

Year: 2022

**DISTRICT
ENVIRONMENT
PLAN
SUNDARGARH
ODISHA**



Collector & District Magistrate
Collectorate, Sundargarh



**OFFICE OF THE DIVISIONAL FOREST OFFICER,
SUNDARGARH FOREST DIVISION**



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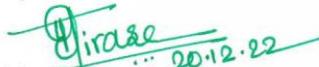
Memo No. 7521 /6F(ENV) /Dated. 20.12.22

To

The Director, Environment-cum-
Special Secretary to Government.
Forest Environment & Climate change Department
Odisha Bhubaneswar.

Sub:- Completion of District Environment Plan in compliance of order
dated 05-07-2021 of Hon'ble NGT in O.A. No.360/2018 reg.

The District Environment Plan in compliance of order dated 05-07-
2021 of Hon'ble NGT in O.A. No.360/2018 is submitted herewith for kind
information & necessary action.


Divisional Forest Officer
Sundargarh Division

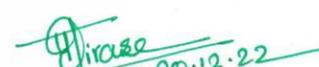
Memo No. 7522 /Date. 20.12.22

Copy to the Collector, Sundargarh for kind information and
necessary action.


Divisional Forest Officer
Sundargarh Division

Memo No. 7523 /Date. 20.12.22

Copy to the Principal Chief Conservator of Forests, Odisha
Bhubaneswar/ Regional Chief Conservator of Forests Rourkela Circle, Rourkela
for kind information and necessary action.


Divisional Forest Officer
Sundargarh Division

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1.0 DISTRICT PROFILE

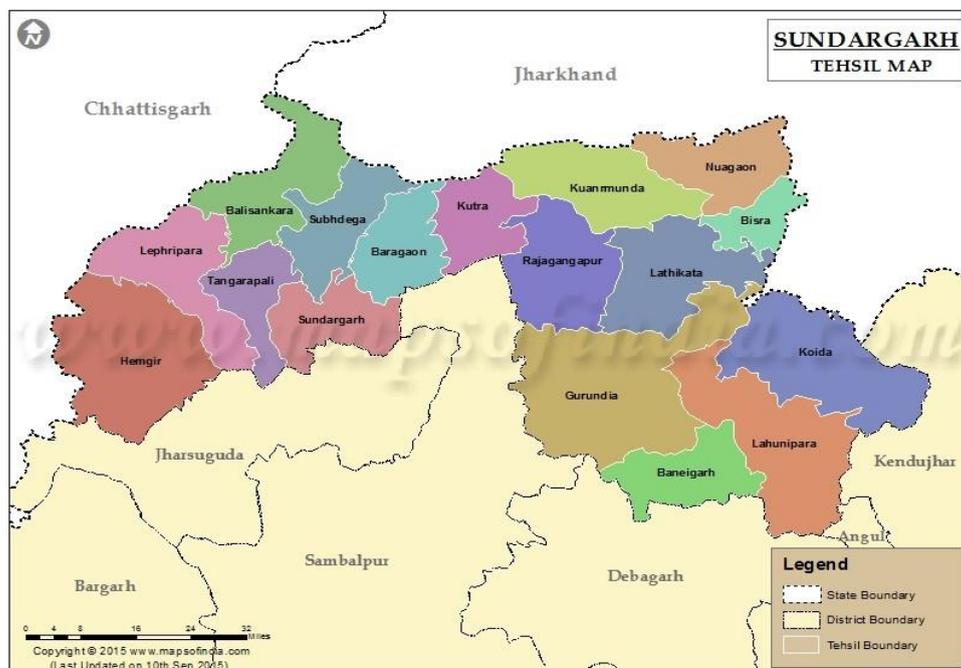
a. District Administrative Set-Up

Sundargarh District was constituted on the 1st January, 1948, out of the two ex-States of Gangpur and Bonai, which merged with Odisha on that day. True to its name, this beautiful District of Sundargarh with about 43 percent of its total area under forest cover and numerous colourful tribes dotting its landscape and with abundant mining potential is bounded by Ranchi District of Jharkhand on the North, Raigarh District of Chhatisgarh on the west and North-West, Jharsuguda, Sambalpur and Angul Districts of Odisha on the South and South-East and Singhbhum District of Jharkhand and Keonjhar District of Odisha on the east. Topographically, this district is located between latitude 21 degree 36' N to 22 degree 32' N and longitude 83 degree 32' E to 85 degree 22' E. The Sundargarh town is the district headquarter. Covering a geographical area of 9712 sq.kms, Sundargarh District is the second largest District of the state, accounting for 6.23 percent of its total area. Out of this total area, forests cover 4232.57 sq km, this being the second largest in the state, accounting for 8.53 percent of the state total.

Sundargarh is recognized as an industrial district in the map of Odisha. Steel Plant, Fertilizer Plant, Cement factory, Ferro Vanadium Plant, Machine building factory, Glass and china clay factory and Spinning mills are some of the major industries of this District. Sundargarh occupies a prominent position in the mineral map of Odisha and is rich in Coal, iron ore, limestone, manganese, dolomite, and fire clay. Major industries are the Odisha Cements Ltd, Hart Fertilizers Ltd, and Odisha Industries Ltd. The industrial town of Rourkela in this District has the first government sector plant built with foreign collaboration and was the first in India to use LD oxygen technology.

Still, more than 50 percent of the people earn their livelihoods from agriculture and allied sectors. Sundargarh District is coming under the North-Western Plateau Zone as per the agro climatic zone of Odisha. Soil group of the Sundargarh district is mixture of red and yellow soil. Out of the 3,13,000 hectares of cultivated land, 52 percent is upland, 30 percent is medium land and 18 percent is low land. As paddy is the main crop, 75 percent of the land is covered with paddy during Kharif. Due to limited irrigation facilities, 24 percent land is irrigated during Kharif, and 8 percent of land is irrigated during Rabi.

Sundargarh District is one of the tourist attractions spots of Odisha. The District is visited by a large number of tourists round the year. Places like Vedavyasa, Manikmonda, Mandira dam, Sarafgarh dam and Nature Camp, Ghogar, Khandadhar waterfalls, Tensa nature Camp, and Darjeeng are the important tourist spots of the district.



The Collector and District Magistrate is the administrative head of the district. For smooth running of administration, he is assisted by Additional District Magistrate, Sub-Collector, Block Development Officers, Tahasildars, Deputy Collectors, and other Officers. Sundargarh consists of three Sub-Divisions viz. Sundargarh, Panposh and Bonai. One Sub-Collector is in charge of each Sub-Division. For the convenience of revenue administration, the district is divided into 18 tahasils namely Sundargarh, Hemgiri, Lephripara, Balisankara, Rajgangapur, Biramitrapur, Panposh, Raurkela, Banei, Tangarpali, Subdega, Baragaon, Kutra, Lathikata, Bisra, Koida, Gurundia and Lahunipara with one Tahasildar in charge of each tahasil. There are six Statutory Towns in the district i.e. Raurkela Municipality, Sundargarh Municipality, Rajgangapur Municipality, Biramitrapur Municipality, Rourkela Industrial Township (ITS) and O.C.L. Industrial Township (ITS).

The other important departments are Forest & Environment department, Agriculture Department, Water resources department, Works department, fisheries department, etc among others.

b. Local Institutions

For development of rural areas consisting of 1779 villages in 262 Gram Panchayats, the district is divided into 17 Community Development Blocks with one Block Development Officer in charge of each Block. 17 nos. of Blocks are namely Kuarmunda, Nuagaon, Bisra, Lathikata, Hemgiri, Rajgangapur, Lephripara, Kutra, Sundargarh, Bargaon, Subdega, Balisankara, Tangarpalli, Lahunipada, Koida, Bonaigarh, Gurundia. In order to look after the developmental activities in the urban areas of the district, one Executive Officer for each of the town has been appointed.

Parliamentary Constituency- The District of Sundargarh Comes under One Parliamentary Constituency i.e. Sundargarh (ST) Parliamentary Constituency.

Assembly Constituency- As per the Assembly Constituencies are Concerned the District is represented by 7 Assembly Constituencies i.e.

008-Talsara (ST)

009-Sundargarh (ST)

010-Biramitrapur (ST)

011-Raghunathpali (SC)

012-Rourkela

013-Rajgangapur (ST)

014-Bonai (ST)

c. Natural Resources

• Water bodies

Brahmani river and Ib river (tributary of Mahanadi) are the major river systems in Sundargarh District.

• Availability of water resources

Except for small strips along major drainage courses, almost the entire district is occupied by the consolidated formations comprising of Precambrian meta sediments of Gangpur series and Iron ore series and also granite gneiss, meta sediments like amphibolite, epidiorite etc. Ground water is stored mainly in the secondary porosity resulting from weathering and fracturing of the rocks. The aquifer materials are highly heterogeneous in character showing both vertical and lateral variations. The weathered residuum forms the main repository of ground water, in which ground water occurs under water table condition and circulates through deeper fractures and fissures. Ground water occurs under confined to semi-confined condition in the deeper fractured zones. The water yielding capacity of fractured rocks largely depends on the extent (depth and degree) of fracturing, openness and size of fractures and extent of their interconnections to the near surface weathered zone.

• Forest coverage

As per Champion's classification, this district falls under Peninsular Sal type and dry deciduous mixed forest. The forests of Sundargarh district are mostly of Northern Tropical Dry Deciduous Type. The crop is a mixed one with Sal (*Shorea robusta*) as the dominant species. The Sal which is the principal timber tree and more or less gregarious in these forests varies from a fairly pure to a mixed crop and occurs throughout the area. The Koiria forests and some portions of Toda Reserve contain best quality of Sal. The other associates of Sal are Asan or Sahaj (*Terminalia tomentosa*), Kurum (*Adina cordifolia*), Bija or Piasal (*Pterocarpus marsupium*), etc. The steep slopes of the hills are covered with a dense forest mixed with many climbers. Sal (*Shorea robusta*) is gregarious and among the other noteworthy trees are species of *Buchania semecarpus*, *Teeminaliacedrella*, Cassia, butea, Bauhinia, Acacia and Adina, which are found also on the lower Himalayan slopes. Mixed with these, however, are a number of trees and shrubs, such as Cochlospermum, Soyimida, Boswellia, Hardarickia and Bassia. The surface of the plateau land between the valleys, where undulating, is usually clothed with a dense scrub jungle in which *Dendrocalamus strictus* is prominent. In keeping with the extensive and splendid forests, the district is rich in varieties of animal lives. The elephant, *Elephas maximus* (Hati) is fairly numerous. They are mostly seen in the east and west portion of Bonai. The wild buffalo, *Bubalus bubalis* (*Bana mainsh*) was at one time Quite plentiful, but today there is not a single specimen left in Sundargarh. Among the principal carnivora, the tiger (occasional), panther, hyaena, wild-dog, jackal and fox are seen. The jungle cats are fairly common in the forests. The common grey man goose is occasionally found in rocky hills in Sundargarh. It is usually larger in size and more yellow in colour than the common mungoose and has the tail tipped with black. The jackal, *Canis aureus* (Bilua) is found all over the district usually in scrub jungle near the villages and avoids dense forests.

d. Geography & Demography

Geographically, the district is not a compact unit and consists of widely dissimilar tracts of expansive and fairly open, dotted with tree, clad isolated peaks, vast inaccessible forests, extensive river valleys and mountainous terrain. Broadly speaking, it is an undulating tableland of different elevations broken up by rugged hill ranges and cut up by torrential hill streams and the rivers IB and Brahmani. The general slope of the District is from north to south. Because of this undulating, hilly and sloping nature of landscape, the area is subjected to rapid runoff leading not only to soil erosion but also to scarcity of water for both agriculture and drinking purposes.

e. Land-use Pattern

Sundargarh District is coming under the North-Western Plateau Zone as per the agro climatic zone of Odisha. The land use/land cover of Sundargarh shows that forest area dominates the district's landscape. Of the total land use/land cover area, forest area is about 51 per cent. This is followed by land for agricultural activities, with net sown area being 29 per cent of the total land area. Soil group of the Sundargarh district is mixture of red and yellow soil. Out of the 3,13,000 hectares of cultivated land, 52 percent is upland, 30 percent is medium land and 18 percent is low land.

Sundargarh district can be divided into three broad natural divisions. Sundargarh and Panposh sub-divisions are long and undulating tracts of varying heights up to about 700 feet (213 metre) above the mean sea level, dotted with hill-ranges and isolated peaks of considerable height. Similarly, the Bonai sub-division is largely an isolated hilly tract with an average elevation of about 800 feet (244 metre) above mean sea level.

f. Climate

The climate of this district is characterised by a hot dry summer and well-distributed rainfall in the South-West monsoon season. The hot season starts with the beginning of March and continues till May which is usually the hottest months of the year with the mean daily maximum temperature of 41°C and the mean daily minimum temperature of 27°C. The onset of rain brings relief although when the spells of rain cease, the weather reverts to oppressive character which is due to the high moisture content in the air. The nights become cooler from the months of October and in November; there is a drop in temperature both at day and at night. The district being a hilly region shows such extremities in climate.

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 per day (In MT)
1.	Municipal corporations (Nagar Nigam or Mahanagar Palika)	40	69609	3,02,040	120
2.	Municipalities (Nagar Palikas)	50	28108	1,29,815	27.1
3.	Nagar panchayats (Town area Councils) Rourkela Steel Plant Township (SAIL)	-	24000	2,10,000	70

Sl. No.	Local Bodies	No of Village panchayats / Blocks	No of Households	Population	Solid Waste Generated per day (In MT)
1	Block /Taluk / Mandal Tehsils	17	299875	1602916	37.484

2	Village/Gram Panchayats	1679/279	299875	1602916	37.484
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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
1.	Segregation				
(i)	Segregation of waste at source	<ul style="list-style-type: none"> About 50 to 60 % of Dry & Wet wastes Segregation at source Being practiced during Door-to-Door collection. Domestic Hazardous Wastes segregation not Carried out. Identification of Bulk Generators like apartments, Market complexes 	<ul style="list-style-type: none"> Regular awareness Programme in Schools, Colleges, and Societies etc. Supply of one set Blue Green cultured into each Households, Apartments, Market complexes (May be on payment basis) Awards, Incentives For best management Identification & Declaration in Social Media for Habitual violators including imposition of penalties. IEC activities through Swatch has at his, Supervisors, Support agencies in every Wards of ULB. Identification on daily basis of lanes & households where mixed waste is practiced engaging with the lane committees for ensuring segregation by all households in the lane 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
2.	Sweeping				
(i)	Manual Sweeping	<ul style="list-style-type: none"> About 60% & 90% paved roads in urban & Rural areas respectively are not covered for regulars sweeping. Manpower deployment in Urban & Rural sector is about 30% & 20% respectively than that of total requirements. No mechanized tools available. PPEs provision not adequate 	<ul style="list-style-type: none"> Handy manual drive Sweeping tools (vacuum type) & small motorized Equipment for transportation to main collection points to reduce direct contact with Wastes. 	Municipal corporation, Municipalities, and District Rural Development Authority	03 Months
(ii)	Mechanical Road Sweeping & Collection (RMC)	<ul style="list-style-type: none"> No provision of Mechanical Road Sweeping systems 	<ul style="list-style-type: none"> 2 nos Truck mounted Vacuums period sweeping machines required for 4 lane/2 lane road spar 50km in urban areas. At least 1 tractor/ small vehicle mounted vacuity period sweeping machines required for single lane/RD roads for Urban & GP areas. Supply of adequate PPEs 	Municipal corporation, Municipalities, and District Rural Development Authority.	06 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
			for sweepers& workers.		
3.	Waste Collection				
(i)	Arrangement for door-to-door collection	<ul style="list-style-type: none"> 100%&50% door to door collection systems provided at Sundargarh, ULBs respectively No door-to-door Collection systems I GPs 	<ul style="list-style-type: none"> Deployment of outsourced a agency, NGOs in rest of Urban/ Semi-Urban areas & completely in Rural areas. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(ii)	Waste Collection trolleys with separate compartments	<ul style="list-style-type: none"> 100% has been provided in narrow lanes & slums in ULBs. Manual collection in most Part of Rural areas 	<ul style="list-style-type: none"> 65 no. of BOV for waste collection Trolleys with separate compartments required for Urban & Rural areas. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(iii)	Mini Collection Trucks with separate compartments	<ul style="list-style-type: none"> 80% has been provided in narrow lanes& slums in ULBs. Manual collection in Most part of Rural areas 	<ul style="list-style-type: none"> Phase-out of existing Diesel mini collection Trucks & switch over to 100% mini-E vehicles with separate compartments 23minicollection Trucks required for Urban & Semi Urban (Block headquarters,) areas respectively shall be replaced by Small vehicles with separate compartments 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(iv)	Waste Deposition centres (for domestic hazardous wastes)	<ul style="list-style-type: none"> No provision has been made in Urban or in GPs. 	<ul style="list-style-type: none"> At least 2nos in each ULBs & one in each GP Headquarters to be Declared as Waste Deposition centres for Domestic Hazardous Wastes & to be linked With authorized Recyclers for disposal. 	Municipality corporation, Municipalities, and District Rural Development Authority.	03 Months
4.	Waste Transport				
(i)	Review existing infrastructure for waste Transport.	<ul style="list-style-type: none"> Waste transport facilities not adequate No mechanical transport facilities in GPs 	<ul style="list-style-type: none"> Additional 2nosMini Vehicles with separate compartments required for Sundargarh ULBs respectively. Tricycle with separate compartments in each village & Mini Vehicles with separate compartments in each GP Headquarters & for semi urban areas 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(ii)	Bulk Waste Trucks	<ul style="list-style-type: none"> No Bulk waste Trucks available. 	<ul style="list-style-type: none"> At least 01no. 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. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(iii)	Waste Transfer points	<ul style="list-style-type: none"> No waste Transfer Points exist. 	<ul style="list-style-type: none"> At least one Waste Transfer Point's required 	Municipal corporation,	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
			in each ULB for recyclable Materials transportation Cyclers.	Municipalities, and District Rural Development Authority.	
5.	Waste Treatment and Disposal				
(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"> Identification of Bulk waste generators in ULBs & GPs yet to be done. Provision for direct supply of segregated vegetable wastes from Vegetable Markets, Mandies to Dairy farms & Goshal as cattle feeds to be ensured. 	<ul style="list-style-type: none"> Listing of Bulk Waste generators in ULBs & GPs. Provision of legal binding for installation & proper functioning of on-site composting facilities for Bulk waste Generators during approval of Building & Other plans. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(ii)	Wet-waste Management: Facilities for central Bio Methanation / Composting of wet waste.	<ul style="list-style-type: none"> No facilities for central Bio methanation/ Composting of wet wastes. 	<ul style="list-style-type: none"> Central Bio-methanation/ Composting of wet wastes facility needs to be installed if population exceeds 1 lakh. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	<ul style="list-style-type: none"> One MRF exists in each ULBs No MRF in GP Headquarters. No waste to Energy Plant Notice up with authorized Recyclers. 	<ul style="list-style-type: none"> One MRF in each GP Headquarters Feasibility study of one Waste to Energy plant considering 2ULBs, Agro wastes from local Villages etc. Tie up with Authorized recyclers for MRFs. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Land fill	<ul style="list-style-type: none"> No proper sanitary land fill sites exist. Parts of SW still being Disposed of by open dumping. 	<ul style="list-style-type: none"> At least one properly designed Sanitary Land Fill site required in each ULB & GP Head quarter for disposal of compost rejects, inert materials. Ensure maximum recovery, reuse & recycle r policy to minimize land filling. 	Municipal corporation, Municipalities, and District Rural Development Authority.	12 Months
(v)	Remediation of historic / legacy dumpsite of historic / legacy dumpsite.	<ul style="list-style-type: none"> No legacy dumpsites exist in ULBs No remediation of legacy dump sites has been initiated. 	<ul style="list-style-type: none"> Proper identification & Remediation plan for each legacy dumpsite In ULBs needs to be prepared & implemented 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(vi)	Involvement of NGOs.	<ul style="list-style-type: none"> Involvement of NGOs yet to be envisaged. 	<ul style="list-style-type: none"> Listing of NGOs & Fund allocation required for Management of Solid waste campaign. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
(vii)	EPR of Producers: Linkage with	<ul style="list-style-type: none"> Identification yet to be done. Lack of legal provisions For fixing responsibility 	<ul style="list-style-type: none"> Listing of producers/Brand owners of packaging 	Municipal corporation, Municipalities, and	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
	Producers / Brand Owners		wastes. <ul style="list-style-type: none"> Setting up of collection centres for packaging wastes by reducers/Brand owners in each ULBs & GP headquarters. Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on whole sellers/Vendors /Market associations. 	District Rural Development Authority.	
(viii)	Authorisation of Waste Pickers	<ul style="list-style-type: none"> Yes 	<ul style="list-style-type: none"> Detail list preparation in each ULB, GPs & Semi Urban areas. 		03 Months
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	<ul style="list-style-type: none"> No gaps 	<ul style="list-style-type: none"> Already prepared SWM by laws. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months

[Action plan should cover all village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above table. If required budgetary requirement and provisions may also be mentioned].

(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
1.	Municipal corporations (Nagar Nigam or Mahanagar Palika)	5MT/Day
2.	Municipalities (Nagar Palikas)	2.4MT/Day
3.	Nagar panchayats (Town area Councils)-Steel Township	5MT/Day

Sl. No.	Local Bodies	Plastic Waste Generated per day
1.	Block /Taluk / Mandal Tehsils	4.50MT/Day
2.	Village/Gram Panchayats	4.50MT/day

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.	Facilitate organised collection of PW at Waste transfer point or Material	<ul style="list-style-type: none"> Identification yet to be done. Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> Listing of producers / brand owners of packaging wastes. Setting up of collection centres for packaging wastes by producers / brand owners in each ULBs & GP headquarters. Inclusion of EPR in by laws of ULBs & GPs &also fixing responsibilities on whole Sellers/ Vendors/ Market associations. 	Identify agencies at local and district level to implement and monitor, Executive Officer in ULBs, Panchayat executive Officer in GPs.	03 Months

Sl. No.	Action points For village panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
2.	PW collection Centres	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility No gaps 	<ul style="list-style-type: none"> • Listing of producers / brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers / brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on whole sellers /Vendors/ Market associations. • 1 IEC activity is in progress in each ULB • Lane committee formation, field study to the MCC & MRF by the students, farmers & citizens to some extent done in ULBs. Wall painting on different IEC for segregation of plastic waste & wet waste in strategic points done. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
3.	Awareness and education programs implementation	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers / brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers / brand owners in each ULBs & GP headquarters. • Inclusion of EP Rigby laws of ULBs & GPs & also fixing responsibilities on whole sellers /Vendors/ Market associations. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months
4.	Access to Plastic Waste Disposal Facilities	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/ brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ brand owners in each ULBs & GP headquarters. • Inclusion of EP Rin by laws of ULBs & GPs & also fixing responsibilities on whole Sellers /Vendors/Market Associations. 	Municipal corporation, Municipalities, and District Rural Development Authority.	03 Months

[Action plan should cover all village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above template. If required budgetary requirement and provisions may also be mentioned].

(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)	40MT/Day
Does the District has 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"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EP Rigby laws of ULBs & GPs & also fixing responsibilities on Wholesalers/ Vendors/ Market associations. 	Municipal corporation, Municipalities, and District Rural Development Authority	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 months?	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	Municipal corporation, Municipalities and District Rural Development Authority	03 Months
3.	C&D recycling Facility	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/Vendors/ Market associations. 	Municipal corporation, Municipalities and District Rural Development Authority	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"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ brand owners in each ULBs & GP headquarters. • Inclusion of EPR in bylaws of ULBs & GPs & also fixing responsibilities on Wholesalers /Vendors/Market associations. 	Municipal corporation, Municipalities and District Rural Development Authority	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"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/brand owners in each ULBs& GP headquarters. • Inclusion of EPR in bylaws of ULBs & GPs & also fixing responsibilities on wholesalers/Vendors/Market associations. 	Municipal corporation, Municipalities and District Rural Development Authority	03 Months

[Action plan for C&D waste management should cover all village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form as above, however all the components mentioned should be addressed for overall C&D waste management. Action plan may dwell upon other relevant action points not mentioned in above template. If required budgetary requirement and provisions may also be mentioned].

(iv)Biomedical Waste Management

a. *Current Status related to biomedical waste*

Inventory of BMW in the District	Quantity
Total no. of Bedded Healthcare Facilities	[53]
Total no. of non-bedded HCF	[240]
No. of HCFs authorised by SPCBs/PCCs	[283]
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	[1]
Capacity of CBWTFs	[7000Kg/day]
No. of Deep burials for BMW if any	[21 Nos]
Quantity of biomedical waste generated per day	[185 Kg/day]
Quantity of biomedical waste treated per day	[120 Kg/day]

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"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on wholesalers/Vendors/ Market associations. 	CDMO / CDVO / SPCB	03 Months
2.	Adequacy of facilities to treat biomedical waste	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on whole sellers/ Vendors/ Market associations 	SPCB	03 Months
3.	Tracking of BMW	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on wholesalers/Vendors/ Market associations. 	CDMO / CDVO / SPCB	03 Months
4.	Awareness and education of healthcare staff	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility • Identification Yet to be done. • Lack of legal Provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/ brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on wholesalers/Vendors/ Market associations. 	CDMO / CDVO / SPCB	03 Months

Sl. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
5.	Adequacy of funds	<ul style="list-style-type: none"> • Identification Yet to be done • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/ brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on wholesalers/Vendors/ Market associations. 	CDMO / CDVO / SPCB	03 Months
6.	Compliance to Rules by HCFs and CBWTFs	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on wholesalers/Vendors/ Market associations. 	SPCB	03 Months
7.	District Level Monitoring Committee	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on wholesalers/Vendors/ Market Associations. 	CDMO / CDVO / SPCB	03 Months
8.	Wastewater Treatment	<ul style="list-style-type: none"> • Identification Yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs& also fixing responsibilities on whole sellers/Vendors/ Market Associations. 	CDMO / CDVO / SPCB	03 Months

[SPCBs/PCCs is the prescribed authority to ensure implementation of BMW Management Rules, 2016. However, Rules also provides mandates to health department to monitor compliance. Hence Action plan for BMW waste management should cover access to biomedical waste management in entire geographical area of the district village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form. SPCBs/PCC should be part of action plan. Action plan may dwell upon other relevant action points not mentioned in above template. If required budgetary requirement for government HCFs may also be mentioned].

(v) Hazardous Waste Management

a. Current Status related to Hazardous Waste Management

[Major source of hazardous waste (HW) is industries and facilities located in the districts, who are required to be regulated under

Water (P&CP) Act 174, Air(P&CP) Act 1981 and E(P) Act, 1986 and the Rules notified thereof. Many commercial establishments like automobile repair shops, paint workshops, stores, etc. may also generate small quantities of hazardous waste. The district administration should be aware of the type of hazardous waste generation in their district and adequacy of facilities for safe handling and disposal within or outside District. Linkage of district administration with common TSDFs in the State is necessary to establish system for safe disposal of domestic hazardous waste].

Details of Data Requirement	Present Status
No of Industries generating HW	[75Nos.]
Quantity of HW in the district	[2,49,735MT/Annum]
(i) Quantity of Incinerable HW	[99.283 MT/Annum]
(ii) Quantity of land fillable HW	[1900 MT/Annum]
(iii) Quantity of Recyclable / utilizable HW	[Recyclable- 1006MT/Annum] [Utilizable-246735MT/Annum]
No of captive/common TSDF	[Nos of integrated TSDF- Nil], [Nos of SLF-2nos]. [No of Standalone incinerators – 1no.]
Contaminated Sites or probable contaminated sites	[4Nos.]

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"> • Identification yet to be done. • Lack of legal provisions For fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/ brand owners of packaging wastes. • Setting up of collection centres for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs& GPs& also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	SPCB	03 Months
2.	Establishment of collection centres	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging assets. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs& GPs& also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	Municipal corporation, Municipalities and District Rural Development Authority.	03 Months
3.	Training of workers involved in handling / recycling / disposal of HW	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging assets. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs& GPs& also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	DIC / SPCB	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 or disposal facility	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging assets. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs& GPs& also fixing responsibilities on whole Sellers/ Vendors/ Market associations. 	SPCB	03 Months
5.	Contaminated Sites	<ul style="list-style-type: none"> • Identification yet to be done. • Lack of legal provisions for fixing responsibility 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging assets. • Setting up of collection centres for packaging wastes by producers/Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs& GPs& also fixing responsibilities on whole Sellers/ Vendors/ Market associations. 	SPCB	03 Months

SPCBs/PCCs is the prescribed authority to ensure implementation of Hazardous and Other (Management, Handling and Transboundary Movement) Rules, 2016. Rules also mandates department of industries to ensure training to workers involved in recycling and handling of hazardous wastes. Action plan for HW waste management should cover HW inventory in the district, check whether rules are implemented effectively, a system for monitoring compliance needs to be in place.

Action plan need not be prepared in Tabular form. SPCBs/PCC should be part of action plan. Action plan may dwell upon other relevant action points not mentioned in above template.

(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	95MT/Year
Collection centres established by ULBs in the District	[3 Nos.]
Collection centres established by Producers or their PROs	[0 Nos.]
No authorized E-Waste recyclers / Dismantler	[3 Nos.]

b. Identification of gaps and action plan:

Sl. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
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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"> • Identification yet To be done. • Lack of legal provisions for fixing responsibility. 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection center for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	SPCB	03 Months
2.	E-Waste collection points	<ul style="list-style-type: none"> • Identification yet To be done. Lack of legal provisions for fixing responsibility. 	<ul style="list-style-type: none"> • Listing of producers/ brand Owners of packaging wastes. • Setting up of collection centers for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	SPCB	03 Months
3.	Linkage among Stakeholders to channelize E-Waste	<ul style="list-style-type: none"> • Identification yet To be done. Lack of legal provisions for fixing responsibility. 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centers for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	Dist. Admn. / SPCB	03 Months
4.	Regulation of Illegal E- Waste recycling / dismantling	<ul style="list-style-type: none"> • Identification yet To be done. Lack of legal provisions for fixing responsibility. 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centers for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. • Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	Dist. Admn. / SPCB	03 Months
5.	Integration of informal sector	<ul style="list-style-type: none"> • Identification yet To be done. Lack of legal provisions for fixing responsibility. 	<ul style="list-style-type: none"> • Listing of producers/brand Owners of packaging wastes. • Setting up of collection centers for packaging wastes by producers/ Brand owners in each ULBs & GP 	Dist. Admn. / SPCB	03 Months

Sl. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
			<ul style="list-style-type: none"> headquarters. Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 		
6.	Awareness and Education	<ul style="list-style-type: none"> Identification yet To be done. Lack of legal provisions for fixing responsibility. 	<ul style="list-style-type: none"> Listing of producers/brand Owners of packaging wastes. Setting up of collection centers for packaging wastes by producers/ Brand owners in each ULBs & GP headquarters. Inclusion of EPR in by laws of ULBs & GPs & also fixing responsibilities on wholesalers/ Vendors/ Market associations. 	Dist. Admn. / SPCB	03 Months

CPCB is the prescribed authority to grant Extended Producer Authorisation to various Producers of Electrical and Electronic Equipment being placed on market. Targets for collection of their E-Waste are given to each Producers. Every Producer should have installed a network of collection centres pan India; accordingly, every district should be covered. SPCBs/PCCS are given mandate to ensure implementation of EPR authorisation. Therefore, district administration should have all information about collection centres / call centres established by various producers in the District. Such information should be disseminated to public and local administration. Action plan for E-Waste management should cover the aspects of inventory, collection centres for e-waste channelization, linkage with Producers of their PROS, linkage with recyclers, information of bulk waste generators and effective EPR verification by SPCBs. Action plan need not be prepared in Tabular form. SPCBs/PCC should be part of action plan. Action plan may dwell upon other relevant action points not mentioned in above template.

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: - Operated by Industry:	- 17 nos. of monitoring stations on trial operation by SPCB (Inclusive of 3 nos. for mines) - 29nos. (Inclusive of 11 nos. for mines)
Number of manual monitoring States operated by SPCBs	5 nos.
Name of towns / cities which are failing to comply with national ambient air quality stations	[Names] Rourkela Municipal Corporation, Rourkela
No of air pollution industries	No of air pollution industries
Prominent air polluting sources [Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln] / [Industrial Estate] / [Others] (Multiple selection)	Large Industry, Medium Industry, Small Industry, Unpaved Roads, Burning of Waste Stubble, Brick Kilns Industrial Estates Under Construction Road networks [Hotspots of air pollution] - Kalunga Industrial Estate, Kuarmunda Industrial area, Bonai Industrial Area, Rajgangpur Industrial Area, Panposh-Vedvyas NH/SH under construction area.

b. Identification of gaps and action plan

Sl. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
1.	Identification of prominent air polluting sources	Regular inspection & monitoring fair polluting Industries & Mines. Regular and continuous monitoring of AAQ wrt PM10, PM 2.5, SO2, NO2, Ammonia, Ozone etc. in Industrial Establishments & Mines.	Regional Office of State Pollution Control Board, Odisha.	1 Year
		Setting up information network for identification of Pollution prone Zone.	District Administration, Sundargarh, DFOs Sundargarh District.	01 Months
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.	Continuing
		Installation of Digital Display Board at Traffic square for Local AAQ.	District Administration, Sundargarh Regional Office of State Pollution Control Board, Odisha.	06monthss
		Display of Real-time AAQ data of Industries at their main gate for Public views.	Regional Office of State Pollution Control Board, Odisha.	
3.	Setting up of Continuous Ambient Air Monitoring Station	Setting up Continuous Ambient Air Quality Monitoring Station	Identification of at least one site for Installation of OCAAQM Sat District Headquarter Installation of Digital Display Board at Traffic square for display of Local AAQ	06 Months
4.	District Level Action Plan for Air Pollution	Action plan should be Sweepers and truck mounted mist cannons are on procurement for dust suppression in industrial areas.	Dist. Admn. / SPCB	06 Months

Sl. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
		Regular & continuous monitoring of AAQ w.r.t.PM10, PM2.5, SO2, NO2, Ammonia, Ozone etc. in Industrial Establishments & Mines.	Regional Office of State Pollution Control Board, Odisha.	Continuing
		Shifting from Petrol/ Diesel driven vehicles to Electric operated vehicles (At least 50%) in Government, Private sectors & Individual levels 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	District Administration, Sundargarh Road Transport Office, Sundargarh	06 months
		Promotion of E vehicles, CNG Taxies, improvements of comfortable Public Transport system.	District Administration, Sundargarh, Road Transport Office, Sundargarh	Continuing process
		Identification, Development & Protection of at least 35% thick Forest area/Plantation Zone in	District Administration, Sundargarh	12monthss
		Ensure Dust control In project construction sites	EE, PWD Department, Sundargarh	01 month
		Strict enforcement of restriction on open burning of Garbage, Plastic wastes, Forest Fire. Waste stubbles& imposition of heavy penalty (Environmental compensation).	District Administration, Sundargarh	01month
		All ULBs & GP Roads to be maintained dust free.	ULBs & GP authorities	03months
5.	Hotspots of air pollution in District	Close watch on stubble burning, illegal waste burning, unauthorized operations, cluster activities, forest fires etc. Strict enforcement of restriction on open burning of Garbage, Plastic wastes, Forest Fire. Waste stubbles& imposition of heavy penalty (Environmental compensation).	District Administration, Sundargarh Regional Office of State Pollution Control Board, Odisha, -ULBs Authority, Sundargarh.	1 Year
6.	Awareness on Air Quality	Strict enforcement of restriction on open burning of Garbage, Plastic wastes, Forest Fire. Waste stubbles& imposition of heavy penalty (Environmental compensation)	District, Administration, Sundargarh	1 Year

The district administration is expected know the air quality in the district, identify air polluting sources both industrial and urban area sources and shall monitor mitigation measures and compliance of air polluting sources. District level air quality management plan is necessary to monitor and implement programs for improving air quality in the district. Action plans prepared for 100+ non-attainment cities under NCAP project initiated by MoEF & CC may be referred for drawing district action plan. Action plan need not be prepared in Tabular form. SPCBs/PCC may be part of action plan for control of industrial air pollution. Action plan may dwell upon other relevant action points which are not mentioned in above template.]

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	Name-4 rivers. Brahmani, Sankh, Koel and Ib. Total Length (in Km)-241
Length of Coastline (if any)	[in Km] Nil
Nalas/ Drains/Creeks meeting Rivers	[32 Nos.]
Lakes / Ponds	[Nos.] and [Area in Hectares-21270]
Total Quantity of sewage from towns and cities in District	[8.78 MLD]
Quantity of industrial wastewater	[3.2MLD]
Percentage of untreated sewage	[40%]
Details of bore wells and number of permissions given for extraction of groundwater	[14637 Nos]
Groundwater polluted areas if any	[Name of areas-Industrial Development Corporation Area, Kalunga]

Polluted river stretches if any	[Length in Km – 7]
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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, Sundargarh Regional Office of State Pollution Control Board, Odisha.	Continue
		• Formation of Level District Environment Monitoring Cell	District Administration, Sundargarh DFO, Sundargarh Division Regional Office of State Pollution Control Board, Odisha	Continue
2.	Quality of water bodies in the district	• Periodic check of water -quality of major water bodies Groundwater Based on their specific use.	Regional Office of State Pollution Control Board, Odisha	03 Months
3.	Hotspots of water contamination	• Identification of pollution prone water bodies & Ground water	District Administration Regional Office of State Pollution Control Board, Odisha	06 months
		• Monitoring of Regular interval. Water quality	Regional Office of State Pollution Control Board, Odisha	06 months
		• Restriction of use of Chemical Fertilizer, Pesticides, Herbicides etc in Agriculture & Horticulture & switch over to Bio-Fertilizer, Bio-Pesticides etc.	District Administration, Sundargarh Division Agricultural Department, Sundargarh Horticulture Department, Sundargarh, Soil Conservation Office, Sundargarh	06 months
		• Preparation of remedial measures	Water Resource Department, Sundargarh, Regional Office of State Pollution Control Board, Odisha	
4.	Protection of river / lake waterfront	• Identification defecation of areas of open	District Administration ULBs & Regional Office of State Pollution Control Board, Odisha	06 months
		• Campaign against open defecation & Provision of community Toilets where very required	NGOs, ULBs & GP authorities	06 months
		• Construction & maintenance of Idol Immersion Ponds at strategic locations near Water bodies.	District Administration, Sundargarh, ULBs & GPs authorities	03 months
		• Free water bodies Frome encroachments	District Administration, Sundargarh, Water Resource Department, Sundargarh, ULBs & GPs authorities	06 months
		• Strict enforcement of Solid Waste Management Rules, Shifting & reclamation of Legacy dumping sites from Riverbanks, Lakes, Imposition of Heavy penalty for any • Dumping of Win water bodies (Environmental compensation)	District Administration, Sundargarh, Regional Office of State Pollution Control Board, Odisha, - ULBs & GPs authorities	06 months
		• Preparation of self-sustainable River/ Lakefront Development Plan (Bathing Ghats, Joggers Park, Restaurant's provision, Water sports, Lighting along	District Administration, Sundargarh, Regional Office of State Pollution Control Board, Odisha, - ULBs & GPs authorities	06 months

Sl. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
		Riverbanks, Aquacultures to support Livelihoods of locals etc)		
5.	Inventory of sources of water pollution	• Identification of Drains, Sewer Lines out falls in water bodies	Water Resource Department, Sundargarh Regional Office of State Pollution Control Board, Odisha, ULBs & GPs authority	06 months
		• Identification of Solid wastes Disposal area in & around Water bodies	Regional Office of State Pollution Control Board, Odisha	06 months
		• Identification & quantitative assessment of areas & type of Chemical, Fertilizers, Pesticides & Herbicides be in gushed in the District	Agriculture Sundargarh Horticulture Sundargarh Department, Department	06 months
		• Preparation of remedial measures	District Administration, Sundargarh, Regional Office of State Pollution Control Board, Odisha, 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, Sundargarh, Water Resource Department, Sundargarh, ULBs & GPs authority	06 months
		• Identification of encroachment areas & initiation to prevent Encroachment.	District administration, Sundargarh Water Resource Department, Sundargarh, ULBs & GPs authority	06 months
8.	Rejuvenation of groundwater	• Identification & mapping of Ground Water status of Sundargarh District (Critical Zone, Safe Zone etc)	District Administration, Sundargarh Water Resources Department, /Central Ground Water Authority, Bhubaneswar/ Lift Irrigation Department, Sundargarh, ULBs & GPs authority	06 Months
		• Identification of vulnerable areas of over exploitation of Ground water	Water Resources Department, Sundargarh /Central Ground Water Authority, Bhubaneswar/ Lift Irrigation Department, Sundargarh	03 months
		• Periodical Monitoring of Ground Water quality.	Regional Office of State Pollution Control Board, Odisha, Central Ground Water Authority, Bhubaneswar	Continuing
		• Preparation of master plan for Rainwater Harvesting • Inclusion of Rainwater harvesting (Roof top collection/ Groundwater Recharge) provisions in By-laws of ULBs/ GPs/ Development authorities while approving Building Plan for Government Offices Commercial Establishments, Institutions & Individual Households. Assessments of Groundwater withdrawal for Industrial/ Agricultural/ Domestic purposes & obtain of	ULBs/ GPs/ Area Development Authorities. Central Ground Water Board/ WR Department	

Sl. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
		NOC from CGWA/ WR Department in case water drawl exceed 10m ³ / Day (Except Exemption list).		
9.	Complaints Redressal System	<ul style="list-style-type: none"> Availability of Public complaints Redressal systems i.e. Email, Public complaint Box etc Development of App. 	District Administration, Sundargarh Regional Office of State Pollution Control Board, Odisha	Continuing
			District Administration, Sundargarh	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	[3Nos.]
No of Class-I towns and above	[2 Nos.]
No of Towns STPs installed	[3Nos.]
No of Towns needing STPs	[2Nos.]
No of ULBs having partial underground sewerage network	[1 Nos.]
No of towns not having sewerage network	[3 Nos.]
Total Quantity of Sewage generated in District from Class II cities and above	[8.78 MLD]
Quantity of treated sewage flowing into Rivers (directly or indirectly)	[Not Quantified]
Quantity of untreated or partially treated sewage (directly or indirectly)	[MLD] Not Quantified
Quantity of sewage flowing into lakes	[MLD] Nil
Total available Treatment Capacity	[40 MLD]

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)	STP partly operates for RMC	Municipal Corporation, Municipalities & DUDA.	2 Year
2.	Underground sewerage network	Under construction in RMC	Municipal Corporation, Municipalities & DUDA	2 Year

Action plan for installing new /up-grading sewage treatment and laying of sewerage network is the mandate of local bodies, being cost intensive action points, the district administration may draw action points in consultation with ULBs and Urban development department. Action plan need not be prepared in Tabular form. ULBs, SPCBs/PCC and UDD may be part of action plan for collection and treatment of sewage. Action plan may also dwell upon other relevant action points which are not mentioned in above template.

5.0 INDUSTRIAL WASTEWATER MANAGEMENT

a. Current Status Related to Industrial Wastewater Management

Number of Red, Orange, Green and White industries in the District	[139Nos of Red industries], [427 Nos of Orange industries], [74 Nos of Green industries], [11 Nos of White industries]
No of Industries discharging wastewater	[1 No]
Total Quantity of industrial wastewater generated	[3.2 MLD]
Quantity of treated industrial wastewater discharged into Nalas / Rivers	[3 MLD]
Common Effluent Treatment Facilities	[Nil]
No of Industries meeting Standards	[1No.]
No of Industries not meeting discharge Standards	[NIL]

b. Identification of gaps and action plan for industrial wastewater

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Compliance to discharge norms by Industries	<ul style="list-style-type: none"> Inspection & Monitoring discharge effluent quality Regular basis Necessary action be initiated through SPCB against the industries not meeting the standards. SPCB officials perform during regular inspection & monitoring 	District Administration, Sundargarh/ Regional Office of State Pollution Control Board, Odisha, Mining Department, Sundargarh Police Department, Sundargarh	01months
2.	Complaint redressal system	<ul style="list-style-type: none"> Availability of Public complaints Redressal systems i.e., Email, Public complaint Box etc. 	District Administration, SPCB	Continuing
		<ul style="list-style-type: none"> Development of App. 	District Administration.	06months

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	Name of mines- list enclosed Iron Ore, Coal, Manganese, Limestone & Dolomite, Sand Mining, Stone mining, Quartz & Quartzite.
No of licence Mining operations in the District	[107Nos.]
% Area covered under mining in the District	60%
Area of Sand Mining	[Sq Km]
Area of sand Mining	[Riverbed] / [Estuary] / [Non -river deposit]

b. Identification of gaps and action plan

Sl. No.	Action points	Gaps and Action Plan	Responsible agency	Timellne for completion of action plan
1.	Monitoring of Mining activity	<ul style="list-style-type: none"> A District Level Task Team may be identified to identify mining activity & to monitor status with respect to environmental compliance. SPCB officials monitor mining activities & environmental compliance during regular inspection & monitoring. 	District Administration, Sundargarh Regional Office of State Pollution Control Board, Odisha, /Mining Department, Sundargarh / Police Department, Sundargarh	01 Months
2.	Inventory of illegal mining if any mining	<ul style="list-style-type: none"> Action plan to identify illegal sand & other mining activities in the District through surveillance, patrolling & enforcement. District level Task force may be constituted for control of illegal mining activities. 	District Level Task Force, Sundargarh DDM, SPCB.	01months
3.	Environment compliance by Mining industry	<ul style="list-style-type: none"> Action Plsmn for periodic verification of compliance to environmental conditions stipulated by SPCB/PCC/ MoEF & CC Department of Mines etc. SPCB officials monitor mining activities & environmental compliance during regular inspection & monitoring. 	District Administration, Sundargarh, Regional Office of State Pollution Control Board, Odisha	Continuing

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	Name of agency Regional Office, SPCB, Rourkela No of analyzers available-1

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.	<ul style="list-style-type: none"> To check whether concerned agency i.e ULBs, SHOS, Traffic Police SPCB & PCC have noise level meter District Administration may ensure through an action plan that concerned agencies & environmental cell under District Administration have adequate no of portable noise level meters. 	Regional Office of State Pollution Control Board, Odisha, ULBs, Police Department, Sundargarh	02monthss
2.	Ambient Noise Level monitoring.	<ul style="list-style-type: none"> ULBs shall ensure that r ambient sound levels comply with notified standard for residential, sensitive zones, apart from portable analyzer fixed ambient noise monitoring stations may be installed in major towns such stations may be installed by ULBs, SPCB/PCC. Level 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, DUDA.	03monthss
3.	Signboards in Noise zones	<ul style="list-style-type: none"> Identification of no. Of Horn Zone in ULBs, Semi Urban Towns (Block Headquarters) Adequate nos. of signboard to be installed at sensitive in towns 	District Administration, Sundargarh, Police Department, Sundargarh	01months
4	Complaint redressing system	<ul style="list-style-type: none"> Redressal system available with SPCB, Police Department, District Administration. Imposition of Penalty for Violators. 	Regional Office of State Pollution Control Board, Odisha SPCB, Police Department, Sundargarh, ULBs.	Continuing

District administration may ensure that concerned agencies responsible for control of noise pollution are equipped with adequate number of noise level meters. There should be a system to monitor ambient sound levels to ensure that national ambient noise standards are complied with. Action plan may be implemented through responsible agencies namely SHOs, Traffic police ULBs and SPCBs. Action plan need not be prepared in Tabular form. Action plan may also dwell upon other relevant action points which are not mentioned in above template.

8.0 WETLAND MANAGEMENT PLAN

The total geographical area of Sundargarh district is 9942 sq km. The wetland area is estimated to be 20725 ha (Table 11), which constitutes about 3 per cent of wetland extent in the state. Inventory estimates the number of wetlands to 2922, which includes a major number (2439) wetlands smaller than 2.25 ha. The major wetland types are River/Stream (11165 ha) comprising of about 54 per cent of wetland extent followed by Reservoir/Barrage (5854 ha), Tank/Ponds (1114 ha). The small wetlands occupy significant area (about 12 %). Compared to the preceding districts, Sundargarh has shown lower seasonal reduction (14 %) in open water extent. It was estimated to be 17336 ha in post-monsoon and found to have reduced to 14989 ha in pre-monsoon. Aquatic vegetation has shown almost 2.5 times increase from post-monsoon (1005 ha) to 2495 ha in pre-monsoon. Turbidity was dominated by moderate level followed by low and high in both the seasons. (Source-NWIT-Odisha).

Table 1: Area estimates of wetlands in Sundargarh District

Sl. No.	Wetland Category	Number of Wetlands	Total Wetland area	% of wetland area	Open Water	
					Post-monsoon area	Pre-Monsoon area
Inland Wetlands- Natural						
1.	Lakes/ponds	-	-	-	-	-
2.	Ox-bow lakes/ Cut-off meanders	-	-	-	-	-
3.	High altitude wetlands	-	-	-	-	-
4.	Riverine wetlands	3	15	0.07		
5.	waterlogged	34	1.38	0.67	35	35
6.	River/Stream	56	11165	53.87	11160	10303
Inland Wetlands- Manmade						
7.	reservoirs/Barrages	144	5854	28.25	5398	3910
8.	Tanks/ponds	246	1114	5.38	743	741
9.	waterlogged	-	-	-	-	-
10.	Salt pans	-	-	-	-	-
Total-inland		483	18286	88.23	17336	14989
Coastal Wetlands-Natural						
11.	Lagoons	-	-	-	-	-
12.	creeks	-	-	-	-	-
13.	Sand/Beach	-	-	-	-	-
14.	Intertidal mud flats	-	-	-	-	-
15.	Salt Marsh	-	-	-	-	-
16.	Mangroves	-	-	-	-	-
17.	Coral reefs	-	-	-	-	-
Coastal Wetlands-Man-made						
18.	Salt pans	-	-	-	-	-
19.	Aquaculture ponds	-	-	-	-	-
Total-Coastal		-	-	-	-	-
Sub-total		483	18286	88.23	17336	14989
Wetlands (< 2.25 ha)		2439	2439	11.77		
Total		2922	20725	100	17336	14989
Area under Aquatic Vegetation					1005	2495

Area under turbidity levels		
Low	5574	3475
Moderate	111268	9754
High	494	1760

Conclusion:

Environmental planning endeavours to manage these processes in an effective, orderly, transparent, and equitable manner for the benefit of all constituents within such systems for the present and for the future. Present day environmental planning practices are the result of continuous refinement and expansion of the scope of such decision-making processes. Some of the main elements of present-day environmental planning are Social & economic development, Urban development, Regional development, Natural resource management & integrated land use, Infrastructure systems, Governance frameworks.

These planning actions will surely acclimatize around the reduction of emissions and material reuse, not adaptations in order to lessen future climate change impacts. This method intends to explore the uncertainty surrounding the impacts of climate change specific to their communities in order to include adaptation in their environmental planning.



Member Secretary, District Convener-
Divisional Forest Officer
Sundargarh Forest Division



Chairman-Cum-Collector &
District Magistrate, Sundargarh