

District Environment Plan
Birbhum
West Bengal



Office of the District Magistrate & Collector
Suri, Birbhum

District Map

INDIA
WEST BENGAL
DISTRICT BIRBHUM



NAME OF VILLAGE HAVING 5000 AND ABOVE POPULATION

C. D. BLOCK MURARAI

1. Garia
2. Rajgram
3. Ramchandrapur
4. Sindurbar

C. D. BLOCK MURARAI-I

1. Palbar
2. Math Basari

C. D. BLOCK RAMPURHAT-I

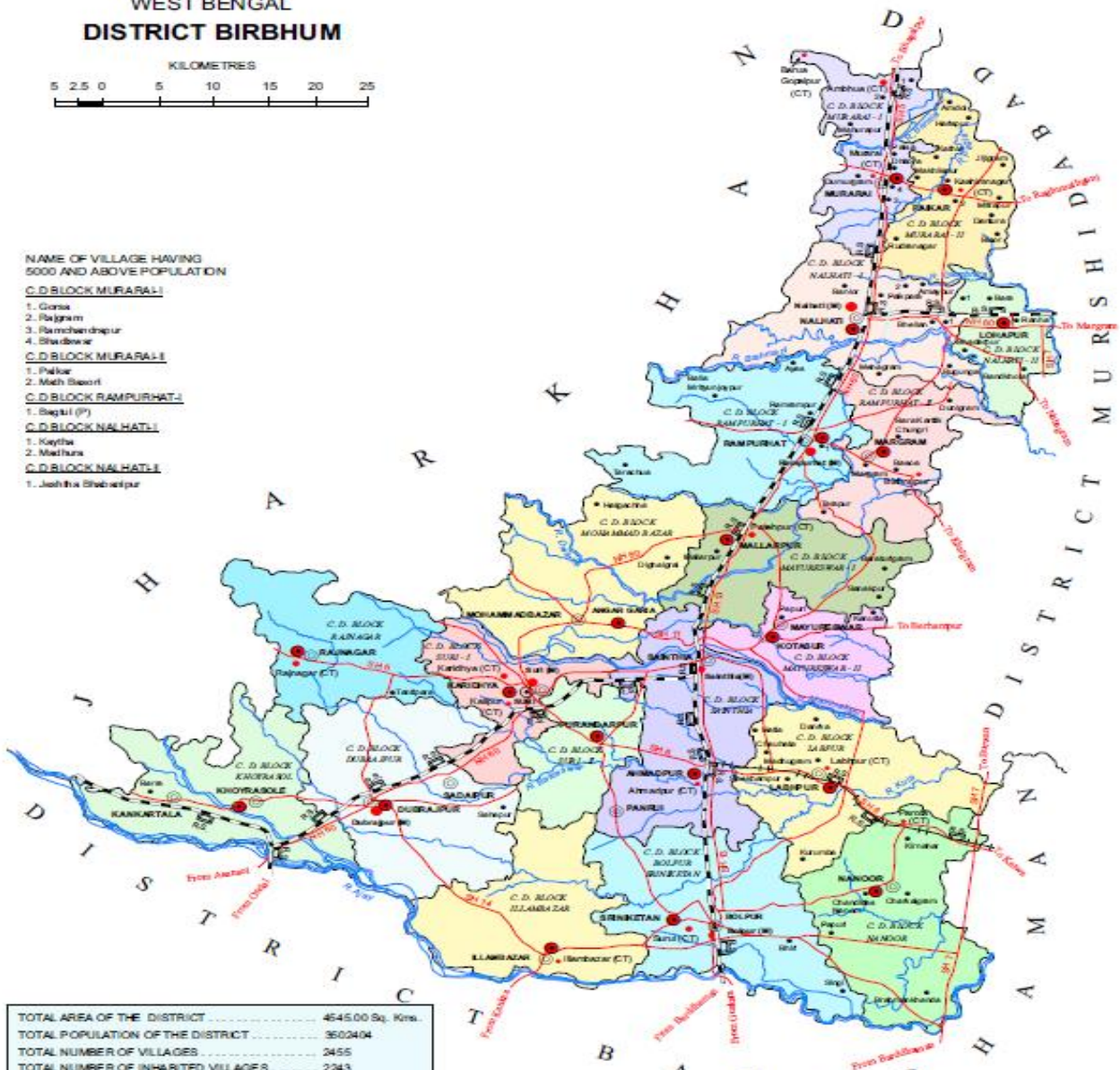
1. Saptali (P)

C. D. BLOCK NALHATI-I

1. Koytha
2. Madhura

C. D. BLOCK NALHATI-II

1. Jashita Ghoshnagar



TOTAL AREA OF THE DISTRICT	4545.00 Sq. Kms.
TOTAL POPULATION OF THE DISTRICT	3502404
TOTAL NUMBER OF VILLAGES	2455
TOTAL NUMBER OF INHABITED VILLAGES	2243
TOTAL NUMBER OF CENSUS TOWNS	14
TOTAL NUMBER OF STATUTORY TOWNS	6
DISTANCE FROM STATE CAPITAL TO DISTRICT HEADQUARTERS (APPROX.)	210 Kms.

BOUNDARY, STATE	—————	NATIONAL HIGHWAY	NH 80
" DISTRICT	—————	STATE HIGHWAY	SH 14
" C. D. BLOCK	—————	IMPORTANT METALLED ROADS	—————
HEADQUARTERS : DISTRICT, POLICE STATION, C. D. BLOCK	● ● ● ● ●	RAILWAY LINE WITH STATION, BROAD GAUGE	—+—+—+—+—+—+—
VILLAGES HAVING 5000 AND ABOVE POPULATION WITH NAME	● ● ● ● ●	RAILWAY LINE WITH STATION, NARROW GAUGE	—+—+—+—+—+—+—
URBAN AREA WITH POPULATION SIZE : II, III, IV, V & VI	● ● ● ● ●	RIVER AND STREAM	~~~~~

Contents

1.0 District Profile	1-16
2.0 Indicative Gap Analysis and Action Plan for complying with Waste Management Rules	17-33
(i) Solid Waste Management	17-24
(ii) Plastic Waste Management	25-27
(iii) C & D Waste Management	28-29
(iv) Biomedical Waste Management	30-31
(v) Hazardous Waste Management	32
(vi) E-waste Management	33
3.0 Air Quality Management	35-36
4.0 Water Quality Management	37-40
5.0 Industrial Waste Water Management	41
6.0 Mining Activity Management Plan	42
7.0 Noise Pollution Management Plan	43

District Profile

Birbhum district is an administrative unit in the Indian State of West Bengal. It is the northernmost district of Burdwan Division one of the administrative divisions of West Bengal. The district headquarters is located at Suri. Jamtara, Dumka and Pakur districts of the state of Jharkhand lie at the western border of this district, whereas the border in other directions is covered by the districts of Purba Bardhaman and Murshidabad of West Bengal.

Often called “The land of red soil”, Birbhum is noted for its topography and its cultural heritage which is unique and is somewhat different from that of the other districts in West Bengal. The western part of Birbhum is a bushy region, a part of the Chhota Nagpur Plateau. This region gradually merges with the fertile alluvial farmlands in the east. This district saw many cultural and religious movements in history. The VisvaBharati University at Santiniketan, established by Rabindranath Tagore, is one of the places Birbhum is internationally renowned for. Many festivals are celebrated in this culturally rich district, including the famous Poush Mela.

Birbhum is primarily an agricultural district with around 75% of the population being dependent on agriculture. Principal industries of the district include cotton and silk harvesting and weaving, rice and oilseed milling, lac harvesting, stone mining and metal ware and pottery manufacture. Bakreshwar Thermal Power Station is the only heavy industry in the district.

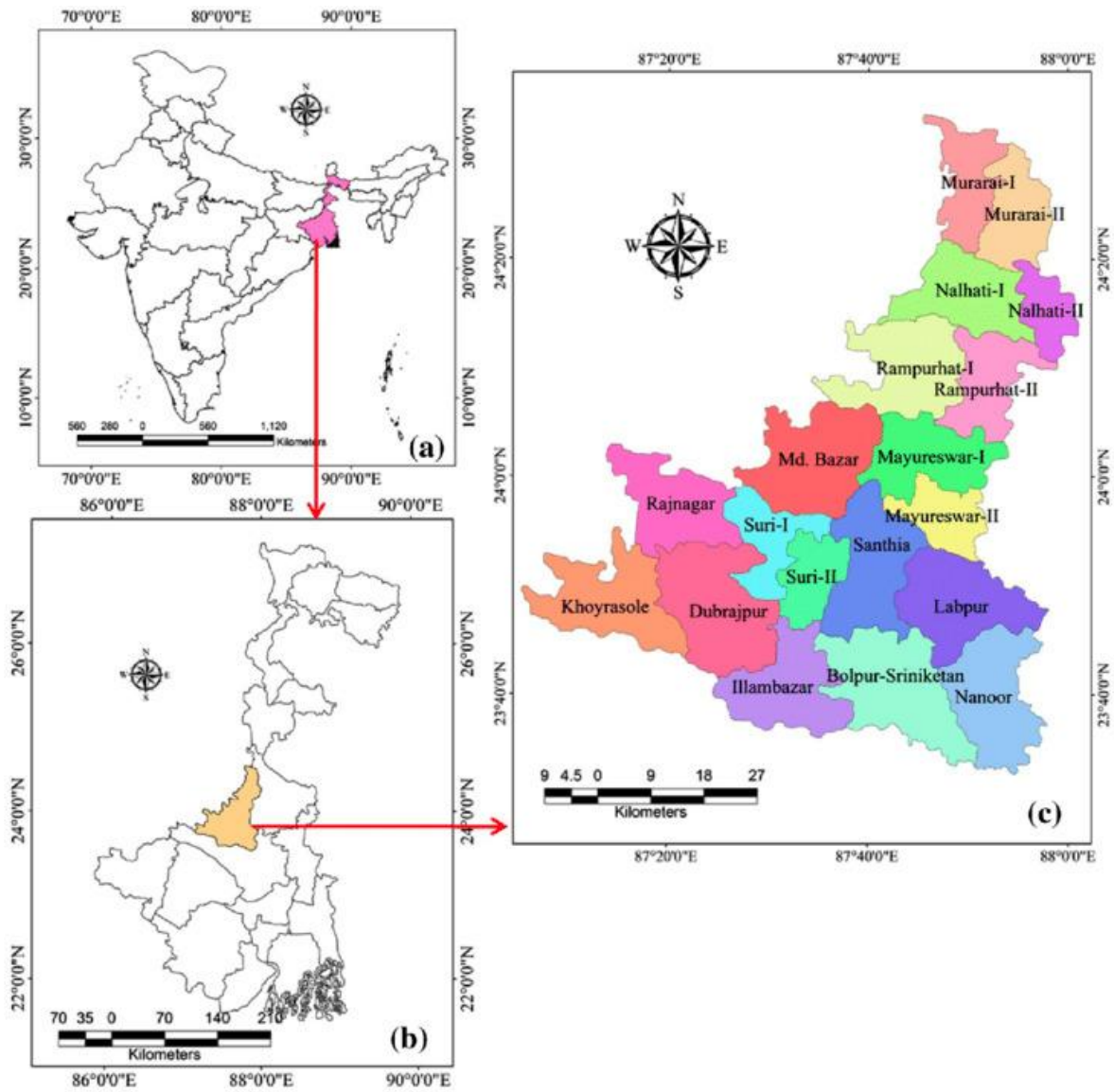
GEOGRAPHY:

Situated between 23° 32' 30" (right above the tropic of cancer) and 24° 35' 0" north latitude and 87° 5' 25" and 88° 1' 40" east longitudes, and about 4,545 square kilometers (1,755 sq mi) in area, this district is triangular in shape River Ajay forms the southern base whereas the apex of the triangle points to the north. The river forms the boundary between the districts of Birbhum and Purba Bardhaman. The state of Jharkhand is located at the northern and the western border of Birbhum and Murshidabad is located at the east. Geographically, this area lies at the north eastern end of the Chota Nagpur Plateau, as it slopes down and merges with the alluvial plains of the Ganges. The western portion of the district is historically known as Vajjabhumi or Bajrabhumi. It is an undulating upland this is generally barren. The comparatively more fertile eastern portion, constituting the northeastern Rarh region, merges with the Gangetic plain. Vajjabhumi is also included in the Rarh region, and rest of Rarh is called Sumha to differentiate it from Vajjabhumi.

CLIMATE:

The climate on the western side is dry and extreme, but is relatively milder on the eastern side. During summer, the temperature can shoot well above 40 °C (104 °F) and in winters it can drop to around 10 °C (50 °F). It has been observed that rainfall is higher in the western areas as compared to the eastern areas. The annual average rainfall in Rajnagar is 1,405 millimeters (55.3 in) and in Nanoor it is 1,212 millimeters (47.7 in), mostly in the monsoon months (June to October).

ADMINISTRATIVE MAP OF THE DISTRICT:



BASIC DATA OF BIRBHUM DISTRICT

Administrative Setup

- No of Subdivisions: 03
- No of CD Blocks /Panchayat Samities:19
- No of Police Stations: 27 nos
- N of Gram Panchayats :167
- No. of Villages:327
- No of Municipalities/Municipal Corporations:06

Demographic Features (2011 Census)

- Population:3502404(Male1791017, Female 1711370) (Rural-3052956 Urban-449448)
- Sex Ratio (Per1000Male): 956
- Scheduled Caste Population: 1033140
- Scheduled Tribe Population: 242484
- Literacy Rate: 70.68%
- IMDP Blocks: Kkoyrasole, Sainthia
- MSDP Blocks: Rampurhat I, RampurhatII, Murarai I, MuraraiII, Nalhati I, NalhatiII, Mayureswar I, MayureswarII, Labpur, Illambazar, Nanoor, Bolpur-Sriniketan, Suri I, Suri II, Md Bazar, Dubrajpur,
- Total Universities: 02
- Total Degree Colleges: 18
- No of Primary Schools: 2401
- No. of Secondary Schools (V to XII):619
- No of Madrasa:31
- No of SSK: 617
- No of MSK: 99
- No of Krishak Bazar:13
- No of Pather Sathi:04
- No of ICDS Centres:5191
- No of Healthcare Facilities:87

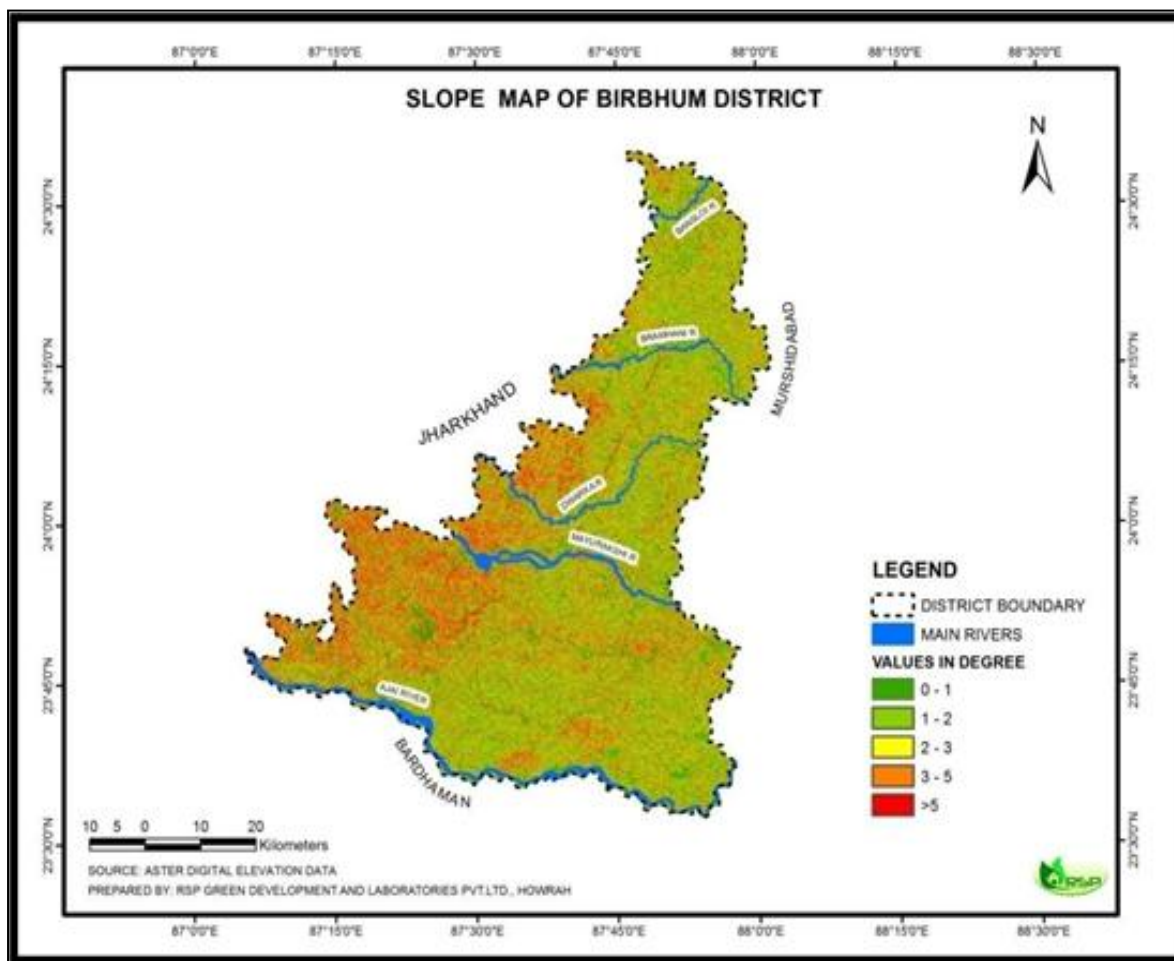
Geography

Topography and Terrain

Birbhum is a part of the Rarh region; high land to the West is located on the hard nonporous crystalline rocks, while the rest is made up of the Gondwana sediments, the laterites and the alluvium. The general trend of the district is from north-west to south-east. At the western boundary the high ridges capped biliterates and are separated by valleys. But at the south-eastern part these ridges disappear gradually and valleys become shallow and gradually mixed with the alluvium of Indo-Gangetic plains.

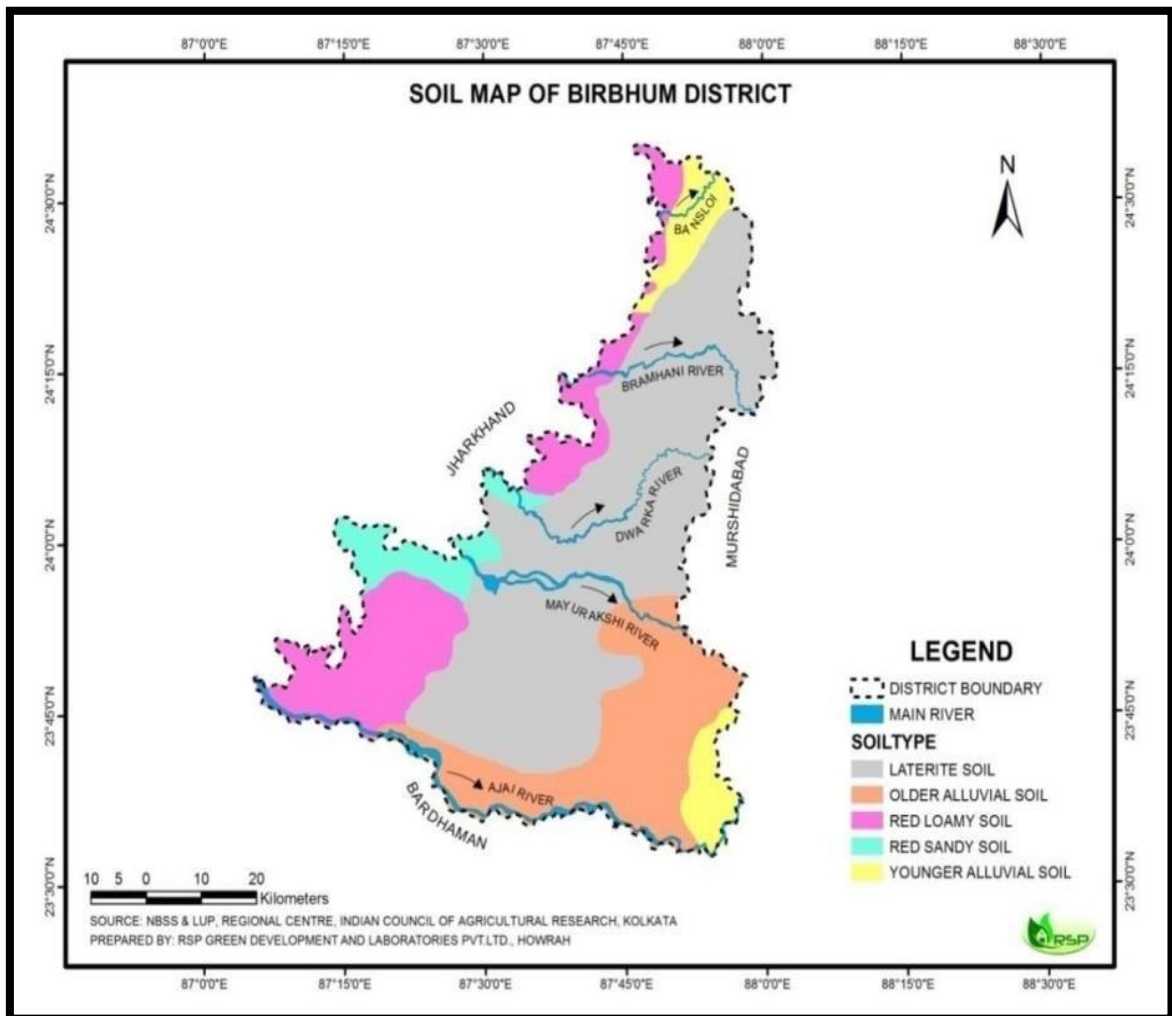
At the Rampurhat Sub-division, hills are the extensions of the low Rajmahal hills of basaltic formation. The south of the Labpur and Bolpur, the land is totally flat. The general gradient is from north-west to south-east. The rolling upland topography between Mayurakshi and the Ajay is known for its splendor and picturesque variety. Mayurakshi shows an on-perennial channel flow where as the Koiya (combined streams of Bakreswar and Kopai) is perennial. Kopai river shows meandering in a semi-circular arc.

TOPOGRAPHY OF THE DISTRICT



SOIL

The soil type of the area is predominantly old alluvium and red lateritic exposed with granite veins at places. The old alluvium is found along with the layer of clay, gravel, sand, with medium in organic matter, phosphate and medium or high level potash. The water holding capacity is very poor. The pH ranges from 4 to 6.5 i.e. acidic in nature. The whole Rampurhat Block-II and portions of Rampurhat Block-I are covered by lateritic soil, characterized by low pH and low fertility status. The basaltic trap area is associated with red sandy soil in the concave surface and gully areas. Rest of the area is covered by old alluvium. On the basis of textural classification, NATMO has classified the soil into three categories. The lateritic tract is termed as clay loam soil, while cap rocks are denoted by sandy loam and the flood prone tract is classified into clay soil, the only fertile tract of this area.



Rock Pattern

The area is covered with Archaean granite-gneisses, Gondwana system, Rajmahal basalt, laterite and old and young alluvium (Oldest to Youngest). Archaean gneiss is mainly found in Suri, Dubrajpur block, has big blocks of granite and gneiss, the Gondwanas of Carboniferous-Permian age cover a small area along Ajay river in the western part, the basalt of early Cretaceous age occur in western part of Rampurhat and Nalhathi blocks, the laterite of Cenozoic age occurs largely in western and southwestern parts, particularly in Bolpur, Dubrajpur, Suri, Rampurhat, Rajnagar etc.

Different Geomorphological Units

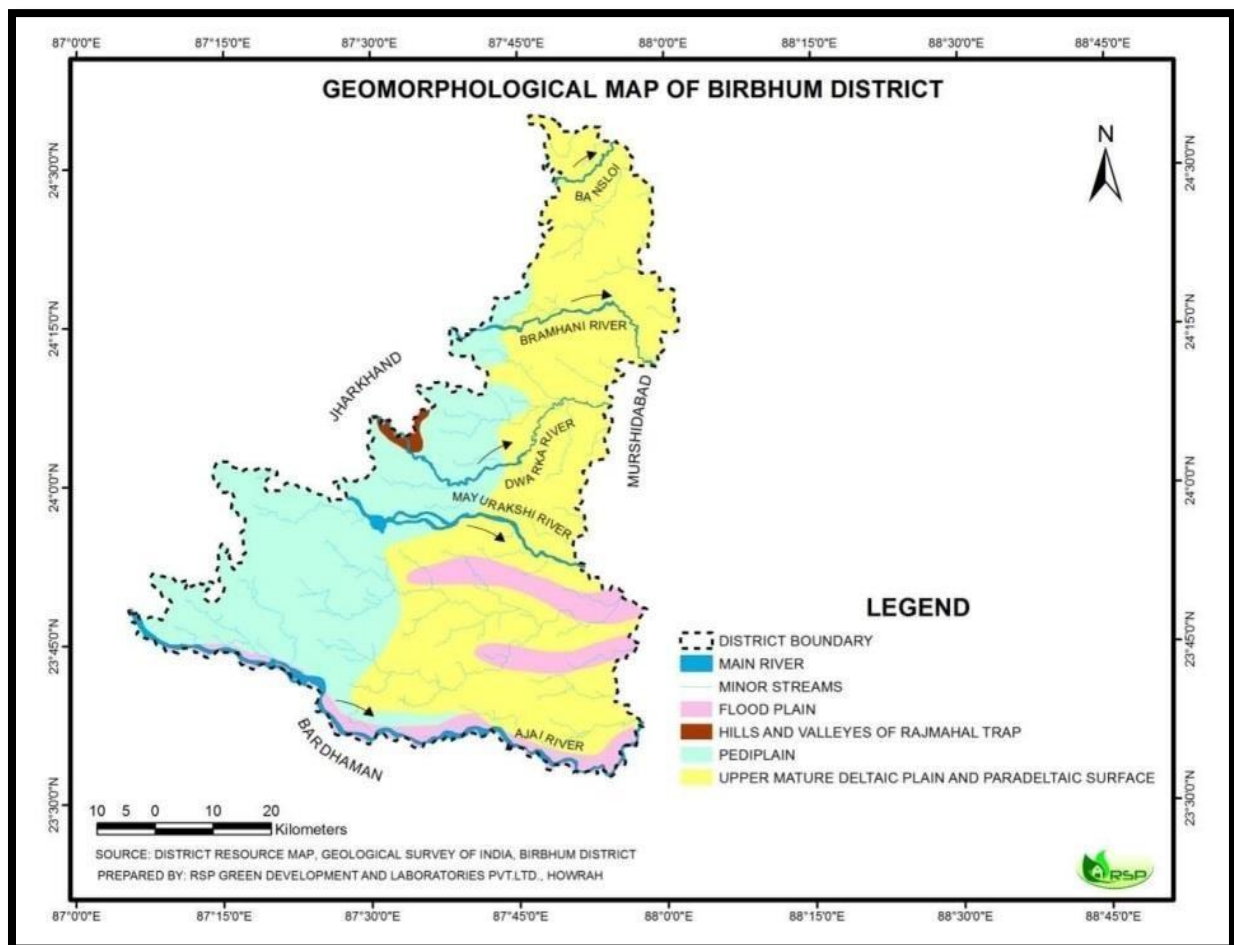
Geomorphology of the region is the expression of surface or subsurface lithostratigraphy. Birbhum district lies at the foothill of western peninsular region i.e., Chhotanagpur Gneissic Complex (CGC) marked by the undulatory uplands.

Peninsular Region

On the western margin, this part is bounded by a plateau region; extension of the Chhotanagpur Gneissic Complex (CGC) is characterized by similar Granite-Gneisses. High plain metamorphic rocks like Gneiss, Schist and varieties of Phyllites are dominant. Hillocks scattered on the high plain evidenced ancient volcanism in the terrain represents Rajmahal basalts. The uplands are characterized by the undulating landform which is subjected to extensive soil erosion.

Alluvium Region

The river in the area has developed through alleviation. The river gradient has decreased from west to east. This part is mostly interbedded layers of sand and clay.



CLIMATE

a) Climate Condition:

- Altitude:**180feet
- Summer Temperature:**Max:40°C
- Winter Temperature:**Min:10°C

■ Summer

The district of Birbhum experiences dry and hot summer with temperatures often rising above normal. During summers, the mercury rises well above 40°C(104°F). As for the direction of the wind, it always blows from the south-east. The climatic conditions in the western and eastern side of the district are different. While the western side is dry and extreme, it is relatively milder on the eastern side. The summers in Birbhum usually start from middle of March and last till the middle of June.

■ Monsoon

The arrival of the month of June marks the onset of monsoon in Birbhum. The district boasts of a high average rainfall. However, it is observed that the western region of the Birbhum district receives higher rainfall as compared to the eastern region. The difference between the annual average rain fall in Rajnagar (1,405millimeters) and Nanoor (1,212millimeters) is an example of this .Monsoon in Birbhum last still the middle of the month of October.

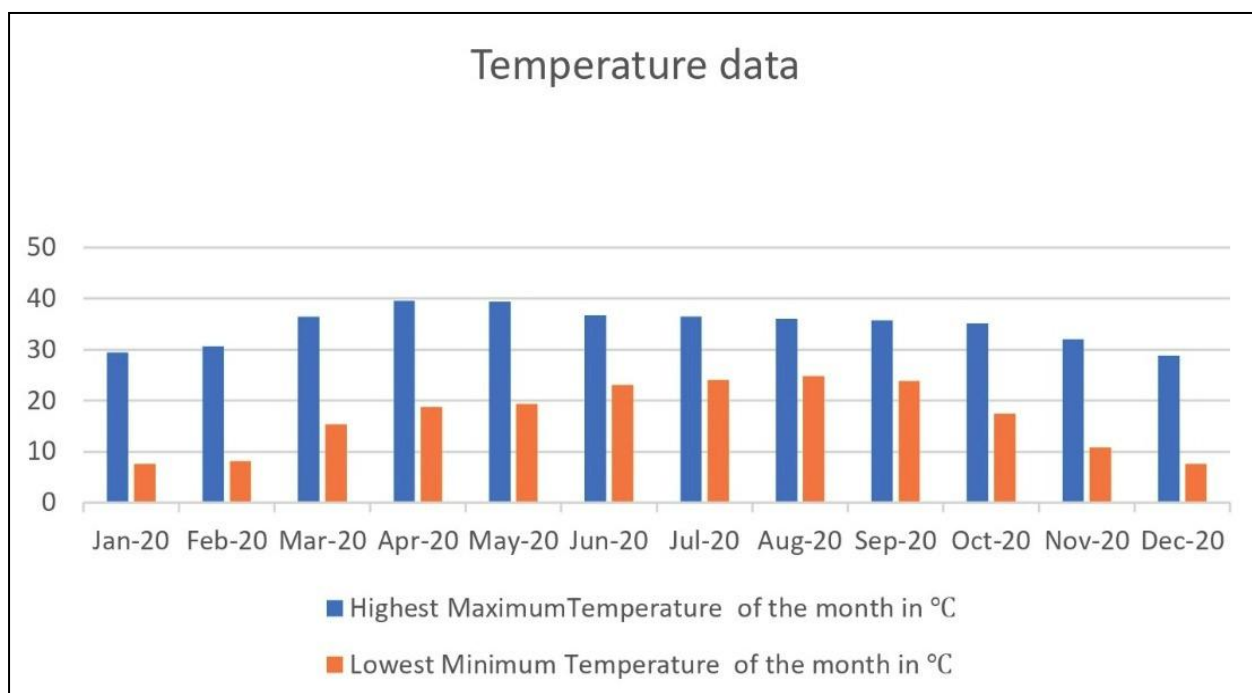
■ Winter

Winters in Birbhum are pleasant and enjoyable, with mercury dropping to about 10°C (50°F).While the day time is pleasingly cool, with the fall of evening temperature lowers further, making the nights chilly and cold. During winters, wind usually blows from the north-west direction. The winter starts from December and last till the month of February. Due to such favorable conditions, winters is deemed as the best time to visit this historic and significant district in West Bengal.

Maximum and Minimum Temperature by month in the district of Birbhum (Centre Suri, Year-2020)

Month	Maximum Temp (°C)	Minimum Temp (°C)
January	29.4	07.6
February	30.6	08.2
March	36.4	15.4
April	39.6	18.8
May	39.4	19.4
June	36.7	23.1
July	36.5	24.1
August	36.0	24.8
September	35.7	23.9
October	35.2	17.4
November	32.0	10.8
December	28.8	07.6

Graphical Representation of Average Minimum & Maximum Temperature of Birbhum of 2020



Rainfall (month wise) and Humidity

Average monthly rainfall of Birbhum District

Month	Normal/Average Rainfall (in mm)	Actual Rainfall (in mm) 2020
January	6.81	22.00
February	2.25	0
March	1.19	0
April	54.04	62.00
May	107.40	110.60
June	229.60	301.17
July	324.26	431.76
August	251.24	311.82
September	216.16	218.48
October	100.74	52.71
November	10.48	9.70
December	1.29	1.20
TOTAL	1305.45	1521.44

RIVERS

Most of the rivers and rivulets arise out from Chhotanagpur hills, entering into the western portion then passing through the eastern portion of the district with slightly south inclination. There are two major rivers Ajay and Mayurakshi by which the district is drained mainly and other rivers are Hingla, Bansloi, Kopai, Bakraswar, Siddheswari, Brahmani, Dwarka passing through the different blocks of the district. The river Ajay divides the district Burdwan and Birbhum. Overall drainage pattern of district is dendritic and parallel but west part is controlled by structurally. So, it may be of Trellis type to some extent. The upland ridges, hillocks, high erosion rate, badland topography have resulted the formation of numerous lower order streams which run through deep cutting of lateritic tract. Hence, stream frequency, drainage density is remarkably high of this geo-province.

Brief descriptions of rivers in this district are:

AJAY RIVER

The Ajay River originates on a small hill, southwest of Deoghar in Jharkhand. After entering Katwa Sub-division of Purba Bardhaman District joins Bhagirathi River. Total length of Ajay is 288 km and catchment area is 6000 sq.km. The important tributaries are Partho and Jayanti in Jharkhand.

MAYURAKSHI RIVER

Also called Mor River, is a major river in Jharkhand and West Bengal. Its source from Trikut hill, from Deoghar in Jharkhand state. Then it flows through Birbhum and Murshidabad of West Bengal before flowing into Hoogly River. The river is about 250km.

BANSLOI RIVER

The Bansloi River originates on Bans Hill in Sahebganj District of Jharkhand through Pakur district of Jharkhand. The combined catchment area of the Pagla-Bansloi river system is 2200sq.km.

KOPAI RIVER

Kopai river is the tributary of the Mayurakshi River. It flows past such towns as Santiniketon, Bolpur, Kankalitala, Kirnahar and Labpur in Birbhum district. The area around the river quite often has purple soil, which forms ravines on the river bank popularly known as khoai.

BAKRESHWAR RIVER

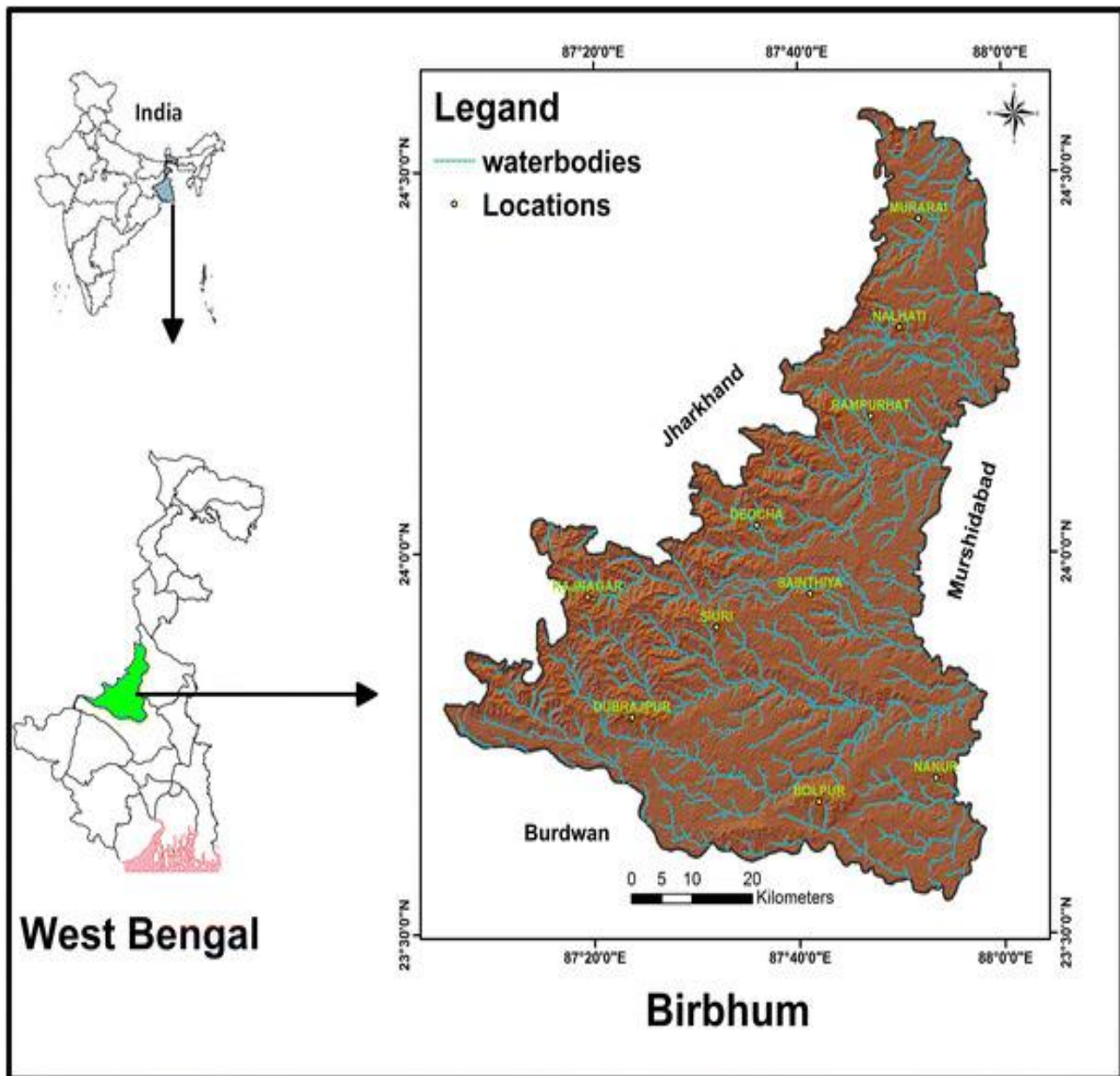
The Bakreshwar River is a tributary of the Mayurakshi River. It originates in Santhal Parganas division of Jharkhand. It meets kopai at Birbhum district.

BRAHMANI RIVER

The Brahmani originates in the Santhal Parganas in Jharkhand and then flows through Birbhum district, bisecting Rampurhat subdivision. It is a hill stream with beds full of pebbles and yellow clay.

DWARAKA RIVER

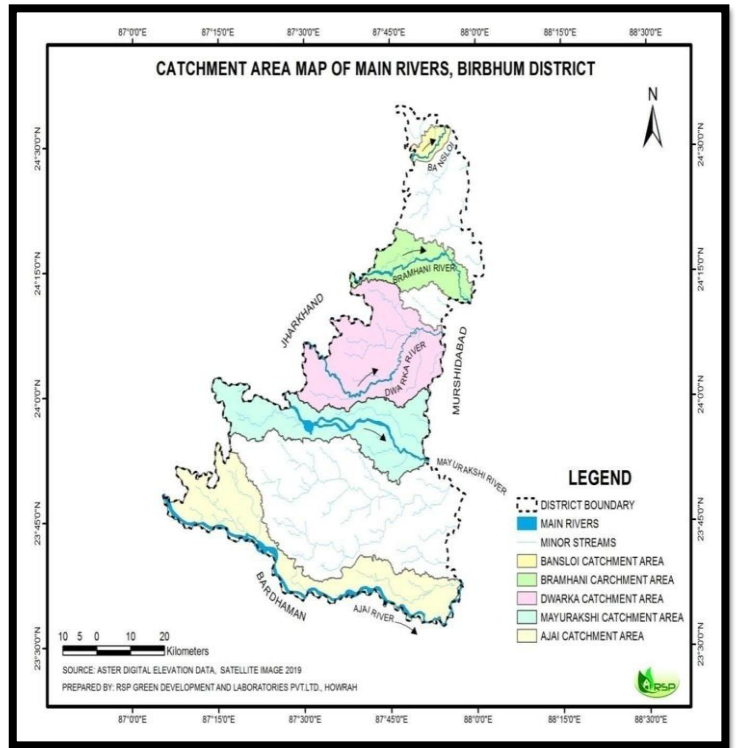
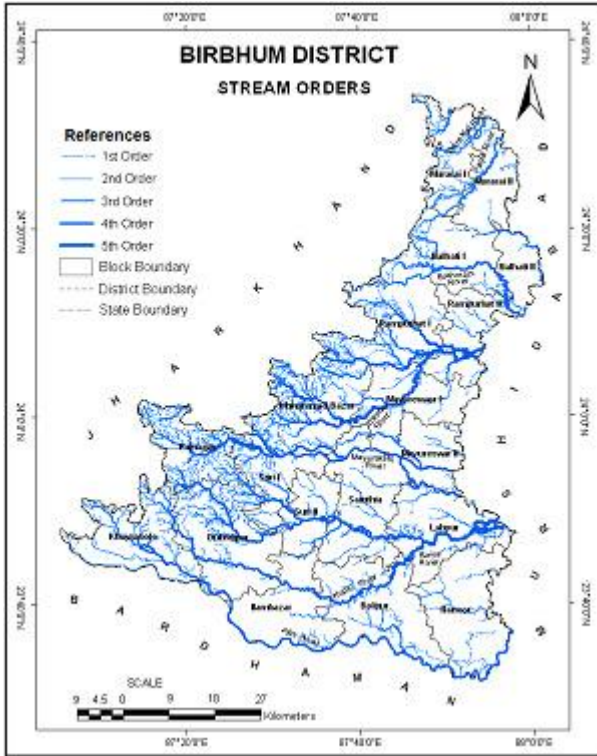
The Dwaraka originates in Santhal Parganas in Jharkhand flows through Deucha and then through Mayureswar and Rampurhat police station areas of Birbhum district. Total length of Dwarka river is 156.5km



Drainage system with description of Main River

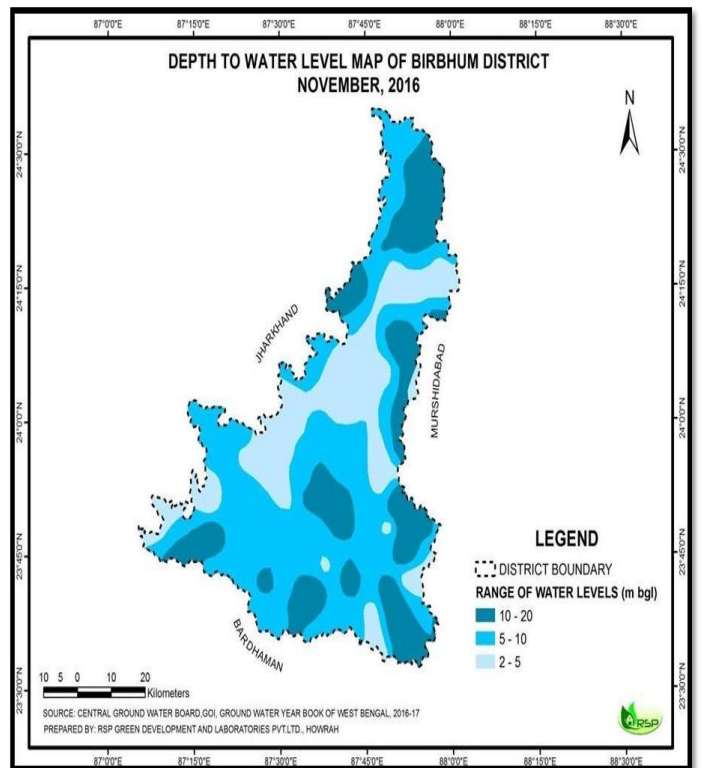
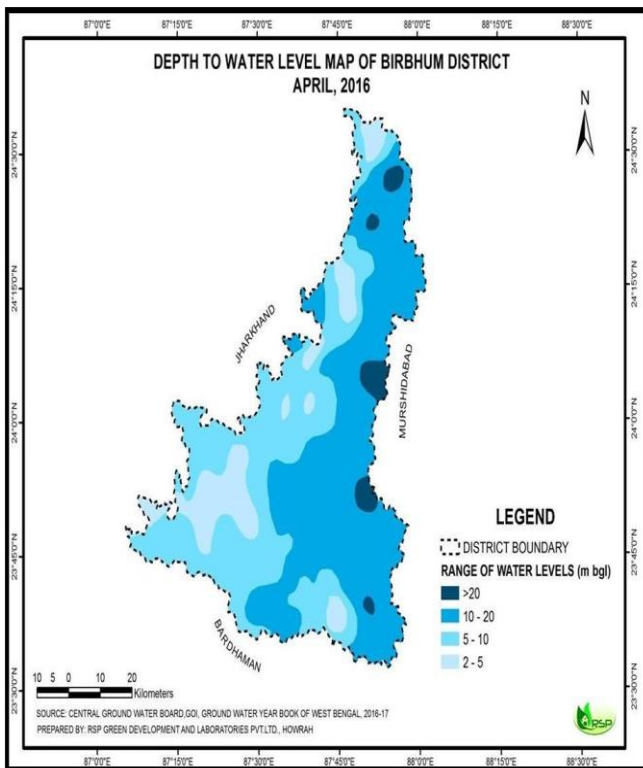
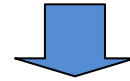
Sl. No.	Name of the River	Area drained (sq.km.)	% area drained in the district	Name of the catchment Areas
1	Mayurakshi	246.27	5.45%	Kalyanpur, Illambazar, Bhedia, Sonarkunda, Haridaspur
2	Ajay	587.35	12.92%	Jayrampur, Dubrajpur, Deucha, Palan, Bajitpur, Dumra
3	Bansloi	444.24	9.77%	Suri, Kunuri, Narasinghpur, Ranpur, Malian, Barulia, Dhanyagram
4	Brahmani	162.25	3.56%	Narayanpur, Swadhinpur, Nalhati, Belebari, Sonarkunda, Haridaspur
5	Dwarka	168.39	3.70%	Sumanpur, Bhimpur, Ramnagar,

The Stream orders and the catchment areas of the rivers in Birbhum:



WATER LEVEL DEPTH MAP OF BIRBHUM DISTRICT (PRE-MONSOON)

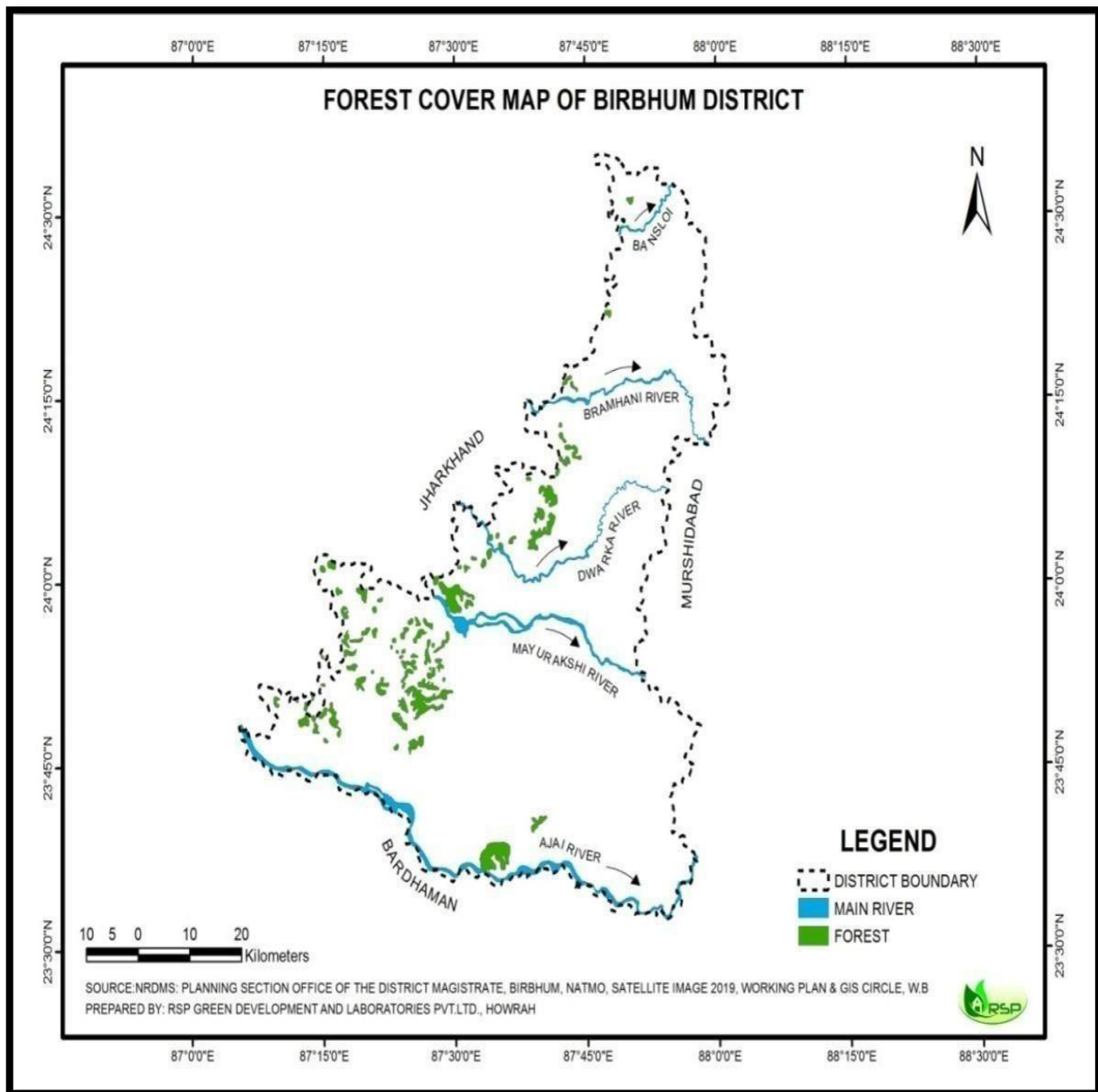
WATER LEVEL DEPTH MAP OF BIRBHUM DISTRICT (POST-MONSOON)



Forest

Birbhum has 15,926.58 hectares of land covered by forest in 2011. Out of the total forest area, 2,848.79 hectares of land is under Reserved Forest, 6,242.30 hectares is under Protected Forest and 6835.49 hectares of land is under Unclassified State Forest. From the forest produce the Government collected revenue of Rs.1,49,03,330/-in 2010-11.

FOREST COVER MAP OF THE DISTRICT



ROCKS & MINERAL RESOURCE OF THE DISTRICT:

□ OVERVIEW OF MINERAL RESOURCES

It is really an enigma, why the plateau regions are the store house or repository of mineral resources. Being a part of Chhotanagpur, mineral resource quarrying in Birbhum district has a historical past. Mining gained sky-scraper popularity after the recovery of famine of 1176 (of Bengali calendar). Processing of sponge iron from good quality laterite in Narayanpur was the popular practice before company rule. During company rule 'Summer Healthy and Co.', the pioneer of coal mining in Raniganj Coal Field (RCF) started iron ore processing in Narayanpur in 1978 and coal mining in Panchokot (Panchokot was then located in Birbhum) in the same year.

China Clay mining in Mohammad Bazar and also in Rampurhat Block-I and basalt quarrying in Baramosia is mining phenomena after independence. Basalt quarrying of Rampurhat Block-I, has started around the beginning of 1960s. Nalhati Block-I contains basalt quarry. The trap basaltic rock of Rajmahal hill has an extension towards Bhagirathibasin, and is found at the surface level in Pakur. Rajmahal Traps consisting mainly medium to fine grained basalt showing vesicular and amygdaloidal structure in the northern and western part basically with intertrappean sediments. In the eastern part of the district, recent alluvium mainly composed of sand and clay occurs patches.

□ DETAILS OF RESOURCES

☀️ Clay

Clay has widespread occurrences in Birbhum districts and is investigated. Different types of clay have been observed according to the modes of their occurrence. The following types are recognised:

- i) Kaolinitic clay associated with weathered granite gneisses, pegmatite and blackstone.
- ii) Semi-plastic light grey clay within the upper Gondwana sedimentaries.
- iii) Plastic white clays within the Tertiary sequence
- iv) Lithomergic clay associated with laterite. The clays are bedded in nature and interbedded with sand and sandy clay. There are a number of clay horizons within the sequence, their thicknesses varying from 2m. to 20m. (as seen in the quarries).

1. Chaknurai sector: This sector is delineated to the east (Dhatelpara, Baghajor) and south of Chaknurai (bounded by Baragachia and Baramasia), 8 km. west of Rampurhat. Clay is exposed in nallah beds, mound scarps, road cuttings, and well section and in the abandoned/ existing quarries. In the exposure the clay is bedded and jointed.

Makhdumnagar Sector: Clay beds are reported from Salak, Makhdumnagar and Shaikherdeh areas in this sector. The clay in this sector is plastic and varies in colour from yellow to cream at the top, followed by creamy white and white with brown, yellow and violet stains, forming bands at places. The clay is bedded and hard when dry and fine grained.

2. Dewanganj-Katpahari Sector: Yellow and white clay is known to occur near Chanda and grey fire clay at Harin-singha near Katpahari.

3. Mohammad Bazar Sector: Occurrences of white clay have been reported since long from the area comprising Mohammad Bazar, Kharia and Kumarpur. Several workers of G.S.I. earlier prospected, aided by drilling, for white clay (deposits in this sector and also in the adjoining areas. (Rao, *et. al.*) estimated a reserve of 20.44 million tonnes of clay. This sector, however, has the largest deposit of white china-clay in Birbhum district.

Morrum

Morrums of Birbhum district have been formed from N-Strending laterite crusts the Rajmahal Trap Basalts, Archean granite-gneiss, Lower Gondwana sediments, Palaeogene gravels and older deltaic alluvium under different tectono-climatic condition of north-western marginal part of Bengal Basin. Low level secondary laterites of Bengal comprising of heterogeneous Fe-Al rich gravelly materials are basically the products from high level primary laterites of plateau region. Morrums are the manifestation of the phenomenon of weathering of laterites or lateritic beds which are formed from the leaching of sedimentary rocks (sandstones, clays, limestones); metamorphic rocks (schists, gneiss and migmatites); igneous rocks (granite, basalt, gabbro and peridotite) and mineralised proto-ores (*i.e.*, protore).

Basically, Laterite is a soil & rock type rich in Fe and Al and commonly considered to have formed in hot and wet tropical climate condition. Nearly all laterites are of red in colour because of high Fe content.

Morrums are generally impervious, friable ferruginous concretions. In Birbhum, morrums are generally of Kankar & lateritic loamy nature.

The main rivers of Birbhum district - Ajay and Mayurakshi are the chief carriers of ferruginous coarse sediments that form an upland lateritic terrain.

In a morrum quarry of Baramasia near Rampurhat-I (24°12'12"N, 87°40'29"E) three distinct domains of laterites are found to be seen.

A well-developed & well preserved laterite profile of about 10-11m thick (primary laterites) is exposed at Naihati-I (24°17'47"N, 82°49'28"E) of Naihati hillock. This acts as a venue for supply of morrum.

Morrums are also recorded at Pansiuri (23°46'39"N & 87°16'47"E).

Based on field observations in Boro Pahari (24°12'03"N, 87°41'33"E) of Rampurhat zones of morrum have been identified.

In a quarry of China Clay (Kaolin) at Bhatina of Birbhum district (24°10'02"N, 87°42'18"E) presence of morrum has been recorded.

The bad land topography (*i.e.*, Khoai Landscape) of Kopai-Ajay interfluvial region of Bolpur has developed over morrum.

Morrums are used for making roads & civil construction purposes. It is used in plinth filling, back filling in trenches; footing pits etc.

In view of the increasing demand of morrum in the state, exploitation of it should be of national interest & it should be prioritized at national level.

Coal

Birbhum has the resource of coking coal with total reserves of 6586.01 million tonnes. Khoyrasole, Deocha & Pachami are the potential coal bearing horizons in Birbhum Province.

- i) At Djara area, Birbhum is covered with Tertiary sediments. The maximum thickness of Tertiary sedimentaries is 323.40m; Rajmahal Formation is 317.40m, Barakar Formation is 233.41m and Talchir Formation is 61.37m
- ii) Gazipur west sector also covered by Tertiary sediments. The maximum thickness of Tertiary sedimentary is

275.60m;Rajmahal Formation is 383.30m and Barakar Formation is 183.19m, respectively. (Source:Indian Minerals Year book 2015(Part-I)/ibm.nic.in)

Deocha - Pachami- Dewanganj- Harinsingha, Birbhum coalfield, District Birbhum, West Bengal of an area of 12.3 sq.km having Lat: 24° 01' 45" - 24° 05' 30" (approx) Long : 87° 34' 15" - 87° 37' 39" (approx), Toposheet No-72P/12.

SEAM/ZONE	THICKNESS OF COAL SEAM ZONES [i.e., CUMULATIVE THICKNESS OF COAL SEAMS & PARTINGS(M)]	DEPTH RANGE	REMARKS
IV	8.98-30.77 (4.1-20.9)	135-355	Seams occur in a number of sections. Coal seams are concealed by a thick cover of Trap, Laterite and Dubrajpur formation
Parting	100-122		
III	17.32-42.66 (6.7-40.4)	280-500	
Parting	30-122		
II	40.69-58.88 (15.2-53.6)	350-580	
Parting	87-200		
I	41.61-79.89 (5.2-63.4)	510-850	

Note: Figures in bracket indicate cumulative thickness of coal sections.

Dewanganj-Harinsingha

Seam Zone	Zone Thickness(m)	Depth Range(m)	Remarks
III	101-138	12-96	There are 5-22 sections in seam zone. The total thickness of coal sections varies from 5.30-38.63m
Parting	47-63		
II	25-74	204-284	There are 6 to 16 sections in seam zone. The total thickness of coal sections varies from 8.62 to 31.04m.
Parting	122-144		
I	10-17	45-386	There are 2 to 4 sections in seam zone. The total thickness of coal sections varies from 6.69-9.65m.

□ RESERVES

Deocha - Pachami: An indicated reserve of 2025.62 m.t. has been reported here and adjoining eastern sector of Birbhum coal fields.

Seam	GrA	GrB	GrC	GrD	GrE	GrF	GrG	Total
IV					23.62	123.51	49.78	196.91
III			135.63	157.06	240.62	265.53	91.08	889.92
II			310.80		147.29			458.09
I			161.44	212.97	94.20		12.09	480.70
Total			607.87	370.03	505.73	389.04	152.95	2025.62

The depth wise breakup of the reserves cited below:

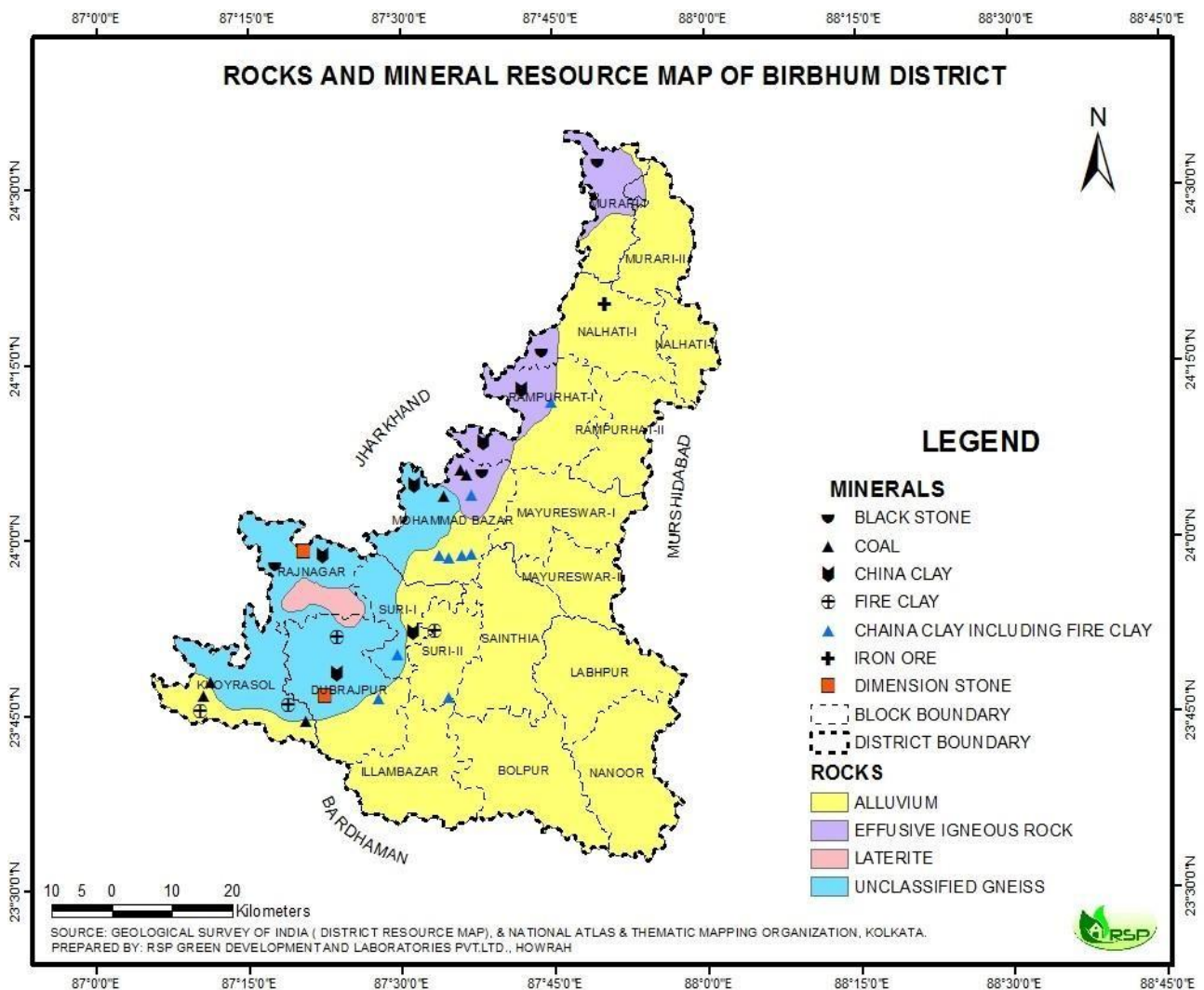
Depth Range(m)	Reserves(Mt)
0- 300	152.20
300-600	1078.39
600-1200	795.03
Total	2025.62

Dewanganj Harinsinha: out of 38.693mt. of net reserves, proved reserve of 28.093 and indicated reserve of 10.600mt. has been reported. Horizon wise reserved of coal seams is as follows:

Horizon (Seam Zone)	Proved Reserve	Indicated	Net Total (in Milliontonnes)
III	12.014	1.797	13.811
Local	1.513	0.825	2.338
II	11.128	6.333	17.461
I	3.438	1.645	5.083
Total	28.093	10.600	38.693

Proved reserves of Dewanganj-Harinsinha blocks have been estimated taking 200 mareaofinfluence from the drilled boreholes

[Source: Birbhum District Coalfield, & West Bengal Coal Wing, GSI,(1992).]



(i) Solid Waste Management**a. Current status related to Solid Waste Management**

	Urban Local bodies	No of Wards	No of Households	Population	Solid Waste Generated per day
1	Municipal corporations				
2	Municipalities (Nagar Palikas)	105	105421	330083	325 gm/HH
3	Nagar panchayats (Town area Councils)				

	Local Bodies	No of Village panchayats /Blocks	No of Households	Population	Solid Waste Generated per day
2	Block/Taluk/MandalTehsils				
	Bolpur - Sriniketan	9	47961	202553	185 gm/HH
	Dubrajpur	10	40429	181437	235 gm/HH
	Illambazar	9	38754	168709	195 gm/HH
	Khayrasole	10	34107	153248	175 gm/HH
	Labpur	11	47005	201901	165 gm/HH
	Md.Bazar	12	36344	164570	180 gm/HH
	Mayureswar-I	9	37943	159782	180 gm/HH
	Mayureswar-II	7	31171	127661	195 gm/HH
	Murarai -I	7	41601	190802	190 gm/HH
	Murarai - II	9	52059	222033	185 gm/HH
	Nalhati -I	9	48318	204818	220 gm/HH
	Nalhati -II	6	31058	127785	210 gm/HH
	Nanoor	11	51305	218654	155 gm/HH
	Rajnagar	5	18084	77979	165 gm/HH
	Rampurhat-I	9	44263	188435	165 gm/HH
	Rampurhat-II	9	49558	187823	170 gm/HH
	Sainthia	12	46552	195349	180 gm/HH
	Suri -I	7	25792	111377	220 gm/HH
	Suri -II	6	20808	87405	185 gm/HH

B) Identification of gaps and Action plan:

S. No.	Action points for villages /blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completin of action plan
1.	Segregation				
(i)	Segregation of waste at source	<p>In Birbhum district source practiced by households of 105 No. of Wards is already started the waste Segregation and H2H Collection has already started</p> <p>80% of the household in rural area practice segregation of waste at household level. Most of the Wet waste in rural area is mainly treated by individual household onsite itself.</p>	<p>Distribution of bins (Green&Blue) for H2H collection in 105 wards. And awareness program for segregation of waste at household ward wise.</p> <p>Awareness program through SHG, NGO at village level.</p> <p>Distribution of 2 Bucket one for wet waste and other for dry waste.</p>	<p>In Birbhum all municipalities for urban area for Bucket distribution.</p> <p><u>Gram Panchayat</u> for rural Area</p> <p><u>DRDC</u> and <u>DICO</u> alongwith <u>Municipality</u> and <u>Gram Panchayat</u> for awareness.</p>	1 Year

2	Sweeping	Example:	Action plan for reducing gap		
(i)	Manual Sweeping	15% Gaps in manpower: Gap in some sweeping tools availability of equipment.	In case of Manual Sweeping, engagement of manpower and supply of materials are crucial for 100% Achievement in this component.	All municipalities For Urban Area	2year.

3.Waste Collection					
(i)	100% collection of solid waste	75 % of the total Solid waste is collected in all municipalities of BIRBHUM District In Block mostly dry Waste needs to be collected.	In Block mostly dry waste needs to be collected as wet waste is mainly treated by individual household onsite itself. In Municipality both dry and wet waste needs to be collected	Municipalities for Urban area <u>Gram Panchayat</u> for rural area	1year
(ii)	Arrangement for door to door collection	Arrangement for door to door waste collection is already started in all Municipalities Door to door waste collection will be started in rural area	More Nos. of trolleys with two separate containers needs to be increased along with manpower. In rural area door to door waste collection is a tough task , to facilitate such activity one <u>primary waste transfer points</u> site in each village needs to be identified where dry waste from each household will be disposed by house hold themselves from where waste can be transported.	<u>All Municipalities</u> To purchase extra trolley <u>Gram Panchayt</u> to identify disposal site in each village and Purchase Trolley for waste transport.	6month.

(iii)	Waste Collection trolleys with separate compartments	6 Nos. of trolleys with two separate containers are available at all Municipality 42more such trolleys are required for inclusion of all wards within the planned time frame and collection of waste from all HHs in the district.	<u>Municipalities</u> To purchase trolley subject to availability of fund	<u>All Municipalities</u> for Urban area	1year.
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		In rural area there is no such trolley available. So 10 trolley for each GP needs to be purchased to collect waste from each primary waste transfer points village.	Gram Panchayat To purchase trolley subject to availability of fund.	Gram Panchayat for rural area	
(iv)	Mini Collection Trucks with separate compartments	Total 32 Nos. of hydraulic Trippers are available in Municipalities in Birbhum IN rural area no such truck available.	If such truck required respective responsible agency can hire.	Municipalities for Urban area Gram Panchayat for rural area	N/A
(v)	Waste Depositin centres (for domestic hazardous wastes)	All Municipalities are searching waste Deposition centre	Construction ,repair and demolition of any civil structure produced in the district is presently being dumped on Road side and mostly filled in low lying areas	AEO ZP For identification of one waste deposition centre for domestic Hazardous Waste	1year
4.Waste Transport					
(i)	Review existing infrastructure for waste Transport.	There are Compactor: 06Nos Dumper:06Nos, Hydralic Trippers:32 nos. Mini Truck:84 Nos Totos:36 nos in the municipalities in Birbhum There are some gap in infrastructure for waste transport in Rural Area	Procurement of more transportation vehicles and carts are required for the Municipalities in Birbhum 10 trolley for each GP needs to be procured subject to availability of fund.	<u>All Municipalities</u> for Urban area <u>Gram Panchayat</u> for rural area	2year.

(ii)	Bulk Waste Trucks	02nos (Inadequate) in Urban Area But in Rural Area no such Transport facilities available	Procurement of atleast 02nos .of Bulk Waste Trucks in Urban area	Municipalities For Urban Area BDO To hire Trucksonce in a Month or whenever necessity arises.	2year
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(iii)	Waste Transfer points	Presently 58 primary waste transfer points are available and 01secondary waste transfer points available in Municipalities	minimum of 120primary waste transfer points and 04 secondary transfer points will be required in Municipality one primary waste transfer points site in each village needs to be identified	Municipalities For Urban Area to identify more Transfer Points Gram Panchayat For Rural area to identify one primary waste transfer points site in each village	6month
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5 Waste Treatment and Disposal

(i)	Wet-waste Management: On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	Whether number of bulk waste generators identified for installation: Yes,(No. is01)	Metering and imposition of fees as per Rule, to be done.	Municipalities in Birbhum;	6month
(ii)	Wet-waste Management: Facility: Composting of wets waste.	The facility is running and the capacity of the facility is upgraded gradually in BIRBHUM Municipality	No plan for biomethanation is feasible for first 03 years of the implementation stage of the present SWM system. After the time period separate plan will be prepared. For Urban Area Wet-waste Management: Facility in each GP needs to be set up. For this a site for such facility needs to be identified.	Municipalities For Urban Area BDO For Rural Area To identify site for Mini Processing Centre as running in Municipalities	1year
(iii)	Dry-Waste Management : Material Recovery for dry-waste fraction	MRF facility exists and is working where segregation of all types of Dry Waste is done. The segregated Dry Wastes are then handed over to a vendor in a regular basis against highest market price. Set-up for Energy Plant is subjected to 100% implementation of the present SWM	Follow up measures for timely implementation of SWM Plan to be done with SUDA in All Municipalities	All 04 Municipalities of Birbhum District;	1year

		Plan in Municipalities in Birbhum But in Rural Area no Such Facility available But vendor are Purchasing dry waste From public directly or Collection from Dumping area by themselves.	MRF along with Wet-waste Management: Facility in each GP need to be set up. For this a site for such facility needs to be identified.	BDO For Rural Area To identify site for Mini Processing Centre as running in Municipalities	
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	The vendor as mentioned above is agreed to collect all types of Dry Wastes.	NA	NA	NA
(vi)	Involvement of NGOs	No NGO has been engaged in any of the Municipalities in Birbhum But in Rural Area no such NGO has been engaged	The NGOs has also been involved for management of solid waste campaign	BDO For Rural Area To select and engage NGO for Each GP	6month
(vii)	EPR of Producers: Linkage with Producers /Brand Owners	As per rules, producers and brand-owners should facilitate in collection of packaging waste	Action plan will be taken for linkage of all producers/brand owners or their PROs for collection of plastic waste	Municipality; For Urban Area Secretary Zilla Parishad For Rural Area	6month
(viii)	Authorization of Waste Pickers	No in both urban and rural area	List of authorized waste pickers will be prepared	Municipality For Urban Areas Gram Panchayat For Rural Area	6Month
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	No	own by-laws will be passed in compliance with SWM Rules 2016 and be implemented.	Municipality For Urban Panchayat Samity For Rural Area	6Month

(ii) Plastic waste Management

(a) Current status related to Plastic waste management

	Urban Local bodies	Estimated quantity of Plastic Waste Generated per day
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	
2	Municipalities (Nagar Palikas)	0.95 gm /HH
3	Nagar panchayats (Town area Councils)	

	Local Bodies	Plastic Waste Generated per day
2	Block/Taluk/MandalTehsils	Assessment need to be done
3	Village/GramPanchayats	

(b) Identification of gaps and Action plan:

S. No.	Action points For village panchayats /blocks/municipalities /corporations	Identification of gap	Action plan	Agencies Responsible	Targeting for Compliance
1.	Door to Door collection of dry waste including PW	Partially (40%) in Urban Area Partially running in rural area	Education through mass media, schools, Producer / brand owner campaigns and Other channels, to reduce the use of Plastic in whole district More trolleys and transfer points need to be increased along with manpower in Urban Area IN rural area one primary waste transfer point site in each village needs to be identified where Plastic waste along with Dry waste will disposed by household	Municipality For Urban Area Gram Panchayat For Rural Area	1year

2.	PW collection Centers	Most of the dry waste contain mainly plastic waste so it can be collected as from dry waste collection centre in Urban Area But in Rural Area no such Facility available	NA for Urban Area In rural area one <u>primary waste transfer point</u> site in each village needs to be identified where Plastic waste along with Dry waste will be disposed by household	All Municipality in Birbhum Gram Panchayat For Rural Area	1year
3.	Awareness and education program simple mentation	Awareness Generation Programmes have been conducting in this ULB still more need to be done by involving school colleges and Self help group.	Education through mass media, schools, Producer / brand owner campaigns and other channels, IEC Activity needs to be organized in whole district	All 04 Municipalities P.D DRDC DICO DYO	1year
4.	Access to Plastic Waste Disposal Facilities	However More facilities needs to be set up	Vendors are already working with them. New Plastic Recycle set up needs to be increased & Plastic to fuel plant need to be setup in district.	GM DIC To encourage entrepreneur to set up such facility in the district	2year

Waste Collection and Disposal at Mini Processing Centre of Birbhum District



(iii) C&D Waste Management

The Construction & Demolition (C &D) Waste The waste comprising of building materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure produced in the district is presently being dumped on Road side and mostly filled in low lying areas. At present BIRBHUM district has not identified locations for dumping the construction debris. In Birbhum the C &D waste is more due to road construction activity by National Highway and State Highway and new building construction.

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)	194.65 MT per year
Does the District have access to C&D waste recycling facility?	Assessment is being done

b. Identification of gaps and Action plan:

S.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.	Large generator of C&D waste in district is mainly due road construction by NH Authority & which after milling the top Bituminous layer by Road Milling Machine the Bituminous will be reused In granular layer in the same project.	One common C&D waste Deposition points needs to be identified.	PWD	6month
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?	NO such fees have been fixed by any local authority in the district.	Such law to fixed user fee on C&D waste need to be introduced as large no of private housing project may come up in Birbhum	Municipalities & Zilla Parishad	6Month
3.	C&D recycling Facility	District has no C&D waste recycling facility	No such huge project which generates large scale C&D waste in the District, Identification of site for the C&D recycling facility needs to be done	PWD	1year

4.	Usage of recycled C&D waste in non structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	There is no policy on usage or promotion of usage of C &D	Though there is no policy but C&D waste generally used in road pavement and filling of low area during house or any other building construction.	PWD	1year
5.	ICE on C &D waste management	Is there any sustained system of creating awareness created among local Communities	Awareness will be done by local folk artist in hat market and other prominent places as well as through social media.	DICO	1year
6.	Dust control ON C&D Waste Management	Policy of control	Sprinkling the water	PWD	This is the continuous process to control whenever it is working by sprinkling the water

(iv) Biomedical Waste Management**a. Current Status related to biomedical waste**

Inventory of BMW in the District	Quantity
Total no. of Bedded Healthcare Facilities	13
Total no. of non-bedded HCF	3
No. of HCFs authorized by SPCBs/PCCs	13
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	2
Capacity of CBWTFs	200kg/hour
No. of Deep burials for BMW if any	6
Quantity of biomedical waste generated per day	750 gm to 1 kg/bed
Quantity of biomedical waste treated per day	7.5 ton

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	Already Done	Not Applicable	Not Applicable	Not Applicable
2.	Adequacy of facilities to treat biomedical waste	Answer: No such gap/gaps Answer: We have 09 No of non bedded PHCs and 01 bedded PHC which need tie-up with M/s Greenzen Pvt. Ltd. for BMW lifting at present.	Trying for ragging with M/s Green zen Pvt. Ltd. For expression Of their interest (EOI), Letter already issued vide Memo No. CMOH/APD/1992 dated 19.06.2021 of CMOH BIRBHUM addressed to Manager, M/S Greenzen Pvt. Ltd.		Waiting for their response
3.	Tracking of BMW	Answer: Yes, except 10 no of PHCs, where Deep burial method is still being practiced	Trying to implement	Bnohs & MOICs of BIRBHUM district	As early as possible
4.	Awareness and education of healthcare staff	Answer: Yes	Yes, training program arranged through the year	District Quality Assurance Cell Superintendent of Hospital, BMOHs, all MOICs & M/s Greenzen Pvt. Ltd.	Ongoing process

5.	Adequacy of funds	Answer: Yes	Adequate fund allotted from the state level	Office of the CMOH, BIRBHUM	For 2-3 occasions every year
6.	Compliance to Rules by HCFs and CBWTFs	Answer: Yes	Visits, surprise visits, monthly meeting & training programs arranged from time to time	District Quality Assurance Cell on guidance of CMOH, Deputy CMOH-I, Deputy CMOH-III, ACMOH & Other officers of CMOH office, Birbhum	Once or twice in a month
7.	District Level Monitoring Committee	Answer: Yes	Once in a month	District Quality Assurance Cell on guidance of CMOH, Deputy CMOH-I, Deputy CMOH-III, ACMOH & Other officers of CMOH office, Birbhum	Once or twice in a month
8.	Waste water treatment	Answer: Installed at Falakata SSH, Jasdanga RH & Silbari hat PHC	Plan & estimate already done to cover up all the HCFs. Estimated cost Rs. 3,000/- to 5,000/- per setup/Facility.	CMOH, ACMOH, BMOHs & MOICs of Birbhum District	As early as possible

(v) Hazardous Waste Management

c. Current Status related to Hazardous Waste Management

“Hazardous waste” means any waste which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger or is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances under Hazardous waste and transboundary movement rules 2016.

At present total 218 nos of industries are running in Birbhum District most of the industries in this district are related to Agro Processing. None of the industry running in Birbhum District falls under Red Category as per the norms of WBPCB. However some of them such as Plastic recycle & chemical related factories though only 6 in no can generate Hazardous Waste which assessment needs to be done immediately.

Many commercial establishments like automobile repair shops, paint workshops, stores, etc. may also generate small quantities of hazardous waste. The district administration are preparing inventory of such establishment and plan for adequacy of facilities for safe handling and disposal within or outside District.

Details of Data Requirement	Present Status
No of Industries generating HW	1
Quantity of HW in the district	2.01 MT
(i) Quantity of Incinerable HW	0.51
(ii) Quantity of land-fillable HW	NA
(iii) Quantity of Recyclable/utilizable HW	1.5
No of captive/common TSDF	NA
Contaminated Sites or probable contaminated sites	NA

d. Identification of gaps and action plan:

S. 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	WBPCB rarely inspect the industries which may generate Hazardous Waste.	District team in association with WBPCB will inspect and check and guide them to maintain necessary arrangement to control Hazardous Waste.	WBPCB & GM DIC	6 month
2.	Establishment	Inventory of such establishment is being done.	Inventory of such establishment will be done immediately	RTO & GM DIC	6 month
3.	Training of workers involved in handling/recycling/disposal of HW	Such training in this District will be done	Training will be imparted to train worker involved in such establishment within 6 Month.	GM DIC & DMO	1 year

(vi) E-Waste Management

e. Current Status related to E-Waste Management

'e-waste' means electrical and electronic equipment, whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from manufacturing, refurbishment and repair processes.

Current practices in Birbhum District were limited to collection and transportation of E-waste to other cities Siliguri, Kolkata etc. for recycling activities. Scrap vendors collected E-waste from Government Offices, residential areas, industries, private institutes, banks etc. Such E-waste was then stored at the scrap yards. When considerable E-waste was collected at the scrap yards they were then packed and transported to the recycling facilities at other cities.

a. Current Status of E-waste Generation

Details of Data Requirement	Present Status
Inventory of E-Waste in MT/year	NA
Collection centers established by ULBs in the District	NA
Collection centers established by Producers or their PROs	NA
No authorized E-Waste recyclers/ Dismantler	NA

f. Identification of gaps and action plan:

S. No.	Action Points	Action Plan	Responsible Agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / Bulk-waste generators	The SPCB should prepare inventory of E-waste generated in the District.	SPCB/ PCC	6 months
2	E-Waste collection points	One E-waste collection Kiosk/ Collection Points in the 19 Blocks and 6 Municipality	Block Development Officers and Executive Officers, All Municipality	6 months
3	Linkage among Stake holders to channelize E-Waste	Clear linkage and communication among the Producers, Supplier, E-waste Collection Points and E-Waste recyclers /Dismantler authorised by SPCB.	PRO, Electronic Shop Owners, Block Development Officers, Executive Officers of All Municipality and E-Waste recyclers / Dismantler authorized by SPCB.	4 months
4	Regulation of Illegal E- Waste recycling /dismantling	Prevalence of informal trading, dismantling and recycling of E-Waste	District Administration, BDOs and municipalities with the help of local Police.	3 months
5	Integration of informal sector	NA	ULBs, UDMA	6 months to 1 year
6	Awareness and Education	NA	ULBs, SUDA and WBPCB	1 year

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:	NIL
Number of manual monitoring Stations operated by SPCBs	1. Suri Municipality Building 2. Rampurhat Municipality Building 3. Bolpur Municipality Building
Name of towns/cities which are failing to comply with national ambient air quality stations	NA
No of air pollution industries	Thermal power plant, Stone crusher, Query activities, Rice mill, Coal mines, Food and bakery products
Prominent air polluting sources [Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln]/ [Industrial Estate]/[Others](Multiple selection)	Industries with majore mission potential are <ul style="list-style-type: none"> • Thermal power plant • Stone crusher • Query activities • Rice mill • Coal mines • Food and bakery products

b. Identification of gap sand action plan:

S. No.	Action points	Indicative Action Plan	Responsible agency	Time line for completi on d action plan
1.	Identification of prominent air polluting sources?	District level Inventory has been done and the summary of emission sources is provided within the DEP asin table 1. Further detail area wise inventory of air pollution sources shall be carried out. Identification of hotspots or areas of concern pertaining to Air pollution in association with State Pollution Control Boards (SPCBs) shall be done.	District Authorities/ West Bengal Pollution Control Board (WBPCB)	6 months

2.	Ambient Air quality data?	This data can be easily accessible in https://www.wbpcb.gov.in/ link.	West Bengal Pollution Control Board (WBPCB)	N/A
3.	Setting up of Continuous Ambient Air Quality Monitoring Stations	<p>Ambient Air Quality Monitoring Station in (AAQMS) Birbhum District</p> <p>4. Suri Municipality Building</p> <p>5. Rampurhat Municipality Building</p> <p>6. Bolpur Municipality Building</p> <p>The major town of this District shall be covered. Such station may be required for ULBs provided in 2(i)a town in future.</p> <p>Use of Sensor-based / Earth Observation-based monitoring may also be explored</p>	District Authorities/ West Bengal Pollution Control Board (WBPCB)	3 Years
4.	District level Action Plan for Air Pollution	<p>To control Air Pollution, the district has already started promoting Public Transport systems, E-mobility, LPG based cooking, carpeting of open areas.</p> <p>Action is to be taken for controlling stubble burning and forest fire, control of pollution from stone crusher and query</p>	District Administration Authorities/Regional Transport Office (RTO)/ District Forest Office (DFO), WBPCB, ULBs, Police Authorities	1 Year
5.	Hotspots of Air Pollution in District	Hotspot with respect to air pollution (such as stubble burning, illegal waste burning, unauthorized operations, cluster activities, forest fires, air polluting industrial process etc.) should be identified.	District Authority/ Urban Local bodies (ULBs)/ Police Authority/ Agriculture Department/ West Bengal Pollution Control Board (WBPCB)	6 Months
6.	Awareness on Air Quality	Dissemination of information on local air quality in towns located in District is already done.	District Authority/General Managers District Industrial Centers (GMDIC)	N/A

Table 1: District Wise Emission data 2015-2019

DISTRICTS	Industry (kg/hr.)	Transport (Tonne/year)	Road & Construction (Tonne/day)
Birbhum	3599.61	126760	4.73

Source: Report on “Estimation of baseline emission load for state of West Bengal in terms of major air pollutant and CO₂” by Environment Department.

Note: The estimate has been done as base line emission potential based upon the activities of the district during the period 2015-2019 assuming base year as 2017. This is subject to change depending on the activities in the district.

Table 2: Locations of the Ambient Air Quality Monitoring Stations and their parameters monitored

Station name and location	Parameters monitored
Manual monitoring stations in Birbhum	
Suri Municipality Building	PM10, NO ₂ , SO ₂
Rampurhat Municipality Building	PM10, NO ₂ , SO ₂
Bolpur Municipality Building	PM10, NO ₂ , SO ₂

Source: As provided by the West Bengal Pollution Control Board.

4.0 Water Quality Management

Water Quality Monitoring

There are numerous rivers, stream of varying size which usually originate in the hill on the North Western and flow southwards. A few natural pools and marshes wetland are also can be seen. There are 6 major and 14 minor river flows though the Birbhum District.

Water testing is being done by 10 nos of Laboratories at Birbhum.

a. Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	Total 6 major and 14 minor river
Length of Coastline (if any)	nil
Nalas/Drains/Creeks meeting Rivers	90678
Lakes/ Ponds	2119492.45 [Area in Hectares]
Total Quantity of sewage from town and cities in District	Assessment has to be done
Quantity of industrial wastewater	Assessment has to be done
Percentage of untreated sewage	[%]
Details of bore wells and number of permissions given for extraction of ground water	Nil
Ground water polluted areas if any	Nil
Polluted river stretches if any	Mayurakshi river, total stretch of Mayurakshi river 246.47 km

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

S. No.	Action points	Gaps and Action Plan	Responsible Agency	Timeline for completion of action plan
1.	Invento ry of water bodies	Inventory of all major rivers minor river are available but water bodies such as canals/ natural drains / creeks / estuaries / groundwater /ponds / lakes / etc are being maintained.	Agri Irrigation For preparing inventory list of Pond and lakes of Birbhum District EO Municipalies To prepare list of drain /natural drain in Municipalities	6month
2.	Quality of water bodies in the district	District level monitoring cell for periodic monitoring of water bodies for specific parameters in association With SPCBs is functional. Disseminate information pertaining to water quality in the form of hoardings on river banks, official websites, etc already done.	NA	NA
3.	Hotspot s of water contami nation	Main water contamination hotspots in Birbhum District is Mayurakshi River Other hotspots need to be identified	Irrigation	6month
4.	Protecti on of river /lake water front	There is no river side open defecation as such. For idol immersion administration have identified few locations in the river stretches or ponds. Besides this WBPCB conducts water quality monitoring before and 15 days after idol immersion.	WBPCB	NA
5.	Inventory of sources of water pollution	Partly Done	Irrigation	NA

6.	Oil	Not Required	NA	NA
7.	Protection of flood plains	Preparation of Plan for flood plain and prevention of encroachment will be done.	Irrigation	6 Month
8.	Rejuvenation	Groundwater in Birbhum district is available. Regular monitoring of availability of Ground water will be done if such situation arises rain water harvesting plan will be prepared rejuvenate ground water in selected areas. Action plan should be prepared for Rain water harvesting	AgriIrrigation	NA
9.	Complaints	Complaints redressal system in District is already functioning.	NA	NA

Domestic Sewage

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

Details of Data Requirement	PresentStatus
No of Class-II towns and above	6
No of Class-I towns and above	NIL
No of Towns STPs installed	One (being Constructed)
No of Towns needing STPs	6
No of ULBs having partial underground sewerage network	0
No of towns not having sewerage network	6
Total Quantity of Sewage generated in District from Class-II cities and above	Assessment not done
Quantity of treated sewage flowing into Rivers (directly or indirectly)	Assessment needs to be done
Quantity of untreated or partially treated sewage (directly or indirectly)	Assessment not done
Quantity of sewage flowing into lakes	none
Total available Treatment Capacity	Not Available

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

S. No.	Actionpoints	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Sewage Treatment (STPs)	One STP is being constructed at Tarapith, Birbhum	All 06 municipalities	2year
2.	Under ground sewerage network	No town at Birbhum district has the underground sewerage network. Plan to Develop Underground sewerage network and has to be prepared immediately.	All 06 municipalities For BIRBHUM	2year

5.0 Industrial Waste Water Management

a. Current Status related to Industrial Waste water Management

Number of Red, Orange, Green and White industries in the district	Red (28) Orange (346) Green (532)
No of Industries discharging waste water	72 (all rice mills)
Total Quantity of industrial waste water generated	Assessment needs to be done
Quantity of treated industrial wastewater discharged into Nalas /Rivers	Assessment needs to be done
Common Effluent Treatment Facilities	72
No of Industries meeting Standards	72Nos
No of Industries not meeting discharge Standards	Nil

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

S.No.	Actionpoints	Gaps and Action Plan	Responsibl eagency	Time line for completion of action plan
1.	Compliance to discharge norms by Industries	Inspection needs to be increased by WBPCB which report has to be shared with district authority.	WBPCB	6month
2.	Complaint redressal system	Yes, and it is functioning	Public Grievance cell	NA

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	River Bed Mining of Sand/Stone/RBM/Boulder
No of licensed Mining operations in the district	145 nos
% Area covered under mining in the district	0.09 %
Area of Sand Mining	4.01 Sq Km
Area of Stone Mining	0.29 Sq Km

b. Identification of gaps and action plan:

S. No.	Actionpoints	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Monitoring of Mining activity	No Gap	District Magistrate, Superintendent of Police, D.L&L.R.O & R.T.O	Already constituted
2.	Inventory of illegal mining if any mining	No Gap	NA	Already constituted

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	Not available

b. Identification of gaps and action plan:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Time line for completion of action plan
1.	Availability of Sound/Noise Level Meters.	No Gap	District Police	NA
2.	Ambient Noise	Though we have no such issue regarding ambient sound levels comply with notified standards to ensure that ambient sound levels comply with notified standards for residential, sensitive zones. Apart from portable analyzers, fixed ambient noise level monitoring stations may be installed in Ramputhar, Suri, Bolpur town.	District Police Along with All Municipality & Blocks	1year
3.	Signboards in Noise zones	Signboards at sensitive zones in towns / cities are already done in some location. However District administration will ensure that adequate number of signboards installed at sensitive zones in towns /cities.	District Police	1year
4.	Complaint redressing system	Already Functional.	NA	NA

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