in sanitation.
- 9. Mechanization of septage management and social security safeguards for sanitation workers
- 10. Administrative cost
 - The Pre-monsoon Cleaning Campaign has been implemented in collaboration with Directorate of Health Services, National Health Mission and Haritha Keralam Mission. Detailed action plan has been drafted and discussed with the collaborating agency and brought out as an operational government circular. The fund earmarked for the purpose has been obtained and disbursed through direct transfer to the Grama Panchayats. Based on the guidelines field level activities were monitored through District Offices. The positive outcome of the campaign was relatively higher mainly owing to pre-campaign planning, integration of activities by different departments and effective convergence of fund at the local government level.

- One of the major activities undertaken was to enhance the infrastructure capability for source level treatment of biodegradable waste and door-to-door collection of non-biodegradables and their recycling. Technical Sanction from State level has been issued to 24 Projects which include Suchitwa Keralam rural fund, out of which 2 are household level projects, 13 are institutional projects and 8 are community level projects. 22 GPs have undertaken projects for source level treatment of waste with a total outlay of Rs. 41.27 lakh. Koovappady and Nedumangad Block Panchayaths have been supported with financial assistance of Rs. 21.12 lakh to take up projects for modification of solid waste processing plant. Pappinisseri and Muthumala Grama Panchayats has been supported for taking up project for equipping solid waste collection, transportation facilities and for procuring equipment like wheel barrow, trolley, pick up auto rickshaw, safety equipment like hand gloves, mask etc. with a total budget outlay of Rs. 4.08 lakh.
- Action has been taken to provide Performance based Incentive to SHGs/small scale entrepreneurs involved in waste management supporting services. A Study by Centre for Management Development (CMD) is progressing to evaluate the performance of Service Providers for solid waste management. The procedure and protocol have been discussed and decided and the survey is ongoing.
- The administrative control of the District Coordinators of Suchitwa Mission and payment of their salary have been transferred to State Suchitwa Mission since 1.10.2018. This has enhanced the establishment work.

2. Swachh Bharat Mission (Gramin)

Having declared as ODF State, Kerala is now focusing on ODF Sustainability and ODF+ activities. During the current year, a total sum of Rs.20.04 Crore has been expended on 8059 Solid and Liquid Waste Management projects across the State. 16 Sanitary Complexes / Public Toilets have been constructed for which Rs.33.52 lakh has been expended till date as part of Community Sanitary Complexes/Public Toilets components. Various IEC / Capacity Buildings activities for ODF Sustainability have been undertaken during the year. Rs.1.5 crore has been expended under SBM (G) towards 1347 IEC/Capacity activities.

2.1 Performance Based Incentive Grant

State received Rs.59.36 Crore towards Performance Based Incentive Grant for the year 2017-18, being 100% Central grant. As per guidelines, Rs.56.46 Crore has been distributed among 14 districts based on the number of households in each GP for undertaking various SLWM activities in GPs as per the guidelines. The fund transfer to the GPs was done only in January 2019 due to delay in disbursal from the Government. Instructions have also been given to the District Suchitwa Mission Co-ordinators to meet retrofitting expenses for IHHL constructed under SBM (G) up to Rs.5,000/ per toilet on the basis of the valuation certificate of concerned Grama Panchayat Overseer, including for the toilets damaged during flood. The progress of implementation has been monitored and project has been conceived/ implemented for about Rs.30 Crore.

2.2 GOBAR DHAN (Galvanizing Organic Bio-Agro Resources DHAN) Scheme

A total number of 21 projects, at least one in each district have been initiated in the State. Four projects, one each in Thaneermukkom GP in Alappuzha Dist., Elamkulam GP in Malappuram District, Nedumkandam Grama Panchayat in Idukki District, Pappinassery Grama Panchayat in Kannur District have been completed.

Total number of projects undertaken	21
Estimated cost	Rs.3.37 Crore
Projects completed	4
Work in Progress	7
Technical Sanctions issued	4
DPR prepared	6

Table:1 Gobardhan Project Status

2.3 Swachh Iconic Place (SIP) – Phase II – Kalady

"Swachh Iconic Place (SIP)" is a multi-stakeholder initiative, focusing on cleaning up 100 places across India that are "Iconic" due to their heritage, religious and/or cultural significance. The objective is to improve the cleanliness conditions at these places to a distinctly higher level. All Iconic sites have designated PSUs for financial and technical support. Kalady in Ernakulam District as the birth place of Sri Sankaracharya has been selected as a Swachh Iconic Place in Phase 2 by Ministry of Drinking water & Sanitation under SBM. BPCL has been designated as the Public Sector Unit (PSU) for supporting the activities in Kalady. Kalady GP is the implementing agency and they have prepared DPR with the support of Suchitwa Mission and BPCL. BPCL have sanctioned Rs.8,53,80,508/- and entered into agreement with the GP. BPCL have transferred 25% of their contribution, i.e., Rs.2,13,45,127/- to the GP on 23.07.2018. The GP have engaged Kerala Electricals Ltd for implementation of works involving CSR contribution. In addition, following funds are also mobilized for the implementation of the project.

- Rs.15,86,000/- from Angamaly Block Panchayat for supporting various waste management activities.
- Rs. 14 lakhs from the SBM(G) funds for undertaking various SLWM activities.
- District Collector, Ernakulam has issued Administrative Sanction for an amount of Rs 305.70 lakhs for constructing bus stand-cum-shopping complex by utilizing MLA fund

As part of the project the peripheral areas have been cleaned. About 500 tons of waste has been removed from the dumping yard. During the flood, 560 tons of non-biodegradable waste has been disposed. Various awareness sessions and IEC programmes are being undertaken for effective waste management. A proposal for developing Kalady as a pilgrim tourist destination is under consideration. The GP renovated 6 major ponds which are being protected. The Progress of the

Project was presented in the Review Meeting held by the Ministry of Drinking Water and Sanitation, Govt. of India at Hyderabad on June 25-26, 2018 by the Executive Director and Programme Officer (Health) of Suchitwa Mission. The Ministry also conducted a Review Meeting at Mumbai on January 15-16, 2019 and the Progress of the Project work from July to December, 2018 was presented by Smt. Thulasibai, President, Kalady GP.

Kalady – Swachh Iconic Place was awarded the "Swachh Bharat National Award" by the Ministry of Drinking Water and Sanitation, Government of India for effective implementation of various schemes. Smt. Thulasibai, President, Kalady GP received the award at New Delhi on 2.10.2018.

2.4 Swachh Survekshan Grameen 2018

The Swachh Survekshan Grameen 2018, a project of Ministry of Drinking Water and Sanitation to rank all districts and States of India on the basis of quantitative and qualitative achievement. The survey and evaluation programme were done in the State during the period from 1st of August to 31st August 2018 through an independent agency (M/s. Kantar Public). The State level inauguration of Swachh Survekshan Grameen 2018 was organized at Edapal, Malappuram district on 28/07/2018. As part of the programme Suchitwa Mission has conducted various IEC activities by printing 50,000 brochures, posters, banners etc. that were distributed among 14 districts for educating the public to create awareness on the importance of Swachh Survekshan Grameen 2018. Though the agency appointed for conducting Swachh Survekshan Grameen had started their work, it could not be completed due to unprecedented flood occurred during the month of August 2018. The agency could carry out their work only in 81 Grama Panchayats in the State. In four districts (Idukki, Ernakulam, Thrissur and Wayanad) no survey could be carried out.

2.5 Swachh Sundar Shauchalaya

The Ministry of Drinking Water and Sanitation launched a month-long campaign viz; "Swachh Sundar Sauchalaya" across the country during the period from 1st of January to 31st January, 2019 to mobilize the households to paint their toilets with an aim to promote sustained usage, ensure high quality of toilets in rural areas. Under this programme it has been stipulated that Grama Panchayats and Districts would be awarded based on the number of toilets painted during the campaign period. As part of the campaign Suchitwa Mission has issued instructions and directed that an amount of Rs.1,500/- could be expended from SBM IEC component for painting each toilet. It has also been instructed to display some sanitation messages on painted toilets. As per direction of Government of India, 5 painted/beautified toilets each in three districts have been shortlisted by the State and forwarded to Ministry of Drinking Water and Sanitation for final verification.

S. N	District name	Total no of painted IHHL	No. Of painted community/school/Anganwadi	Total no. of painted toilets photographed
1	Alappuzha	4	0	2
2	Ernakulam	75	9	71

Table 2: District	wise list	of toilets	painted/beautified
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3	Idukki	11	0	14
4	Kannur	42	9	32
5	Kasaragod	0	0	0
6	Kollam	43	5	44
7	Kottayam	33	2	44
8	Kozhikode	6	0	26
9	Malappuram	4	7	11
10	Palakkad	5	2	13
11	Pathanamthitta	6	1	7
12	Thiruvananthapuram	47	2	44
13	Thrissur	5	0	6
14	Wayanad	0	0	0
	Total	281	37	314

2.6 Swachh Shakti 2019

In order to honour and recognize the women champions at the grassroots level for their contribution in the field of sanitation across the country, Ministry of Drinking Water and Sanitation, Govt of India organized 'Swachh Shakti 2019' event on 14th February, 2019 at Kurukshetra, Haryana, in the run-up to International Women's Day 2019. Smt. Mary Thomas, President, District Panchayat, Thrissur; Smt. Gowri, President, Kanjangad Block Panchayat, Kasaragode; Smt. Anila, President, Karakulam Grama Panchayat, Thiruvananthapuram and Smt. Anitha Prasad, President, Sooranad North Grama Panchayat, Kollam were nominated from the State to participate in the programme. They were accompanied by two Officials from State Suchitwa Mission. Smt. Anila, President, Karakulam Grama Panchayat, Thiruvananthapuram shared the dais with the Prime Minister of India during the function.

Source level treatment of bio waste- Status in Grama Panchayats

The status of aerobic and anaerobic composting facilities at the Household, Institutional and Community level has been collected based on the household level survey carried out during the Freedom from Waste campaign and compiled in Table 3. The Table is to be validated for data accuracy.

No	District	of including composting pit				faciliti	metha es (Biog nstallat	Total waste treated	
		GPs	House-	Institu-	Commu-	House-	Institu	Commu-	tpd
			hold	tional	nity	hold	-tional	nity	
1	Thiruvananthapuram	73	192593		1	8030	39	10	145
2	Kollam	68	416807	16795	572				630
3	Pathanamthitta	53	22640		6	3900	28	3	13
4	Alappuzha	72	490728	10234	204	2834	44	3	747

Table 3 Composting/Bio-methanation facilities in Grama Panchayath

		941	2340402	27092	807	62141	711	55	2143
14	Kasaragod	38	17825	4	2	1028	4	0	18
13	Kannur	71	366273	19	1	6125	4	3	55
12	Wayanad	23	21031	15	0	4785	477	0	12
11	Kozhikode	7	440576	2	3	7458	3	7	235
10	Malappuram	94	119831	13	3	2692	51	9	110
9	Palakkad	88	29255	0	4	2409	3	0	17
8	Thrissur	86	116144	8	1	12887	5	2	85
7	Ernakulam	82	60154	1	0	5357	37	14	41
6	Idukki	52	17102	0	4	2936	4	1	12
5	Kottayam	71	29443	1	6	1708	12	3	23

Non-bio degradable Management: Systems in place

In order to institute door-to-door collection of non-biodegradable waste, an enterprise group namely Haritha Karma Sena (HKS) has been formed through the Kudumbasree Mission and trained through Kerala Institute of Local Administration (KILA) and Kudumbasree. Viability Gap Fund is being provided for the first six months for building the HKS as a sustainable group. In order to enable the storage, recycling and disposal of the non-biodegradable waste, Material Collection Facility, Plastic Shredding Units and Resource Recovery Facility are being established. The services of Clean Kerala Company and other service providers are being used for establishing Plastic Shredding Units. The Clean Kerala Company is being provided with a Viability Gap Fund for operating the RRF being established. 36 Haritha Sahaya Sthapanam (HSS) has been identified and enlisted through due process. The proposal for providing cash compensation to HSS is approved by the Government. The progress of the strategy for the management of non-biodegradable waste is given in Table 4.

No	District	No	Haritha	a Karm	a Sena		MCF			RRF	
		of GP	Formed	Funct- ional	Trained Members	Constr- ucted	Funct- ional	Under constr- uction	Constr- ucted	Funct- ional	Under constr- uction
1	Thiruvananthapuram	73	73	41	2356	37	23	5	8	2	0
2	Kollam	68	68	51	1668	39	39	9	8	8	0
3	Pathanamthitta	53	53	50	1150	13	45	7	3	3	4
4	Alappuzha	72	72	20	1693	23	20	21	2	3	8
5	Kottayam	71	71	41	1688	8	25	8	9	10	3
6	Idukki	52	52	16	1475	15	10	9	4	4	1
7	Ernakulam	82	82	34	1522	30	17	6	9	5	1
8	Thrissur	86	86	22	2045	20	17	17	18	9	9
9	Palakkad	88	88	31	2520	30	18	10	4	4	3

Table 4 System being established for management of non-biodegradable waste

10	Malappuram	94	94	22	2477	20	11	6	3	2	13
11	Kozhikode	7	70	70	1643	21	20	6	3	2	1
12	Wayanad	23	23	10	536	9	14	8	2	2	6
13	Kannur	71	71	66	1235	50	50	7	7	4	7
14	Kasaragod	38	38	10	1348	14	8	8	1	1	6
	Total	941	941	484	23356	329	317	127	81	59	62

There are 59 Functional Plastic Shredding Units as a part of RRF of which 41 in Grama Panchayath and 18 in Block Panchayats.

3. Suchitwa Keralam (Urban)

The Scheme has the following components.

- 1. Solid Waste Management plant & its modification MRF/RRF, Plastic shredding unit etc.
- 2. Source Level Treatment of waste
- 3. Pre-monsoon cleaning campaign
- 4. Intensive IEC activities including workshop, R&D and capacity building
- 5. Construction of Sanitary Complexes in Public Places
- 6. Advertisement charges, Transaction fee for modern plant
- 7. Liquid waste management including septage treatment plant
- 8. Assistance to promote recycling and other ecofriendly industries
- 9. Initial handholding support for SHGs/small scale entrepreneurs involved in waste management,
- 10. Incentive for promoting Extended Producer Responsibility.
- 11. Sanitation Awards for Schools, RWAs, ULBs, Institutions/Commercial Establishment competitions etc.
- 12. Mechanization of septage Management
- 13. Technical advice for Urban civic amenities
 - As in the case of rural areas, the Pre-monsoon Cleaning Campaign has been implemented in the ULBs with the support of Directorate of Health Services, National Health Mission and Haritha Keralam Mission based on the guidelines stipulated in the operational circular. The fund earmarked for the purpose has been obtained and disbursed through direct transfer to the ULBs. The field level activities were monitored through the District Office.
 - Technical Sanction has been issued from State level to 5 Projects out of which 1 is household level projects, 2 are institutional level projects and 2 are community level projects. Four Municipalities have undertaken project for Source Level Treatment of waste with a total outlay of Rs. 61.35 lakh. A Plastic shredding facility is functional in Neendakara Harbour to shred, bale, and forward plastic materials collected from sea by the fishermen. Rs.4.5 lakh has been provided for its operation & maintenance under 'Initial handholding support for SHGs/ Small Scale entrepreneur in waste management supporting services'. A series of discussion has been held with the Railway officials for setting up a

modern sanitary complex for commuters in the Railway station, Thampanoor. Railways have identified the land for setting up the sanitary complex adjacent to the auto/ taxi stand. The design of the building has been completed by Costford and a detailed estimate is being prepared.

4. Swachh Bharat Mission (Urban)

The Project has 5 components namely Individual House Hold Latrines (IHHL), Capacity Building and Office Expenses (CB &OE), Infomation Education and Communication (IEC), Solid Waste Management (SWM) and Public Toilet. The progress of each component is given hereunder.

4.1 Individual House Hold Latrines (IHHL)

The IHHL construction has been completed totally against the target of 29578 IHHLs. 77 urban local bodies in the State have been certified as ODF by Quality Council of India (QCI). ODF inspection is going on in other ULBs. 10532 nos of IHHL were destroyed during the flood. The State Level Empowered Committee (SLEC) and Ministry of Housing and Urban Affairs (MoHUA) have given sanction to take up the construction of the damaged toilets. The State has issued Order in this regard (GO (Rt)No.2851/2018/LSGD dated 7/11/2018). The ULBs are in the process of taking up projects in this regard.

4.2 Capacity Building and Office Expenses (CB &OE)

Capacity building activities have been conducted for stakeholders like officials, people's representatives, resource persons, Green Task Force members etc. An amount of Rs.160 lakh has been released by MoHUA for Capacity Building and Office Expenses activities and an amount of Rs.150.15 lakh has been spent. Two State level workshops has been organized as follows.

- One day workshop on 'Star Rating for garbage free cities for Chairpersons and Secretaries of ULB and officials of Suchitwa Mission on 15.05.2018 at Mascot hotel attended by 180 participants
- One day workshop on launching of Swachh Survekshan 2019 for Chairpersons and Secretaries of Urban Local Bodies and District Coordinators of Suchitwa Mission on 27.09.18 held at Kerala State Science & Technology Museum attended by 200 participants

Further, training on solid waste management with exposure visits has been organized through Kerala Institute of Local Administration to all the Secretaries of ULBs. In order to conduct various training programme pertaining to sanitation and waste management, KILA has been provided Rs. 125 Lakh. Accordingly, the following trainings have been organized or being conducted.

- 1. Training to harithakarmasena on scientific waste management
- 2. Training to Residence Association representatives
- 3. Training to Health Standing Committee members
- 4. Training to councilors and officials

4.3 Infomation Education and Communication (IEC)

The IEC programme undertaken included Radio jingles campaign, Cinema Theatre Advertisement, Video Documentation, Exhibitions, Tool Kit Preparation for Star Rating Protocol, Inter personal communication, Green Protocol, Preparation of IEC Tools like Video, Booklets leaflet, posters etc. An amount of Rs.160 lakh has been spent for IEC activities. 12 short demonstration videos on waste management, documentary on decentralized waste management, 20-minute video on composting

4.4 Solid Waste Management (SWM)

The entitlement for Solid Waste Management under SBM(U) for the state under Central Share is Rs.121 crores based on the urban population. This is 35% of the total cost of SWM projects submitted by the ULBs. All the ULBs were periodically addressed to prepare Detailed Project Report through qualified agencies. A total of 82 ULBs have prepared the DPR which have been scrutinized by the Technical Committee headed by the Executive Director, Suchitwa Mission. Based on the suggestions, the ULBs revised the DPR which were further scrutinized and placed before the Sub Committee headed by the Secretary, LSGD. Based on the recommendations of the Sub Committee, 82 DPRs were placed before the State Level Empowered Committee (SLEC) for Sanitation which approved the proposal for a total project cost of Rs. 295.09 Crore (Central Share: Rs. 103.28 Crore; State share: Rs 68.75 Crore ULB share Rs. 123.05 Crore). The Ministry of Housing and Urban Affairs (MoHUA), Govt. of India has approved the 82 DPRs. A total of Rs.38.95 Crore as the central share and Rs.19.98 Crore as the matching State share have been released to 57 ULBs as 1st Instalment. The 1st Instalment Central share to the second batch of 17 ULBs is sanctioned and released to the State which is yet to be released to the SM for disbursal. The first batch of 57 ULBs have taken up 313 projects with a total outlay of Rs.92.92 crore, the progress of which is being monitored on a monthly basis.

4.5 Public Toilet

The target set for the construction of Public Toilet seats in the state is 2445. Currently, the number of toilet seats undertaken is 2001. The DPC has approved projects for construction of additional 1775 seats. Construction is completed for 146 seats. Project for the construction of 622 seats is progressing and 836 seats is under tendering process.

Source level treatment of Bio degradable Waste in ULBs- Status

The status of aerobic and anaerobic composting facilities at the Household, Institutional and Community level in the Urban Local Bodies has been collected based on the household level survey carried out during the Freedom from Waste campaign and compiled in Table 5. The Table is to be validated for data accuracy.

			Compo	sting insta	llations	Bi	ant	Total	
No	No District	No. of	includir	ng compos	ting pit	in	waste		
110	District	ULBs	House-	Institu-	Commu-	House-	Institu-	Commu-	treated
			hold	tional	nity	hold	tional	nity	tpd
1	Thiruvananthapuram	5	78388	3	230	6336	325	13	107
2	Kollam	5	154976	335	18				91

Table 5 Composting/Bio-methanation facilities in ULBs

3	Pathanamthitta	4	5524		12	240	4	3	9
4	Alappuzha	6	99887	2238	19	2076			183
5	Kottayam	6	2993	6	23	160		1	5
6	Idukki	2	697			459	2	2	2
7	Ernakulam	14	15051	48	753	1939	5	6	269
8	Thrissur	8	92337	10	107	3774	4	9	91
9	Palakkad	7	1935		4	610	7	0	7
10	Malappuram	12	32760	16	7	167	6	2	37
11	Kozhikode	8	215765	0	32	222	2	3	122
12	Wayanad	3	6593	5	0	494	162	2	4
13	Kannur	10	123355	2	9	212	5	8	19
14	Kasaragod	3	3623	0	2	0	0	0	2
		93	833884	2663	1216	16689	522	49	948

Non-biodegradable management systems in ULBs- Status

As in the case of Grama Panchayats, a system involving Haritha Karma Sena, Material Collection Facility and Resource Recovery Facility for the management of non-biodegradable waste is being established in ULBs and its progress is given in Table 6.

No	District	No	Hai	ritha F	Karma S	ena		MCF			RRF	
		of	For	ULB	Functi	Train	Constru	Functi	Undue	Constru	Functi	Under
		UL	med	S	onal	ed	cted	onal	construc	cted	onal	construc
		Bs		train		Memb			tion			tion
				ed		ers						
				HKS								
1	Thiruvana	5	5	5	4	196	41	41	0	4	4	1
	nthapuram											
2	Kollam	5	5	4	4	262	5	4	0	4	4	1
3	Pathanamt	4	4	2	2	86	4	4	0	3	3	1
	hitta											
4	Alappuzha	6	6	1	3	54	13	12	2	3	3	2
5	Kottayam	6	6	6	5	292	4	6	0	0	1	4
6	Idukki	2	2	2	1	138	2	2	0	2	2	0
7	Ernakulam	14	13	13	6	512	12	11	3	10	5	2
8	Thrissur	8	8	11	4	372	10	8	4	6	3	3
9	Palakkad	7	7	7	6	288	6	6	0	6	5	0
10	Malappura	12	12	10	7	603	5	3	7	2	2	9
	m											
11	Kozhikko	8	8	8	8	310	6	4	0	3	2	2
	de											
12	Wayanad	3	2	2	1	128	0	1	1	0	0	2
13	Kannur	10	10	10	10	464	9	9	0	6	5	2

 Table 6. System being established for management of non-biodegradable waste

14	Kasargod	3	3	3	1	98	2	2	0	1	1	1
	Total	93	91	84	62	3803	119	113	17	50	40	30

There are 40 Plastic Shredding Units functional in urban areas as part of RRF.

Junk-le Park

The Resource Recovery Centre of Punalur Municipality at Plachery, inaugurated on 22nd January 2019 by Sri. A.C Moideen, Minister for Local Self Government Department is one of its kind in the whole country. The Resource Recovery Museum located adjacent to the RRF is the cynosure of the campus. The beautiful installations in the museum is made of junk materials, conveys the message that junks are not to be wasted but are resources for another valuable object. Many from outside the district as well as the State is visiting the museum to have a glimpse of this unique creativity. The museum is made of non-bio degradable waste materials collected by the Municipality through its green volunteers. The green volunteers collect non bio degradable waste from houses and institutions on regular intervals, segregate and keep the collected materials in the ward level Mini Collections Facilities from where it is transported to the RRF where it undergoes secondary segregation. Recyclable ones are sold to the scrap dealers at a rate decided by the council and the non-recyclable ones are shredded and handed over to Clean Kerala Company Limited for road tarring.

5. Technical sanction

During the current year, issuance of Technical Sanctions has been expedited. The details of TS issued are given in the Table below. Different types of composting systems and biogas plants have been provided at the household and institutions (schools, offices etc). Aerobic composting devices, biogas plants, Organic Waste Converter etc have been provided at the community level such as markets, shopping malls, community centres and such other public places. The details of Technical Sanctions issued to SWM Projects, Slaughter Houses and Crematorium are given in Table 7.

Due	so to a man a mont	No. of Technical
Pro	ject component	No. of Technical
		Sanctions Issued
Biodegradable waste	Household Level	258
	Institutional Level	87
	Community Level	68
Material Collection Facili	ty/Resource Recovery Facility	3
Slaughter House/ Render	ing Plant	3
Gas Crematorium		7
Liquid Waste Manageme	13	
Total		439

Components	2018-19
Household level Biogas Plants	15043
Household level Composting Plants	206309
Institutional Level Biogas Plants	1367
Institutional level compost plants	669
Community Level Biogas Plants	9
Community level composing plants	441
MRF	10
Liquid Waste Management	13
Gas Crematorium	7
Biogas Plant Maintenance	29
SWM Treatment plant	3
Total	223900

State wide technical sanction- Component wise

5.1 Technical Committee

The Technical Committee consists of the Executive Director, Suchitwa Mission, Chief Engineer, LSGD, Chief Environmental Engineer, Trivandrum Regional Office, Kerala State PCB, Dr. E.V. Ramaswamy, Associate Professor, School of Environmental Sciences, M.G University, Kottavam, Dr. V.B. Manilal, Senior Principal Scientist (Rtd.), NIIST, CSIR, Thiruvananthapuram, Dr. Sudharmai Devi C.R., Professor, Soil Science & Agricultural Chemistry, College of Agriculture Vellayani, Thiruvananthapuram, Dr. Sabu Joseph, Associate Prof & Head of Dept. Environmental Sciences, University of Kerala, Thiruvananthapuram and Shri. Shibu K, HoD Environmental Engineering Division, Dept. of Civil Engineering, College of Engineering, Thiruvananthapuram. In addition, Experts from Suchitwa Mission also form part of the Committee. During the year, the Committee met 3 times on 05.05.2018, 11.01.2019 and 02.03.2019 for enlisting service providers and approval of new technology/ devices in the field of solid waste management. Based on expression of interest for empanelling agencies as service providers and for exploring new technology/ device in the field of solid waste management, 8 applications were received for service provider and 9 applications for approval as new technology/ devices. Based on verification of documents, presentation made and evaluation by the Committee, 2 agencies are recommended for empanelment as service provider and 4 new devices are recommended subject to field level performance verification. The field level performance of one of the devices namely Organic converter machine of capacities ie, 25 kg, 50 kg and 75 kg per day (To be used mainly in institutions) has been conducted. The sub-committee is not satisfied with the performance of the Organic Converter Machine for institutional installations based on six parameters such as cost factor, energy consumption, occupational social aspects, environment friendliness, O&M expenditure and over-all performance efficiency compared to other composting devices. (Higher capacity Organic Converter Machines for mechanizing decentralized waste management plants have approval from the Suchitwa Mission).

6. Liquid Waste Management (LWM)

Suchitwa Mission issued Technical Sanction and partial financial assistance for 8 Liquid Waste Management (LWM) projects for sewage treatment, proposed to be installed in hospitals and market places. The Mission also proposed to support establishment of sewage treatment plants (STP) in 14 Government hospitals, one in each district. A meeting was convened on 05.10.2018 with the officials of concerned LSGIs, hospitals, Pollution Control Board and Directorate of Health Services to discuss and decide the way forward and time-line. Accordingly, SM provided draft tender document for DPR preparation and technical advisory support. Out of the fourteen hospitals, Taluk Hospital at Sultan Bathery, Wayanad awarded the tender for implementation of the STP project after preparing DPR and obtaining TS from SM. Kottarakkara Municipality also tendered and selected the agency and the DPR is under preparation. Other LSGIs are yet to float the tender for DPR preparation.

6.1 Support to Government Hospitals for establishing Sewage Treatment Plants

Many of the Government Hospitals do not have Sewage Treatment Plants (STP) to treat the toilet waste. Therefore, it is proposed establish STP in atleast one hospital in each district. During the 1st Phase, the hospitals proposed to be covered are given in Table 8.

S.N	District	LSGI	Name of	Capital	Current	Remarks
			hospital	Cost in Rs.	Status	
1	Kollam	District	Kollam	2,23,97,537	TS	Sanctioned Rs.
		Panchayat	District		issued	82.6 lakh from
			Hospital &			SM fund and
			Govt. Victoria			Rs. 49.56 lakh
			Hospital			disbursed as 1 st
						instalment
2	Kozhikkode	Kunnummal	Kuttyadi	40,00,000	TS	
		Block	Taluk		issued	
		Panchayat	Hospital			
3	Pathanamthitta	District	Kozhencheri	61,00,000	TS being	
		Panchayat	Hospital		issued	
4	Trissur	Cherpu	Community	12,87,000	based on	
		Block	Health Centre		decision	
		Panchayat			on 8.2.19	
5	Wayanad	District	District	48,55,800		
		Panchayat	Hospital			
6	Kasaragod	District	District	1,08,76,530		
		Panchayat	Hospital,			
			Kanhangad			

 Table 8. Proposals for establishing Sewage Treatment Plants in Govt. Hospitals

7	Kasaragod	District	KSD General	1,06,72,930	
		Panchayat	Hospital		

6.2 Proceedings of Technical Committee for Liquid Waste Management Projects

The Technical Committee consisting of experts from Academic field, Kerala Water Authority, Pollution Control Board etc in addition to the experts of Suchitwa Mission has been convened 4 times on 4.9.2018, 24.10.2018, 17.12.2018 and 8.2.2019 for evaluating DPRs for Septage Treatment Plants and other waste water treatment plants as per the details are given below.

- 1. ETP of Kollam Corporation Slaughter House
- 2. Waste water treatment in Uppala Town, Mangalpady GP
- 3. STPs for Govt. hospitals in Kasaragod
- 4. STP in Town hall, Kadakkal GP
- 5. STP for Pvt. Bus stand Adimaly GP
- 6. STP for Dist. Ayurveda Hospital, Wayanad
- 7. STP for Kuttyadi Hospital, Kunnummal BP
- 8. STP for District Hospital, Idukki;
- 9. Waste water treatment plant for fish market, Ponmundom GP
- 10. STP for Dist. Ayurveda Hospital, Wayanad
- 11. Waste water treatment plant for fish market, Ponmundom GP
- 12. STP for Kozhancheri Hospital, Pathanamthitta
- 13. Waste water treatment plant for Community Health Centre, Cherpu Block
- 14. STP for Pampad Housing colony, Malappuram
- 15. STP for town hall, Koyilandi Municipality

Based on the recommendations of the Technical Committee, the TS has also been issued or in process to the Liquid Waste Management projects listed in Table 9.

S.N	District	LSGI	Name of project	Capital	Current Status
				Cost in Rs.	
1	Kollam	Chittumala Block	Sewage Treatment	28,20,000	TS issued
		Panchayat	Plant in Inchavila Old		
			Age home		
2	Kollam	Kadakkal GP	STP Panchayat Town		Suggested DPR
			Hall		modification
3	Kollam	Municipal	ETP in Slaughter house		Technical
		Corporation			Approval given
4	Idukki	Adimaly Grama	STP in private bus	18,26,500	TS being issued
		panchayat	stand		as per decision
					on 08.02.2019

Table 9. Liquid Waste Management Projects being cleared technically

5	Thrissur	Municipal Corporation	ETP in Kuriyachira Slaughter house	37,00,000	TS Issued
6	Thrissur	Iringalakkuda Municipality	ETP in Slaughter House	27,99,600	TS Issued
7	Thrissur	Iringalakkuda Municipality	ETP in Evening Market	17,72,000	TS Issued
8	Thrissur	KILA	STP	98,00,000	TS Issued
9	Malappuram	Tirur Municipality	Waste water treatment in municipal bus stand	60,00,000	TS Issued
10	Malappuram	Malappuram Municipality	STP in Pampad Housing colony	29,19,926	TS being issued as per decision
11	Malappuram	Ponmundam Grama panchayat	ETP in fish market	19,00,000	on 08.02.2019
12	Kozhikkode	Koyilandi Municipality	STP in town hall	18,96,000	
13	Kasaragod	Mangalpady Grama panchayat	Waste water treatment plant in Uppala Town	80,00,000	TS Issued

6.3 Rejuvenation of Canal network in Alappuzha

A decentralised liquid waste treatment system as part of the rejuvenation of Canal network in Alappuzha is being done on an action research mode. The project consists of two systems, one a Decentralized Waste Water Treatment System (DEWATS) in Municipal colony and a Phytorid system at the debouching point of Municipal canal with Vada canal. The first project covers a stretch of about 375 metres of Municipal canal receiving discharges from 52 houses in Municipal Colony and 90 individual houses along the bank of the canal with an outlay of Rs. 85.83 lakh is being implemented by M/s. CDD Society of India, Regional Office, Ernakulam making use of CSR fund. Implementation of the DEWATS system project is almost completed. The second project is proposed by M/s. National Environmental Engineering Research Institute (NEERI), Nagpur under CSIR, Govt. of India with an outlay of Rs.67.55 lakh. This is to be funded by Suchitwa Mission as an Action Research Project subject to approval by Government. The project is to establish a Phytorid treatment system at the debouching point of Municipal Canal with Vada Canal to treat the flowing water from Municipal Canal, part of which is treated using the DEWATS system. The project is to be implemented by NEERI on an experimental basis. The technical sanction of the projects has been issued by Suchitwa mission after scrutiny and recommendation for issuing technical sanction by a Committee consisting of Executive Director, Suchitwa Mission, Chief Engineer, Irrigation Department. The project obtained Administrative Sanction for Rs. 67,55,325/- vide GO (Rt) No.577/2019/LSGD dated 08.03.2019. The fund will be disbursed as soon as the budget allocation is released.

6.4 Model Septage Treatment Plants in KILA Centres in Kottarakkara and Thaliparamba

Implementation of septage treatment plants is a priority in the state and availability of land is the major hindrance. Kerala generates about 8 Mm³ of septage/fecal sludge on a daily basis which need to be treated at the nearest place possible. There are only two stand-alone septage treatment plants in the state which are located in Kochi Corporation. There is a need to establish atleast one stand-alone septage treatment plants in each district initially to treat the waste water emptied from about 70 lakh on-site sanitation systems on a periodical basis. In order to demonstrate the treatment system as well as to generate demand for setting up such facilities, it is proposed to have model systems in the northern and southern portion of the state. Based on discussion with the Director, KILA, Suchitwa Mission has done a reconnoitre study in KILA- SIRD campus, Kottarakkara and KILA-ETC campus, Thalipparamba during December, 2018 and January 2019. Both the sites are located near to agricultural farms and therefore, the treated water and composted sludge could be made use of then and there. A decision has to be taken at the Government level to go ahead with the project for which proposal has been submitted.

6.5 Feasibility Study on Centralised & Decentralised Waste Water Management in ULBs

A Secretary level Committee has been formed to deal with the pollution of water bodies due to lack of liquid waste management systems as per a decision taken in a meeting chaired by the Hon'ble Chief Minister on 11.06.2018. Based on the decision, a Technical Committee has been constituted vide GO(Ms)No.35/2018/WRD dated 21.07.2018 with the Executive Director, Suchitwa Mission as Chairman and Chief Engineer, KWA as Convenor. In addition, the Committee includes Jt. Director (Health), Directorate of Urban Affairs, Jt. Director, Directorate of Urban Affairs, LSGD and Executive Engineer, Sewerage Division, KWA, with representation from Directorate of Urban Affairs. The Liquid Waste Management Expert of Suchitwa Mission assisted the Technical Committee. The Committee met thrice and undertook the following task.

- Prepared a format for collecting baseline information from ULBs on liquid waste management
- Organized an orientation workshop to the Chairman/Secretary of ULBs on 21.9.2018
- Estimated the volume of sewage and fecal sludge and septage in the 93 ULBs
- Collected baseline data from the selected 14 ULBs involving the Engineers of KWA and Technical Consultants of Suchitwa Mission in each district
- Compiled the sanitation status of selected ULBs of 13 Districts except Wayanad.
- Evaluated the existing status and ongoing initiatives in the liquid waste management sector under KWA, Amrut Mission and Suchitwa Mission

Based on the details, the Committee prepared an Interim Report and submitted to the Addl. Chief Secretary, Water Resources Department. There are five detailed recommendations in the report which will have to be followed up.

6.6 Member of the Technical Committee, Sewerage Management and Sanitation projects under Smart Cities Mission in Kochi

Smart Cities Mission of Government of India, Kochi intends to develop a sewage collection and treatment system to cover the Fort Kochi, comprising of wards 1,2,3,4 and 5 covering an area of

2.7 square kilometres. Executive Director, Suchitwa Mission is a member of the technical committee which would be finalising the type of sewer collection and treatment system.

6.7 State Level technical committee for AMRUT

Executive Director, Suchitwa Mission is the Chairman of the State level Technical Committee (SLTC) for according Technical sanctions for Sewerage and Septage sector projects under AMRUT. There were 8 technical committees conducted so far to accord technical sanctions for the projects. The details of projects which were given technical sanction under AMRUT are given in Table 10.

S. N	District	LSGI	Name of project	Capital Cost in Rs. (in crore)	Current Status
1	Thiruvananthapuram Thiruvananthapura m Corporation		STP, Medical College	19.16	TS Approved
1.	Kollam	Kollam Corporation	STP	30	TS Approved
2.	Alappuzha	Alappuzha Municipality	STP, General Hospital	3.45	TS Approved
3.	Thrissur	Thrissur Corporation	STP, General Hospital	3.52	TS Approved
4.	Trissur	Thrissur Corporation	Decentralised STP and sewerage network	53.4	TS Approved
5.	Palakkad Palakkad Municipality		Decentralised STPs, sewer network	26.05	TS Approved
6.	Palakkad	kkad Palakkad Municipality		2.88	TS Approved
7.	Kozhikode	Kozhikode Corporation	STP, Medical College	14.12	TS Approved
8.	Kozhikode	Kozhikode Corporation	STPs and network Zone A	116.5	TS Approved
9.	Kannur Kannur Corporation		Decentralised STPs and sewerage network	46.81	TS Approved
10.	Kollam	Kollam Corporation	Three FSTPs	12.66	TS Approved
11.	Alappuzha	Alappuzha Municipality	FSTP	6	TS Approved
12.	Thrissur	Guruvayur Municipality	FSTP	4.5	TS Approved
13.	Thrissur	Thrissur Corporation	FSTP	3.5	TS Approved
14.	Palakkad	Palakkad	FSTP	3.41	TS Approved

Table 10. Details of LWM Projects being given TS under Amrut Mission

		Municipality			
15.	Kannur	Kannur Corporation	FSTP	3.42	TS Approved

7. Information, Education and Communication (IEC) Activities

Suchitwa Mission has been utilizing all possible means for campaigning and disseminate messages regarding scientific waste management, promoting segregation at source, reduce waste generation, reuse resources at its optimum and donating recyclables to scrap dealers. The following activities have been undertaken during the period under report.

7.1 Sponsored programme in Akashawani

60-episode campaign was launched through AIR, intended to popularize the successful waste management initiatives of various local bodies in the state, scientific waste management strategies adopted at these LSGIs, like source level segregation, composting, management of non-bio degradable waste etc. The program helped the public to get familiarised with concepts like Haritha Karmasena, Material Collection Facilities (MCF), Resource Recovery Facility (RRF), SWAP shops, Green Protocol etc. The representative of around 30 LSGIs conversed on their successful interventions in waste management through this programme. There were episodes on subjects like purpose of Harithakeralam Mission, basic concepts and evolution of sanitation strategies in the State etc. The 40 episodes of this programme has already been aired based on the themes developed by SM for each episode from November 2018 to February 2019. The theme for the remaining episodes is being finalised based on the latest developments happening in the state.

7.2 Mid media activities through Rangasree team of Kudumbasree Mission

Suchitwa Mission with the support of Kudumbashree Mission planned to conduct Street plays across the state on scientific waste management practices adopted by the state like source level segregation of dry waste, handing over them to Harithakarmasena, encourage public to pay user-fee, encourage public to compost wet waste at households, promoting green protocol etc., at 642 selected spots in 93 ULBs of the state. Key messages have been prepared and script is finalized after having a consultative workshop and discussions with the team members of Rangashree. The team performed the final play before the Suchitwa Mission officials and District level rehearsals are also completed. Draft agreement has been mutually agreed upon. But could not execute the final agreement, as a clarity on the date of commencement of the program in the wake of general elections is to be made.

7.3 Clean campus green campus: campaign through 1828 NSS units across the state

A 6-month long project through NSS to make the colleges, higher secondary/VHSE schools and adopted wards of NSS units 'waste-free' commenced on October 2018. Camps have been held in the adopted villages throughout the state during the months of November/December 2018. 1828 NSS units and around 20000 volunteers participated in the campaign. Prior to the implementation of the project, training was given to around 1800 Programme Officers of NSS with the support of KILA.

Cleaning dumpsite and converting the garbage site into a garden, Cleaning water sources, House visits and pamphlet distribution, Bio-compost pit construction: on-site demonstration of management of bio- wastes in households, Awareness programs such as rallies, street plays and flash mobs were the activities conducted by the volunteers. Waste management activities were done in the school/college campuses and it is planned to declare the campuses as 'zero waste campus' on 5th June 2019

7.4 Subhiksham suchitwam/swachh sangamam-grading of hotels, restaurants, auditoriums, marriage halls based on hygiene and waste management

Draft grading protocol was prepared and this protocol was discussed in detail by a technical committee constituted for the purposed. The Technical Committee constituted with representations from the departments of Panchayaths, Urban Directorate, Food Safety, Pollution Control Board, Department of Health Services, Haritha keralam Mission held two sittings and a draft final protocol has been finalised.

7.5 Radio jingles through FM

To popularize the campaign of Swach Survekshan under the Swachh Bharat Mission (Gramin), a campaign was done from 1st to 15th August through 5 FM stations including Akashavani FM stations at 16 spots per day and to promote Green Protocol in the Attukal Pongala Festival, a campaign was launched as a part of Haritha pongala in 5 FM channels for a period of 10 days @ 10 insertions per day from 11th to 20th March. Three audio jingles of 30 seconds duration have been prepared for the purpose. As value addition, it was also ensured the the theme of green protocol was frequently repeated by the RJ in all FM stations for garnering public support for the initiative

7.6 Haritha Ponkala Campaign through regional television channel – ACV

During the Attukal Ponkala festival 2019, a green-ponkala campaign was launched with the support of ACV channel. Street magic shows, Green Protocol messages and broadcast of video messages of Hon.Minister for LSGD, Hon. Mayor, Thiruvananthapuram Corporation, Executive Vice-chairperson, Harithakeralam Mission, Executive Director, Suchitwa Mission were part of the campaign. The street magic show was held as a value addition service by the channel and was held at prominent places in Thiruvananthapuram city for a period of 2 days and the video message broadcast was held for a period of 10 days. Further, the channel installed 25 message boards in prominent locations on green-ponkala as per the request of Suchitwa Mission as value addition service

7.7 Railway jingles

A10-day long campaign was held from 11th to 20th March through 12 selected Railway stations from Nagercoil to Kottayam stretch as part of promoting Green Protocol in Attukal Pongala Festival. The jingles requested public to avoid disposables and carry reusable cutleries while participating in the Ponkala-ritual.

7.8 Green Protocol Slide Shows through digital display boards in 16 railway stations in the state

As part of Mission Green Sabarimala campaign, slide shows through the 102 digital display hoardings (57 LED & 45 touch screen kiosks) in 16 railway stations in the state were done for a period of one month from 27th November to 26th December. The campaign was intended to dissuade pilgrims from using disposables and dumping/littering of plastic waste on way-sides and forests.

7.9 Video exhibitions on Mission Green Sabarimala

Following discussion with railway authorities regarding the possibility of a campaign through major railway stations in south India, it was decided to produce a 1-minute video to dissuade pilgrims from using disposables. Subsequently the idea and content for promoting green protocol during Sabarimala Pilgrimage was developed and produced a video with the support of CDIT. Railway Divisions of Kerala and Tamilnadu agreed to display the videos free of cost in all major stations in Kerala and Tamilnadu. The video was displayed through the television screens in railway stations in Kerala and Tamil Nadu during the entire pilgrimage season.

7.10 Print media advertorial- 4-page broadsheet

In the context of a significant number of Local Self Governments putting in place overflow waste management systems and in the backdrop of declaring 'Litter-free Premises Campaign' in Governor's speech, it was decided to publish a 4-page advertorial in all major Malayalam dailies in the month of March 2019. The advertorial published the messages of Hon. Chief Minister and Hon. Minister for Local Self Governments, relevance of Litter Free Campaign, certain achievements in waste management sector and the government declaration to provide 90% subsidy to household waste management systems etc on its 1st page. The second page highlighted Green Protocol and its success stories, systems for treating biodegradable waste at source, Haritha Karma Sena (HKS), an enterprise group for door-to-door collection of non-biodegradable waste and management through MCF and RRF. The third page displayed the success stories in waste management prepared by visiting official residences of Hon' Governor and Hon. Chief Minister of Kerala, various institutions and locations to highlight certain models evolved. The fourth page was against littering and its deleterious effects and to convey the rules pertaining to waste management and penal provisions for non-compliance. Draft contents were prepared and vetted through discussions and consultations at various level and a layout was prepared and consulted with various stakeholders for final approval. The advertorial was released in major news dailies on March 02nd and 04th 2019. The advertorial with details as mentioned above reached more than 50 lakh households and expected to help in the Litter-free Premises Campaign.

7.11 IEC outcome and needs assessment towards developing evidence-based IEC strategy

Developing evidence-based IEC strategy and impact assessment is one of the activities planned by Suchitwa Mission during the year 2018-19. A ToR was prepared in this regard for seeking proposals from research/academic institutes and based on this ToR, proposals were sought from institutes and a detailed proposal was received from behaviour sciences department, Kannur University. Subsequently, a technical committee was formed with experts and a meeting has been convened to review the proposal. The proposal was presented before the committee and the recommendations of the committee has been put up for incorporating in the proposal.

7.12 IEC Tools produced and disseminated

Short demonstration videos on different waste management aspects has been produced through Cdit and published in You-tube and website of SM. These videos are also disseminated through Facebook page of SM and Whatsapp-groups.

Short Videos made on:

- Source level Composting Techniques
 - Portable Bio-bin composting
 - Pit Composting
 - Pipe Composting
 - o Thumboormuzhi Composting
 - Pot composting
- Green-protocol for waste reduction
- SWAP Shops for Reuse promotion
- E-waste management
- Segregation of Waste at Source
- Appeal against Burning and Dumping of waste
- Leptospirosis the state expected outbreak of leptospirosis after the deluge happened in August'2018. SM prepared a video on the precautionary measures to be adopted to contain the disease and disseminated through whatsapp/facebook, Doordarsan, Victers channel
- A 20-minute video on 9 household level composting techniques was produced through KSFDC for training and capacity building purpose. Detailed consultations and study were done to prepare the script.
- A10-minute documentary on decentralized waste management is prepared as per the request of Swacch Bharat Mission and submitted. The video conveys the successful decentralized waste management practices in LSGIs in the state. The documentary primarily depicts the initiative of Thiruvananthapuram and Alapuzha municipalities to showcase its success at national level. Detailed consultations and study were done to prepare the script and finalizing the shooting locations.
- One-minute Green Protocol video as part of Mission Green Sabarimala is produced with the support of C-dit and exhibited through television screen in railway stations
- Various digital posters were prepared and disseminated during the time of flood on management of waste of various type at rehabilitation camps, directives and flow charts were published regarding the cleaning of households in flood affected area after the deluge.

7.13 Materials Printed & Published

- *Haritha Office* Green Protocol handbook; No. of copies 27500, Total No. of pages 56. The copies were distributed during the training programmes for green protocol nodal officers at state and district levels.
- Prepared creative designs (Size A3, Calendar Size, 6*4 size) for the promotion of Haritha Office Do's & Don'ts. The designs for hoarding and posters were distributed among all government offices and institutions in the state. The boards are placed in many of the institutions and training centres in the sate

- A four-page brochure on *Haritha office* DO's & Don'ts has been prepared and printed 50,000 copies of the same. The brochures are being distributed during the sweepers training programmes at the state and district levels.
- A four-page Brochure on haritha jeevitham, ideal waste management practices, source level composting devices, rules and regulations related to disposal and burning of waste, is prepared and distributed through district missions while conducting exhibitions and training programs. One lakh copy was printed
- **Designed and printed 50000 copies of Green Protocol posters** for displaying at school class rooms across the state as part of "Clean Campus Green Campus Campaign"

7.14 Documenting Best practices/success stories

To facilitate learning and adopting successful interventions, good practices on Waste Management from various municipalities and panchayats were collated, documented and shared with Government of India, other local bodies in the State and uploaded in the website. Successful IEC campaigns were also documented and shared with Government of India

The best practices prepared and shared are as under:

- 1. Waste Management in Adimaly Grama Panchayat, Idukki
- 2. Plastic smart Aryad Grama Panchayat, Alappuzha
- 3. Zero waste Poonjar GP, Kottayam
- 4. Waste Management Programmes of Bharanickavu Block Panchayat
- 5. Carbon Neutral Meenangadi Panchayat
- 6. Use of shredded plastics for road construction in Eraviperoor GP, Pathanamthitta
- 7. Plastic waste management -Kathirur model, Kathirur GP, Kannur
- 8. Harithagramam programme in Vadakkekkad GP, Thrissur
- 9. Swap- shop at Thrikkalangode Gramapanchayath, Malappuram
- 10. Waste to wealth model in Thuvvur Panchayat, Malappuram
- 11. zero waste on ground Varapetty GP, Ernakulam
- 12. Waste Management in Kunnakulam Municipality, Thrissur
- 13. Zero waste on ground North Paravur Municipality, Ernakulam
- 14. Zero waste on ground -Mavelikkara Municipality, Alappuzha
- 15. Waste management in Kanjagad Fish Market, Kanjagad Municipality
- 16. Pappinessery rendering plant
- 17. Bottle booth Kolayad, Kannur
- 18. Taliparamba STP
- 19. Brahmapuram STP
- 20. STP Vandanam, Alappuzha
- 21. Gobhardhan Alappuzha
- 22. Haritham- NSS camps on sanitation and waste management
- 23. Biogas plant in Medical College Hospital, Trivandrum
- 24. Biogas plant in vegetable market, Perumbavur
- 25. Biogas plant in Sreekrisnapuram Engineering college, Palakkad
- 26. Household level biogas plants in Trivandrum

Case study on 'social mobilization by Harithakarmasena' was compiled and sent to Government of India. This case was selected as one of the best practices and included in the Coffee table book released by Ministry of Housing and Urban Affairs in February 2019

7.15 Social Media Promotion

Considering the growing influence of social media especially the Facebook, Suchitwa Mission has started rigorous promotion of the Mission's Fb page from January 2019 onwards. Different posts/cartoons/posters/short videos/trolls etc., on a regular basis are shared and also launches special promotions during various days of importance. Special campaigns through Facebook was done on Republic day, during Attukal Ponkala and special posts and campaigns on litter free premises.

Owing to live promotions and campaigns, the likes and following of the Fb page has increased. The likes have now gone up to 10,000 from 5500 in just 2 months (from Mid-January 2019 to Mid-March 2019). The troll campaigns, the latest trend in social media, gained a lot of media attention and many major dailies carried special reports on the troll campaigns initiated by Suchitwa Mission. Suchitwa Mission is also making use of WhatsApp groups to widely disseminate information, videos, posts etc.

7.14 Other IEC Activities

- Road shows in connection with Attukal Harithapongala
- Road shows & Painting competition and green protocol information centre right in front of the temple in connection with Attukal Harithapongala with the support of a major Malayalam news daily
- Exhibitions in all districts in connection with 1000 days campaign of state Government
- Exhibitions in flood affected districts as a part of rebuild Kerala with the support of UNDP.
- Exhibitions on source level waste management practices in all districts as part of various regional events.

8. Green Protocol Activities

8.1 Green Protocol in Government Offices

As per Government Order G.O (MS) No. 132/2018/LSGD dated 19.09.2018 Green office campaign in offices has been expedited. Every Government office at the State and district level designated a nodal officer for co-ordinating Green Protocol activities in their offices and the list of officers is uploaded in Suchitwa Mission website. Training has been given to the designated State and District level Nodal officers for facilitating implementation of Green Protocol in Government offices. The progress of the activity is given hereunder:

SN	Category	No	No. of institutions who nominated State level Nodal Officer	No. of Nodal Officers attended State level training	No. of Offices completed first level of green office activities
1	Govt. Departments	83	62	58	58

Table 11. Details of Green Office Campaign at the State level

2	Public Sector Undertakings	90	54	45	45
3	Govt. Commissions	33	15	13	13
4	Govt. Welfare Boards	33	17	17	17
5	Other Govt. Institutions	160	92	82	82
		399	240	215	215

Review and evaluation of the implementation of Green Protocol in Government offices is being conducted periodically with the help of Haritha Keralam Mission.

8.2 Green events

Green protocol is being promoted in major events such as festivals, meetings etc. The details of events/function where Green Protocol was followed in 2018-19 are given in Table 12.

S. N	Name of the Activity	Venue	Date
1	Jagratholsavom – Students campaign	State wide	01.04.2018 - 0.04.2018
2	Green Ramzan-2018	State Wide	16.05.2018 - 5.06.2018
3	Summer School 2018	State Central Library, Thiruvananthapuram	3.05.2018
4	Exhibition in connection with 2 nd Anniversary of the Government	Nishagandhi, Thiruvananthapuram	19.05.2018 - 26.05.2018
5	Closing Ceremony - 2 nd Anniversary of Government	Nishagandhi, Thiruvananthapuram	26.05.2018
6	Karkidaka vavu	Thiruvananthapuram	11.08.2018
7	Swearing in of Minister Shri. E.P Jayarajan	Kerala Raj Bhavan	14.08.2018
8	At Home Programme- Independence Day	Kerala Raj Bhavan	15.08.2018
9	Honouring of fisherman for the activities in flood affected areas	Nishagandhi Auditorium	29.08.2018
10	Karkidaka vavu	Thiruvananthapuram	11.08.2018
11	State level declaration of Green protocol by Hon'ble Chief Minister	Kanakakunnu palace	02.10.2018
12	State Sports School Meet- Thiruvananthapuram	University Stadium	18.11.2018- 22.11.2018
13	NavaKeralam Mission Seminar	Girideepam Convention centre	27.11.2018, 28.11.2018
14	Vasantholsavom-2019	Kanakanunnu	13.01.2019-20.01.2019
15	At Home Ceremony- Kerala Raj Bhavan	Kerala Raj Bhavan	26.01.2019

Table 12. Details of State level events organized complying Green Protocol

16	Beemapally- Uroos-2019	Thiruvananthapuram District	07.02.2019- 17.02.2019
17	Attukal Pongala 2019	Thiruvananthapuram District	20.02.2019

The number of green events held in various districts is given in Table 13.

Table 13. Number of Green events organized in various districts

Sl. No.	Name of Districts	No. of events
1	Thiruvananthapuram	12
2	Kollam	27
3	Pathanamthitta	12
4	Alappuzha	19
5	Kottayam	9
6	Idukki	18
7	Ernakulam	28
8	Thrissur	11
9	Palakkad	7
10	Malappuram	10
11	Kozhikode	9
12	Wayanad	11
13	Kannur	29
14	Kasargode	9
	Grand Total	211

8.3 Institutional level Green Protocol activities

Various organizations have taken initiatives for complying with Green Protocol and Suchitwa Mission extended support and facilitation. The details are given in Table 14 below.

Table 14. Events organized complying to Green Propotocol by various organizations

S.N.	Name of the Organization	Venue	Date
1	State Central Library – Summer School 2018	Thiruvananthapuram	3.05.2018
2	Directorate of Survey and Land records	Vazhuthacaud,	22.5.2018
		Thiruvananthapuram	
3	Kerala Institute of Tourism and Travel	Thycaud,	26.05.2018
	Studies (KIITS)	Thiruvananthapuram	
4	Directorate of Planning & Economics Affairs	Thiruvananthapuram	29.05.2018
5	Directorate of Mining & Geology	Kesavadasapuram,	29.05.2018
		Thiruvananthapuram	

6	Directorate of Industries& Commerce	VikasBhavan,	31.05.2018
		Thiruvananthapuram	
7	Travancore Titanium Products Limited	Thiruvananthapuram	01.06.2018
8	A.R Police Camp	Nandavanam,	02.06.2018
		Thiruvananthapuram	
9	Bharat Sanchar Nigam Limited (BSNL)	Kaimanam,	08.06.2018
		Thiruvananthapuram	
10	PWD Guest House	PWD Guest House,	31.10.2018
		Thycaud	
11	Directorate of Handloom & Textiles	Vikas Bhavan,	23.11.2018
		Thiruvananthapuram	

8.4 District Level Green Protocol Activities

The details of Green protocol activities undertaken in the districts are given below.

Sl. No.	Name of the Districts	No. of District level offices	No. of institutions who nominated District Level Nodal Officer	No. of district level nodal officers trained	No. of institutions who completed first level of Green Office activities
1	Thiruvananthapuram	51	49	46	46
2	Kollam	65	65	60	60
3	Pathanamthitta	72	72	60	60
4	Alappuzha	49	40	38	38
5	Kottayam	65	57	57	57
6	Idukki	69	39	35	35
7	Ernakulam	117	45	64	64
8	Thrissur	127	50	50	50
9	Palakkad	70	68	63	63
10	Malappuram	52	48	42	42
11	Kozhikode	120	100	88	88
12	Wayanad	94	57	45	45
13	Kannur	121	105	67	67
14	Kasaragod	42	41	41	41
Tota	1	1114	836	756	756

Table 15. Details of Green Office Campaign at the District level

8.5 Block Level Green Protocol Activities

The details of Green protocol activities undertaken at the Block level are given in Table 16.

Table 16. Details of Green Office Campaign at the Block level

Sl. No.	Name of Districts	No. of offices in Block Level	No. of institutions that nominated Nodal	No. of nodal officers	No. of offices completed first level of Green
			Officer	trained	Office activities
1	Thiruvananthapuram	170	170	170	170
2	Kollam	88	88	88	88
3	Pathanamthitta	120	68	46	46
4	Alappuzha	57	-	-	-
5	Kottayam	1052	374	-	-
6	Idukki	145	145	-	-
7	Ernakulam	154	98	167	167
8	Thrissur	-	-	-	-
9	Palakkad	717	650	569	569
10	Malappuram	123	75	-	-
11	Kozhikode	132	86	86	86
12	Wayanad	84	43	43	43
13	Kannur	157	157	157	157
14	Kasaragode	358	190	190	190

8.6 Training of Sanitation Workers

Series of training programmes have been conducted for the sanitation workers in various institutions on waste management and the details are given in Table 17.

Table 17. Details of training of sanitation workers

Sl.	Name of Districts	No. of Offices	Total no. of Training	No. of persons
No.		in District		trained
1	Thiruvananthapuram	-	-	-
2	Kollam	1256		1000
3	Pathanamthitta	72	1	14
4	Alappuzha	-	-	-
5	Kottayam	1122	3	280
6	Idukki	65	1	87
7	Ernakulam	76	1	51
8	Thrissur	127	1	75
9	Palakkad	895	-	-
10	Malappuram	494	5	205
11	Kozhikode	120	1	55
12	Wayanad	637		90
13	Kannur	96	1	113
14	Kasargode	405	1	90
		Total		2060

9. Capacity Building Programme

S.	Name of the Training	No. of	Date	Place	No. of
Ν	programme	Batches			participants
1	Green Office - Orientation for Govt. Secretaries & Dept. Heads	1	04.04.2018	Durbar Hall, Govt. Secretariat	48
2	Jagratholsavom- 2-day State Level Residential Training for Resource persons of Haritha Keralam Mission and Suchitwa Mission	1	04.04.2018, 05.04.2018	IMG, Thiruvananthapu ram	150
3	Zero waste on Ground - One day FAQ Workshop for Experts & Technical persons from Waste management sector	1	28.04.2018	Govt. Guest House, Thycaud	67
4	Green Office- One Day training for Green Protocol State Level Nodal Officers	1	08.05.2018	IMG, Thiruvananthapu ram	147
5	Star Rating for Garbage Free cities - One Day workshop for Mayors, Municipal Chairpersons, ULB Secretaries & Officials of Suchitwa Mission	1	15.05.2018	Mascot Hotel	200
6	Green Office- Orientation Programmes for State Level Employees of Directorate/ Commissionerate and Other State Level Govt. Institutions	10	From 15.05.2018	Concerned Offices	1400
7	"Clean campus -Green campus"- One Day Training Programme for N.S.S Officers & Resource Persons	1	28.05.2018	KILA, Thiruvananthapu ram	50
8	Two Days Training for District Suchitwa Mission Officials on Liquid Waste Management Techniques	1	2.07.2018, 3.07.2018	KILA, Thiruvananthapu ram	35
9	3 Day orientation Workshop for DPR Preparation for ULB Secretaries, Health standing committee chairperson, Municipal Engineers, SBM- Nodal officers	1	05.09.2018- 06.09.2018	Yatri Nivas, Thycaud, Thiruvananthapu ram	153
10	One Day Orientation Workshop for Haritha Sahaya Sthapanam- Post Flood activities	1	14.09.2018	Govt. Guest House Thycaud	57

 Table 18. Details of State Level Capacity Building Programmes

undertaken at the State and District levels are given in Table 18 and Table 19.

11	Two days Orientation workshop	1	18.09.2018,	KILA,	20
	for Technical Consultants of		19.09.2018	Thiruvananthapu	
	District Suchitwa Mission			ram	
12	One Day Workshop on launching	1	27.09.2018	Priyadarsini	200
	of Swachh Survekshan- 2019 for			Planetarium	
	Chairman, chairperson, ULB			Meeting Hall,	
	Secretaries & District			P.M.G Junction	
	Coordinators of Suchitwa Mission				
13	One Day Meeting on the	1	05.10.2018	Banquet hall,	60
	establishment of STP in			Govt. Guest	
	Selected Hospitals for LSG			House	
	Officials, Hospitals Superintend,				
	state and District Suchitwa				
	Mission Officials				
14	Two days Orientation workshop	1	11.10.2018,	Vanasree	80
	on DPR Preparation for 37		12.10.2018	Auditorium,	
	Municipalities on Solid Waste			Vazhuthacaud	
	Management				
15	Meeting of agencies on	1	27.10.2018	Govt. Guest	50
	Advanced technology toilets			House	
	suitable for the water-logged			Alappuzha	
	areas- Alappuzha				
16	One day Training on Waste	1	31.10.2018	Govt. Rest	50
	management devices for House			House, Thycaud	
	Keeping employees of Govt.				
	Offices				
17	PFMS Hands on training on	1	19.11.2018	Kerala Water	32
	Swachh Bharath Mission			Authority	
	(Gramin) for Accounts & Data				
	entry Operators of Suchitwa				
	Mission				
	Total	17			2769

Table 19. Details of District Level Capacity Building Programmes

SN	Name of the Districts	No. of Capacity Building	No. of	No. of participants
		Programmes	Batches	
1	Thiruvananthapuram	24	53	4545
2	Kollam	37	62	3251
3	Pathanamthitta	28	43	2251
4	Alappuzha	16	19	2443
5	Kottayam	75	174	6623
6	Idukki	55	76	2869
7	Ernakulam	16	56	7727
8	Thrissur	6	6	267
9	Palakkad	32	54	3527

10	Malappuram	43	68	4995
11	Kozhikode	14	162	3513
12	Wayanad	7	7	363
13	Kannur	53	76	7628
14	Kasaragod	10	13	965
	Total	416	869	50,967

In addition, the Technical Support Group of Suchitwa Mission assisted KILA and KILA-SIRD in developing training modules of sanitation and waste management sector. The Technical personnel of Suchitwa Mission also functioned as resource persons for various training programmes organized in KILA and State Institute of Rural Development (SIRD) and Extension Training Centres (ETC), the two institutions under KILA for officials and elected representatives in LSGIs. The Mission also prepared training materials consisting of presentation slides and write-ups for liquid waste management for the Training of Trainers on waste management

10. Post Flood Activities Initiated by Suchitwa Mission

Sanitation activities at relief camps were initiated from the very first day of flood incidence in all the flood affected areas through the District Suchitwa Mission Office with the help of State Officials. The activities were monitored on a daily basis and corrections made as and when required. The following are the indicative activities that have been undertaken as part of post-flood sanitation upkeep programme.

- 1. Suchitwa Mission issued advisory on 17/08/2018 to maintain proper sanitation and waste management in relief camps with following instructions.
- a. Processing of biodegradable waste at source through compost pits.
- b. Setting up of bio-toilets wherever necessary.
- c. Fogging to reduce mosquito menace and removal of stagnant water.
- d. Collection of non-biodegradable wastes from relief camps.
- e. Removal of septage from the toilets.
- 2. Coordinated installation of 263 bio-toilets, especially in the relief camps of Alappuzha district. In addition, temporary toilet facilities provided in relief camps wherever required, particularly in Pathanamthitta district.
- 3. Promoted Green Protocol in relief camps by issuing advisory for using steel glasses and plates and prohibiting the use of one-time use and throw disposables.
- 4. Organized awareness campaign for post flood sanitation upkeep through print media, Doordarsan, Akashawani, social media etc. and publicity programme for mobilizing cleaning programmes
- 5. Technical Advisory issued for safe disposal of the carcass and coordinated its disposal on a priority; 831400 carcasses have been safely disposed off.
- 6. Overall coordination support for massive and participatory cleaning. 2,79,168 cleaning squads cleaned 6,93,287 houses, 5836 public buildings and 2371 public places.
- 7. About 300 ton of bleaching powder, 100 ton of lime, 7 ton of inoculums, 10 ton of sanitreat, 1000 litres of phenol concentration and 400 litres of Hydrogen Peroxide were distributed wherever necessary. In addition to these 15,000 shovels, 75,000 gum boots, 2 lakh gloves, 1

lakh broom brushes, 2 lakh masks and 20,000 buckets and mugs were made available by Suchitwa Mission for the purpose of cleaning activities.

- 8. Mobilized UNICEF support for Post-flood IEC campaign to the tune of over Rs. 9 lakhs.
- 9. Mobile septage treatment plants (4 Nos) mobilised through UNICEF and utilised
- 10. A month-long sponsored programme on scientific waste management during post flood period was aired through All India Radio.
- 11. Coordinated intensive IEC activities through the District Suchitwa Mission.
- 12. Coordinated like-minded agencies in the waste management sector to facilitate the collection, transportation, treatment and disposal of flood waste. Accordingly, scrap dealers, plastic recyclers, Govt. identified Haritha Sahaya Sthapanam etc were linked to the speedy disposal of flood waste. Accordingly, Suchitwa Mission facilitated issuance of orders to engage more institutions / organisations for the purpose of removing non-biodegradable waste from the flood affected area, in addition to the service of Clean Kerala Company. Also held series of discussions with Kerala Enviro Infrastructure Limited, the agency operating the facility for scientific management of Hazardous Waste located Brahmapuram, Kochi and persuaded them to extend their service for the disposal of non-biodegradable waste at a reduced rate.
- 13. Facilitated disposal of 15,674 tone of non-biodegradable waste for recycling or disposed through engineered landfill through scrap dealers, Haritha Sahaya Sthapanam and Kerala Enviro-Infrastructure Limited.
- 14. Facilitated disposal of about 4500 tons of biodegradable flood waste at the respective sources.
- 15. Coordinated and monitored on a day-to-day basis the disposal of biodegradable flood waste and movement of non-biodegradable waste.
- 16. Conducted field study to assess the quantity of old waste dump that slide downslope to a large private property and reason for such a slide during the high intensity rain and flood days in GP. Based on study report, Government issued Kumili the orders vide GO(Rt)No.39/2019/LSGD, dated 17/01/2019 for releasing an amount of Rs. 171.84 Lakh for facilitating transportation and disposal of 4000 ton of slide waste from Kumili Gramapanchayat to Kerala Enviro Infrastructure Ltd. for sanitary landfill. Accordingly, the amount has been released to the District Collector, Idukki.
- 17. Conducted a field study and estimated the quantity of flood waste dumped in the Solid Waste Management Yard at Brahmapuram, Kochi. Also examined the environmental and financial implications of landfilling the flood waste insitu, and transporting and disposing it in Scientific Hazardous Waste Landfill facility at Brahmapuram. Based on the report, Government issued orders vide GO(Rt)No.40/2019/LSGD, dated 17/01/2019 for releasing an amount of Rs. 58 Lakh for the disposal of accumulated flood waste of 2821 tonnes from Brahmapuram to the engineered landfill at Kerala Enviro Infrastructure Ltd., Kochi.
- 18. Suchitwa Mission facilitated in time issuance of orders
 - 1. Orders for retrofitting of toilets damaged in flood in GPs by using Performance Based Incentive Grant on the basis of valuation certificate.
 - 2. Upon urgent request and submission of guidelines by the Executive Director Suchtiwa Mission regarding safe removal and disposal of animal carcasses post flood to the Government, Government issued an order vide G.O No 389/DC1/2018/LSGD (ii) dated

20.08.2018 issuing directions to abide by the guidelines of Executive Director, Suchitwa Mission towards safe disposal of animal carcasses

- 3. Based on the Note submitted by the Executive Director, Suchitwa Mission regarding allocation of funds to Grama Panchayats for Solid Waste Management, the Government issued orders vide G.O (Rt) No.2159/2018/LSGD dated 15.08.2018 permitting Grama Panchayats to utilizing up to 20 lakhs for institutional/community level solid waste management projects under SBM (Gramin)
- 4. Executive Director, Suchitwa Mission wrote to the government requesting to issue necessary directions towards managing non-biodegradable materials through Kerala Enviro Infrastructure Limited (KEIL). Based on this, the Government issued orders vide G.O (Rt) No. 2805/2018/LSGD dated 01.11.2018 allowing local bodies to handover the biodegradable waste to KEIL at a rate of Rs. 1796/- including GST per metric ton of waste
- Reading the letter of Executive Director, Suchtiwa Mission Government issued order vide G.O (Rt) No 3163/2018/LSGD dated 17.12.2018 permitting Grama Panchayats to utilize an amount of Rs. 5000/- towards reconstruction of fully/partially damaged toilets of BPL families in flood affected areas

10. 1 Workshop on Toilet Technology for low lying and water-logged areas

In the context of post flood damage to toilets in low lying and water-logged areas of Kuttanadu, Suchitwa Mission was entrusted with the responsibility of identifying locally appropriate and technologically feasible options for such areas. Accordingly, a workshop was held on 27.10.2018 at Govt guest house, Alappuzha. Six agencies viz., M/s Samudrapriya shipyard Ltd, M/s Eram Scientific Solutions Pvt Ltd, M/s Socio Economic Unit Foundation, M/s Red R, M/s Ram Biologicals, M/s Unicef presented various options suitable for the area. The existing models of using Bio-digesters in water logged areas of Munroe Island in Ashtamudi lake was also discussed.

10.2 UNICEF supported Programme

Prepared a project proposal for securing funds for Post flood IEC and submitted to UNICEF for funding support. Held consultative meetings with UNICEF team and secured funding support. Contents and messages were prepared for 10 short videos of 1 minutes each on how to do post flood waste management- segregation, various composting options, dos and don'ts, preventing leptospirosis, green protocol etc. Apart from making the videos available on website, you tube, the same has been disseminated through WhatsApp groups, Facebook, Doordarsan and Victers channel.

10.3 Sabarimala report

Upon recommendation by the high-level committee meeting post flood chaired by the Chief Minister, Suchitwa Mission team led by the Executive Director Dr. R. Ajaya Kumar Varma inspected the sites in Nilackal and Pamba on 23.11.2018 to assess the current sanitation and further requirements. Apart from visiting the sites and assessing the situation, the team held discussions with duty magistrates, Environmental engineer, Travancore Devaswam Board, Environmental engineer, Pamba Pollution Control Board.

The suggestions/recommendations of the Team are as follows:

<u>Nilackal</u>

- 1. 120 prefabricated water free urinals adjacent to the existing 13 traditional toilet complexes are to be constructed
- 2. 125 prefabricated water free urinals are to be constructed near the existing 8 container toilets
- 3. The waste water from prefabricated urinals is to be captured in the 2000 litre prefabricated septic tank and the overflow water from the septic tank is to be treated by constructing a soak pit
- 4. During the peak seasons, urinal tanks are to be emptied on a weekly basis using mechanised tanker lorries and treated using STP
- 5. 300 new container type toilets and 150 water less urinals are to be constructed at the new parking area
- 6. Signage boards in multi-language are to be installed for easy location of toilets
- 7. Entire toilets are to be disinfected every day during night time

<u>Pamba</u>

- 1. No toilets should be constructed on the banks of the river Pamba
- 2. As large number of pilgrims enter the Pamba banks through the forest walk way, 100 temporary bio toilets and 50 water free urinals are to be constructed in area
- 3. 100 bio toilets and 25 water free urinals are to be established on the sides of roads in pampa
- 4. the waste water from prefabricated urinals is to be captured in the 2000 litre prefabricated septic tank and the overflow water from the septic tank is to be treated by constructing a soak pit
- 5. In peak seasons, if there is an overflow in bio toilets and urinals and is beyond the capacity of the existing STP to treat the waste water, mobile treatment plants are to be used
- 6. Only primary treatment using chemicals is done in the existing STP. Hence to mitigate the environmental impact, provision has to be made in the plant for secondary and tertiary treatment. It is recommended to install 70 million litre capacity STP considering the influx of pilgrims in the future

11. Haritha Keralam Mission- Sanitation and Waste Management Sub-mission

Suchitwa Mission functioned as the implementing agency for Sanitation & Waste Management Submission of Haritha Keralam Mission. During the period under report, one Task Force of Sanitation & Waste Management Sub Mission of Haritha Keralam Mission was held on 13.11.2018. The progress of activities under the Submission is periodically informed to HKM and most of the activities, especially the campaign activities are planned in consultation with HKM.

11.1 Selection of Haritha Sahaya Sthapanam

As per the decision of the Task Force on Sanitation and Waste Management under the Haritha Keralam Mission, the Suchitwa Mission was entrusted the task of enlisting appropriate Haritha Sahaya Sthapanam, a temporary institutional mechanism to support the LSGIs by providing technical support to LSGIs, facilitating the functioning of Haritha Karma Sena etc. Accordingly, an Expression of Interest was floated and obtained 27 agencies in the first time, 39 agencies in the second time and 19 agencies in the third time. A Technical Committee was constituted in consultation with the Haritha Keralam Mission which consisted of Executive Director, Suchitwa Mission; Dr.Antony Palackal, Associate Professor, Department of Sociology, University of

Kerala; Director, Institute of Management of Kerala, University Campus, Thiruvananthapuram; Prof. Suhruth Kumar, Asso. Prof. Govt. Law Collage, Thiruvananthapuaram; Managing Director, Clean Kerala Company Ltd., Shri. N. Jagajeevan, Senior Consultant, Haritha Keralam Mission; Shri. Balachandran Nair, Dy Development Commissioner, MGNREG Mission; Dr. P. N. Shameena, Programme Manager, Kudumbashree. In addition, Experts from Suchitwa Mission also formed part of the Committee. The Committee met 3 times and recommended 36 agencies for empanelment as Haritha Sahaya Sthapanam by the Haritha Kerala Mission.

12. Other Activities

12.1 Zero Waste on Ground

As per the directions of the 28th Executive Committee, 10 wards each from one selected Municipality from 14 Districts has been selected to implement "Zero Waste on Ground" campaign. The selected municipalities are Varkala, Punalur, Pathanamthitta, Mavelikkara, Pala, Kattappana, North Paravur, Kunnamkulam, Chittur- Thathamangalam, Perintalmanna, Faroke/koyilandi, Kalpetta, Mattannur, Kanhangad. The project commenced in the month of August 2018 and the campaign go delayed due to the flood havoc. As on 31st March 2019, 70 wards in the State-ten each in 7 Municipalities have been declared 'Zero Waste on Ground'. The 70 wards are in the municipalities of Mattannur, Mavelikkara, Chittur-Thathamangalam, North Paravur, Punalur, Vaikkam & Koyilandi. The declaration came at the end of a rigorous 6-month campaign that included activities such as waste reduction at source, door-to-door collection of segregated dry waste, sanitation drives, establishment of Material Collection Facilities and Resource Recovery Facility and ban on plastic bags below 50 microns with the help of people's representatives, residents' associations, volunteer organisations. External evaluation of the result is yet to be done.

12.2 Project Green Grass Cleaning drives in forest areas

This is an initiative for intensive action for environmental upgradation and cleaning of high range areas, especially forest regions, where tourism inflow is very high. The programme involves all the stakeholder departments especially the departments of Forest, Tourism, Public Works, Local Self Governments and Environment and Suchitwa Mission. The Chief Secretary on a monthly basis reviews the actions taken by each department and decides further actions for upgradation of environment in the region. As directed in the meeting chaired by the Additional Chief Secretary, Labour department on 09.05.2018, Suchitwa Mission has submitted a project proposal for Disposal of waste accumulated in the forest area from Neriyamangalam to Munnar via Adimaly on 9.8.2018

Further, in response to the directions, Suchitwa Mission organized cleaning drives jointly with various Local Self Government Institutions, Non-Governmental Organizations, District Suchitwa Missions from 2018 December to 2019 February. Approximately 1090 tons of waste were removed through this drive. An amount of Rs. 47,41,234/- was spent for this. A special drive was launched to remove wayside waste accumulations on and either side of the road from Neriamangalam to Munnar with the help of Adimali Grama Panchayat on 30.09.2018. Suchitwa Mission provided Rs. 61,250/- to Adimali Grama Panchayat for this activity. 275 workers were involved in the campaign and 7500 kilo waste was collected in a single day. The portion of the road has very high traffic intensity. Many such cleaning drives were organized with the support of

Local Government and involving Non-Governmental Organizations, Forest Range Officials, Health Officials and activists, National Service Schemes, Vanasamrakshana samithy etc. The Suchitwa Mission was directed to take necessary actions to clear the waste dumping sites located in various local governments falling under forest areas of various districts and accordingly actions have been taken through the respective Local Governments.

The total waste removed from high-range patches of different districts are given in Table 20.

Table 20. Total way-side waste collected and disposed in various districts as part of Green
Grass Project

Sl. No.	District	Quantity of waste disposed (in tons)
1.	Thiruvananthapuram	0.4
2.	Kollam	5.55
3.	Pathanamthitta	89.018
4.	Kottayam	3
5.	Idukki	9.25
6.	Ernakulam	949.87
7.	Thrissur	13.152
8.	Palakkad	3
9.	Malappuram	0.32
10.	Kozhikkode	2.82
11.	Wayanad	2.07
12.	Kannur	10.78
	Total	1089.23

Further, as directed by the Chief Secretary, the quantity of waste dumped at the site of the District Hospital in the Vazhathoppu Grama Panchayat was assessed by the Sanitation Expert by visiting the site on 14.02.2019. As per the assessment done the total waste dumped is 146 tons, of which recyclable non-biodegradable waste including plastic is \sim 44 tons; mixed waste of bio and non-biodegradable waste which had undergone partial composting is \sim 146 tons.

Also as directed by the Chief Secretary, the Documentation Team of Suchitwa Mission consisting of IEC Expert, Programme Officer (CCDU) and Programme Officer (IEC) visited the intervention sites of Ex Service Men Charitable Trust, Kattappana, Idukki on 12.02.2019 to understand the documentation activities done by the Trust and generated a report. As per direction, more documentation will be done on the ongoing waste management activities.

12.3 Technical Assistance to the Coordination Committee

As necessitated, Suchitwa Mission generated about 26 technical input to the Coordination Committee for facilitating most appropriate decision during 2018-19. The input details are given below.

1. Technical sanction to Bio digester pot as part of Source level waste management project in Puthuppally Grama Panchayat, Kottayam (21.03.2018)

- 2. Recommendation for Viability Gap Fund for Plastic Shredding unit of Uzhavoor Block Panchayat till CKCL takes over the unit (23.05.2018)
- 3. Recommendation for Viability Gap Fund Plastic shredding unit of Lalam Block Panchayat (18.07.2018)
- 4. Policy decision is needed towards providing toilet maintenance fund to individual beneficiaries- referring to the decision of Chakkupallam Grama Panchayat (18.07.2018)
- 5. Recommendation to construct septic tanks for BPL beneficiaries in Kuzhippilly Grama Panchayat (13.08.2018)
- 6. Recommendation for Viability Gap Fund Plastic shredding unit in North Paravoor Block (13.08.2018)
- 7. Recommendation to provide toilet maintenance funds to BPL families in Thooneri Grama Panchayat, Kozhikode (13.08.2018)
- 8. Examining the income and expenditure of various plastic shredding units in state and determine the average rate report submitted (05.09.2018)
- 9. Provided various options of toilet construction in Kuttanadu (05.09.2018)
- 10. Recommendation to consider reconstruction of dysfunctional toilets in Velinalloor Grama Panchayat as a special case (27.09.2018)
- 11. Recommendation to terminate VGF for Haritha karma Sena after six months (16.10.2018)
- 12. Recommendation thhat stand-alone incinerators are not advisable (16.10.2018)
- 13. Constructing locally suitable toilets in Kuttanadu (16.10.2018)
- 14. Recommendation on subsidy norms for spill over projects on household biogas plants (31.10.2018)
- 15. Recommendation for providing subsidy for installing Liquid Waste Management systems at HH level (31.10.2018)
- 16. Recommendation on extending Viability Gap Fund for another six months from plan fund to HarithaKarma sena activities (31.11.2018)
- 17. Recommendation on hiring vehicle for Haritha karma sena in Mannachery Grama Panchayat (31.11.2018)
- 18. Recommendation regarding subsidy to spill over projects on the corresponding year for household level Biogas plant at Alamcode Grama Panchayat (31.11.2018)
- Recommendation regarding technical support of Suchitwa Mission to Ezhimala Naval Academy-Kannur for installing bio waste management projects in the academy premises (31.12.2018)
- 20. Recommendation regarding construction of new household level toilets to 97 beneficiaries in Pallikkathode Grama Panchayat after detailed field level examination in the context of Panchayat already declared as ODF (31.12.2018)
- 21. Recommendation to utilise plan fund of the Panchayat for construction of 170 toilets in Ayamanam Grama Panchayat, Kottayam (31.12.2018)
- 22. Suchitwa Mission compiled details of modern crematorium in all Panchayats and submitted the government as per the direction of Co-ordination Committee held on 31.12.2018
- 23. Recommendation regarding approval of installation of cameras in hots spots as per the *Nirmalam Nirbhayam* project in Pulikeezhu Grama Panchayat (05.02.2019)
- 24. Recommendation for approval of project for distribution of Waste management bins in Mutholi Grama Panchayat, Kottayam (27.02.2019)

25. Recommendation towards buying pick up Auto Rikshaw for Haritha Karma sena towards collecting Non-biodegradable waste in Koorachund, Grama Panchayat, Kozhikode (27.02.2019)

12. 4 GIS tracking of Crematorium & Slaughter houses

As part of assessing the facilities available in the State for cremating bodies and availability of modern crematorium, Suchitwa Mission collected the list of functional, non-functional (both modern and traditional) and under construction crematorium and slaughter houses through a detailed exercise of site visits and discussions with LSGI officials. The current status of the units was inspected through field visits. Location was mapped and GPS attributes noted for GIS based tracking. The details are now collated and made available in the public domain by hosting in the website. Anyone can now easily track the nearest Crematorium and slaughter house and know its functionality and nature

Summary of collected details are as follows:

Crematorium	Fully Functional	Not functional	Under construction	Total
Conventional	529	28	12	569
Modern	125	12	13	150
Grand Total	654	40	25	719

Table 21 Crematoriums in LSGDs in Kerala

Table 22 Slaughter Houses in LSGDs in Kerala

Slaughter House	Corporation	Municipality	Grama Panchayat	Total
Functional	12	13	34	59
Non-Functional	2	8	3	13
Under Construction	0	1	1	2
Grand Total	14	22	38	74

12.4 Technical Support for LSGIs & Institutions

i) Kochi Corporation

a. Management of legacy waste: Suchitwa Mission technical team conducted field visit on 08.05.2018 to provide technical advice on managing the non-biodegradable legacy waste accumulated at Brahmapuram SWM Plant. Accordingly, Suchitwa Mission prepared a detailed

report with practical and legal suggestions to manage the non-biodegradable waste. The report was given to Kochi Corporation.

<u>b. Leachate treatment at Brahmapuram MSW Plant:</u> As per the direction from Additional Chief Secretary LSGD, technical expert from Suchitwa Mission along with experts from AMRUT Mission and Kochi Corporation conducted field visit on 27.10.2018 and immediate solutions to manage the issues were reported to the Government in connection with the NGT case penalizing Kochi Corporation related to leachate treatment at Brahmapuram MSW Plant.

c. Being a member of the State Level Expert Committee formed vide G.O (Rt) No. 3105/2018/LSGD dated 06.12.2018 in connection with the NGT case penalizing Kochi Corporation related to leachate treatment in MSW plant Brahmpuram and as part of timely interventions to mitigate the issue, Suchitwa Mission through its technical wing has provided technical support to Government in developing assessment reports and actions plan through continuous filed visits on 07.12.2018 and 04.01.2019.

ii) NGT 5th Regional Monitoring Committee (South) Meeting at Kochi on 24th & 25th January 2019

Vide G.O(Rt) No.80/2019/LSGD dated 17.01.2019, Executive Director Suchitwa Mission was entrusted with co-ordinating all activities as per the schedule for conducting the 5th NGT Regional Monitoring Committee meeting held on 24th & 25th January 2019 at Hotel Taj Gateway Kochi. Suchitwa Mission has taken all necessary actions to consult with each stake holder department/organization/institution such as LSGD, KSPCB, DUA and Kochi Corporation to conduct the event as per schedule.

As part of the co-ordination, Executive Director, Suchitwa Mission convened a meeting of the concerned departments/institutions at Govt. Guest House, Kochi on 20.01.2019 to review the progress of responsibilities entrusted with them. Also, the venue for the programme and accommodation of delegates and other arrangements were verified by Executive Director in person. Suchitwa Mission coordinated and monitored the logistics arrangement for the delegates and their accommodation. The RMC meeting was conducted as two-day programme with field visit on 24.01.2019 and review meeting on 25.01.2019. The delegates from Administration Departments and PCB/PCC of Southern States and CPCB conducted field visit at Brahmapuram MSW Plant, Septage Treatment Plant at Brahmapuram, Hazardous Waste Sanitary Landfill of KEIL, Biomedical Waste Management facility at AIMS and decentralized waste management project of CREDAI. The review meeting on 25.01.2019 was chaired by Hon'ble Justice Dr P. Jyothimani, Chairman RMC (South) and was co-chaired by Shri. Harmendar Singh IAS & Member Secretary RMC (South). 26 delegates from various states attended the meeting and the event was conducted as per the schedule. Suchitwa Mission has compiled the proceedings of the meeting and submitted to NGT for finalising.

iii) Kollam Corporation: - Kollam Corporation has invited EoI for remediation/reclamation of existing dump site at Kureepuzha and Suchitwa Mission evaluated the proposal received by attending the technical committee held on 16.11.2018 at Kollam Corporation. Two agencies have responded and only one agency has appeared before the committee for presentation. The proposal

was not accepted since only one agency made the presentation. Also, the EoI floated by Kollam Corporation was not proper. Hence Suchitwa Mission prepared draft document for inviting tender for remediation/reclamation of legacy waste at Kureepuzha Trenching ground. Kollam Corporation has invited the tender and further actions are in process

iv) North Paravur Municipality: - Suchitwa Mission technical team visited North Paravur municipality on 10.07.2018 to provide technical support and suggestions for solid waste management. Mission has assessed the facility available in the municipality and provided technical inputs for solid and liquid waste management in the local body.

Kalady Gramapanchayat:- Suchitwa has provided technical support to Kalady Gramapanchayat in quantifying the legacy waste accumulated at the dumping yard on 08.05.2018 through field inspection. The quantity of legacy waste assessed was reported to the local body for taking further necessary steps for scientific disposal.

Waste management at various institutions: - Suchitwa Mission has conducted field visit from time to time to provide technical solutions for effective management of waste at various institutions in Thiruvanathapuram such as TRIDA HQ, Excise Commissionerate, Coir Bhavan, Vikas Bhavan, Tax Tower, KEPCO Regional Paultry Farm, Sree Padmanabha Swamy Temple. Waste management systems are put in place in these institutions based on the suggestion from Suchitwa Mission.

DPR for Modern Gas Crematorium under KIIFB: - Suchitwa Mission has compiled the estimates and supporting documents from 12 LSGIs and prepared the DPR for an amount of Rs.11.439 Crore based on the modifications suggested by KIIFB and was submitted to IMPACT Kerala on 08.10.2018. The proposal is under the evaluation of KIIFB for appraisal.

12.5 Legal issues handled

There are currently 16 legal complaints which is being countered by the Mission. The cases are related to grievances raised by enlisted service providers and some related to implementation of SWM rules and implementation of Septage Management system in the State. The Mission has filed counter affidavits and have submitted related documents as and when required.

Sl. No.	Case No.	Filed by	Subject	Status
1.	WP(C) No. 13311/2018	Sri. C.L. Anto before the Hon'ble High Court	Regarding preparation of DPR on SWM to avail financial support under Swachh Bharath Scheme	Counter Affidavit filed on 25-06-2018
2.	WP(C) No. 13326/2018	Sri. C.L. Anto before the Hon'ble High Court	Solid Waste Management Project	Counter Affidavit filed on 17-10-2018
3.	WP(C) No. 13353/2018	Sri. C.L. Anto before the Hon'ble High Court	Regarding preparation of DPR on SWM to avail financial support under Swachh Bharath Scheme	Counter Affidavit filed on 18-07-2018
4.	WP(C) No. 5546/2018	Sri. C.L. Anto before the Hon'ble High Court	Regarding preparation of DPR on SWM to avail financial support under Swachh Bharath Scheme	Counter Affidavit filed on 27-07-2018
5.	WP(C) No. 4776/2018	Sri. C.L. Anto before the Hon'ble High Court	Regarding preparation of DPR on SWM to avail financial support under Swachh Bharath Scheme	Counter Affidavit filed on 31-07-2018
6.	OA 199/14	NGT	Regarding implementation of SWM Rules 2016	ATR Submitted and Counter Affidavit filed from Government
7.	SMW(C) 1/2015	State of Kerala	Regarding implementation of SWM Rules 2016	ATR Submitted and Counter Affidavit filed from Government on 0-08-2018 & 13-09-2018
8.	WP(C)No. 37230/2016	Shri. C.V. Sebastian Hon'ble High Court of Kerala	Regarding Septage Management in the State.	Counter Affidavit filed on 27-06-2018
9.	WP(C)No. 5597/2018	M/s Hitech Crematorium Pvt. Ltd. Hon'ble High Court of Kerala	Installing Gas Crematorium in LSGIs	Counter Affidavit filed on 26-12-2018
10	WP(C)No. 9428/2017	Shri.C.L.Anto Hon'ble High Court of Kerala	Panchayats Tender Procedures	Statement of Facts submitted on 21-07-2017

Table 22 Details of cases and cu	rrent status

	WP(C)No. 8828/2017	Shri.C.V.Shaju Hon'ble High Court of Kerala	Regarding enlisting as Service Provider for installing Gas Crematorium in LSGIs	Statement of Facts submitted on 25-05-2017
	WP(C)No. 5636/2016	All Kerala River Protection Council	Total ban of plastic carry bags	Statement of Facts submitted on 12-03-2018
	WP(C)No. 32923/2006	Secretary, Thrissur Municipal Corporation	Setting up of Slaughter House in Kuriyachira.	Counter Affidavit filed on 17-12-2018
	WP(C)No. 27285/2017	Paper cup manufactures associates and other	Banning of Paper cups	Statement of Facts submitted on 13-10-2017
	WP(C)No. 3059/2019	Paper cup manufactures associates and other	Banning of Paper cups	Statement of Facts submitted on 12-03-2018
	WP(C)No. 28093/2018	Shri. Shibi A.A	Disposal of accumulated wastes	Statement submitted

12.6 Meetings and Visits

State and district officials of Suchitwa Mission attended various meetings and training programmes outside the State during the year 2018-19 which helped the Mission to learn from others' experiences, gain new knowledge and skills. The meetings also helped to highlight the activities of the Mission at National/regional levels. Details of the meetings are as follows:

Table 23 Trainings, meetings attended by Suchitwa Mission Officials outside the State

S.N	Name of Programme	Organized by	Participants	Venue	Date
1	8 th Regional 3R Forum in Asia and Pacific	United nation Centre for Regional Development	Executive Director	Indore, Madhyaprades h	9 th -12th April 2018
2	Swachh Bharat Mission – "Satyagrah se Swachhagrah", an event to commemorate the Mahatma Gandhi's Sathyagrah centenary	Ministry of Drinking Water & Sanitation, Government of India	Shri. Akhil Prakash, Programme Officer, Alappuzha and 12 Resource Persons (Swachaagrahis)	Champaran in Bihar	10 th April 2018
3	Round table Meeting on Gobardhan	Ministry of Drinking Water & Sanitation, GoI	Director (Drinking Water), PO(Health)	New Delhi	11 th April 2018
4	Meeting with States to discuss the National Annual Rural Sanitation Survey (NARSS)	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither, Director (DW)	New Delhi	12 th April 2018
5	Meeting of State IMIS Nodal Officers for Swachh Bharat Mission (Gramin) and National Rural Drinking Water Programmes	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither, Director (DW) Shri. Vidhu Krishna, PO(E.governance)	New Delhi	16 th April 2018
6	Launching Ceremony, Gobardhan	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither, Director (Drinking Water)	Haryana	30 th April 2018
7	Decentralised Waste water treatment systems and Fecal sludge & Septage Management	Ecosan Services Foundation	Smt. Anuja P.G LWM Expert Smt. Indu Isaac, Technical Consultant, Shri. Shajio, Technical Consultant, Smt. Sandhya, Technical Consultant, Shri. Bharat, Technical Consultant	Pune	30 th April to 5 th May 2018
8	Two-day workshop on ODF - S & ODF +	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither, Director (Drinking Water)	Pune	16 th & 17 th May 2018
9	Review of the Implementation of Action Plan under Swachh Iconic Place	Ministry of Drinking Water and Sanitation, Government of India	Dr. T. Shaji Programme Officer (H)	Hyderabad	25 th & 26 th June 2018

10	MIS training on Gobardhan	Ministry of Drinking Water & Sanitation, GoI	Shri. Vidhu Krishna, Programme Officer (E. Gov)		3 rd July 2018
11	Consultation & Launch of Swachh Survekshan Grameen	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither Director (Drinking Water)	New Delhi	13th July 2018
12	National Workshop- "Skilling under Gobardhan"	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither Director (Drinking Water)	New Delhi	30 th July 2018
13	ODF-Sustainability & Quality Consultation Meeting	Ministry of Drinking Water & Sanitation, GoI	Shri. L.P. Chither Director (Drinking Water)	New Delhi	24th August 2018
14	Municipalika-2018 15 th Conference and exhibition for smart and sustainable city Solution	Ministry of Housing & Urban Affairs, GoI	Executive Director	Bombay Exhibition centre, Mumbai	19th-21st September 2018
15	Mahatma Gandhi International Sanitation Convention held in New Delhi	Ministry of Drinking Water and Sanitation, Government of India	Shri P.K. Sanilkumar, Director (DW)	New Delhi	29 th September to 2 nd October 2018
16	Review/ Consultation of ODF Q & S and NARSS	Ministry of Drinking Water and Sanitation, Government of India	Shri P.K. Sanilkumar, Director (DW)	New Delhi	24 th October 2018
17	Swachh Iconic Place – Special award declared for Swachh Iconic Place Kalady	Ministry of Drinking Water and Sanitation, Government of India	Smt.Thulasi Bhai, President, Kalady Grama Panchayat	New Delhi	2 nd October 2018
18	Business to Government organised by GIZ held at Mumbai Exhibition Centre	GIZ	Executive Director	Mumbai	15 th to 17 th October 2018
19	Southern Region Review Meeting on Swachh Bharat Mission (Gramin)	Ministry of Drinking Water and Sanitation, Government of India	Shri. Pradeep Kumar, PO(H) Smt. Binz C. Alappuzha, Shri. Philip Joseph, Kottayam, and Shri. Siju Thomas, Ernakulam	Chennai	30 th October 2018

20	Fecal Sludge Management workshop in connection with World Toilet Day 2018	Ministry of Drinking Water and Sanitation, Government of India Ecosan	Shri. Jayakumar, Sanitation Expert & Shri. Renju R. Pillai, Sr.Consultant (Design)	Mumbai	18 th to 20 th November 2018
21	Fecal Sludge and Septage Management: Case study of Wai, Maharashtra	National Institute of Urban Affairs & Ecosan Foundation	Shri. Jayakumar, Sanitation Expert Smt. Anuja P.G, LWM Expert	Pune	20 th to 22 nd December 2018
22	Meeting to discuss the Implementation of GOBAR-DHAN scheme and GOBAR-DHAN MIS	Ministry of Drinking Water and Sanitation, Government of India	Shri. Pradeep Kumar, PO(H)	New Delhi	28 th December 2018
23	Swachh Iconic Place – Review Meeting	Ministry of Drinking Water and Sanitation, Government of India	Smt.Thulasi Bhai, President, Kalady Grama Panchayat	Mumbai	15 th &16 th January 2019
24	Co-treatment of Septage & Sewage	National Institute of Urban Affairs & Ecosan Foundation	Smt. Dhanya M.S, Technical Consultant, Kollam, Smt. Sandhya C.R, Technical Consultant, Kollam; Shri. Rahul M.K, Technical Consultant, Kottayam; Shri. Sajio Joseph, Technical Consultant, Wayanad	Chennai	23-24 January 2019
25	Swachh Shakti 2019	Ministry of Drinking Water and Sanitation, Government of India	Shri. Shaji, PO(M) Shri. Johnson Premkumar, PO(T), President	Kurukshetra, Haryana	10-12 February 2019
26	Panchayat Raj Systems	Government of Odisha	Smt. Binz,District Coordinator, Alappuzha; Smt. Beena, Executive Engineer LSGD, Shri. Rajesh K.S, Harithakeralam Coordinator; Shri. Santhosh, Jr. Supt. District Panchayat	Bhuvaneswar	24 th February to 03 rd March 2019

13. Financial Progress

The financial progress under the four schemes up to 28/02/2019 is given hereunder.

Rs. Lakh

Component	Outlay	Release	Expenditure	Expenditure Vs Release	Expenditure Vs Budget
Suchtiwa Keralam	3200	2181	2022.05	100%	62.21%
(Rural)					
Suchitwa Keralam	2000	417	636.27	100%	31.81%
(Urban)					
Swachh Bharat Mission	11085	8014	8448.20	100%	76.21%
(Gramin)					
Swachh Bharat Mission	7208	3852	4377.79	100%	60.74%
(Urban)					
Total	23493	14464	15484.31	100%	57.74%

Table 24 Financial Progress

14. Human Resource status

The status of human resource availability for the functioning of State Suchitwa Mission is given in the Table hereunder.

Table 25 Human Resource Status

State Mission

Sl.	Name of Post	No.	GO based on which the post is	Present status
No.		of Desta	created	
_	5	Posts		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
1	Executive Director	1	GO(MS) No.31/08/LSGD dt.	Contract
			31/01/2008	
2	Director (Operations)	1	-DO-	Vacant
3	Director (Drinking Water)	1	-DO-	Deputation
4.	Director (Solid Waste Management	1	-DO-	Vacant
5.	Director (Liquid Waste	1	-DO-	Vacant
	Management)			
6.	Programme Officer (Health)	1	-DO-	Deputation
7.	Programme Officer (Monitoring)	1	-DO-	Deputation
8.	Programme Officer (Training)	1	-DO-	Deputation
9.	Programme Officer- IEC	1	-DO-	Contract

Sl. No.	Name of Post	No. of Posts	GO based on which the post is created	Present status
10.	Senior Consultant (Design)	1	-DO-	Contract
11.	Senior Consultant (Technology)	1	-DO-	Deputation
12.	Office cum Finance Manager	1	-DO-	Vacant
13.	Programme Officer- CCDU	1	GO(Rt) No.1663/08/LSGD dt 09/06/2008	Contract
14.	Programme Officer (Finance)	1	GO(Rt) No.144/2015/LSGD dt 17/01/2015	Contract
15.	Programme Officer (IT & E-Gov.)	1	GO(Rt) No.144/2015/LSGD dt 17/01/2015	Contract
16.	IEC Expert	1	GO(Rt) No.2268/2016/LSGD dt 27/07/2016	Contract
17.	Sanitation Expert	1	GO(Rt) No.2268/2016/LSGD dt 27/07/2016	Contract
18.	MIS Expert	1	GO(Rt) No.2268/2016/LSGD dt 27/07/2016	Vacant
19.	Technical Expert (LWM) -RPMU	3	GO(Ms)No.74/2017/LSGD dt 31/03/2017	3 Vacant
20.	Technical Expert (SWM)-RPMU	3	GO(Ms)No.74/2017/LSGD dt 31/03/2017	3 Vacant
21	Project Manager – RPMU-RPMU	3	GO(Ms)No.74/2017/LSGD dt 31/03/2017	3 Vacant
22	Solid Waste Management Expert	2	GO(Ms)No.74/2017/LSGD dt 31/03/2017	2 Vacant
23.	Liquid Waste Management Expert	2	GO(Ms)No.74/2017/LSGD dt 31/03/2017	In position 1 (Contract) Vacant 1
25.	Slaughter House Expert	1	GO(Ms)No.74/2017/LSGD dt 31/03/2017	Vacant
26.	Project Manager	2	GO(Ms)No.74/2017/LSGD dt 31/03/2017	2 Vacant
27.	Community Mobilisation Expert	1	GO(Ms)No.74/2017/LSGD dt 31/03/2017	Vacant
28	Legal Expert	1	GO(Ms)No.74/2017/LSGD dt 31/03/2017	Vacant

District Mission

SI.	Name of Post	No.	GO based on which the post is	Present status
No.		of	created	
		Posts		
1	District Suchitwa Mission Co-	13	GO (Rt) No.1093/2018/LSGD dated	Deputation
	ordinators, Asst. Development		17/04/2018	
	Commissioners (Except Alappuzha		GO(Rt) No.2634/2018/LSGD	
	District)		dated 14/10/2018	
2	District Mission Coordinator	1		Deputation
	(Deputy Development			
	Commissioner) Alappuzha			
3	Assistant Co-ordinator (IEC)	14	GO(Rt) No.1092/2018/LSGD dated	In position-3
			17/03/2018; GO(Rt)	Vacant - 11
			No.1305/2018/LSGD dated	
			10/05/2018; GO(Rt)	
			No.34/2019/LSGD dated 05/01/2019	
4	Assistant Co-ordinator (SWM)	14	GO(Rt) No.2442/2018/LSGD dated	In position- 4
			17/09/2018; GO(Rt)	Vacant -10
			No.1306/2018/LSGD dated	
			10/05/2018; GO(Rt)	
			No.1186/2018/LSGD dated	
			26/04/2018; GO(Rt)	
			No.34/2019/LSGD dated 05/01/2019	
6	Programme Officers	14	GO(Rt) No.144/2015/LSGD dated	In Position -12
			17/01/2015; GO(Rt)	Vacant -2
			No.2677/2016/LSGD dated	
			09/09/2016	
6.	Technical Consultant	14	GO(Rt) No.144/2015/LSGD dated	In Position-13
			17/01/2015	Vacant- 1