National Mission for Clean Ganga

Format for submission of Monthly Progress Report for the month of March 2022 in the NGT

Matter OA No. 673 of 2018

(in compliance to NGT order dated 24.09.2020)

For the State of Manipur submitted on 20th April 2022

Overall status of the State:

I. Total Population:

	2011 Census	Projected as on 2020
Urban Population	8,34,154	10,47,135
Rural Population	17,36,236	21,79,541
Total	25,70,390	32,26,676

Estimated Sewage Generation (MLD) : 115.054 MLD

II. Details of Sewage Treatment Plant:

- Existing No. of STPs and Treatment Capacity : 1 (one) STP of 27 MLD operational
- Capacity Utilization of existing STPs : 13. 83 MLD
- MLD of sewage being treated through alternate technology : NIL
- Gap in Treatment Capacity in MLD : 13.17 MLD
- No. of Operational STPs : 1 (one) Detail of STP is at **Annexure - 1**
- No. of Complying STPs : 1 (one)
- No. of Non-complying STPs : 1 (one)

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	Lamphel, Imphal West	27 MLD	13.83 MLD	Operational (51.22%)	Complying

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	Completion Timeline
1	Maibam Leikai, Imphal West	16 MLD	91 %	NIL	31.03. 2022
2	Iroisemba, Imphal West	1 MLD	53 %	NIL	31.03. 2022

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)	Likely Date of Completion
1	Imphal	49 MLD	Waiting for approval of NIT from NDB	---

III. Details of Industrial Pollution:

No. of industries in the State	:	1011 Nos. 944 outside Industrial Estate 67 inside Industrial Estate
No. of water polluting industries in the State located along the 9 (nine) prioritized rivers of Manipur	:	21 Units (**Annexure - 2**) The list has been prepared in consultation with the Manipur Pollution Control Board as on 19.02.2022
Quantity of effluent generated from the industries in MLD	:	0.93 KLD (estimated) in case of the 3 units located within Nilakuthi Food Park, Imphal East
Quantity of Hazardous Sludge generated from the Industries in TPD	:	Data not available
Number of industrial units having ETPs	:	Nil
Number of industrial units connected to CETP	:	3 (three)
Number and total capacity of ETPs	:	Nil
Details of existing	:	Nil
Under construction	:	Nil
Proposed	:	Nil
Compliance status of the ETPs	:	Nil
Number and total capacity of CETPs	:	1 (one) CETP
Details of existing	:	1 unit of 400 KLD capacity
Under construction	:	Nil
Proposed	:	Nil

Town	Existing ETP Capacity	CETP Proposed, if any	Status (DPR/ tendering/ under construction etc.)
Imphal	400 KLD capacity	Nil	Nil

- Status of compliance and operation of the CETPs

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
Imphal	5 (five)	Data not available	Nil	1 (one) CETP of 400 Kilo Liter / Day at Nilakuthi Industrial Estate, Imphal **Status : Non-functional** The State Government has been requested for an amount of Rs. 1.77 crore as proposed by M/s MANIDCO be made available through excess authorization as no funds are available for the said works in BE 2021-22. Relevant file is with the State Finance Department

IV. **Solid Waste Management:**

- Total Urban Local Bodies (ULBs) : 27 ULBs
- Population of ULBs : 6,15,344 (2011 Census)
  : 7,92,734 (2020 projected population)
- Current Municipal Solid Waste Generation : 311 MTD
  (as on 2020 projected population)
- Waste Collected : 200 TPD
- Existing Management / treatment facility : 122 TPD
- Utilization of MSW processing : 117 TPD
- Segregated Waste landfilled / dumped : 0 TPD
- Number, installed capacity and utilization of existing MSW processing facilities in TPD bifurcated by type of processing.

SN	**Name of MSW processing unit**	**Installed capacity**	**Utilization (in TPD)**	**Type of processing**	**Action plan to bridge Gap between utilization and installed facility**
1	IMC / Municipal Solid waste Management Plant, Lamdeng, Imphal	100	90	• Waste to Energy and Composting	• For Waste to energy plant: By June 2022 • 100% by December, 2022
2	Lamshang MC		2	• Composting	• Vigorous IEC campaign and implementation of stringent rules or by- laws • By-Law is published and shall be implemented for closing the gap
3	Samurou MC	1	3.03	• Segregation cum transfer station	• 100% Segregation at source by March 2022 • Presently collected waste after segregation of recyclable plastic waste is being transferred to Lamdeng SWM plant • Increase in awareness • Increase in Manpower and vehicles • Allotment of permanent land for management of solid waste is proposed to DC
4	Thongkhong Laxmi MC	0.5	2.95	• Manual segregation cum transfer shed/station	• In terms of Ward-wise/region wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					collection, there is 100% coverage of D2D • More Awareness and behavioral change campaign • Capacity building of manpower • By acquiring a permanent sanitary landfill/SWM site (ULB has requested vide letter of even No. dated 18.05.2019, 02.08.2021 and 29.11.2021 to allocate a suitable SWM site for the ULB but yet to be allocated till now
5	Sekmai MC	1	1.85	• Home composting is predominant in all wards • Central Composting at Segregation Shed, Parao • Mixed/ Dry Waste disposed at Lamdeng SWM Plant	• Engagement of local clubs/SHGs in emphasizing segregation at source. • Capacity building and IEC activities
6	Lilong IW MC	0	0.5	• Composting, segregation shed	• Distribution of home composting bins, more vehicles and manpower by May, 2022 • Cluster basis facilities at Lamdeng SWM Plant
7	Lamlai MC	1	0.8	• Composting (Home + Centralised) • Source segregation and Centralised segregation	• 1TPD FACILITY is segregation cum transfer station and composting • Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)
8	Thoubal MC / Thoubal SWM Plant	4	0.5	• Segregation and composting	• Hiring of Staffs for segregation and composting
9	Yairipok MC		0.2	• Composting	• Segregation shed & composting unit by June 2022 • Treatment Facility at Thoubal Cluster
10	Sikhong Sekmai MC	1	0.97	• Home Composting • Segregated plastic waste sent to recycler	• Facility is transfer station, segregation and Composting pit/ aerobic • Treatment facilities at Thoubal cluster
11	Lilong Thoubal MC		0.5	• Segregation Shed Composting Unit	• Distribution of home composting bins

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					• More vehicles and manpower by May 2022 • Cluster basis facilities at Thoubal SWM Plant
12	Heirok MC		0.2	• Transfer and Segregation Station and Composting	• More composting unit by July 2022
13	Wangjing Lamding MC		0.5	• Segregation and transfer station	• More composting unit by July, 2022
14	Andro MC	0.07	0.5	• Composting, Segregation and Recycling	• 0.07 TPD facility is manual segregation and composting • Transport of remaining segregated inert waste to the transfer station for Cluster-B located at Thoubal Khunou • Increase in manpower • Awareness drives & Engagement of Recyclers
15	Kakching MC/ Kakching SWM Plant	6	4.5	• Composting & manual segregation of waste & recycling	• Purchase of 4 TATA 407 • IEC activities and Behavioural changes • Engagement of recyclers
16	Kakching Khunou MC	0.07	0.5	• Composting, Segregation & Recycling	• 0.07 TPD facility is manual segregation and composting • Transport of remaining segregated wasted to Kakching cluster • Engagement of recyclers
17	Sugnu MC	0.05	0.5	• Composting, Segregation & Recycling	• 0.05 TPD facility is manual segregation and composting • Transport of remaining segregated waste to Kakching cluster • Engagement of recyclers
18	Mayang I m p h a l MC	2	2	• Segregation Sheds at Ward Level and Processing Unit are operational • Home composting plant is on progress	• Construction of Treatment/Composting Plant is on well progress and target for commission on May, 2022 • Segregation Sheds at the processing Site and Ward level are all operational • Effective awareness programme, IEC activities and engagement of more recyclers etc.
19	Wangoi MC	0	0	• Composting	• Construction of Segregation shed and engagement of more staff
20	Kumbi MC	0	1.5	• Composting	• Composting Plant by June, 2022

SN	**Name of MSW processing unit**	**Installed capacity**	**Utilization (in TPD)**	**Type of processing**	**Action plan to bridge Gap between utilization and installed facility**
21	Kwakta MC	0	0	• Composting	• Composting unit by June, 2022
22	Moirang MC	0	0	• Composting	• Segregation shed has constructed functioning is not yet started • Composting plans also been constructed function is also not yet started • IEC Campaign has organised for proper 100% source segregation
23	Ningthoukhong MC	0	0.52	• Composting & sent back for re-cycling	• Composting unit, almost complete
24	Bishnupur MC	0	0	• Segregation Shed, Composting Unit & Sanitary Landfill	• Vigorous IEC campaign and implementation of stringent rules or by-laws • By-Laws is published and shall be implemented for closing the gap
25	Oinam MC	0	0	• Composting	• Encouraging households to source segregate waste and practice home composting of wet waste • Engaging recyclers for dry waste
26	Nambol MC	1	0	• Composting pit delayed due to ongoing Covid 2nd wave • Manual Segregation initiated at the segregation shed	• Manual Segregation initiated at the segregation shed • Home Composting is being encouraged • Source Segregation at household
27	Jiribam MC	4	2.83	• Composting send back for recycling, MRF	• For expanding management/ treatment facilities the Council planned to set up C&D waste management facility and FST facility at the near future
	Total	**122**	**117**		

• Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	• Planning for upgrade the installed capacity as per required by 2029-30
• No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	• Existing – Nil • Proposed – 5TPD
• Total No. of wards	• 305 Wards
• No. of wards having door to door collection service	• 305 Wards
• No. of wards practicing segregation at source	• 273 Wards

- Details of MSW treatment facilities **proposed and under construction** :

Sl No	Name of ULB or Processing unit	Capacity	Technology	Proposed / under Construction
1	Annexed at **Table-3**			

• No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	• 9 (nine) uncontrolled dumpsites of 8 ULBs / Annexure-table 3
• 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	• 1 at Jiribam MC [floating racks/screens installed]
• Status of ULB wise Management of Solid waste	• At **Annexure – Table -1 and Table-2**

V. Bio-medical Waste Management:

Total Bio-medical generation	:	0.71 TPD	• Deep burial practiced at remote rural areas • DPR submitted to ministry for up-gradation of the existing CBMWTF • Action Plan submitted to the State Pollution Control Board by the Directorate Health Service for BMW management
No. of Hospitals and Health Care Facilities	:	534 Nos. [i/c 420 PHSCs]	
Status of Treatment Facility CBMWTF	:	CBMWTF = 1 No. (capacity-25 Kg/hr.) Captive Facility = 2 Nos. (Capacities-100 Kg/hr. & 105 Kg/hr.) Deep Burial = 391 Nos.	
Status of Treatment Facility ETPs	:	26 Nos.	

VI. Hazardous Waste Management:

Total Hazardous Waste generation	:	0.99 TPD
No. of Industries generating Hazardous waste	:	334 (automobile service centres mainly micro-scale units)
Treatment Capacity of all TSDFs	:	Nil
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	:	Nil
Details of on-going or proposed TSDF	:	Under preparation of DPR, Final DPR by March 2021

VII. Plastic Waste Management:

Total Plastic Waste generation	:	22.7 TPD
Treatment / Measures adopted for reduction or management of plastic waste	:	Plastic waste utilized for waste to energy plant, road construction and for recycling
Details of Alternate Treatment Technology being adopted by the State/UT	:	Nil
Identification of including drains contributing to river	:	Joint survey was conducted and the report

pollution and action as per NGT order on in-situ treatment			was submitted in January, 2020 **Completed**
Details of Nodal Officer appointed by Chief Secretary in the State / UT		:	• Shri M.H. Khan Additional Chief Secretary Forest and Environment Govt. of Manipur as Chairman, State level Monitoring Mechanism • Dr. T. Brajakumar Singh Joint Director, Directorate of Environment and Climate Change as Nodal Officer for appearing / VC / submission / compiling of reports before NGT/CPCB/CMC • Dr. W. Roshan Singh Executive Engineer Manipur Pollution Control Board
VIII.	Details of meetings carried under the in the State/UT	:	• Last meeting under Chairmanship Chief of Secretary, Govt. of Manipur was held on 17th November 2021 • Once or twice in every month by Addl. Chief Secretary (Forest and Environment), Government of Manipur
IX	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river	:	At **Annexure – 4**
IX.	Ground water regulation	:	Nil
X.	Good irrigation practices being adopted by the State	:	1. Irrigation from Barrages and Dams through Canals 2. Loktak Lift Irrigation through open canals 3. River Lift Irrigation schemes by Minor Irrigation Department 4. Ground Water Irrigation schemes through tube wells and dug wells by Minor Irrigation Department 5. Surface Minor Irrigation through Canals
XI.	Rain Water Harvesting	:	Nil
XII.	Demarcation of Floodplain and removal of illegal encroachments	:	1. The Manipur Flood Plain Zoning Act, 1987 has been enacted for zoning of flood plains of rivers in the State of Manipur. 2. Boundaries and limits of the major rivers of the State were declared in 1988, by the Irrigation and Flood Control Department, Manipur (now Water Resources Department). 3. Eviction and removal of illegal encroachments is being carried out from time to time. 4. Eviction along rivers in Imphal East & West was initiated in January, 2021. It is kept on hold due to Covid 19 pandemic. 5. Proposal for eviction along major rivers

			in Imphal area has been sent to the Flood Zoning Authority.
XIII.	Maintaining minimum e-flow of river	:	I. Water is released from the Dams and reservoirs from time to time to maintain e-flow of various rivers in the state. II. For other rivers without reservoir or dam, no activities are taken up in the upper catchment for maintenance of e-flow as it is beyond the scope of Flood Division, WRD.
XIV.	Plantation activities along the rivers	:	•
XV.	Development of biodiversity park	:	•
XVI.	Reuse of Treated Water	:	• Nil
XVII.	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards	:	• Nambul River (Priority – II) Targeted Action for achieving the bathing quality standards as at **Annexure - 5**
XVIII.	Status of Preparation of Action Plan by the 13 Coastal States	:	NA
XIX.	Regulation of Mining Activities in the State / UT	:	i. The Mines and Mineral (Regulation and Development) Act, 1957 differentiates minerals into (a) major mineral, and (b) minor mineral. The mineral administration of mining activities belonging to major minerals vests with the Central Government and are regulated under the Mines and Mineral (Regulation and Development) Act and rules frame there under. The mineral administration of minor minerals vests with the respective State Governments and are regulated under their respective minor mineral concession rules framed under Section 15(1) of the Act and rules framed their under. Similarly, in Manipur, the mining activities belonging to minor minerals are regulated under the Manipur Minor Mineral Concession Rules, 2012 and amendments thereon ii. In order to check illegal mining, to regulate transportation and storage of minor minerals, The Manipur Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules, 2018 has also been notified iii. In addition, The Manipur Mineral Policy, 2021 is being framed

			iv. Final DSR for 9 (nine) districts have been submitted to Trade, Commerce & Industries for onward submission to SEIAA (State Level Environment Impact Assessment Authority) v. DSR has been published by the concerned DCs for public consultation vi. Details for preparation of DSR for the remaining 7 (seven) districts were sought from all the DC. Senapati & Ukhrul DCs have submitted the details and draft DSR is being prepared
XX.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	:	Nil

Annexure - 1

A. Total Status of STPs in Imphal (as on 20th April, 2022)

Particular	Unit	Phase I	Phase II	Ongoing NRCD Project	Total
Capacity of STP	MLD	27	49	17	93
Capacity of STP Utilized	MLD	13.83			13.83
Total Sewer Pipe	RM	69,429	2,77,289		3,46,718
Primary (Main Pipe)	RM	25,291			25,291
Secondary (Sub-main Pipe)	RM	44,138			44,138
Interception & Diversion Pipelines	RM			14,545	14,545
No. of urban drains to be collected	Drain			72	72
Targeted Connection septic tank	Unit	9,564	42,190		
Connected septic tank	Unit	4,900			4,900
Lift Station	Unit	5	21	14	40
Population (by 2054)	Lakh	1,86,534	3,49,759		5,36,293
Covered Municipal Ward	Wards	11	16	14	
Area covered	Sq. Km.	11	35		
Covered Polluted River				Nambul P-II	
Method of Treatment		ASP	SBR	MBBR	

Note : Targeted household for Phase I has been decreased from 12,000 Nos. to 9,564 because 2436 household shall be covered in Imphal Sewerage project – Phase II.

Status of utilization of the existing STP :

- 1 (one) unit of 27 MLD STP (ASP technology) is operational under PHED
- 69,429 km sewer pipeline [25,291 rm primary lines, 44.14 rm secondary lines]
- Total target connection is 9,564 households

INCREMENTAL STATUS OF UTILIZATION FOR 27 MLD AT LAMPHELPAT, IMPHAL WEST

	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Cumulative as on 20 Mar 2022	Gap
Household Connected	4000	250	250	60	10	30	0	0	0	0	4900	4664
Utilization in MLD	9 MLD	9.5 MLD	10 MLD	10.26 MLD	10.28 MLD	10.35 MLD	10.35 MLD	10.35 MLD	10.35 MLD	10.35 MLD	13.83 MLD	13.17 MLD
Utilization in %	33%	35%	38%	38%	38%	38%	38%	38%	38%	38%	51.22%	48.78%
	Oct 2021	**Nov 2021**	**Dec 2021**	**Jan 2022**	**Feb 2022**	**Mar 2022**	**Apr 2022**					
Household Connected	0	50	0	0	0	150	50					
Utilization in MLD	13.13 MLD	13.27 MLD	13.27 MLD	13.27 MLD	13.27 MLD	13.69 MLD	13.83 MLD					
Utilization in %	49%	49.14%	49.14%	49.14 %	49.14 %	50.71 %	51.22 %					

B. In-situ Bio-remediation and others :

	Name of the Polluted River (P-V)	Total Length of the River	Length of Polluted stretches	BOD Range (mg/l)	Population at polluted zone	Status / Proposed for Treatment
1	Imphal	89.24 km	19.98 km	2.9 - 3.1	84,857	• Revised DPR for Imphal River along with Fecal Sludge and Septage Management (FSSM) for 315 KLD at 27 ULBs and in situ treatment through Bio-remediation of 16.75 MLD submitted to NRCD on 18th September 2021. • Revised DPR with full justification on the comments made by the Ministry will be submitted soon.
2	Iril	156.50 km	18.12 km	2.8 - 3.0	1,714	
3	Khuga	79.25 km	10.92 km	2.0 – 3.0	857	
4	Khujairok	10.06 km	4.21 km	3.2	4,286	
5	Lokchao/ Thongjarok	17.04 km	5.31 km	3.0	1,143	
6	Manipur	261.00 km	35.00 km	3.1	7,143	
7	Thoubal	142.80 km	24.61 km	2.8	30,286	
8	Wangjing	35.08 km	3.70 km	3.1 - 3.2	7,143	

Note :

ASP (Activated Sludge Process), EAP (Extended Aeration Process),
SBR (Sequencing Batch Reactor), MBBR (Moving Bed Biofilm Reactor)

FORMAT FOR SEWAGE TREATMENT PLANTS AND UTILIZATION OF SEWAGE (20th February 2022)

Sl. No.	City / Town	No. of STP	Location of STP	Coordinates of STP	STP Commissioned year	Status (operational/ Non-Operational/ Under Construction)	STP Installed Capacity (In MLD)	Actual Utilization of installed capacity (In MLD)	Technology UASB / ASP / OP / SBR / MBBR / FAB etc.	Consent status	Compliance Status Source: Manipur Pollution Control Board			
											pH	TSS mg/l	COD mg/l	BOD mg/l
1	Imphal	1	Lamphel	24°49''45'N 93°54''58'E	2020	Operational	27	13.83 MLD	ASP		7.0	54	52	12.5

LIST OF WATER POLLUTING INDUSTRIES REGISTERED UNDER THE FACTORIES ACT, 1948 LOCATED OUTSIDE OF INDUSTRIAL ESTATE/FOOD PARK

Sl. No.	Name of unit	Status	Factory License	Consent status	Re-categorisation as per CPCB direction	Factory Type	Nearest River	Occupier/Proprietor	Section	No. of workers
1.	Elija's Resting Center Singjamei Mayengbam Leikai, IW	Action initiated/ taken	322	No	Green, water polluting	Soap/ Detergent	Imphal	Smt Irom (O) Manju Devi	85	8
2.	Manihar Oil Mill Wangoi Thounaojam Leikai, IW	Action initiated/ taken	264	No	Green, water polluting	Oil Mill	Manipur	L. Manihar Singh	85	3
3.	Dish & Detergent Making Industry, Thoubal Achouba (Mela Ground), Thoubal	Instructed to apply for consent	268	No	Green, water polluting	Soap/ Detergent	Manipur	Thounaojam Premila Devi	85	9
4.	Ahanthem Oil Mill Pishumthong, Oinam Leikai, IW	Action initiated/ taken	48	No	Green, water polluting	Oil Mill	Nambul	Ahanthem Arunkumar Singh	85	3
5.	Tet (Tyre, Engine, Gas Body), Uripok Khoisnam Leikai, IW	Action initiated/ taken	59	No	HW generating unit	Automobile Workshop	Nambul	A Satyaranjan Sharma	85	5
6.	Mohon Motor Works Naoremthong Khullen Leikai, IW	Action initiated/ taken	103	No	HW generating unit	Automobile Workshop	Nambul	Maibam Dian Mohan	2m(i)	18
7.	Surjit Motor Works Uripok Yambem Leikai, IW	Action initiated/ taken	303	No	HW generating units	Automobile Workshop	Nambul	Soubam Surjit Singh	85	6
8.	Athokpam Oil Mill Wangbal Lamboithong, Thoubal	Action initiated/ taken	321	No	Green, water polluting	Oil Mill	Thoubal	Athokpam Bolai Singh	85	3
9.	Bimolchand Oil Mill Yairipok Poiroukhongjin, IE	Action initiated/ taken	242	No	Green, water polluting	Oil Mill	Wangjing	Konthoujam Bimolchand Singh	85	3
10.	Miranda Oil Mill Wangjing Sorokhaibam Leikai, Thoubal	Action initiated/ taken	126	No	Green, water polluting	Oil Mill	Wangjing	Khundrakpam Miranda Devi	85	3
11.	Oinam Motors Maruti Suzuki Workshop Yairipok Bishnunaha	Action initiated/ taken	210	No	Green, water polluting	Automobile Workshop	Wangjing	Oinam Ananta Singh	85	6

Sl. No.	Name of unit	Status	Factory License	Consent status	Re-categorisation as per CPCB direction	Factory Type	Nearest River	Occupier/Proprietor	Section	No. of workers
	Pukhri Mapal, Thoubal									
12.	Ingocha Tractor Repairing Centre, Yairipok Bishnunaha, Thoubal	Action initiated/ taken	294	No	HW generating unit	Automobile Workshop	Wangjing	Takhelambam Ingocha Singh	85	6

LIST OF WATER POLLUTING FACTORIES LOCATED WITHIN INDUSTRIAL ESTATE/FOOD PARK

Takyel Industrial Estate, Imphal West Districts, Manipur.

Sl No.	Name of unit	Nearest River	Proprietor	Name of Products
1	M/S Modern Foods	Nambul	T. Sanajaoba Singh	Noodles
2	M/S Hangle Industries	Nambul	H.Nabadeep Singh	Spices & Food Products
3	M/S Pera Fruit Products	Nambul	Kh. Sanayaima Singh	Fruit Processing
4	M/S Khudol	Nambul	K. Siddhanta Sharma	Food Processing
5	M/S Ratana Fruit	Nambul	L. Sarat Singh	Food items
6	M/S Universal Iodises Salt Industries	Nambul	P. Joychandra Singh	Food Items

Nilakuthi Food Park, Imphal East

Sl No.	Name of unit	Nearest River	Proprietor	Name of Products
1	Shree Balaji Flour Mill	Imphal	Mrs. Rangnamei Martha	Flour
2	KMU	Imphal	Wangkheirakpam Gobin Singh	Bakery
3	Thangjam Agro Industries Pvt. Ltd.	Imphal	Thangjam Joykumar Singh	Bakery

Annexure – 3

TABLE 1 : SOLID WASTES GENERATION, COLLECTION AND MANAGEMENT - ULB WISE IN MANIPUR, JANUARY, 2022

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at source)	Managed/Treated (in TPD)					Plan to mitigate the gap between generation of wastes Vs collection, managed / treated and Remarks
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
1	Imphal MC	2,65,573	3,50,050	158	129	9.5	100	90	19	109	31%	• For Waste to energy plant: By June 2022 • 100% by December, 2022
2	Lamshang MC	8,130	9813	3.43	2	1	0	2	0.43	2.43	29.15%	• Vigorous IEC campaign and implementation of stringent rules or by-laws • By Law is published and shall be implemented for closing the gap
3	Samurou MC	14818	18602	6.51	3.03	1.65	1	3.03	1.83	4.86	25%	• 100% Segregation at source by March 2022 presently collected waste after segregation of recyclable plastic waste is being transferred to Lamdeng SWM plant • Increase in awareness • Increase in manpower and vehicles • Allotment of permanent land for management of solid waste is proposed to DC
4	Thongkhong	14,878	18,677	6.54	2.95	1.59	0.5	2.95	2.0	4.95	24.31%	• In terms of Ward-wise, area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D • More Awareness and behavioral

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at source)	Managed/Treated (in TPD)				Plan to mitigate the gap between generation of wastes Vs collection, managed / treated and Remarks
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
	Laxmi MC											change campaign • Capacity building of manpower • By acquiring a permanent sanitary landfill/SWM site (ULB has requested vide letter of even No. dated 18.05.2019, 02.08.2021 and 29.11.2021 to allocate a suitable SWM site for the ULB but yet to be allocated till now)
5	Sekmai MC	5,065	6,358	2.23	1.85	0	1	1.85	0.38	2.23	0%	• Engagement of local clubs/SHGs emphasize segregation at source
6	Lilong IW MC	12,427	15,600	5.46	1.5	1.96	0	0.5	2	2.5	54%	• Distribution of home composting bins, more vehicles and manpower by May, 2022 • Cluster basis facilities at Lamdeng SWM Plant
7	Lamlai MC	4,601	5,776	2.02	1	0.02	1	0.8	1	1.8	11%	• 1TPD FACILITY is segregation cum transfer station and composting • Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)
8	Thoubal MC	45,947	57,678	20.2	9	7.19	4	0.5	4	4.5	78%	• Hiring of Staffs for segregation and composting
9	Yairipok MC	9,569	12,012	4.2	2	1	0	0.2	1.2	1.4	67%	• Segregation shed & composting unit by June 2022 • Treatment Facility at Thoubal Cluster

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at source)	Managed/Treated (in TPD)				Plan to mitigate the gap between generation of wastes Vs collection, managed / treated and Remarks
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
10	Sikhong Sekmai MC	7,390	9,277	3.25	0.97	0	1	0.97	2.28	3.25	0%	• Facility is transfer station, segregation and Composting pit/ aerobic • Treatment facilities at Thoubal cluster
11	Lilong TBL MC	24,900	31,258	10.9	2	5.74	0	0.5	3.2	3.7	66%	• Distribution of home composting bins, more vehicles and manpower by May, 2022 • Cluster basis facilities at Thoubal SWM Plant.
12	Heirok MC	2,974	3,733	1.31	0.6	0.41	0	0.2	0.3	0.5	62%	• More composting unit by July 2022
13	Wangjing Lamding MC	8,055	10,112	3.54	1.5	1.34	0	0.5	0.7	1.2	66%	• More composting unit by July 2022
14	Andro MC	8,744	10,977	3.84	1.2	0.24	0.07	0.5	2.4	2.9	24.48%	• 0.07 TPD facility is manual segregation and composting • Transport of remaining segregated inert waste to the transfer station for Cluster-B located a t Thoubal Khunou • Increase in manpower, Awareness drives • Engagement of Recyclers
15	Kakching MC	32,138	40,344	14.1	7.31	3.77	6	4.5	3.02	7.52	46.67%	• Purchase of 4 TATA 407 • IEC activities and Behavioral changes • Engagement of recyclers

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at source)	Managed/Treated (in TPD)				Plan to mitigate the gap between generation of wastes Vs collection, managed / treated and Remarks
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
16	Kakching Khunou MC	11,379	14,284	5	1.6	0.7	0.07	0.5	2.7	3.2	36%	• 0.07 TPD facility is manual segregation and composting • Trasport of remaining segregated wasted to Kakching cluster • Engagement of recyclers
17	Sugnu MC	5,132	6,442	2.25	1	0.15	0.05	0.5	1.1	1.6	28.89%	• 0.05 TPD facility is manual segregation and composting • Transport of remaining segregated waste to Kakching cluster • Engagement of recyclers
18	Mayang Imphal MC	24,239	34,428	10.7	4	4.65	2	2	2	4	62%	• Construction of Treatment/ Composting Plant is on well progress and target for commission on May, 2022 • Segregation sheds at the processing site and Ward level are all operational • Effective awareness programme, IEC activities and engagement of more recyclers etc.
19	Wangoi MC	9,106	11,431	4	1.1	1.4	0	0	1.5	1.5	63%	• Construction of Segregation shed and engagement of more staff
20	Kumbi MC	9,546	11,983	4.19	1.5	0.2	0	1.5	2.5	4	5%	• Composting Plant by June 2022
21	Kwakta MC	8,579	10,769	4.97	2.87	0.91	0	0	1.19	1.19	76%	• Composting unit by June 2022
22	Moirang MC	19,893	24,972	8.74	6.54	1	0	0	1.2	1.2	86%	• Segregation shed has constructed functioning is not yet started

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at source)	Managed/Treated (in TPD)					Plan to mitigate the gap between generation of wastes Vs collection, managed / treated and Remarks
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
												• Composting plans also been constructed function is also not yet started • IEC Campaign has organised for proper 100% source segregation
23	Ningthoukhong MC	13,078	16,417	4.75	2	0.5	0	0.52	2.25	2.77	42%	• Composting unit almost complete
24	Bishnupur MC	12,167	15,274	5.35	3.4	1.15	0	0	0.8	0.8	85%	• Vigorous IEC campaign and implementation of stringent rules or bye-laws • By-laws is published and shall be implemented for closing the gap
25	Oinam MC	7,161	8,989	3.15	2	0.85	0	0	0.3	0.3	90%	• Encouraging households to source segregate waste and practice home composting of wet waste • Engaging recyclers for dry waste
26	Nambol MC	22,512	28,260	9.89	5	3.89	1	0	1	1	90%	• Manual Segregation initiated at the segregation shed • Home Composting is being encouraged • Source Segregation at household
27	Jiribam MC	7,343	9,218	3.23	2.83	0	4	2.83	0.4	3.23	0%	• For expanding management/ treatment facilities the Council planned to set up C&D waste management facility and FST facility in the near future
Total		6,15,344	7,92,734	311	200	50.8	122	117	60.7	177.53		

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at source)	Managed/Treated (in TPD)					Plan to mitigate the gap between generation of wastes Vs collection, managed / treated and Remarks
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
PC to the generated wastes					64%	16%	39%	38%	19%	57%	43%	

Note : ***1.** Taking r=2.3 as annual Population growth rate [Ref : MoUD, GoI] *2. Waste generated is estimated including floating population @10%

TABLE 2 : SOLID WASTES GENERATION, COLLECTION AND MANAGEMENT – WARDWISE OF ULBs IN MANIPUR, APRIL 2022

Sl. No.	Name of ULB	Total Wards	Door to Door (D2D) Collection		Segregated at source		Land Available in Acre	Type of processing unit	Plan to mitigate the gap generation and Management
			No. of Wards	in %	No. of Wards	in %			
1	Imphal MC	27	27	100%	27	100%		• Waste to Energy and Composting	• 100% by June 2022
2	Lamshang MC	9	9	100%	0	0%	0	• Composting	
3	Samurou MC	11	11	100%	11	100%	0	• Segregation cum transfer station	• 100% Segregation at source by July 2022 • Presently collected waste after segregation of recyclable plastic waste is being transferred to Lamdeng SWM plant • Increase in awareness • Increase in Manpower and vehicles • Allotment of permanent land for management of solid waste is proposed to DC
4	Thongkhong Laxmi MC	11	11	100%	11	100%	0	• Manual Segregation cum transfer shed/station	• In terms of Ward-wise, Region-wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D • More Awareness and behavioural change campaign • Capacity building of manpower by acquiring a permanent sanitary landfill/SWM site (ULB has requested vide letter of even No. dated 18.05.2019, 02.08.2021 and 29.11.2021 to allocate a suitable SWM site for the ULB but yet to be allocated till now)
5	Sekmai MC	9	9	100%	9	100%	0	• Home Composting is predominant in all wards	• IEC activities to emphasize segregation at source

Sl. No.	Name of ULB	Total Wards	Door to Door (D2D) Collection		Segregated at source		Land Available in Acre	Type of processing unit	Plan to mitigate the gap generation and Management
			No. of Wards	in %	No. of Wards	in %			
								• Central Composting at Segregation Shed, Parao • Mixed/ Dry Waste disposed at Lamdeng SWM Plant	
6	Lilong IW MC	9	9	100%	9	100%	0	• Composting, segregation shed	• More composting unit by May, 2022 • Engaged recyclers
7	Lamlai MC	9	9	100%	9	100%	0.9	• Composting (Home +Centralised) • Source segregation and centralised segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach) • IEC activities
8	Thoubal MC	18	18	100%	18	100%	6.7	• Segregation and composting	• Collection to be done through NGOs and SHGs
9	Yairipok MC	9	9	100%	5	56%	2.2	• Composting	• Segregation shed & composting unit by June 2022 • Capacity building of manpower • Awareness Drive
10	Sikhong Sekmai MC	9	9	100%	9	100%	0.62	• Home Composting, Segregated plastic waste sent to recycler	• Treatment facilities at Thoubal Cluster
11	Lilong TBL MC	9	9	100%	9	100%	0	• Segregation Shed Composting Unit	• More Composting Unit by May, 2022 • More engagement of plastic recyclers
12	Heirok MC	9	9	100%	3	33%	0	• Transfer and Segregation Station and Composting	• More composting unit by July, 2022
13	Wangjing Lamding MC	9	9	100%	9	100%	0	• Segregation and transfer station	• More composting unit by July 2022
14	Andro MC	12	12	100%	12	100%	0.96	• Composting, Segregation and Recycling	• 100% Source Segregation by March 2022 • Transport of remaining segregated Inert waste to the transfer station for Cluster-B located at Thoubal

Sl. No.	Name of ULB	Total Wards	Door to Door (D2D) Collection		Segregated at source		Land Available in Acre	Type of processing unit	Plan to mitigate the gap generation and Management
			No. of Wards	in %	No. of Wards	in %			
									• Increase in manpower • Awareness drives & Engagement of Recyclers
15	Kakching MC	12	12	100%	12	100%	5	• Composting, manual segregation of waste & recycling	• Engagement of SHGs • Construction of another segregation shed and aerobic composting unit is expected to be completed by March 2022
16	Kakching Khunou MC	9	9	100%	9	100%	2	• Composting, segregation & Recycling	• Transport of remaining segregated waste to Kakching cluster • Engagement of recyclers
17	Sugnu MC	9	9	100%	9	100%	1	• Composting, Segregation & Recycling	• Transport of remaining segregated waste to Kakching cluster • Engagement of recyclers
18	Mayang Imphal MC	13	13	100%	13	100%	1.25	• Segregation Sheds at Ward Level and Processing Unit are operational • Home composting plant is on progress	• Construction of Treatment/Composting Plant is on well progress and target for commission by May, 2022 • Segregation Sheds at the processing Site and Ward level are all operational • Effective awareness programme, IEC activities and engagement of more recyclers etc.
19	Wangoi MC	9	9	100%	9	100%	Nil	• Composting	
20	Kumbi MC	9	9	100%	9	100%	0.27	• Composting	• Composting Plant by June 2022
21	Kwakta MC	9	9	100%	9	100%	0.625	• Composting	• Composting unit by June 2022
22	Moirang MC	12	12	100%	12	100%	0	• Composting	• Requested DC to allot land • Rigorous IEC Campaign to be held for source segregation
23	Ningthoukhong MC	14	14	100%	14	100%	1.31	• Composting & sent back for re-cycling	• Composting unit almost complete
24	Bishnupur MC	12	12	100%	12	100%	5	• Segregation Shed, Composting Unit & Sanitary	• Composting plant at 2.5 Acre

Sl. No.	Name of ULB	Total Wards	Door to Door (D2D) Collection		Segregated at source		Land Available in Acre	Type of processing unit	Plan to mitigate the gap generation and Management
			No. of Wards	in %	No. of Wards	in %			
								Landfill	
25	Oinam MC	9	9	100%	3	33%	0	• Composting	• Encouraging households to source segregate waste and practice home composting of wet waste • Engaging recyclers for dry waste
26	Nambol MC	18	18	100%	11	61%	3.21	• Composting pit delayed due to ongoing Covid 2nd wave • Manual Segregation initiated at the segregation shed	• Capacity building of sanitary Workers • Increasing manpower, vehicles and machinery • Awareness drive • Involvement of SHGs and active participation of CSOs in SWM
27	Jiribam MC	10	10	100%	10	100%	6.02	• Composting, Send back for recycling, MRF	• Nil
Total		305	305		273	92%	36.445		
	In Percentage			100%		92%			

Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, MARCH 2022

Sl No.	Name of ULB or Name of Processing Unit	Processing unit Under Construction		Uncontrolled Dumpsite		Sanitary Landfill/ Controlled Dumpsite		Area of Legacy waste within 1 km buffer of the river	Drains falling into river having floating racks/screen
		Capacity TPD	Technology	No.	Area (Acre)	No.	Area (Acre)		
1	Imphal MC and Lamdeng SWM Plant [Extension]	100	Waste to Energy plant and C&D	Nil	Nil	1	Nil	Nil	Nil
2	Lamshang MC	NA	NA	Nil	Nil	Nil	Nil	Nil	Nil
3	Samurou MC	NA	NA	Nil	Nil	Nil	Nil	Nil	Nil
4	Thongkhong Laxmi MC	NA	NA	Nil	Nil	Nil	Nil	Nil	Nil
5	Sekmai MC	0	NA	0	0	Nil	Nil	Nil	Nil
6	Lilong IW MC	0.5	Composting and Manual segregation of waste	Nil	Nil	Nil	Nil	Nil	Nil
7	Lamlai MC	0	NA	Nil	Nil	Nil	Nil	Nil	Nil
8	Thoubal MC	0	NA	Nil	Nil	1	2	Nil	Nil
9	Yairipok MC	0.001	Composting and manual segregation of waste	Nil	Nil	Nil	Nil	Nil	Nil
10	Sikhong Sekmai MC	0	NA	Nil	Nil	Nil	Nil	Nil	Nil
11	Lilong TBL MC	0.5	Composting and manual segregation of waste	Nil	Nil	Nil	Nil	Nil	Nil
12	Heirok MC	0.2	composting pit	Nil	Nil	Nil	Nil	Nil	Nil
13	Wangjing Lamding MC	0.3	composting pit [proposed]	Nil	Nil	Nil	Nil	Nil	Nil
14	Andro MC	0	NA	Nil	Nil	Nil	Nil	Nil	Nil
15	Kakching MC	2	Manual Segregation of waste & Aerobic composting[proposed]	2	4.5	Nil	Nil	Nil	Nil
16	Kakching Khunou MC	0	NA	0	0	Nil	Nil	Nil	Nil
17	Sugnu MC	0	NA	Nil	Nil	Nil	Nil	Nil	Nil
18	Mayang Imphal MC	3	Manual segregation of waste & composting	Nil	Nil	Nil	Nil	Nil	Nil
19	Wangoi MC	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil
20	Kumbi MC	0.2	Composting pit	1	0.27	Nil	Nil	Nil	Nil

Sl No.	Name of ULB or Name of Processing Unit	Processing unit Under Construction		Uncontrolled Dumpsite		Sanitary Landfill/ Controlled Dumpsite		Area of Legacy waste within 1 km buffer of the river	Drains falling into river having floating racks/screen
		Capacity TPD	Technology	No.	Area (Acre)	No.	Area (Acre)		
21	Kwakta MC	0.14	composting pit [proposed under 3rd SFC 20-21]	1	0.006	Nil	Nil	Nil	Nil
22	Moirang MC	4	Segregation (4), Composting (1) and recovery of reusable wastes	1	2.5	Nil	Nil	Nil	Nil
23	Ningthoukhong MC	0.6	Aerobic, composting and Segregation and recovery of reusable wastes	1	1.31	Nil	Nil	Nil	Nil
24	Bishnupur MC, Multi-Segregation shed at Chothe Village, Ward No. 12	5	Anaerobic	1	2.5	1	2.5	Nil	Nil
25	Oinam MC	1	Composting	1	0.4	Nil	Nil	Nil	Nil
26	Nambol MC	0.05	Aerobic and vermi-composting	1	3.21	Nil	Nil	Nil	Nil
27	Jiribam MC	0	NA	Nil	Nil	1	1.72	Nil	1
	Total	117		9	14.696	4	6.22		1

Annexure – 4

STATUS OF WATER QUALITY OF POLLUTED RIVERS

Remark :

Manipur Pollution Control Board has been conducting monthly water quality analysis of the polluted rivers. The monthly water quality data of the polluted rivers will be reported during 1st week of the next month i.e. Report for January will get on 1-10th February. Therefore, Water Quality Report for January will be reproduced in the MPR of February.

Water Quality of the Imphal, Iril, Manipur, Thoubal, Wangjing, Khuga, Khujairok, Lokchao, Nambul, Waisel Maril & Moirang Rivers and Effluent of Sewage Treatment Plant, Langol
for the month of April, 2022

1. Imphal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Koirengei	7.2	7.3	3.2	8.1	45
Minutrhong	6.9	7.4	3.4	10.8	80
Mahabali	6.6	7.2	3.3	9.0	70

2. Iril River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kangla Siphai	7.3	7.3	3.2	13.2	40
Porompat	7.1	7.3	3.1	9.0	50
Lilong	7.0	7.3	3.4	12.7	60

3. Manipur River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Yairipok	6.9	7.2	3.3	15.5	60
Sekmaijing	7.3	7.4	3.2	11.6	70
Ithai	7.2	7.1	3.3	15.1	70

4. Thoubal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Litan	7.0	7.2	3.3	15.6	30

5. Wangjing River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Heirok	7.0	7.0	3.5	14.9	50
Wangjing	6.8	7.2	3.3	12.7	60

6. Khuga River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Churachandpur Bazar	7.1	7.2	3.3	10.9	55
Khuga Dam	7.2	7.2	3.3	9.1	20

7. Khujairok River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Khujairok	7.0	7.0	3.4	15.8	170

8. Lokchao River, Bishnupur

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Lokchao Bridge near Bishnupur Bazar	6.9	7.2	3.3	10.6	40

9. Nambul River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Samushang	6.0	6.5	4.8	16.8	140
Naoremthong	6.3	6.7	4.6	16.1	110
Hump Bridge	4.8	6.4	5.6	18.2	190
Heirangoithong	5.0	6.9	5.1	20.1	240
Singda Dam	7.7	7.4	3.3	10.2	50

10. Kongba River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kongba Eranpham	6.2	7.1	4.0	16.5	120
Kongba Erong	6.0	7.0	4.1	11.2	140

11. Waisel Maril

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Meijrao Bridge, Hiyangthang	6.1	7.0	5.0	14.4	160
Kha Sangenbam Mayai Leikai	6.9	7.1	3.5	11.8	120

12. Moirang River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Laikhurembi, Moirang Bazar	6.9	7.2	6.0	11.4	50

13. Sewage Treatment Plant Effluent

Location	Oil & Grease (mg/l)	pH	TSS mg/L	BOD mg/L	CIOD mg/L
Langol	2.4	7.0	54	12.5	52

Annexure – 5

Action Plan of the model river in Manipur

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Time Line	Status
Action 1	**Solid Waste Management**			
1.1	Identification of garbage vulnerable point	12 Municipal Wards	Oct 2019	Completed **Action:** MAHUD / IMC
1.2	Door to Door Collection, identify & register of missed out house hold, punitive action against litterer along the River	12 Municipal Wards	Oct 2019	Completed **Action:** MAHUD / IMC
1.3	Formation of Tasks Force for proper implementation of waste management		Oct 2019	Constituted
1.4	Providing of household waste bins	19,863 bins	Oct 2020	80% completed **Action:** Environment & CC
1.5	High rise fencing of grilling and netting at vulnerable zones of both the river banks to protect throwing of solid wastes into the river	5 km	Apr 2021	Completed **Action:** Environment & CC
1.6	Renovation of existing crematoria along the river stretch	56 Nos.	Apr 2021	Completed **Action:** Environment & CC
1.7	Installation of secondary waste collection bins / community bins / dumper placer containers / transfer bins / littering bins at suitable places	37 Nos.	Oct 2020	Completed **Action:** Environment & CC
1.8	Construction of Public toilets at vulnerable points	35 Nos. by IMC 20 Nos. under NRCD	Apr 2021	Completed **Action:** Environment & CC
1.9	IEC / Public Awareness Activities	14 No. (one each in every ward)	Every month	Conducted regularly **Action:** Environment & CC
Action 2	**Channelization, treatment, utilization and disposal of treated domestic sewage**			
2.1	Identification of location and estimation of liquid waste generation at Imphal town		Oct 2019	Completed **Action:** PHED
2.2	**Interception and diversion** of the urban drains / outfalls to the Nambul River by laying pipes of 14,545 meters at both the banks of River at 12 Municipal Wards viz. 6, 7, 8, 9, 11, 12, 13, 14,15, 16, 24 and 27		Apr 2022	30% Completed **Action:** Environment & CC
2.3	**Treatment option and capacity :** Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD		Apr 2022	85% Completed **Action:** Environment & CC
2.4	Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD		Dec 2019	Commissioned **Action:** PHED
2.5	Commissioning of the Imphal Sewerage Project Phase-II of 41 MLD		Apr 2022	DPR Submitted, waiting for approval of NIT from NDB **Action:** PHED

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Time Line	Status
Action 3	**Protection of catchment area**			
3.1	*In-situ* augmentation of medicinal plants and economic plantation at catchment			Completed **Action:** Forest
Action 4	**Protection and prevention of Flood Plain Zone**			
4.1	Protection and Improvement of River Bunds. 1,500 m for Nambul River 16,860 m in Imphal River 2,670 m in Kongba River 2,403 m in Thoubal River 317 m in Wangjing River 11,711 m in Manipur River		Before 2021	Status will be updated soon **Action:** WRD
4.2	Re-Sectioning of Rivers and Streams. 82,091 m in Imphal River. 15,480 m in Kongba River 89,100 m in Nambul and its tributaries. 1,900 m in Chakpi River		Before 2021	Status will be updated soon **Action:** WRD
4.3	CC/RCC Retaining Walls with and without piles to be provided at the most eroded and vulnerable river banks.		Before 2021	Status will be updated soon **Action:** WRD

B. 8 (eight) polluted stretches of Rivers viz. Imphal, Iril, Khuga, Khujairok, Lokchao, Manipur, Thoubal, Wangjing under Priority V in Manipur

Action	Target Action	Target Quantity	Timeline	Status & Actor
Action 1	**Solid Waste Management**			
1.1	Identification of garbage vulnerable point along the 8 (eight) identified polluted river stretches	59 Municipal Wards	6 months (December 2019)	Status will be updated soon **Action :** MAHUD / ULBs
1.2	Door to Door Collection and transportation of Municipal solid wastes with source segregation through Cluster Approach	59 Municipal Wards 33.45 MT	1 year (June 2020)	
1.3	Installation of littering bins at suitable places	500 Nos. of Bins	1 year (June 2020)	
1.4	Setting up of waste processing site at Cluster Approach	5 Cluster Units	2 Year (June 2021)	
1.5	Construction of Public toilets at vulnerable points	59 Nos. (one each for every ward for 59 wards)	2 Year (June 2021)	
1.6	IEC / Public Awareness Activities	177 Nos. (3 times for every 59 Wardfs)	Ongoing	
1.7	Encouraging of home composting	10% of total household	Ongoing	
Action 2	**Channelizatio, treatment, utilization and disposal of treated domestic sewage**			
2.1	Identification of location and estimation of liquid waste generation	Under survey	Ongoing	Completed **Action** : PHED
2.2	Treatment option through phytoremediation technique in consultation with NEERI (National Environmental Engineering Research Institute), Nagpur	27.024 + 38.73 = 65.754 MLD	2 Years (June 2021)	DPR submitted to NRCD, Ministry of Jal Shakti, Govt. of India **Action** : Environment & CC
2.3	**Commissioning of the Imphal Sewarage Project Phase-II:** Installation of STPs of 3 (three) units SBR (Sequencing Batch Reactors) technology covering all the remaining wards of Imphal Municipal Corporation (Finalized DPR)	41 MLD	Funding awaited	DPR submitted, waiting for approval of NIT from NDB **Action** : PHED
Action 3	**Protection of catchment Area of 1539 sq. km.**			
3.1	*In situ* augmentation with economic plants	1539 sq. km.	2 Years (June 2021)	Status will be updated soon **Action** : Forest
3.2	Inventorisation and mapping of springs for protection and rejuvenation at catchment	8 rivers	1 Year (June 2020)	Status will be updated soon **Action** : Environment & CC
Action 4	**Protection and prevention of Flood Plain Zone**			

4.1	Protection and Improvement of River Bunds	1. 1500 m for Nambul River 2. 16860 m in Imphal River and its tributaries 3. 2670 m in Kongba River 4. 2403 m in Thoubal River 5. 317 m in Wangjing River 6. 11711 m in Manipur River	Before 2021	Status will be updated soon **Action** : WRD
4.2	Re-Sectioning of Rivers and Streams	1. 82091 m in Imphal River 2. 15480 m in Kongba River 3. 89100 m in Nambul and its tributaries 4. 1900 m in Chakpi River	Before 2021	
4.3	CC / RCC Retaining Walls with and without piles to be provided at the most eroded and vulnerable river banks	Along Nambul, Imphal, Thoubal, Kongba, Iril and other major rivers	Before 2021	