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GOVERNMENT OF INDIA/ भारत सरकार

LAKSHADWEEP ADMINISTRATION/ लक्षद्वीप प्रशासन

(LAKSHADWEEP PUBLIC WORKS DEPARTMENT)/ लक्षद्वीप लोक निर्माण विभाग

CIRCLE OFFICE/ सर्किल कार्यालय

KAVARATTI – 682555

F.No.101/05/2019-S2/2509 दिनांक/Dated: 13.11.2019

To/ सेवा मे

Shri. A. Sudhakar,
DH, WQM-I Division
Central Pollution Control Board,
Ministry of Environment , Forest & climate Change
Government of India
Perivesh Bhawan, East Arjun Nagar, Delhi-110032

Sub / विषय: Compliance report on NGT order regarding Rain water Harvesting & Water conservation. - Reg.

Ref:- F.No.A-14011/325-2015/2019-WQM-I/7144 dated 27.09.2019

Sir/ महोदय

In inviting reference to the subject mentioned the details pertaining to UT of Lakshadweep is submitted for further action.

Yours faithfully/ आपका आभारी

Encl :- as above

C.N. Shajahan / सि.एन.शाजहान
Superintending Engineer/ अधीक्षण अभियंता

DESPATCHED
DATE 14/11/19

Copy to :- 1. The Conservator of Forest, Department of Environment & Forest, Kavaratti

2. The Director, Department of Science & Technology, Kavaratti.

Compliance report on the NGT order on Rain water Harvesting and conservation of water.

General description of Island

The UT of Lakshadweep is a group of island spread over a distance of 300 km ,consist of 36 coral atoll islands (with low elevation of 3-5 m above mean sea level with an area of32 Sq.Km) and number of sunken banks, open reef and sand banks between latitude 8o and 14o N and longitudes 74o 41' and 74o 10'E. Ten of these islands are inhabited. There is no surface water like river, lake etc in UT of Lakshadweep.

Ground Water Conditions & Utilisation

Ground water occurs under phreatic conditions in these islands occurring as thin lens floating over the seawater and is tapped by open wells/ ponds (Big dug wells - 10 to 30 Sqm in area). In small islands like Lakshadweep, fresh water lens is thin and the tidal range is usually greater than the head above the mean sea level. Due to the diurnal fluctuations a sharp interface does not exist but rather a transition zone develops between the fresh and salt water. The recharge to the ground water is only through rainfall infiltration. The probability of mixing of the thin freshwater lens with the brackish water is high hence exploitation using grater HP pumps /uncontrolled pumping is not advisable.

Open manual dug wells are the traditional methods used by the islanders to obtain fresh water for their basic needs. The depth to water level in this islands varies from few Centimetre to 5 Metres below ground level.

Ground water was conserved by using step wells, ponds (Big dug wells - 10 to 30 Sqm in area) and used for washing and bathing purposes. Almost all households have their own dug well for domestic purposes. Island wise details of ponds/wells is depicted below

Sl.No	Name of Island	No of wells	No of ponds (Big dug wells - 10 to 30 Sqm in area)
a)	Agatti	925	127
b)	Andrott	1609	399
c)	Amini	1002	137
d)	Bitra	62	10
e)	Chetlat	473	83
f)	Kadmat	922	168
g)	Kalpeni	711	456
h)	Kavaratti	1307	148
i)	Kiltan	683	127
j)	Minicoy	1365	76
Total		9059	1731

But recent trend is to use small capacity centrifugal pumps mostly ½ HP capacities for their domestic needs. The growing population and raised standard of living has imparted

stress on the available fresh water resources. The lack of surface and ground water storage capacity in these islands, in spite of high rainfall, makes freshwater resources a dear commodity. Action is initiated for the rejuvenation of ponds & wells and to aware the public on the importance of utilisation of ponds /wells.

a. Rejuvenation, Repair and rehabilitation of existing structures.

- At Kavaratti Cleaning work of 34 No ponds completed.
- At Kadmatt 25 No. pond & 184 ponds rejuvenated
- Proposed rejuvenation work is as given below

Sl. No.	Name of Island	Total No. of Ponds (submitted by VDP)	No. of Ponds proposed to take-up in the first phase
1	Agatti	24	9
2	Amini	70	27
3	Androth	30	11
4	Bitra	6	3
5	Chetlat	8	3
6	Kadmat	25	10
7	Kalpeni	4	2
8	Kavaratti	34	13
9	Kiltan	24	9
10	Minicoy	13	5
Total		238	92

Note:- Area of pond (big Dug wells) is between 10 - 30 Sqm only

Alternate arrangement by the Administration for providing safe water for Drinking & Cooking

a) Installation of Desalination plants

The Administration is providing dirking water to the public by installing Desalination plants and constructing rain water tanks. Low Temperature Thermal Desalination (LTTD) plants each with fresh water generation capacity of 100 m^3/day were established at the islands of Agatti (July 2011), Minicoy (April 2011) and Kavaratti (May 2005) and establishment of 1.5 Lakh litre per day capacity LTTD Plants in the remaining islands Kadmat, Amini, Chetlat, Kiltan, Kalpeni and Androtт is in progress and expected to be completed by 2020.

b. Construction of roof top Rain water harvesting

The administration is constructing roof top Rain Water harvesting structures both individual and community type of various capacity under state scheme as well as the central schemes like AMRUT. As on date 4532 individual RHT and has been constructed and 49 community Rain water tanks has been provided and about 355 lakh liter of Rain water harvested per annum. The over flow from this structures are connected to the nearby dug wells for accelerating the recharge of ground water. Island wise details follows.

Island wise Details of IndividualRHT Constructed

Sl.No.	Name of Island	Rainwater tank Constructed(Nos)			Under construction
		10000 ltre Cap	5000 lit Cap	Total	
1	Kavaratti	620	100	720	-
2	Amini	359	100	459	100
3	Androth	199	100	299	75
4	Kadmat	280	100	380	30
5	Kiltan	262	100	362	-
6	Chetlat	259	100	359	-
7	Bitra	100	10	110	-
8	Minicoy	548	100	648	-
9	Agatti	621	100	721	159
10	Kalpeni	374	100	474	70
	Total	**3,622**	**910**	**4532**	**434**

Capacity of the Tank Under Construction is 10,000 litter except Kadamat it is 5000 litre

Island wise Details of Community Rain Water Harvesting Tank Constructed

Sl.No	Name of Island	Capacity of Tank in litre	Number	Total capacity In litre	Remark
1	Kavaratti	1,00,000	5	1190000	
2		75,000	3		1 No in progress
3		65,000	1		
4		60,000	1		
5		50,000	4		3 in progress
6		40,000	3		2 in progress
7		20,000	2		
8	Minicoy	1,00,000	1	249000	
9		30,000	1		
10		25,000	1		
11		20,000	4		
12		14,000	1		
13	Agatti	1,00,000	3	300000	
14	Bangarum	50,000	1	150000	
15		10,000	3		
16		5,000	14		
17	Androtti	20,000	1	20000	
18	Amini	12,000	1	12000	
19	Kalpeni	20,000	1	20000	
20	Kadmatt	20,000	1	20000	
21	Chetlat	30,000	1	60000	
22		15,000	2		
Total			55	20,21,000	

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