भारत सरकार
लक्षद्वीप प्रशासन
विज्ञान एवं प्रौद्योगिकी विभाग
लक्षद्वीप प्रदूषण नियंत्रण समिति
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File No: LD-03006/4/2019-LPCC-UT-LKS Dated 21.10.2021

To

Shri Ruby Raju,
Project Engineer,
National Mission for Clean Ganga
Ministry of Jal Shakthi,
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New Delhi- 110 001
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Sub: Submission of Monthly Progress Report in compliance to the NGT matter OA No. 673/2018 – Regarding

Sir,

I am enclosed herewith the Monthly Progress Report in compliance to the National Green Tribunal matter OA No. 673/2018 for information and further necessary action.

This is issued with the approval of Competent Authority.

Yours faithfully,

(P.POOKOYA)
Member Secretary, LPCC

Encl: As above

National Mission for Clean Ganga
Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

State/UT: UT of Lakshadweep **Month & Year: July- September, 2021**

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately:

The tiniest Union Territory of India, Lakshadweep is an archipelago consisting of 12 atolls, three reefs and five submerged banks. It is a uni-district Union Territory with an area of 32 Sq.Kms and is comprised of ten inhabited islands, 17 uninhabited islands attached islets, four newly formed islets and 5 submerged reefs. Total population of Lakshadweep as per 2011 census is 64,473 of which urban population is 50,332 and rural population is 14141. The total population growth in this decade was 6.30 percent while in previous decade it was 17.19 percent. The population of Lakshadweep forms 0.01 percent of India in 2011.

II. Estimated Sewage Generation (MLD):

2.8 MLD

III. <u>Details of Sewage Treatment Plant:</u>

- Existing no. of STPs and Treatment Capacity (in MLD):

At present in the UT of Lakshadweep only two Sewage Treatment Plants, one is at INS Dweeprakshak which is under construction stage and at Bangaram Island Resort the capacity is 24000 l/d.

- Capacity Utilization of existing STPs: 24000 l/d
- MLD of sewage being treated through Alternate technology:

Regarding the treatment, it is submitted that the islands do not have any major industries or factories. In the island out flow is only from individual household, private establishments and from government institutions. The faecal waste water is first discharged into septic tank and subsequently to soak pit and the filtrated waste water from soak pit is then going to the ground through further natural filtration. Non faecal waste water is first going to a separate soak pit and then filtrated waste water from soak pit is then going to the ground through further natural filtration. For the treatment of faecal waste, UTL successfully implemented Bio-Toilets in three islands. For making 100% coverage of all households initially in Kavaratti, tender is in process. Further, it is proposed to explore possibility of centralized Septage Treatment Plant at Kavaratti for processing of night soil from the septic tank after retention period.

- Gap in Treatment Capacity in MLD:
- No. of Operational STPs: 1
- No. of Complying STPs: 1
- No. of Non-complying STPs: Nil

Details of each existing STP in the State

No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
1	Bangaram Beach Resort	24000 l/d	18000 l/d	Operational	

Details of under construction STPs in the State

No.	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Incremental progress	Completion Timeline
1	INS Dweeprakshak, Kavaratti	23000 l/d	In tendering Stage			

Details of proposed STPs in the State

No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Incremental progress	Likely Date of Completion
	Nil				

IV. Details of Industrial Pollution:

- No. of industries in the State: NIL
- No. of water polluting industries in the State: NIL
- Quantity of effluent generated from the industries in MLD: NIL
- Quantity of Hazardous Sludge generated from the Industries in TPD: NIL
- Number of industrial units having ETPs: NIL
- Number of industrial units connected to CETP: NIL
- Number and total capacity of ETPs (details of existing/ under construction / proposed)
- Compliance status of the ETPs: NA
- Number and total capacity of CETPs (details of existing/ under construction / proposed) : NA
- Status of compliance and operation of the CETPs

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)

V. **Solid Waste Management:**

- Total number of Urban Local Bodies and their Population:

In the UT of Lakshadweep each island has one Village (Dweep) Panchayath in 10 inhabited islands and a District Panchayat for entire territory. The inhabited islands are Kavaratti, Agatti, Amini, Kadmat, Kiltan, Chetlat, Bitra, Andrott, Kalpeni and Minicoy. Bitra is the smallest of all having only a population of 271 persons. No ULBs are present at UTL.

The population of each island is as follows:

Agatti : 7560
Amini : 7656
Androth : 11191
Bitra : 271
Chetlat : 2345
Kadmath : 5389
Kavaratti : 11221
Kalpeni : 4419
Kilthan : 3946
Minicoy : 10474

- Current Municipal Solid Waste Generation:

Solid Waste Generation in the UT of Lakshadweep islands is 35 TPD. In that, 21 MT Coconut Residues and 11.5 MT house-holds wastes and leaf litter. The Non Bio Degradable Wastes are 2.5 MT.

- Number, installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg- Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), biomethanation, MRF etc

- The Municipal Solid Waste Management Incinerator with 100 Kg/Hr capacity at Kavaratti and Agatti.
- The Lakshadweep Administration has taken additional land of 4180 sq.m on lease basis for the development of treatment facilities for biodegradable waste and Thumboor Model Compost pit, Compound wall, Material recovery facility (MRF) area etc. are completed at Kavaratti.
- The coconut leaf shredder with capacity 15 kg/hr, the plastic bottle shredder with capacity 50 kg/hr and Bio compost machine with capacity 250 kgs/hr installed in the treatment facility area, Kavaratti.
- UT of Lakshadweep placed two types of 150 L capacity garbage bins like blue for non- biodegradable wastes and red colour bins also placed for napkins and diapers.
- The UT of Lakshadweep Administration distributed twin bin (Green and blue) to all 2418 houses for segregating and keeping the biodegradable and non-biodegradable waste without mixing at Kavaratti Island.
- 100 Nos. 200 L capacity Green bins placed in the important locations of Kavaratti Island (Community bins) for the collection of Bio degradable waste generated in day to day manner.
- UTL has procured e-cart for transportation of non-biodegradable waste from waste bins to Central Garbage Depository.
- One coconut leaf shredder cum pulverization machine was procured and installed at Kavaratti for disposal of coconut wastes.
- The Solid Waste Management Parks were established at Kavaratti and Androth.
- The Coconut Husk & Pit Management -1000 capacity defibering plant commissioned in Fibre Factory at Kavaratti.
- The sweeping of prime important/important/Least important locations are managing at Kavaratti Island in addition to sorting of non-biodegradable waste, packing of segregated waste, treatment of biodegradable waste etc. in the island.
- The transportation and scientific disposal of segregated non-biodegradable waste viz. scrapes, plastic bottles, rubber and chapels, hard plastic, ceramics etc. are given to recycler at mainland (Kerala)
- 43 nos. biogas plants are completed and started functioning as part of decentralization of waste management activities in the Lakshadweep islands.
- The UTL Administration is exploring the possibility to establish 2 Ton Capacity pilot project on centralized bio gas plant in turn to electricity at Kavaratti island utilizing fish and other household biodegradable waste through Department of Biotechnology, University of Calicut. In this regard an expert person made a presentation on 22.04.2021

- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)

- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)

• A total 11,847 household is residing in islands. An average of 10 to 15 houses is constructing by demolishing old construction in a year. The Construction and Demolition waste generated from house level are re-utilizing for the filling of base of new construction houses considering the acute shortage of building materials in islands. • The Lakshadweep Public Works (LPWD) is the major stake holder and Executing and Implementing agency of Construction and Demolition Waste in Lakshadweep. • The Union Territory of Lakshadweep also reutilizing the C&D waste for the new construction purpose as and when required. It has established 21 wastes Depository Yard in the Islands of Androth, Agatti, Amini, Chetlat, Kadmat, Kalpeni, Kavaratti, Kiltan and Minicoy. • As per the request of administration the TRU-MANIT (Team Rethinking Urbanism and Maulana National Institute of Technology) visited Lakshadweep for the primary assessment of integrated waste and its management. The TRU-MANIT recommended that *"an Eco-tile plant to produce road tiles from waste plastic, glass and sand available in plenty at the islands. The C&D waste produced at the island may also be put to use by installing a crusher and segregator plant"*. The C&D plant will be recommended only after the ecological impact report received from the environment department concerned.

- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source

All the inhabited islands has the door to door collection of non-bio degradable wastes and segregation in the Common Depository site

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)

• The other 50 Kg incinerator proposed in the island of Kadmath, Kiltan, Chetlat and Kalpeni • It is also proposed the installation and commission of 2 Nos, 25 kg incinerator in the islands of Bitra and Bangaram.

- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills.

No uncontrolled garbage dumpsite and sanitary landfill site in the UT of Lakshadweep

- No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers

NIL

- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers

NIL

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
No ULB at present in Lakshadweep. 10 Village (Dweep) Panchayth	35 TPD	35 TPD			

VI. Bio-medical Waste Management:

- Total Bio-medical generation:

100 Kg/day in whole Lakshadweep islands

- No. of Hospitals and Health Care Facilities:

46

- Status of Treatment Facility/ CBMWTF:

The Common Biomedical Waste Treatment facilities (CBMWTF's) are not available in any of the Islands and it is not feasible due to geographical isolation of island and lesser quantity of biomedical waste generation. The Yellow category wastes are disposed through incinerator/deep burial in concerned island. The other category of wastes (Red, blue, white) are transported to mainland after pretreatment in the health care centers for recycling. An agreement is done with IMAGE (a Kerala Govt undertaking) treatment facility and Lakshadweep Administration.

VII. Hazardous Waste Management:

- Total Hazardous Waste generation:

2500 LPA.

- No. of Industries generating Hazardous waste

In the UT of Lakshadweep, there is no hazardous waste generating unit. However, in the UT of Lakshadweep, the power supply generating from the Diesel Generator under the Department of Electricity, Lakshadweep Administration.. The discarded/used oil collected by the Department of Electricity and transported to Mainland for recycling.

- Treatment Capacity of all TSDFs

Nil

- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated

NA

- Details of on-going or proposed TSDF

NA

VIII. <u>Plastic Waste Management:</u>

- Total Plastic Waste generation:

46 TPA

- Treatment/ Measures adopted for reduction or management of plastic waste:

Lakshadweep has no plastic waste recylers. The UTL Administration has identified a recycler at mainland for recycling the plastic waste. • Lakshadweep has already framed byelaws as "Lakshadweep Solid Waste Management Bye Law, 2018. • The Monitoring Committee strictly monitoring and timely directions are issued to shop owners those who are providing plastic carry bags. • Lakshadweep has banned open burning. The Monitoring Committee strictly monitoring and issued directions to the public. • UT of Lakshadweep Administration has conducted frequent awareness among the public in the reduction and management of plastic wastes. • UT of Lakshadweep prohibited the Single Use Plastic (SUP).

IX. Details of Alternate Treatment Technology being adopted by the State/UT

UT of Lakshadweep proposes to experiment with installation of Pilot Project on Fecal Sludge and Septage Treatment Plant (FSSTP) of capacity 5^3 at Kavaratti. A feasibility assessment report and detailed project report is prepared by M/s Ram Biologicals, Calicut fo 4.5 KLD capcity. The final DPR forwarded to NIT, Calicut for expert opinion about the suitability of the technology and awaiting the opinion from NIT for further action. Simultaneously, UT of Lakshadweep Administration is exploring the possibility of installing bio toilets in all households across 10 inhabited islands. 1600 households are already installed bio toilet instead of septic tank.

X. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment:

No river in the Lakshadweep.

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT:

XII. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:

XIII. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;

NA, since no river in Lakshadweep

XIV. Ground water regulation:

XV. Good irrigation practices being adopted by the State

UTL is not having any ponds having an area of 0.5 acre or more. However, UTL is having 1731 small ponds (average size of 10 to 30 sqm). It is noticed some of the above ponds are abandoned or damaged. The conservation of these traditional ponds is highly relevant in the island scenario as the usage of these ponds will minimize the extraction of ground water and

also enhance recharging of ground waters through rain. Action has been initiated for the rejuvenation, repair and rehabilitation of existing ponds. Out of 456 identified abandoned/damaged ponds 218 have been rejuvenated. The Action Plan for the rejuvenation of remaining 238 ponds prepared by the UTL Administration and approved by the Jal Shakthi Abhiyan. The estimate and other details for rejuvenation provided by the Dept. of Panchayath and technical will be extended by Lakshadweep Public Works Department and Department of Science & technology. An amount of Rs, 25 Lakhs has released o 10 Village (Dweep) Panchayath as 1st installment for phase-1 for the execution of rejuvenation of water bodies. The cleaning of all identified ponds were completed in Kavaratti and 2 ponds in Kilthan also completed. The work is delaying on non-availability of construction materials due to COvid-19 pandemic,

XVI. Rain Water Harvesting:

A total of 4532 houses out of 11574 houses have been provided with rainwater harvesting tanks in capacities of 5000 - 10000 Ltr. Further 49 community rainwater tanks have been provided having capacities of 40000 – 100000 Ltr. About 355 Lakh Ltr. of rainwater per annum is harvested in Lakshadweep. The overflow from the rainwater structures are connected to nearby dug wells for accelerating the recharge of ground water.

XVII. Demarcation of Floodplain and removal of illegal encroachments:

XVIII. Maintaining minimum e-flow of river:

NA

XIX. Plantation activities along the rivers

NA

XX. Development of biodiversity park:

NA

XXI. Reuse of Treated Water:

NA

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:

NA

XXIII. Status of Preparation of Action Plan by the 13 Coastal States:

The Action Plan prepared and submitted

XXIV. Regulation of Mining Activities in the State/UT

No mining activities in the UT of Lakshadweep

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring

NA

***Note: Incremental progress made by the State/UT in each activity to be provided.**