

Year: 2022

**DISTRICT  
ENVIRONMENT  
PLAN  
JAGATSINGHPUR  
ODISHA**



**Collector & District Magistrate**  
Collectorate, Jagatsinghpur

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## 1.0 DISTRICT PROFILE

### (a) District Administrative Set-Up

Enriched with glorious cultural heritage, Jagatsinghpur district formed on 01.04.1993 vide Govt. Notification No. 14218 / R dated. 27.03.1993 and EOG No. 459 dated. 01.04.1993. Before that, it was a part of the erstwhile Cuttack district, subsequently which divided into four different districts for administrative convenience. The district lies at 19° 58' to 20° 23' North latitude and 86° 3' to 86° 45' East longitude. Jagatsinghpur district is surrounded by the Bay of Bengal in the east, Cuttack district in the west, Kendrapara district in the north and Puri district in the south. History of Jagatsinghpur comprises the conglomeration of Hindu, Muslim, Maratha and British realms. The East India Company established its trading Arsenal at Hariharpur in 1600 and captain Bruton administered the place till 1633. The Maratha Administration kept the place under their jurisdiction and appointed Jagat Singh in 1748 to collect revenue. He collected the Peshkush and Najarana. He remained an unchallenged and uninterrupted administrator for a long period. The place was converted from 'Hariharpur' to 'Jagatsinghpur' after the name of Jagat Singh since 1786.

Having a geographical area of 1668 Sq. Km. the Jagatsinghpur district is the smallest district in Odisha in terms of territorial location. The district has got a total population of 11,36,971 including 5,77,865 male and 5,59,106 female as per 2011 census. The total SC population of the district is 2,48,152 and ST population is 7,862 as per 2011 census. The average literacy rate of the district is 86.6% comprising of 92.38% male literacy rate and 80.63% female literacy rate.

Jagatsinghpur has only one subdivision namely Jagatsinghpur. There are 8 Blocks, 8 Tahasils, 1292 Villages, 198 Gram Panchayats and 12 Police Stations functioning in the district.

Jagatsinghpur district enjoys tropical climate. Winters are cold, while summer are hot and humid. The district is prone to cyclonic rainfalls during the monsoon. The maximum temperature of the district is 38° C and minimum temperature is 12°C. The actual and normal rainfall of the district as per 2020 data is 1638.5 mm and 1514.6 mm respectively.

The district is packed with many attractive places such as Paradeep Port, Paradeep, Paradeep Garh, Sarala Temple, Garh Kujang, Siali sea beach etc. are some of the visiting places of the district. Gorekhanath Temple is one of the most attractive temples of the district. Jagannath temple of Garei is also famous tourist spot visited by a large number of people from the world.

The district is predominantly agrarian. It has been experiencing natural calamities like floods and cyclones which are major hindrance in the economic development. Apart from agriculture, trade and commerce, transport, storage and communication, manufacturing, processing and repairing services engage a major chunk of population in the district. A section of people is engaged in fishing as allied activity.

The major food crops grown in Jagatsinghpur district is paddy, sugarcane, turmeric and groundnut which are considered as major commercial crops. The district enjoys rich fertile soil of the Mahanadi River.

Jagatsinghpur district celebrates many festivals with great joy and enthusiasm. Common festivals of the district are Kalinga Baliyatra Mahotsav, Chandan Yatra of Goddess Sarala, Dussehra, Laxmi Puja, Raja, Sivaratri, Ratha Yatra, Khudurukuni Puja etc.

### (b) Local Institutions

Education		
Primary School (2017-18)	No. of Schools	981
	Enrolment (No.)	34023
	Pupil Teacher Ratio	12
Upper Primary School (2017-18)	No. of Schools	557
	Enrolment (No.)	66193
	Pupil Teacher Ratio	14
Secondary School (2017-18)	No. of Schools	316
	Enrolment (No.)	64561
	Pupil Teacher Ratio	19
General College (2017-18)	No. of Junior Colleges	34
	No. of Degree Colleges	24
Medical College (2017-18)	No. of Medical Colleges	00
Govt. Law College (2017-18)	No. of Govt. Law Colleges	00
PoPolytechnic School (2017-18)	No. of Polytechnic Schools	00
Literacy Rate (2011)	Male	92.38%
	Female	80.63%

### (c) Natural Resources

#### Water Bodies and availability of water resources

There are lots of water bodies in the district ranging from the sea to rivers and canals. The length of the seacoast of the district of Jagatsinghpur is 67 Km. Sandy ridges are found along the seacoast which stretches into the districts of Kendrapara and Puri. The ridges vary in width and have prevented the rivers to find their way into the ocean. There are four major river systems i.e., the Mahanadi, Kathajodi, Devi and Biluakhai system that irrigate the mainland of Jagatsinghpur district. Cultivable alluvial plains are formed mainly from above river systems and contribute to the agricultural prosperity of the district. In addition to these four major river systems, there are series of natural streams and river distributaries like Alaka, Hansua, Paika etc. flow through this district. Apart from major rivers, there are many ponds and canals which exist in the district. Two main canals are Taladanda and Machhagaon are chief source of irrigation. Taladanda canal is the largest and longest canal in Odisha which was dug up during British period in the year 1869. Availability and exploitation of ground water plays a vital role to ensure the supply of drinking water and irrigation water. According to Central Ground Water Board (CGWB) all the blocks in Jagatsinghpur district are in the safe limits of ground water utilization as per availability. Ground water quality is saline in few blocks like Ersama, Balikuda, Kujang and Naugaon.

## Forest Coverage

Table 1: Category wise forest cover in Jagatsinghpur District

Type	Area (in Sq. Kms.)
RF	1.23
Demarcated PF	4.77
Un Demarcated PF	83.06
Un-classed Forests	0.02
Other Forests	43.84
Total Forest Area	132.92
Total Geographical Area	1668
% of Forest Area to Geographical Area	7.97

## (d) Geography & Demography

### Geography

Home to many rivers, beaches and being endowed with immensely fertile soil, the district of Jagatsinghpur is indeed pretty rich in geographical features. But the region is equally prone to natural calamities like cyclones, floods and even droughts. In fact, during last few decades Jagatsinghpur has time and again faced nature's wrath, which has had a catastrophic effect not only on lives of ordinary people but also on its economic pursuits.

Jagatsinghpur is located in east coast of Odisha State. In terms of latitude and longitude, the district falls in latitude of 20° 27' North and longitude of 86° 17' East. In terms as per distribution or break down of land area is concerned, the forest area makes for only 132.92 Sq. Km., while rest of the land area is primarily divided among agricultural and non-agricultural activities.

### Demography

Table 2: Population of Jagatsinghpur District in 2011 and 2001

Description	2011	2001
Population	11,36,971	10,57,629
Male	5,77,865	5,38,881
Female	5,59,106	5,18,748
Population Growth	7.5%	13.26%

Table 3: Demographic details of Jagatsinghpur district for 2011 and 2001

Description	2011	2001
Area Sq. Km	1668	1668
Population Density/km <sup>2</sup>	682	634
Proportion to Odisha population	2.71%	2.87%
Sex ratio (Females per 1000 males)	968	963
Child sex ratio (0-6 age) Females per 1000 males	929	926
Average literacy	86.59%	79.08%
Male literacy	92.38%	88.55%
Female literacy	80.63%	69.28%

Description	2011	2001
Total child population (0-6 age)	1,10,249	1,24,550
Male child population (0-6 age)	57,155	64,682
Female child population (0-6 age)	53,094	59,868
Literates	8,89,027	7,37,848
Male literates	4,81,049	4,19,922
Female literates	4,07,978	3,17,926
Child proportion (0-6 age)	9.70%	11.78%
Boys proportion (0-6 age)	9.89%	12.00%
Girls proportion (0-6 age)	9.50%	11.54%

#### (e) Land Use Pattern

Geographical area (Sq. Km.)	1668
Area under forest (Sq. Km.)	132.92
Land put to non-agricultural use (Ha)	49301
Barren and Non-cultivable land (Ha)	655
Permanent pastures & other grazing land (Ha)	11286
Land under misc. tree, crop & groves not included net area sown (Ha)	5050
Cultivable waste (Ha)	7552
Old fallows (Ha)	4583
Current fallows (Ha)	7248
Net area sown (Ha)	78766
Irrigated area (Ha)	61800

#### (f) Climate

Jagatsinghpur district enjoys quite moderate tropical climate. In other words, summers are bearably hot, so is the cold during winter and even rainfall recorded here is just above moderate. During summer season temperature can rise up to 38°C, while during winter season temperature can slip to 12°C. The actual and normal rainfall of the district as per 2020 data is 1638.5 mm and 1514.6 mm respectively. One important feature of Jagatsinghpur's climate is its erratic climatic behaviour, which results in natural calamities like cyclones, floods etc. The erratic climatic behaviour is largely owing to unique location of this district.

## 2.0 INDICATIVE GAP ANALYSIS & ACTION PLAN FOR COMPLYING WITH WASTE MANAGEMENT RULES

### (i) Solid Waste Management

#### a. Current status related to solid Waste management

Sl. No.	Urban Local Bodies	No. of Wards	No. of Households	Population	Solid Waste Generated perday (MT)
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	NA	NA	NA	NA
2	Municipalities (Nagar Palikas)				
	1. Jagatsinghpur Municipality	21	7010	33631	Not available
	2. Paradeep Municipality	19	17485	68585	51
3	Nagar panchayats (Town area Councils)	NA	NA	NA	NA

Note: NA- Not Applicable

Sl. No.	Local bodies	No. of Village panchayats / Blocks	No. of Households	Population	Solid Waste Generated per day (MT)
1	Block / Taluk / Mandal Tehsils ##	08	236812	1034755	Not available
2	Village/ Gram Panchayats	1292/198			

## Total urban and village population (Sl 1 +2)

#### b. Identification of gaps and Action plan

Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
<b>1 Segregation</b>					
(i)	Segregation of waste at source	<ul style="list-style-type: none"> <li>About 50 to 60 % of Dry &amp; Wet wastes segregation at source being practiced during Door-to-Door collection.</li> <li>Domestic Hazardous wastes segregation not carried out.</li> <li>Identification of Bulk Generators like apartments, complexes</li> </ul>	<ul style="list-style-type: none"> <li>Regular awareness programme in Schools, Colleges and Societies etc.</li> <li>Supply of one set Blue &amp; Green coloured bins to each Households, Apartments, Market complexes (May be on payment basis)</li> <li>Awards, Incentives for best management</li> <li>Identification &amp; declaration in social media for Habitual violators including imposition of penalties.</li> <li>IEC activities through Swachhasathis, Supervisors, Support agencies in every Wards of ULB.</li> <li>Identification on daily</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	3 Months

Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
			basis of lanes & households where mixed waste is practiced engaging with the lane committees for ensuring segregation by all households in the lane		
<b>2 Sweeping</b>					
(i)	Manual Sweeping	<ul style="list-style-type: none"> <li>About 60 % &amp; 90% Paved roads in urban &amp; rural areas respectively are not covered for regular sweeping.</li> <li>Manpower deployment in Urban &amp; Rural sector is about 30% &amp; 20% respectively than that of total requirements.</li> <li>No mechanized tools available.</li> <li>PPEs provision not adequate</li> </ul>	<ul style="list-style-type: none"> <li>Handy manual drive sweeping tools (vacuum type) &amp; small motorized equipment for transportation to main collection points to reduce direct contact with wastes.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
(ii)	Mechanical Road Sweeping and collection	<ul style="list-style-type: none"> <li>No provision of Mechanical Road Sweeping systems</li> </ul>	<ul style="list-style-type: none"> <li>2 nos Truck mounted vacuum type road sweeping machines required for 4 lane/2 lane roads per 50 km in urban areas.</li> <li>At least 1 no. tractor / small vehicle mounted vacuum type road sweeping machines required for single lane / RD roads for Urban &amp; GP areas.</li> <li>Supply of adequate PPEs for sweepers &amp; workers.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	06 Months
<b>3 Waste Collection</b>					
(i)	100% collection of solid waste	<ul style="list-style-type: none"> <li>About 70 to 80% waste collection being carried out on daily basis by ULBs &amp; less than 50% in Rural areas.</li> <li>Inadequate collection Bins/ community Bins</li> </ul>	<ul style="list-style-type: none"> <li>Deployment of mechanical transportation systems.</li> <li>Clear Demarcation of waste collection stations.</li> <li>Fixing of responsibilities on Bulkgenerators for collection of segregated wastes.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
(ii)	Arrangement for	<ul style="list-style-type: none"> <li>100% &amp; 70% door to</li> </ul>	<ul style="list-style-type: none"> <li>Deployment of out</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur</li> </ul>	03 Months



Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
	door to door collection	door collection systems provided at Jagatsinghpur, Paradeep ULBs respectively. ▶ No door to door collection systems in GPs.	sourced agencies, NGOs in rest of Urban/Semi-Urban areas & completely in Rural areas.	Municipality ii. Paradeep Municipality iii. All Grampanchayats	
Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
(iii)	Waste collection trolleys with separate compartments	<ul style="list-style-type: none"> <li>• 100% has been provided in narrow lanes &amp; slums in ULBs.</li> <li>• Manual collection in most part of Rural areas</li> </ul>	<ul style="list-style-type: none"> <li>• 50 no. of BOV for waste collection Trolleys with separate compartments required for Urban &amp; Rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
(iv)	Mini Collection Trucks with separate compartments	<ul style="list-style-type: none"> <li>• 80% has been provided in narrow lanes &amp; slums in ULBs.</li> <li>• Manual collection in most part of Rural areas</li> </ul>	<ul style="list-style-type: none"> <li>• Phase-out of existing Diesel mini collection Trucks &amp; switch over to 100% mini E vehicles with separate compartments</li> <li>• 21 mini collection Trucks required for Urban &amp; Semi Urban (Block Headquarters, ) areas respectively shall be replaced by Small E vehicles with separate compartments.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
(v)	Waste Deposition Centres (for domestic hazardous wastes)	<ul style="list-style-type: none"> <li>• No provision has been made in Urban or in GPs.</li> </ul>	<ul style="list-style-type: none"> <li>• At least 2nos in each ULBs &amp; one in each GP Headquarters to be declared as Waste deposition centers for domestic Hazardous wastes &amp; to be linked with authorized recyclers for disposal.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
<b>4 Waste Transport</b>					
(i)	Review existing infrastructure for waste transport	<ul style="list-style-type: none"> <li>▶ Waste transport facilities not adequate</li> <li>▶ No mechanical transport facilities in GPs</li> </ul>	<ul style="list-style-type: none"> <li>• Additional 2 nos Mini E Vehicles with separate compartments required for Kendrapara and Pattamundai ULBs respectively.</li> <li>▶ Tri cycle with separate compartments in each village &amp; Mini E Vehicles with separate compartments in each GP</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
			Headquarters & for semi urban areas.		
(ii)	Bulk waste trucks	<ul style="list-style-type: none"> <li>No Bulk waste Trucks available.</li> </ul>	At least 01 no. of Bulk waste Truck (preferably E Truck) required for each ULB. Mini E Trucks with separate compartments in each GP Headquarters & for semi urban areas.	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(iii)	Waste transfer points	<ul style="list-style-type: none"> <li>No waste Transfer Points exist.</li> </ul>	<ul style="list-style-type: none"> <li>At least one Waste Transfer Point is required in each ULB for recyclable materials transportation to recyclers.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
<b>5 Waste Treatment and Disposal</b>					
(i)	Wet-waste Management: On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	<ul style="list-style-type: none"> <li>Identification of Bulk waste generators in ULBs &amp; GPs yet to be done.</li> <li>Provision for direct supply of segregated vegetable wastes from Vegetable Markets, Mandies to Dairy farms &amp; Goshalas as cattle feeds to be ensured.</li> </ul>	<ul style="list-style-type: none"> <li>Listing of Bulk Waste generators in ULBs &amp; GPs.</li> <li>Provision of legal binding for installation &amp; proper functioning of onsite composting facilities for Bulk waste Generators during approval of Building &amp; other plans.</li> </ul>	<ul style="list-style-type: none"> <li>ULBs Authority</li> <li>Town Planning &amp; Development Authority</li> <li>Block level Authority</li> </ul>	03 Months
(ii)	Wet-waste Management: Facility (ies) for central methanation/ composting of wet wastes	<ul style="list-style-type: none"> <li>No facilities for central Biomethanation / Composting of wet wastes.</li> </ul>	<ul style="list-style-type: none"> <li>Central Biomethanation/ Composting of wet wastes facility needs to be installed if population exceeds 1 lakh.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	<ul style="list-style-type: none"> <li>One MRF exists in each ULBs.</li> <li>No MRF in GP Headquarters.</li> <li>No waste to Energy Plant.</li> <li>No tie up with authorized recyclers.</li> </ul>	<ul style="list-style-type: none"> <li>One MRF in each GP Head quarters</li> <li>Feasibility study of one Waste to Energy plant considering 2 ULBs, Agro wastes from local villages etc.</li> <li>Tie up with authorized recyclers for MRFs.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	<ul style="list-style-type: none"> <li>No proper sanitary land fill sites exist.</li> <li>Parts of SW still being disposed of by open dumping.</li> </ul>	<ul style="list-style-type: none"> <li>At least one properly designed Sanitary Land Fill site required in each ULB &amp; GP Head quarter for disposal of compost rejects, inert materials.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	12 Months

Sl. No.	Action points for villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
			<ul style="list-style-type: none"> <li>Ensure maximum recovery, reuse &amp; recycle policy to minimize land filling.</li> </ul>		
(v)	Remediation of historic / legacy dump site	<ul style="list-style-type: none"> <li>No legacy dump sites exist in ULBs.</li> <li>No remediation of legacy dump sites has been initiated.</li> </ul>	<ul style="list-style-type: none"> <li>Proper identification &amp; Remediation plan for each legacy dump sites in ULBs needs to be prepared &amp; implemented</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(vi)	Involvement of NGOs	<ul style="list-style-type: none"> <li>Involvement of NGOs yet to be envisaged.</li> </ul>	<ul style="list-style-type: none"> <li>Listing of NGOs &amp; fund allocation required for management of solid waste campaign.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	<ul style="list-style-type: none"> <li>Identification yet to be done.</li> <li>Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>Listing of producers / brand owners of packaging wastes.</li> <li>Setting up of collection centers for packaging wastes by producers/Brand owners in each ULBs &amp; GP headquarters.</li> <li>Inclusion of EPR in bylaws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(viii)	Authorisation of waste pickers	Yes	<ul style="list-style-type: none"> <li>Detail list preparation in each ULBs, GPs &amp; Semi Urban areas.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	No gaps	<ul style="list-style-type: none"> <li>Already prepared SWM by laws.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months

## (ii) Plastic Waste Management

### (a) Current status related to Plastic Waste management

Sl. No.	Urban Local bodies	Estimated quantity of Plastic Waste Generated per day (TPA)
1	Municipal Corporations (Nagar Nigam or Mahanagar Palika)	Not applicable
2	Municipalities (Nagar Palikas)	
	Jagatsinghpur Municipality	712
	Paradeep Municipality	3124.4
3	Nagar Panchayats (Town area Councils)	Not applicable

Sl. No.	Local Bodies	Plastic Waste Generated per day (MT)
1	Block /Taluk / Mandal Tehsils	Not available
2	Village/Gram Panchayats	Not available

## (b) Identification of gaps and Action Plan

Sl. No.	Action points for village panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
1	Door to Door collection of dry waste including PW	<ul style="list-style-type: none"> <li>►Identification yet to be done.</li> <li>►Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers / brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers / brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in bylaws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers / Vendors / Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> </ul>	03 Months
2	Facilitate organized collection of PW at waste transfer point or Material Recovery Facility	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers / brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers / brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole Sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
3	PW collection Centres	<ul style="list-style-type: none"> <li>►Identification yet to be done.</li> <li>►Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers / brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers / brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers /Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
4	Awareness and	No gaps	• IEC activity is in	i. Jagatsinghpur	03 Months

Sl. No.	Action points for village panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
	education programs implementation		<p>progress in each ULB</p> <ul style="list-style-type: none"> <li>• Lane committee formation, field study to the MCC &amp; MRF by the students, farmers &amp; citizens to some extent done in ULBs.</li> <li>• Wall painting on different IEC for segregation of plastic waste &amp; wet waste in strategic points done.</li> </ul>	<p>Municipality ii. Paradeep Municipality iii. All Grampanchayats</p>	
5	Access to Plastic Waste Disposal Facilities	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers / brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers / brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole Sellers /Vendors/ Market Associations.</li> </ul>	<p>i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats</p>	03 Months

### (iii) C & D Waste Management

#### a. Current status related to C & D Waste

Details of Data Requirement	Present Status
Total C & D waste generation in MT per day (As per data from Municipal Corporations / Municipalities)	1.15
Does the District have access to C&D waste recycling facility?	No

## b. Identification of gaps and Action plan

Sl. No.	Action points for blocks / town municipalities /City Corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1	Arrangement for separate collection of C&D waste to C&D waste deposition point.	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/Brand owners in each ULBs&amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
2	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/brand owners in each ULBs&amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
3	C&D recycling Facility	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/brand owners in each ULBs&amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
4	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/brand owners in each ULBs&amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

Sl. No.	Action points for blocks / town municipalities / City Corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
5	IEC on C&D waste management	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

#### (iv) Biomedical Waste Management

##### a. Current Status related to biomedical Waste

Inventory of water resources in District	Quantity
Total no. of Bedded Healthcare Facilities	23 nos.
Total no. of non-bedded HCF	34 nos.
No. of HCFs authorized by SPCB	67 nos.
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	Nil
Capacity of CBWTFs	59
No. of Deep Burials for BMW if any	Nil
Quantity of Biomedical waste generated per day	Not available
Quantity of Biomedical waste treated per day	Nil

##### b. Identification of gaps and Action plan

Sl. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory and Identification of Healthcare Facilities	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

Sl. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
2	Adequacy of facilities to treat biomedical waste	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
3	Tracking of BMW	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/Brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
4	Awareness and education of healthcare staff	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/Brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
5	Adequacy of funds	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months



Sl. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
6	Compliance to Rules by HCFs and CBWTFs	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ Brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
7	District Level Monitoring Committee	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
8	Waste water Treatment	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

## (v) Hazardous Waste Management

### a. Current Status related to Hazardous Waste Management

Details of Data Requirement	Present Status
No of Industries generating HW	15
Quantity of HW in the district	15,986 MT/Annum
(i) Quantity of Incinerable HW	720 MT/Annum
(ii) Quantity of Land-fillable HW	332 MT/Annum
(iii) Quantity of Recyclable / utilizable HW	14,934 MT/Annum
No of captive/common TSDF	03 (Captive SLF of IOCL Refinery, PPL & IFFCO of Paradeep). However there are no common TSDF in the district
Contaminated sites or probable contaminated sites	02 probable contaminated sites viz. Gypsum pond of PPL & IFFCO in Paradeep
No. of industries authorized by SPCB/CPCB	15
No. of industries displayed sign board of HW generation in front of gate	15

## b. Identification of gaps and action plan

Sl. No.	Action points	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1	Regulation of industries and facilities generating Hazardous Waste	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
2	Establishment of collection centres	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months
3	Training of workers involved in handling recycling disposal of fHW	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	i. Jagatsinghpur Municipality ii. Paradeep Municipality iii. All Grampanchayats	03 Months

Sl. No.	Action points	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
4	Availability / Linkage with common TSDF disposal facility	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
5	Contaminated Sites	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

## (vi) E-Waste Management

### a. Current Status related to E-Waste Management

Details of Data Requirement	Present Status
Inventory of E-Waste in MT/year	Not available
Collection centers established by ULBs in the District	Nil
Collection centers established by Producers or their PROs	01
No. of authorized E-Waste recyclers / Dismantler	01 (M/s N.C. Metalics, At-Sova, P.O-Balikuda)

## b. Identification of gaps and action plan

Sl. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / Bulk-waste generators	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
2	E-Waste collection points	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
3	Linkage among Stakeholders to channelize E-Waste	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP head quarters.</li> <li>Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole</li> <li>• sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
4	Regulation of Illegal E- Waste recycling / dismantling	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

Sl. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
5	Integration of informal sector	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP head quarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months
6	Awareness and Education	<ul style="list-style-type: none"> <li>• Identification yet to be done.</li> <li>• Lack of legal provisions for fixing responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Listing of producers/ brand owners of packaging wastes.</li> <li>• Setting up of collection centers for packaging wastes by producers/ brand owners in each ULBs &amp; GP headquarters.</li> <li>• Inclusion of EPR in by laws of ULBs &amp; GPs &amp; also fixing responsibilities on whole sellers/ Vendors/ Market associations.</li> </ul>	<ul style="list-style-type: none"> <li>i. Jagatsinghpur Municipality</li> <li>ii. Paradeep Municipality</li> <li>iii. All Grampanchayats</li> </ul>	03 Months

### 3.0 AIR QUALITY MANAGEMENT

#### (a) Current Status related to Air Quality Management

Details of Data Requirement	Present Status
Number of Automatic Air Quality monitoring stations in the district.	
- Operated by SPCB / State Govt. / Central govt./ PSU agency:	Nil
- Operated by Industry:	Nil
Number of manual monitoring States operated by SPCBs	03
Name of towns / cities which are failing to comply with national ambient air quality stations	Nil
No of air pollution industries	Not available
Prominent air polluting sources [Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste/Stubble] / [Brick Kiln] / [Industrial Estate] / [Others] (Multiple selection)	Large Industry / Small Industry/ Industrial estate

#### (b) Identification of gaps and action plan

S. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
1.	Identification of prominent air polluting sources.	Regular inspection & monitoring of air polluting Industries & Mines.	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Regular & continuous monitoring of AAQ w.r.t. PM10, PM2.5, SO2, NOx, Ammonia, Ozone etc in Industrial establishments & Mines.	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Setting up of information network for identification of Pollution prone Zone	District Administration, Jagatsinghpur	01months
			DFO MFD (WL) Rajnagar DFO Cuttack (T) Division	
			Regional Office of State Pollution Control Board, Odisha, Paradeep	
2.	Ambient Air quality data	Creation of Public awareness to get access to SPCB & CPCB server for online Real time Data	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Installation of Digital Display Board at Traffic square for Local AAQ.	District Administration, Jagatsinghpur. Regional Office of State Pollution Control Board, Odisha, Paradeep	06 months
			ULBs Authority, Jagatsinghpur	
		Display of Real time AAQ data of Industries at their main gate for Public views	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing

S. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
			Industry Authority	
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	Identification of at least one site for installation of OCAAQMS at District Headquarter Installation of Digital Display Board at Traffic square for display of Local AAQ	District Administration, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep ULBs Authority, Jagatsinghpur	06 months
4.	District Level Action Plan for Air Pollution	Regular inspection & monitoring of air polluting Industries & Mines.	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Regular & continuous monitoring of AAQ w.r.t. PM10, PM2.5, SO2, NOx, Ammonia, Ozone etc. in Industrial establishments & Mines.	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Use of at least 25% energy from renewable sources (Green Energy) in all Government offices, Commercial establishments, Industrial sectors.	District Administration, Jagatsinghpur Energy Department, Jagatsinghpur	06 months
		Shifting from Petrol/Diesel driven vehicles to Electric operated vehicles (At least 50%) in Government, Private sectors & individual levels.	District Administration, Jagatsinghpur Road Transport Office, Jagatsinghpur	06 months To prevent Air Pollution the Transport Department of Govt. of Odisha is encouraging Govt. and Private institutions as well as general public to use more and more electric operated vehicles instead of petrol/Diesel driven vehicles in this state.
		Promotion of E vehicles, CNG Taxies, improvements of comfortable Public Transport system.	District Administration, Jagatsinghpur Road Transport Office, Jagatsinghpur	Continuing process
		Identification, Development & Protection of at least 35% thick Forest area /Plantation Zone in each ULBs/ Block /GP of the District.	District Administration, Jagatsinghpur DFO MFD (WL) Rajnagar DFO Cuttack (T) Division	12 months

S. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
		Ensure Dust control in project construction sites	EE, PWD Department, Jagatsinghpur	0 month
			EE, Rural Works Department, Jagatsinghpur	
			Contractors of the Project	
		Strict enforcement of restriction on open burning of Garbage, Plastic wastes, Forest Fire. Waste stubbles & imposition of heavy penalty (Environmental compensation).	District Administration, Jagatsinghpur DFO MFD (WL) Rajnagar DFO Cuttack (T) Division	01 month
			ULBs & GP authorities	
			Regional Office of State Pollution Control Board, Odisha, Paradeep	
			Agriculture Department, Jagatsinghpur	
		All ULBs & GP Roads to be maintained dust free.	ULBs & GP authorities	03 months
5.	Hotspots of air pollution in District	Close watch on stubble burning, illegal waste burning, unauthorized operations, cluster activities, forest fires etc.	District Administration, Jagatsinghpur DFO MFD (WL) Rajnagar DFO Cuttack (T) Division Regional Office of State Pollution Control Board, Odisha, Paradeep ULBs Authority, Jagatsinghpur	Continuing
		Strict enforcement of restriction on open burning of Garbage, Plastic wastes, Forest Fire. Waste stubbles & imposition of heavy penalty (Environmental compensation).	District Administration, Jagatsinghpur DFO MFD (WL) Rajnagar DFO Cuttack (T) Division	
			Regional Office of State Pollution Control Board, Odisha, Paradeep	
			ULBs Authority, Jagatsinghpur	
	Awareness on Air Quality	Installation of Digital Display Board at Traffic square for display of Local AAQ.	District Administration, Jagatsinghpur	06 months
			Regional Office of State Pollution Control Board, Odisha, Paradeep	



S. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
			ULBs Authority, Jagatsinghpur	
		Receive of Public complaint through Email.	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing

## 4.0 WATER QUALITY MANAGEMENT

### 4.1 Water Quality Monitoring

#### a. Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	Mahanadi, Kathajodi, Devi and Biluakhai
Length of Coastline (if any)	67 Km
Nalas/ Drains/Creeks meeting Rivers	Alaka, Hansua, Paika
Total Quantity of sewage from towns and cities in District	NA
Quantity of industrial wastewater	37 MLD
Percentage of untreated sewage	NA
Details of bore wells and number of permissions given for extraction of groundwater	NA
Groundwater polluted areas if any	NA
Polluted river stretches if any	NA

#### b. Identification of gaps and action plan for water quality monitoring

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory of Water bodies	Detail inventory of each category of water bodies yet to be done	Water Resources Department, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Formation of District level Environment Monitoring Cell	District Administration, Jagatsinghpur  DFO MFD (WL) Rajnagar DFO Cuttack (T) Division  Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Regular monitoring of water quality of water bodies	Regional Office of State Pollution Control Board, Odisha, Paradeep	01 months
2.	Quality of water bodies in the district	Periodic check of water quality of major water bodies & Ground water based on their specific use.	Regional Office of State Pollution Control Board, Odisha, Paradeep	03 months
3.	Hotspots of water contamination	Identification of pollution prone water bodies & Ground water	Water Resource Department, Jagatsinghpur  Regional Office of State Pollution Control Board, Odisha, Paradeep	06 months
		Monitoring of water quality on Regular interval.	Regional Office of State Pollution Control Board, Odisha, Paradeep	06 months

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
		Restriction of use of Chemical Fertilizer, Pesticides, Herbicides etc in Agriculture & Horticulture & switch over to Bio Fertilizer, Bio Pesticides etc.	District Administration, Jagatsinghpur DFO MFD (WL) Rajnagar DFO Cuttack (T) Division Agricultural Department, Jagatsinghpur Horticulture Department, Jagatsinghpur Soil Conservation Office, Jagatsinghpur	06 months
		Preparation of remedial measures	Water Resource Department, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep	
4	Protection of river / lake water front	Identification of arear of open defecation	ULBs & authorities authorities of GPs	06 months
		Campaign against open defecation & Provision of community Toilets wherever required	NGOs ULBs & GPs authorities	06 months
		Construction & maintenance of Idol Immersion Ponds at strategic locations near Water bodies.	District Administration, Jagatsinghpur ULBs & GPs authorities.	03 months
		Free water bodies from encroachment.	District Administration, Jagatsinghpur Water Resource Department, Jagatsinghpur ULBs & GPs authorities.	06 months
		Strict enforcement of Solid Waste Management Rules, Shifting & reclamation of Legacy dumping sites from River banks, Lakes, Imposition of Heavy penalty for any dumping of SW in water bodies (Environmental compensation)	District Administration, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep ULBs & GPs authorities.	06 months
		Preparation of self-sustainable River / Lake front Development Plan (Bathing Ghats, Joggers Park, Restaurants provision, Water sports , Lighting along River Banks, Aqua cultures to support Livelihoods of locals etc)	District Administration, Jagatsinghpur Water Resource Department, Jagatsinghpur ULBs & GPs authority	06 months
5.	Inventory of sources of water pollution	Identification of Drains, Sewer Lines outfalls in water bodies	Water Resource Department, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep ULBs & GPs authority	06 months
		Identification of Solidwastes disposal area in & around Water bodies	Regional Office of State Pollution Control Board, Odisha, Paradeep ULBs & GPs authority	06 months

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
		Identification & quantitative assessment of areas & type of Chemical Fertilizers, Pesticides & Herbicides being used in the District.	Agriculture Department, Jagatsinghpur Horticulture Department, Jagatsinghpur	02 months
		Preparation of remedial measures	District Administration, Jagatsinghpur  Regional Office of State Pollution Control Board, Odisha, Paradeep  Reputed Institutions/ Agencies	06 months
6	Oil spill disaster management(for coastal districts)	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
7	Protection of flood plains.	Regulation for protection of Flood Plain	District Administration, Jagatsinghpur  Water Resource Department, Jagatsinghpur  ULBs & GPs authority	06 months
		Identification of encroachment area and initiation to prevent encroachment	District administration, Jagatsinghpur Water Resource Department, Jagatsinghpur ULBs & GPs authority	06 months
8	Rejuvenation of groundwater	Identification & mapping of Ground Water status of Jagatsinghpur District (Critical Zone, Safe Zone etc)	District Administration, Jagatsinghpur	06 months
			Water Resources Department, / Central Ground Water Authority, Bhubaneswar/ Lift Irrigation Department, Jagatsinghpur  ULBs & GPs authority	
		Identification of vulnerable areas of over exploitation of Ground water	Water Resources Department, Jagatsinghpur / Central Ground Water Authority, Bhubaneswar/ Lift Irrigation Department, Jagatsinghpur	03 months
		Periodical Monitoring of Ground Water quality.	Regional Office of State Pollution Control Board, Odisha, Paradeep Central GroundWater Authority, Bhubaneswar	Continuing

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
		Preparation of master plan for Rainwater Harvesting Inclusion of Rain water harvesting(Roof top collection/Ground water Recharge) provisions in Bylaws of ULBs/GPs/Development authorities while approving Building Plan for Government offices, Commercial Establishments, Institutions & Individual Households. Assessments of Ground water withdrawal for Industrial / Agricultural /Domestic purposes & obtain of NOC from CGWA/WR Department in case water drawl exceed 10 m <sup>3</sup> /Day (Except exemption list).	ULBs/GPs/Area Development Authorities.  Central Ground Water Board/WR Department	
9	Complaints redressal system.	Availability of Public complaints Redressal systems i.e. Email, Public complaint Box etc	District Administration, Jagatsinghpur  Regional Office of State Pollution Control Board, Odisha, Paradeep.	Continuing
		Development of App.	District Administration, Jagatsinghpur	06 months

## 4.2 Domestic Sewage

### a. Identification of gaps and action plan for treatment of domestic sewage

Details of Data Requirement	Present Status
No. of Class-II towns and above	Nil
No. of Class-I towns and above	Nil
No. of Towns STPs installed	Nil
No. of Towns needing STPs	2
No. of ULBs having partial underground sewerage network	Nil
No. of towns not having sewerage network	Nil
Total Quantity of Sewage generated in District from Class II cities and above	Not available
Quantity of treated sewage flowing into Rivers (directly or indirectly)	Not available
Quantity of untreated or partially treated sewage (directly or indirectly)	Not available
Quantity of sewage flowing into lakes	Not available
Total available Treatment Capacity	Not available

## b. Identification of gaps and action plan for treatment of domestic sewage

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1	Sewage Treatment Plants (STPs)	No STP available in the District. Identification of areas (covering nos of wards) in each ULBs, Semi urban Towns (Block Headquarters) etc & preparation of feasibility report for setting up of STPs based on Decentralized concept.	District Administration, Jagatsinghpur  Authority of ULBs/GPs/Development Agencies	06 months
		Individual STPs for Apartments, Hospitals (more than 30 beds), Institutions, Industrial Townships etc.	District Administration, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep	06 months
			Authority of ULBs/GPs/Development Agencies	
2	Underground sewerage network	Laying of sewerage system for each STP	Housing & urban Department, Odisha Authority of ULBs	12 months
		Installation & commissioning of STP	Housing & Urban Department, Odisha	12 months
			Authority of ULBs	
			Odisha Water Supply & Sewerage Board.	

## 5.0 INDUSTRIAL WASTEWATER MANAGEMENT

### a. Current Status related to Industrial Wastewater Management

Number of Red, Orange, Green and White industries in the district	Not available
No. of Industries discharging waste water	14
Total Quantity of industrial waste water generated	37 MLD
Quantity of treated industrial waste water discharged into Nalas / Rivers	37 MLD
Common Effluent Treatment Facilities	Nil
No. of Industries meeting Standards	14
No. of Industries not meeting discharge Standards	Nil

### b. Identification of gaps and action plan for industrial wastewater

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1	Compliance to discharge norms by Industries	Inspection & Monitoring of discharge effluent quality on Regular basis	Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing
		Installation of online Effluent Quality Monitoring Systems (OEQMS) with Real Time Data Transmission facilities to SPCB/CPCB server for Large Industries.	Regional Office of State Pollution Control Board, Odisha, Paradeep	OEQMS need to be installed by user industries
2	Complaint redressal system	Availability of Public complaints Redressal systems i.e. Email, Public complaint Box etc	District Administration, Jagatsinghpur	Continuing
			Regional Office of State Pollution Control Board, Odisha, Paradeep	
		Development of App.	District Administration, Jagatsinghpur	06 months

## 6.0 MINING ACTIVITY MANAGEMENT PLAN

### a. Current Status related to Mining Activity Management

Details of Data Requirement	Existing Mining operations
Type of Mining Activity	Sand mining
No. of licensed Mining operations in the District	Not available
% Area covered under mining in the district	Not available
Area of Sand Mining	River bed

### b. Identification of gaps and action plan

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for Completion of action plan
1.	Monitoring of Mining activity	Constitution of District Level Task Force	District Administration, Jagatsinghpur / Regional Office of State Pollution Control Board, Odisha, Paradeep / Mining Department, Jagatsinghpur / Police Department, Jagatsinghpur	01 month
		Installation of online Effluent Quality Monitoring Systems (OEQMS) with Real Time Data Transmission facilities to SPCB/CPCB server for Large Industries	Regional Office of State Pollution Control Board, Odisha, Paradeep	As & when Industry shall be fully operational.
2.	Inventory of illegal mining if any mining	Surveillance & Patrolling.	District Level Task Force, Jagatsinghpur	01 month
		Use of GPS for Transportation of minerals.	District Administration, Jagatsinghpur  Mining Department, Jagatsinghpur	06 months
3.	Environment compliance by Mining industry	Inspection & Monitoring of Mines on Periodic basis	District Administration, Jagatsinghpur  Regional Office of State Pollution Control Board, Odisha, Paradeep	Continuing



Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for Completion of action plan

## 7.0 NOISE POLLUTION MANAGEMENT PLAN

### a. Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in district	02 nos. with SPCB, Odisha, Paradeep

### b. Identification of gaps and action plan

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1	Availability of Sound/Noise Level Meters.	02 nos. noise measuring devices available with SPCB, Odisha, Paradeep. Procurements of Noise Level Meters with Data Loggers (Recommended specifications) for Police Department, Jagatsinghpur, District Administration, Jagatsinghpur, Traffic Department, Jagatsinghpur & SPCB, Odisha, Paradeep.	District Administration, Jagatsinghpur Regional Office of State Pollution Control Board, Odisha, Paradeep ULBs Police Department, Jagatsinghpur	02 months
2	Ambient Noise Level monitoring	Training to Field officers & Staff for operation, Data evaluation & reporting using Noise Level meter w.r.t. legal compliances.	Regional Office of State Pollution Control Board, Odisha, Paradeep	03 months
		Installation of online Noise Level Monitoring Systems with Real Time Data Display facilities at Noise prone area/ Silence Zones.	District Administration, Jagatsinghpur Police Department, Jagatsinghpur	06 months
3	Signboards in Noise zones	Identification of no. of Horn Zone in ULBs, Semi Urban Towns (Block Head quarters)	District Administration, Jagatsinghpur Police Department, Jagatsinghpur	01 month
		Provision of Sign Boards in Silence Zones/Sensitive Zones.	District Administration, Jagatsinghpur Police Department, Jagatsinghpur	02 months
	Complaint redressing system	Availability of Public complaints Redressal systems i.e. Email, Public complaint Box etc.	District Administration, Jagatsinghpur Police Department, Jagatsinghpur	Continuing
		Development of App.	District Administration, Jagatsinghpur Police Department, Jagatsinghpur	06 months
		Imposition of Penalty for Violators	District Administration, Jagatsinghpur Police Department, Jagatsinghpur	Continuing

## 8.0 WETLAND MANAGEMENT PLAN

The total geographical area of Jagatsinghpur district is 1688 Sq. km. The wetland area in the district is estimated to be 20435 ha. In spite of the presence of coastal wetlands like Intertidal Mudflats, Mangrove and Aquaculture Ponds the inland wetlands dominated in terms of extent accounting for about 65 per cent. Major wetland types are River/Stream (12153 ha), Intertidal Mudflats (2348 ha) and Aquaculture Ponds (2250 ha), which account for about 60 %,12 % and 11 % respectively.

### a. Current Status related to Wetland Management Plan

Details of Data Requirement	Measurable Outcome
No. of Wetland and its extent	No- 1055; Area = 20435 in Ha.

Sl. No.	Wetland Category	No. of wetlands	Total wetland area (in Ha)
<b>Inland Wetlands - Natural</b>			
1	Ox-bow lakes/ Cut-off meanders	8	83
2	Riverine Wetlands	3	37
3	Waterlogged	38	638
4	River/Stream	67	12153
<b>Inland Wetlands - Man-made</b>			
5	Tanks/Ponds	37	427
<b>Total - Inlands</b>		<b>153</b>	<b>13338</b>
<b>Coastal wetlands- Natural</b>			
6	Sand/Beach	11	971
7	Intertidal mudflats	73	2348
8	Mangroves	33	833
<b>Coastal wetlands- Man-made</b>			
9	Aquaculture ponds	90	2250
<b>Total -Coastal</b>		<b>207</b>	<b>6353</b>
<b>Wetlands (&lt;2.25 ha)</b>		<b>695</b>	<b>695</b>
<b>Total</b>		<b>1055</b>	<b>20435</b>

### b. Identification of gaps and action plan

Sl. No.	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1	Sewerage discharge	Inadequate knowledge on water and aquatic land pollution. Load based assessment of Sewerage and additional STP for treatment of sewerage	ULB	6 months
	Disposal of Solid & other Waste	Unscientific disposal of solid waste into wetland. Load based assessment of Solid waste & other waste. Identification of additional land-fill sites and promotion of SLF	ULB	12 months
	Water quality testing	Any such initiative of monitoring of water quality of wetland is not yet been taken up by OSPCB. Sampling in every quarter for testing and provision for mobile lab for on-site testing, Empanelment of private testing labs	SPCB	Half-yearly

	Preventing siltation	Almost all wetland silted up over the years and water bearing capacity got	Water Resources Department	Occasional
		reduced. De-siltation of the water bodies. Impose penalty clause on disposal of waste into wetland		
	Demarcation of flood protection zone	Any such demarcation is yet not beendone. Special initiative/ study require for such demarcation.	Water Resources Department	One time
	Removal of Encroachment	Massive encroachment found specially in urban area. Revenue authorities along with DoWR and ULB officials will make inspection of drainage areas for removal of encroachment	District Administration(Revenue Authorities)	1 year

Member Convener-Cum-DFO,  
Mangrove Forest Division (WL) Rajnagar

Chairman-Cum- Collector &  
District Magistrate, Jagatsinghpur