

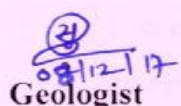


**DISTRICT SURVEY REPORT
FOR SAND MINING / SAND GHATS
DISTRICT DUMKA AS PER
SUSTAINABLE MINING GUIDE LINES.**



NOVEMBER_2017

**MEMBERS OF THE DISTRICT SURVEY REPORT
COMMITTEE FOR SAND MINING/SAND GHATS
DISTRICT DUMKA AS PER SUSTAINABLE
MINING GUIDE LINES**



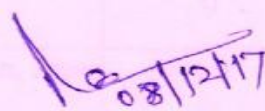
08/12/17

**Geologist
District Geological Office
Dumka**



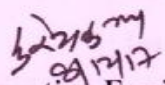
08/12/17

**Assistant Director Geology
District Geological Office
Dumka**



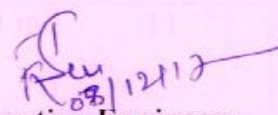
08/12/17

**District Mining Officer,
Dumka**



08/12/17

**Executive Engineer
Irrigation Department
Dumka**



08/12/17

**Executive Engineer
Minor Irrigation Department
Dumka**



08/12/17

**Divisional Forest Officer,
Dumka.**



08/12/17

**Deputy Commissioner
Dumka.**

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PREFACE

In Compliance to the letter No. 1874/CS dated 01.08.2017, issued by the Chief Secretary to Government, Government of Jharkhand and notification No. Kha.Ni.(Vivid)—67/2017, 1905 dated 16.08.2017 issued by the secretary of Government, Department of Industries, Mines and Geology Government of Jharkhand. The preparation of District survey report of River bed mining and other minor minerals is in accordance appendix 10 of the notification. It is also mentioned here that the procedure of preparation of District Survey Report is as per notification guidelines. Every efforts have been made to cover sand mining locations, areas & overview of Mining activity in the district with all its relevant features pertaining to geology & mineral wealth in replenishable and non-replenishable areas of rivers, stream and other sand sources. This report will be a model and guiding document which is a compendium of available mineral resources, geographical set up, environmental and ecological set up of the District and is based on data of various departments, published reports, and websites. The data may vary due to flood, heavy rains and other natural calamities.

SURVEY REPORT OF DISTRICT DUMKA

In reference to the letter No. 1874/CS dated 01.08.2017, issued by the Chief Secretary to Government, Government of Jharkhand and notification No. Kha.Ni.(Vivid)—67/2017, 1905 dated 16.08.2017 issued by the secretary of Government, Department of Industries, Mines and Geology Government of Jharkhand a Survey shall be carried out by the District Environment Impact Assessment Authority (DEIAA) with assistance of irrigation department (Minor), Forest department, Mining department and Geology department in the district for preparation of District Survey Report as per the sustainable Sand mining guidelines to ensure identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area. Every efforts have been made to cover sand mining locations, areas & overview of Mining activity in the district with all it's relevant features pertaining to geology & mineral wealth in replenish-able and non-replenish-able areas of rivers, stream and other sand sources. The mineral potential is calculated based on field investigation & geology of the catchment area of the river or streams. Also as per the site conditions and locations, depth of minable mineral is defined. The area for removal of the mineral in a river or stream is decided depending on geomorphology & other factors, it can be 50% to 60% of the area of a particular river or stream. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

Introduction:

Dumka District, an administrative district of Jharkhand has its headquarter at Dumka. It was separated from Santhal Pargana on 10.06.1983 when Deoghar, Sahibganj and Godda were upgraded as new Districts. After formation of new Jharkhand State, Dumka District was further divided and Jamtara Sub-Division was upgraded as a separate District. The district lies between 23°45' to 24°38' (North) Latitude and 86°20' to 87°07' 5" (East) Longitude. The district is situated in the Northern Plain of India and eastern plateau and hill region. The Dumka District is surrounded by Sahibganj, Godda and Banka of Bihar in the north, by Pakur (Jharkhand) and Birbhum (West Bengal) in the east, by Jamtara (Jharkhand) and Burdwan (West Bengal) in the south and by Deoghar in the west. The total geographical area of the district is about.



3716.2 Sq. km. Dumka District have many popular temples like Basukinath, Sirshanath, Maruti Mandir and Dharamsthana. Baba Basukinath & Baba Sumeshwarnath is famous temple of Lord Shiva. In the month of Shravan lacs & lacs of people from different parts of country as well as people of several countries come to Basukinath to worship Lord Shiva. Also on the eve of Mahashivratri the people of different parts of the district come to Sumeshwarnath to worship Lord Shiva. Naag Mandir also a famous temple of Lord Shiva is situated at the top of a hill of Shiv Pahar at Dumka. Besides of above Masanjore Dam, Tatloi, Water Park, Shrishti Hill Park and Malooti are the famous tourist place in Dumka district having beautiful, attractive & greenish natural atmosphere. Malooti is a historical and religious place which is situated in Sikaripara Block on Dumka -Rampur hat interstate highway at a distance of 55 K.M. from district headquarter Dumka. In 1860 Malooti was made tax-free capital by the then king Basant Rai alias Bsant. Malooti is also associated with the archaeological and religious important place for natural beauty. Dumka is the sub-capital of Jharkhand state.

1. Overview of Mining Activity in the District:

Dumka District is having a large number of stone mines and crushers. Approximately 87 mines & 263 crushers are in operation with the support of 25 Thousand labour force in present time. The stone industry is paying 1 crore rupees per year as royalty to the Govt. in addition to commercial taxes. The quality of Dumka black stone chips is excellent for constructional purpose. Though, Dumka is not rich in minerals. However, a number of economic minerals occur here and there and are being worked out. Among the minerals found are coal, fireclay, and silica sand.

2. List of Sand Mining Leases in the District with location, area and period of validity

Sl.No	Location (Panchayat)	Area in Hector	Period of validity
1	Banderjori	22.720	01.06.16 to 3 years
2	Sarwa	20.502	04.09.15 to 3 years
3	Haripur	13.800	07.09.15 to 3 years
4	Sarsabad	18.089	28.09.15 to 3 years
5	Bara	15.087	23.12.15 to 3 years
6	Dalahi	9.025	04.09.15 to 3 years
7	Ranga	11.190	28.09.15 to 3 years
8	Govindpur	196.480	EC not issued, mining closed
9	Sukjora	11.291	EC not issued, mining closed
10	Kusmaha	1.093	07.09.15 to 3 years
11	Haripur	10.562	04.09.15 to 3 years
12	Khadukadma	7.074	07.09.15 to 3 years
13	Bankijor	3.217	07.09.15 to 3 years
14	Kalajhar	4.128	07.09.15 to 3 years
15	Kuschira	29.461	EC not issued, mining closed

3. Details of Royalty or revenue receipt in last three years

Sl.No	Year	Royalty (in lakhs)
1	2015-16	348.56
2	2016-17	48.09
3	2017-18 (Up to Nov_17)	0.00

4. Details of Production of Sand or Bajari or Minor Mineral in last three years.

Sl.No	Year	Sand (in Million Ton)
1	2015-16	527167.64
2	2016-17	915672.64
3	2017-18	270787.48

5. PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVERS OF THE DISTRICT:-

The deposition in a river bed is more pronounced during rainy season although the quantum of deposition varies from stream to stream depending upon numbers of factors such as catchment, lithology, discharge, river profile and geomorphology of the river course. where annual deposition is one meters, but it is noticed that during flood season whole of the pit so excavated is completely filled up and as such the excavated area is replenished with new harvest of minerals.

In order to calculate the mineral deposits in the stream beds, the mineral constituents have been categorized as clay, silt, sand, bajri and boulder. However during present calculation, the waste material i,e silt which vary from 10 to 20% in different streams has also been included in the total production. Further the Survey of India Topo-Sheets are used as base map to know the extent of river course. The mineral reserves have been calculated only upto 1.00 meter depth although there are some portions in the river beds such as channel bars, point bars and central islands where the annual deposition is raising the level of river bed thus causing shifting of the rivers towards banks resulting in to cutting of banks and at such locations, removal of this material upto the bed level is essential to control the river flow in its central part to check the bank cutting. While calculating the mineral potentials, the mineral deposits lying in the sub-tributaries of that particular stream/river has not been taken into consideration. Since these mineral deposits are adding annually.

6. General Profile of the District

Dumka district ranks eleventh in terms of total population in the state and nineteenth in regard to decadal population growth rate (2001-11) among the twenty four districts. With a sex ratio of 977, it ranks seventh in the state. The district comprises of ten blocks, namely, Saraiyahat, Jarmundi, Ramgarh, Gopikandar, Kathikund, Shikaripara, Ranishwar, Dumka, Jama and Masalia. As per Census 2011, the district has 2688 villages and 5 towns distributed in four assembly constituencies. Census 2011 figures indicated that the percentage share of scheduled caste population to total population was 0.62 percent, while that of scheduled tribes was 43.22 percent. Based on the number of total rural households in Census 2011 and BPL Revision Survey of 2010-11, the percentage of BPL households in rural areas is 56.86 percent.

BLOCKS AT A GLANCE							
INDICATOR SUB DISTRICT	POPULATION	MALE	FEMALE	CHILD POPULATION	SEX RATIO	CHILD SEX RATIO	LITERACY RATE (7 & ABOVE) (%)
Saraiyahat	156291	80535	75756	27416	941	943	58.65
Jarmundi	185286	94202	91084	32674	967	952	59.04
Ramgarh	159911	79944	79967	26694	1000	991	55.45
Gopikandar	42063	20999	21064	7686	1003	981	50.12
Kathikund	71458	35598	35860	12841	1007	983	54.08
Shikaripara	131464	65723	65741	22931	1000	968	57.10
Ranishwar	101667	51115	50552	15478	989	973	60.06
Dumka	210785	107949	102836	30568	953	957	74.73
Jama	137963	69621	68342	23015	982	981	61.88
Masalia	124554	62828	61726	20146	982	956	61.66
Source : Census of India, 2011							

7. Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.

Sl. No.	Name of District	Geographical Area	Forest Area	Land Put to Non-Agricultural Use	Barren & Utilised land	Permanent Posture & Other Grazing Land	Cultivable Waste Land	Land Under Miscellaneous Trees
1	2	3	4	5	6	7	8	9
1	DUMKA	379.03	42.71	41.99	24.00	18.59	22.72	8.17

8. Physiography of the District

Topographically the district is an upland tract with a hilly backbone running from north to south. A narrow but long strip of alluvial soil which is between the Ganga and Rajmahal hills, flank the north east side. There are several hill ranges like Rajmahal hill, Ramgarh hill, Lagwa hills with several small hillocks. The average elevation of the hill ranges between 150 to 300 meters.

The landscape of the district is to a large extent comprises of long undulation ridges forming rugged and coarsely dissected topography between which runs the drainage channels. The trough in between the undulations is full of rich alluvial soil. Geomorphologic ally the district can broadly be divided into three well defined, physically identifiable and genetically significant units:

- (i) the hilly area
- (ii) the rolling country or (Valleys) and
- (iii) the pediplained flat country.

9. Rainfall Data

The district receives a larger share of the annual rainfall mainly by the south – west monsoon during inter-monsoon period which originates in the Bay of Bengal. The district receives 60% of the annual rainfall during monsoon period. July is the month which receives the highest rainfall. The average annual rainfall for the district is 1391.40 mm. The normal annual rainfall of the district is 1422.5 mm with normal monsoon rain fall of 1125.6mm. During the year 2008 the annual rainfall was 1336 mm and monsoon rainfall was 1223.2 mm which was 91.3 % of the annual rainfall.

Monthly Rainfall Details Year 2008 to December 2016 of Dumka District

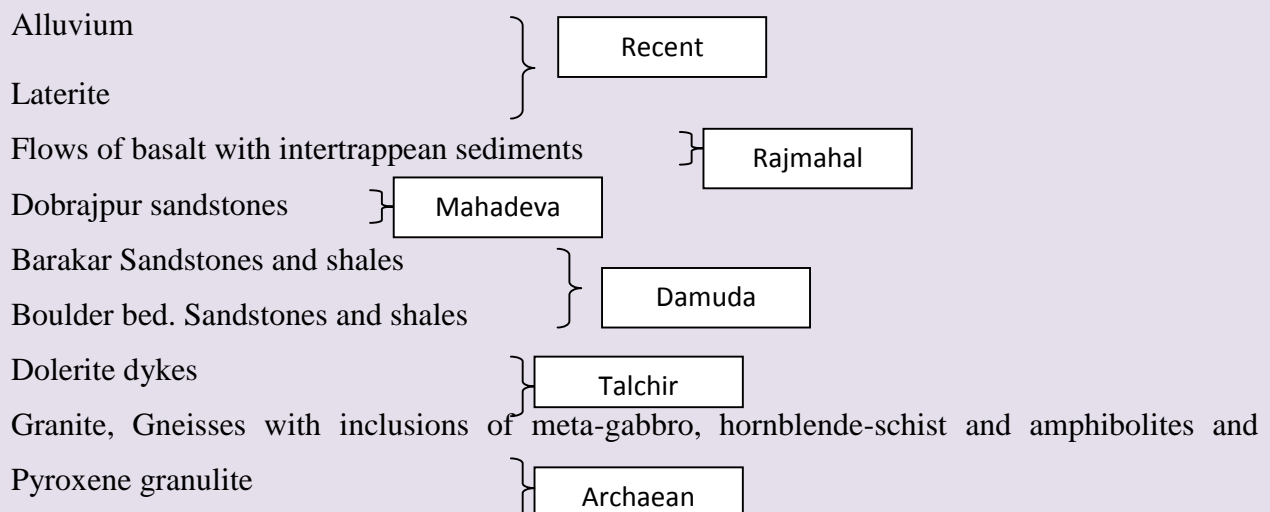
s. n.	Year	Jan.	Feb.	March	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Years of Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Average Rainfall	16.8	19.2	16.2	24.7	72.8	218.1	335.2	329.5	252.7	117.2	14.7	2.1	1419.2	
2	Actual Rainfall	2008	23.1	0.0	4.5	18.5	46.1	277.0	418.1	321.8	206.5	22.1	0.00	0.0	1337.7
3		2009	0.3	7.5	0.9	5.3	110.9	51.2	204.7	239.0	277.3	90.3	0.0	0.0	987.4
4		2010	0.0	0.0	0.0	0.0	36.0	133.0	223.7	200.3	197.0	73.4	2.1	0.5	866.0
5		2011	4.1	3.5	6.6	18.0	46.3	357.2	163.0	322.6	197.8	14.8	0.0	0.0	1133.9
6		2012	2.3	1.4	1.8	2.5	9.3	95.9	292.8	157.4	231.6	61.0	66.7	0.0	922.7
7		2013	0.0	15.2	2.5	23.6	123.8	166.1	137.9	263.3	138.4	203.2	0.0	0.0	1074.0
8		2014	0.6	19.6	8.5	7.6	92.8	138.5	296.3	173.0	153.3	21.7	0.0	0.0	911.9
9		2015	3.6	1.0	10.4	23.6	28.9	196.9	480.5	332.9	103.5	0.0	0.0	0.0	1181.3
10		2016	10.3	0.0	0.0	0.0	59.1	226.5	286.8	323.7	203.3	18.8	0.0	0.0	1128.5

10. Geology and Mineral wealth

Rajmahal Trap is the major rock type in the district. The other geological formations of the district are alluvium, Laterite and Gondwana. In the eastern part of the district, recent alluvium occurs in patches, which is mainly composed of sand and sub ordinate clay. Laterites are mainly of in situ origin and have been formed by sub-aerial erosion of underlying basalts under favorable climatic conditions. Laterites provide good porous and permeable nature. The most significant Barakar coal measures of Gondwana formation occurs in western part of the district. The different units of the lava flows are the main water bearing horizons in basaltic formation. The massive basaltic unit is hard and compact in nature with negligible primary porosity and permeability. But the process of weathering and structural deformations, development of secondary porosity such as joints and fractures.

The Lower Gondwana rocks inclusive of coal bearing Barakar formation in Rajmahal Groups of coal fields generally form subdued topography along main river valleys like Bansloi, Gumra, and Brahmani etc. Its southern margin with the Brahmani basin is concealed by younger units comprising Dubrajpur Formation and Rajmahal formation. The western boundary is Precambrian basement on the west of juxtaposed against the Lower Gondwanas. The central part is covered by younger formations like Dubrajpur and Rajmahal formation standing out as plateau type hills.

Geological Succession of Dumka



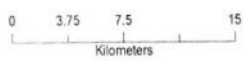
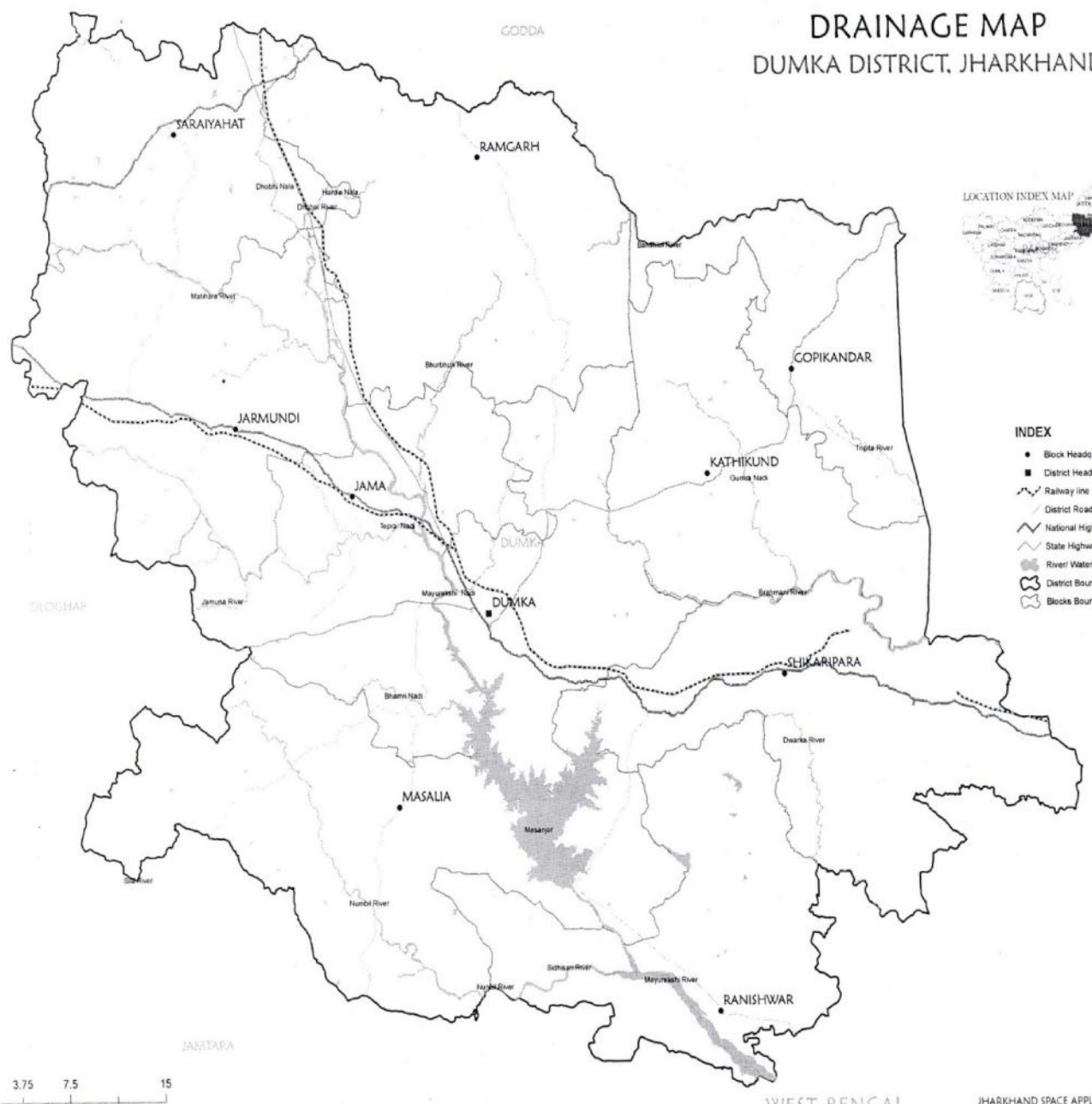
11. Drainage system with description of main rivers

Sl.No	Name of the River	Area drained (Sq.Km)	% area drained in the District
1	Tepra river	1371.322	33.28
2	Tripita river	122.257	2.96
3	Nunbil river	236.732	5.74
4	Sidhidari river	891.797	21.64
5	Motihari river	343.931	8.34
6	Mayurakshi river	1860.00	45.14
7	Hardia river	129.338	3.13
8	Jamuna river	191.785	4.65
9	Dwarka river	173.56	4.21
10	Gumra river	109.75	2.55
11	Dhobai river	193.49	4.69
12	Brahmani river	603.248	14.64
13	Bhurbhuri river	217.11	5.26
14	Bhamri river	129.807	3.15
15	Banshloi river	246.524	5.98

DRAINAGE MAP DUMKA DISTRICT, JHARKHAND



- INDEX**
- Block Headquarters
 - District Headquarters
 - Railway line
 - District Road
 - National Highway
 - State Highway
 - River/ Waterbody
 - District Boundary
 - Blocks Boundary



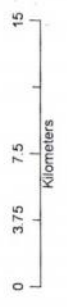
JHARKHAND SPACE APPLICATIONS CENTER
Dept. of Information Technology & e-Governance
Govt. of Jharkhand

DRAINAGE MAP (DRAINAGE ORDER)

DUMKA DISTRICT, JHARKHAND



- INDEX**
- Block Headquarters
 - District Headquarters
- Stream/ River Order**
- 1st
 - 2nd
 - 3rd
 - 4th
 - 5th
 - 6th
 - 7th
 - 8th
- District Road
 - National Highway
 - State Highway
 - River/ Waterbody
 - District Boundary
 - Blocks Boundary



12. Salient features of the important rivers and streams

Sl.No	Name of River/stream	Total length in District (Km)	Place of origin	Altitude at origin (in meter)
1	Tepra river	42.77	Near Pahridih	300.84
2	Tripita river	19.25	Near Bakijor	156.97
3	Nunbil river	53.99	Near Barmasia	255.12
4	Sidhidari river	17.88	Near Rangatand	227.99
5	Motihari river	37.62	Near Patharchapti	262.13
6	Mayurakshi river	72.00	Near Trikut Hills	262.13
7	Hardia river	11.92	Near Patgora	222.81
8	Jamuna river	8.66	Near Bankanatichak	223.42
9	Dwarka river	15.99	Near Saraidaha	155.75
10	Gumra river	25.71	Near Majhdiha	224.64
11	Dhobai river	16.87	Near Kamat Pathara	200.26
12	Brahmani river	40.43	Near Dhakodih	231.65
13	Bhurbhuri river	28.70	Near Kaniyajamal	224.95
14	Bhamri river	5.28	Near Pardangal	170.39
15	Banshloi river	3.38	Near Bans Hills (Jari)	214.28

13. The Mayurakshi :

The combined streams of Matihari, Dhobbi, Pussaro, all originating from the uplands of Santal Parganas in Jharkhand form the origin of the river Mayurakshi or Mor. Before entering Birbhum district in West Bengal, it is fed by the combined streams of Siddheswari and Noonbeel. After entering West Bengal, it is again joined by the river Khuskarni from the right and the rivulet Ghoshbera from the left, it leaves the boundary of the district and meets the river Dwarka at Talgram in Murshidabad district, the combined stream outfalls into river Bhagirathi.. Many “bils” and tanks are found in the Murshidabad district. In the north, an area of about 389 sq. kms. form a strip of low-lying country, which becomes a vast lake in the rains, village sites looking like islands. In the south, there is a plain of 129 sq. kms. at the confluence of the Mor and the Dwaraka, known as “hijal”. The Mayurakshi enters Birbhum from the Santhal Parganas (now in Jharkhand) and flows through the centre of the district from west to east, passing two miles north of Suri and forming the southern boundary of Rampurhat subdivision. It leaves the district and joins the Dwaraka, which itself is a tributary of the Bhagirathi. All the distributaries of the Mayurakshi take off from the left bank. In the eastern portion of its course it gives off distributaries known as Kana and Manikarnika Nalas. The Hingla enters Birbhum district from the Santhal Parganas and gradually approaches the river Ajay. The river unites with the river Ajay at Chapla in Dubrajpur then. The Bakreswar rises at the hot springs of the same name west of Suri, and after following a zig zag course eastwards, and receiving one by one the waters of almost all the rivulets of South Birbhum, joins the Mayurakshi beyond the eastern boundary of the district. The Brahmani a river enters the district at Narayanpur bisects the Rampurhat subdivision and passing under the railway two miles south of Nalhati falls into the Dwaraka in the Murshidabad district. The tributaries of the Mayurakshi are Bakreswar, Kopai, Dwarka and Brahmani.

14. A). The Brahmani :

The Brahmani rises in the west of the Dudhua hills in the Brahmani north of the Dumka subdivision and flowing through Pharasemul and Sankara form the southern boundary of the Dumka Damini. It passes by the Jhilmili and Mosnia bungalows in the Damini-ikoh, and leaving the Dumka subdivision at Darin-Mauleswar enters the Birbhum District and joins the Bhagirathi after crossing the East Indian Railway at Nalhati station. Its main tributaries are the Gumro and Ero, which drain the watershed between the Ramgarh and the Damini hills.

B). The Bansloi:

The Bansloi rises at a hill called Bans Pahar in the Godda Subdivision, and flowing in a general easterly direction, forms the northern boundary of the Dumka Subdivision, separating it from the Godda and Pakur subdivisions. It emerges into the Dumka Damini through the Pachwara pass and then meanders along its northern boundary past the Silingi and Kuskira bungalows. It leaves the district near Maheshpur and flowing past Murarai station on the East Indian Railway debouches into the Bhagirathi.

C). The Dwarka:

The Dwarka or Babla is a narrow non-perennial stream, originates in the Ramgarh hills of the Chotonagpur plateau, the river describes the district boundary of Birbhum flowing south-east. In its southeasterly course the Dwarka receives numerous small tributaries of which mention might be made of Bamini Nala and Kuila Nala. In its northeasterly course the Dwarka receives many tributaries on its right bank. After crossing a length of about 70 km in Birbhum district and receiving water of streams like Gambhira, Gharmora etc it turns east, then the south and finally meets the combined flow of Mayurakshi and Kuiya at Hijol beel in Murshidabad district and outfalls into Bhagirathi. The Gharmora and the Chila nalas combine and the united stream falls into the Dwarka. In its easterly course also the Dwarka receives a few tributaries from the south. The Dwarka unites with the Brahmani and goes into Murshidabad district.

15. List of Settled Sand Ghats

Sl. No	River or stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in Kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tone) (60% of total mineral potential)
1	Tepra river	Kusmaha	3	120	360000	486000
2	Tripita river	-	-	-	-	-
3	Nunbil river	Dalahi	14	80	1120000	1512000
4	Sidhidari river	-	-	-	-	-
5	Motihari river	-	-	-	-	-
6	Mayurakshi river	Raneswar to Dudhani	25	180	4500000	6075000
7	Hardia river	-	-	-	-	-
8	Jamuna river	-	-	-	-	-
9	Dwarka river	-	-	-	-	-
10	Gumra river	-	-	-	-	-
11	Dhobai river	-	-	-	-	-
12	Brahmani river	Angachi	12	110	1320000	1782000
13	Bhurbhuri river	-	-	-	-	-
14	Bhamri river	-	-	-	-	-
15	Banshloi river	Kuschira	2	120	240000	324000
Total					7540000	10179000

LIST OF SETTLED SAND GHAT IN DUMKA DISTRICT

Sl. No	Name of highest auction name	Block	Name of detail of balu ghat in area	Area (in hector)	Period
1	M/S Saran Alkohal Pvt Ltd Name of sand holder- sri Youendra Tiwary, S/O - Sri RAmeshwar TIwary vill-gilanpara,p,o+p.s+District- Dumka Phon N0-9431156284	Dumka	Auction And sand ghat in Mauraksi river And Banderjori Panchyat, Mouza-Harnakundi Thana No-33, Katha no-57,plot no-820, Mouza—Mortanga, Thana no-34, Katha no-63,Plot no-1069,Mouza-Badiya,Thana no- 01, Katha No-44,Plot no-749,540,570	22.720	01.06.16 To 3 Years

2	Ms Saran Alcohol Pvt Ltd Name of sand holder-sri Yougendra Tiwary, S/O-Sri Rameshwar Tiwary Vill- Gilanpara, P,o+p.s+District- Dumka Phon NO-9431156284	Dumka	Auction And sand ghat in Mauraksi river And Sarwa Panchyat, Mouza-Sarwa, Thana No-25, katha no-25,plot no-1,88, Mouza—Bijaypur, Thana no-27, Katha no-47,Plot no-152/1348,1152Mouza-Karamtola,Thana no-29,Katha No-11,Plot no-91,Mouza-Hizla, Thana no-32, Katha NO-25,Plot no-1/713	20.502	04.09.15 to 3 Years
3	Sri paramveer Mishra S/O-Late-Mohan Chandra Mishra Vill+P.O+P.S-District-Dumka Pin no-814101,M.NO-8969888030	Dumka	Auction And sand ghat in Mauraksi river And Haripur Panchyat , mouza-Babupur, Thana No-04, katha no-41,plot no-522/p, Mouza—Haripur, Thana no-23, Katha no-40,Plot no-72/p, Mouza-Siyardangal,Thana no-24,Katha No-24,Plot no-02/p,Mouza-Hizla,	13.8	07.09.15 to 3 years
4	Sri Parmeshwar Kapri S/O- Falanana Kapari Village—Sarsabad, P.o-Maharo, P.S-Jama, District-Dumka	Dumka	Auction And sand ghat in Mauraksi river And Sarsabad Panchyat, mouza-Mangurdih, Thana No-43, katha no-37,plot no-1/p,246/p, Mouza—Lakrapahari, Thana no-27, Katha no-68,Plot no-147/pMouza-Murmala,Thana no-44,Katha No-26,Plot no-274/p, Katha NO-105,Plot no-2135/p	18.089	07.09.15 to 3 Years
5	Sri Arjun Prasad Gupta S/O-Late Ganpat sha Village-Gadi Dewli,P.O-Gowari, P.S-Jama,District-Dumka M.no-9470125144	Jama	Auction sand ghat in Bara Panchyat , mouza-Bara,Thana No-14, katha no-200,plot no-1318,3824 Mouza—Maghi Ghotwali, Thana no-15 Katha no-17,Plot no-870,Mouza-Meghi santali,Thana no-16,Katha No-26,Plot no-1,431,759Mouza-Saro pahari, Thana no-17, Katha NO-33,Plot no-1,mouza-Fulopani,thana no-18,Khata no-42,Plot no-1,437,1222,Mouza-Dudhani ,Thana no-19,Katha , Mouza-Jamogari,Thana no-20,Katha no-43	15.087	23.12.15 to 3 Years
6	M/S Mehar Developers , Part-Sri Anil Kumar Singh S/o-Sri Saligram Singh Village- Kumarpara,P.O+P.S+District- Dumka,pin no-814101, M.no-08873953285	Masaliya	Auction sand ghat in Nunbil riverAnd Dalahi Panchyat , mouza-Kalipatahr,Thana No-11, katha no-31,plot no-852,97,98,Mouza-Chuadaha,Thana no-15,Katha no-47,Plot no-1188 Mouza—Bariyabad, Thana no-13 Katha no-27,Plot no-01,Mouza-Daldali ,Thana no-24,Katha No-53,Plot no-121,699,Mouza-Banbad, Thana no-08, Katha NO-20,Plot no-723,401,01,	9.025	04.09.15 to 3 Years
7	Bindwasani Commercial Service PVT LTD Sand holder Name- Sri tej pratav singh,S/O-Sri Shiv Pujan Singh, vill - Dhirendrapuram ,Near of pond Ranibandh,District- Dhanbad, pin, no-826004	Masaliya	Auction in sand Ghat Nunbil And Ranga Panchyat,Mouza-Goyasol,Thana no-09,Katha no-62,Plot no-1226,1373	11.190	28.09.15 to 3 Years
8	Bindwasani Commercial Service PVT LTD Sand holder Name- Sri tej pratav singh,S/O-Sri Shiv Pujan Singh,vill-Dhirendrapuram ,Near of pond Ranibandh,District- Dhanbad,pin,no-826004	Raneshwar	Auction sand ghat in Maurasiriver And Gobindpur Panchyat , mouza - Benigram, Thana No-25, plot no-38,Mouza-Husain ganj, Thana no-26,Katha no-19,Plot no-137 Mouza—Checkvirla, Thana no-27 Katha no-06,Plot no-01,Mouza-Harjora ,Thana no-28,Katha No-47,Plot no-830,Mouza-Dumra, Thana no-326, Katha no-67, Plot no-01,Mouza -- Mohalpur, Thana no-38, Katha no-67, Plot no-1194,44,Mouza-Chapakuli, Thana no-39,Katha no-77,plot no-677, Mouza-Gobindpur,Thana no-40/34, Katha no-191,plot no-1655, 1656, Mouza - Aamjora, Thana no-43/12,Katha no-231, plot no - 1536, 412, 525, Mouza-Diguli, Thana no-44 Katha no-114, plot no-2	196.480	Ec Pending
9	Shri Rajan Prasad S/o-Sakaldev Prasad Add-Shastrinagar p.o.+p.o.-Bank More Dist-Dhanbad	Raneshwar	All Sand Ghat of Mayurakshi River and Sukhjora Panchayat,Mauza-Chamakdah,Police Station No.-17/21,Khata No.-.....plot no.-2843,Mauza-aktalla Police station 18 Khata No.-210,Plot No.-998,Mauza-Narangni,Ploice station 21/27,Khata No.-218,plot No.-2875,2874,Mauza-rakhari,Police Station 22,khata No.-24,Plot No.-410	11.291	The Agreement of sand ghat is being delayed due to lack of environment clearance

10	Ms Saran Alcohol Pvt Ltd. Dir.-Shri Yogendra Tiwari, S/O-Shri Rameshwar Tiwari, Vill-Gilanpara,P.o-Dumka, P.s.-dumka Town,Dist-dumka,Pin no.-814101. Mob.-9431156284	Jarmundi	All sand ghat of Tepra Nadi and Kushmaha panchayat,Mauza-sindhni,Police Station No.-23,Khata No.- 34,Plot No.-1252,Mauza-jogdhara Police Station No.- 03,Khata No.-41,Plot No.-290,01,Mauza-kushmaha Police station No.-04, Khata No.-23,Plot No.-610,607	1.093	07.09.15 to 3 Years.
11	Ms Swastik Traders Part.-Shri Sudip Kumar Dey S/o-Sunil kumar Dey Vill-Dakshin Nanna Jatiya P.o+P.s.-Bijpur, Dist-Uttar 24 pargana,Pin-743136 Mob.-9308980402	Jarmundi	All Sand ghat of Tepra River and Haripur Panchayat,Mauza- Latapaker,Police Station No.-41,Khata No.-27,Plot No.- 407,526,527 Mauza-Ambadanal,Police Station No.- 42,Khata No.-23,Plot No.-199,Mauza-Labda,Police Station No.-44,Khata No.-30,Plot No.-209,284,Mauza-Mohanpur, Police Station No.-45,Khata No.-09,Plot No.-01,Mauza- Haripur, Police Station No.-42,Khata No.-43,Plot No.- 216,217 Mauza-harladanal,Police Station No.-48,khata No.- 14 Plot No.-95,99,106 Mauza-Nunamati Police Station No.- 49,Khata No-30,Plot No.-336	10.562	04.09.15 From 3 Years
12	Ms Saran Alcohol Pvt Ltd Name of sand holder- sri Yogendra Tiwari, S/O-Sri Rameshwar Tiwari vill- Gilanpara, p.o+p.s+District-Dumka Phon NO-9431156284	shikaripara	Auction in Sand Ghat Bramhani River & Khadukadma Panchayat,Mouza-Khadukadma,Thana no-23,Khata no-80,Plot no-1,mouza-Bhuktandih,Thana no-01,Khata No-41,Plot no-109,110,1953,1954,1955,1956,1957& 685	7.074	07.09.15 to 3 Years
13	M/S Mehar Developers , Part-Sri Anil Kumar Singh S/o-Sri Saligram Singh Village- Kumarpara, P.O+ P.S+ District- Dumka, pin no-814101, M.no-08873953285	Shikaripara	Auction in Sand Ghat Sarsajol River and Bakijor Panchayat , Mouza-Sidhachatar,Thana no-10,Khata no-28,Plot no- 1195,1250,Mouza-Lakhansara,Thana no-11,Khata no---,Plot no-322,Mouza-Bakijor,Thana no-6,Khata No-84,Plot No- 1297,2681,2682,2701	3.217	07.09.15 to 3 Years
14	MS Swastik Traders ,Part-Shree Sudeep Kumar dey,S/o-Sunil Kumar Dey,Vill-Dakshin Nanna Jatia,PO+PS-Bijpur,Dist-North 24 Pargana,PIN-743136,Mb- 9308980402	Kathikund	Auction in Sand Ghat Aamgachhi Gumro River and Kalajhar Panchayat,Thana no-47,Khata no-35,Plot no-180, Mouza- Shaharjori,Thana no-48,Khata No-31,Plot no-18,45, Mouza – Morbhanga,Thana no-52,Khata no-22,Plot no- 746,267,Mouza-Daldali ,Thana no-53,Khata no-49,Plot no- 395,1388,746 ,Mouza-Aamgachhi ,Thana no-55,Khata no- 43,Plot no-229, Mouza – Pokharia,Thana no-54,Khata no— 30,Plot no-616,618,620	4.128	07.09.15 to 3 Years
15u	Ms Saran Alcohol Pvt Ltd Name of sand holder-sri Yogendra Tiwari, S/O-Sri Rameshwar Tiwari vill - Gilanpara, Po+P.s+District - Dumka Phon NO-9431156284	Gopikander	Auction in Sand Ghat Basloi River & Kushchira Panchayat ,Mouza-Dhundhapahari,Khata No-39,Plot no-1, Mouza- Kushchira,Katha No-46, plot no-931,936	29.461	Due To EC Pending

16. Mineral Potential for Settled Sand Ghats

Boulder (MT)	Bajrai (MT)	Sand (Metric Tonne)	Total Mineable Mineral Potential(Metric Tonne)
NIL	NIL	10179000	10179000

Annual Deposition

Boulder (MT)	Bajrai (MT)	Sand (MT)	Total Mineable Mineral Potential(MT)
NIL	NIL	3053700	3053700

Sl. No	River or stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in Kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tone) (60% of total mineral potential)
1	Mayurakshi river	Raneswar to Dudhani	25	180	4500000	6075000
2	Banshloi river	Kuschira	2	120	240000	324000
3	Brahmani river	Amgachi	12	110	1320000	1782000
4	Nunbil river	Dalahi	14	80	1120000	1512000
5	Tepra river	Kusmaha	3	120	360000	486000
Total			56		7540000	10179000

17 (A). Unsettled Sand Ghats used for JSMDC

Sl. No	River or stream	Order of River	Portion of the river or stream recommended for mineral concession (Mouza Name)	Length of area recommended for mineral concession (in meter)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric ton) (60% of total mineral potential)	Category
1	Brahmani River	6 th	Rakhabani (vilai) (Shikaripara Circle)	364	120	43680	58968	2 nd
2	Brahmani River	6 th	Kajaladaha (Jhunki) (Shikaripara Circle)	455	100	45500	61425	2 nd
3	Brahmani River	6 th	Dhoba Ghati (Shikaripara Circle)	700	70	49000	66150	2 nd
4	Brahmani River	6 th	Dhaka (Shikaripara Circle)	1000	100	100000	135000	2 nd
5	Mayuraxchi River	6 th	Sadipur (Raneswar Circle)	600	100	60000	81000	2 nd
6	Mayuraxchi River	6 th	Bilkandi (Shilajori) (Raneswar Circle)	700	150	105000	141750	2 nd
7	Mayuraxchi River	6 th	Chotakanti, Pariharpur, Ranigram, Palasdangal (Raneswar Circle)	3000	300	900000	1215000	2 nd
8	Mayuraxchi River	6 th	Mokhapar (Sariyahat Circle)	225	50	11250	15188	2 nd
9	Mayuraxchi River	6 th	Barkundi (Sariyahat Circle)	150	50	7500	10125	2 nd
10	Mayuraxchi River	6 th	Belidhap (Sariyahat Circle)	250	50	12500	16875	2 nd
11	Mayuraxchi River	6 th	Kharna (Sariyahat Circle)	250	50	12500	16875	2 nd
12	Mayuraxchi River	6 th	Gowari (Sariyahat Circle)	300	50	15000	20250	2 nd

13	Mayuraxchi River	6 th	Patsar (Sariyahat Circle)	250	50	12500	16875	2 nd
14	Nunbil River	6 th	Dhobna (Masalia Circle)	400	50	20000	27000	2 nd
15	Nunbil River	6 th	Lakhiyadih (Masalia Circle)	500	50	25000	33750	2 nd
16	Nunbil River	6 th	Fulsahari (Masalia Circle)	800	50	40000	54000	2 nd
17	Nunbil River	6 th	Dukhiya Dih (Masalia Circle)	450	60	27000	36450	2 nd
18	Nunbil River	6 th	Kusumghata (Masalia Circle)	850	50	42500	57375	2 nd
19	Mayuraxchi River	6 th	Dundia (Jama Circle)	2000	250	500000	675000	2 nd
20	Mayuraxchi River	6 th	Sitakohwar (Plot no 1130/1131) (Jama Circle)	2000	250	500000	675000	2 nd
21	Mayuraxchi River	6 th	Sitakohwar (Plot no 1131/1132) (Jama Circle)	3000	250	750000	1012500	2 nd
22	Mayuraxchi River	6 th	Lagla (Jama Circle)	600	100	60000	81000	2 nd
23	Mayuraxchi River	6 th	Sirsa (Jama Circle)	500	100	50000	67500	2 nd
24	Mayuraxchi River	6 th	Bangha (Jama Circle)	500	250	125000	168750	2 nd
25	Motihara River	6 th	Gajanda, Lakardiwani, Makuni, Murlick, Durweck, Korikatniya, Katniya (Jama Circle)	4500	110	495000	668250	2 nd
26	Motihara River	6 th	Dekchagonga (Jarmundi Circle)	1000	90	90000	121500	2 nd
27	Sukjora River	6 th	Baganthara, Sukjora, Kordiha, Karamkitatarni, Asbari, Petsar, (Jarmundi Circle)	5500	60	330000	445500	2 nd
28	Bansloi River	6 th	Rampur (Ramgarh Circle)	2000	60	120000	162000	2 nd

29	Bansloi River	6 th	Kushdiha (Ramgarh Circle)	1600	60	96000	129600	2 nd
30	Bansloi River	6 th	Jagatpur (Ramgarh Circle)	1300	60	78000	105300	2 nd
31	Bansloi River	6 th	Pipra (Ramgarh Circle)	1600	60	96000	129600	2 nd
32	Brahamni River	6 th	Masaniya (Kathikund Circle)	600	100	60000	81000	2 nd
33	Brahamni River	6 th	Musabil (Kathikund Circle)	700	100	70000	94500	2 nd
			Total	38644	3400	4948930	6681056	

Note :- All Calculation has been done without Mining Zone

Mineral Potential for Unsettled Sand Ghats of JSMDC

Boulder (MT)	Bajrai (MT)	Sand (Metric Ton)	Total Mineable Mineral Potential(Metric Ton)
NIL	NIL	6681056	6681056

Annual Deposition

Boulder (MT)	Bajrai (MT)	Sand (MT)	Total Mineable Mineral Potential(MT)
NIL	NIL	2004316.8	2004316.8

17 (B) List of First Category Sand Ghat Used for Panchayat

Sl. No	River or stream	Order of River	Portion of the river or stream recommended for mineral concession (Mouza Name)	Length of area recommended for mineral concession (in meter)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric ton) (60% of total mineral potential)	Category
1	Kamar Dudhani Nala	2 nd	Gaybathani (Jama Circle)	6000	30	180000	243000	1 st
2	Tepra River	2 nd	Kadal Jori (Jama Circle)	4000	70	280000	378000	1 st
3	Belkupi River	2 nd	Sariya (Jama Circle)	7000	30	210000	283500	1 st
4	Bhurburi River	2 nd	Muskack (Jama Circle)	2200	50	110000	148500	1 st
5	Brambhani Joria (Murgabani)	2 nd	Murgabani (Bartally Panchyat) (Dumka Circle)	2000	40	80000	108000	1 st
6	Sarsajor River	2 nd	Hirapur (Shikaripara Circle)	700	100	70000	94500	1 st
7	Dwarka River	2 nd	Palasi (Shikaripara Circle)	400	40	16000	21600	1 st
8	Mothira River	2 nd	Reda (Ramgarh Circle)	1000	50	50000	67500	1 st
9	Dhobai River	2 nd	Gajamba (Ramgarh Circle)	400	40	16000	21600	1 st
10	Bhurburi River	2 nd	Kahara (Ramgarh Circle)	1000	60	60000	81000	1 st
11	Bansloi River	3 rd	Nawadih (Ramgarh Circle)	500	60	30000	40500	1 st
				25200	570	1102000	1487700	

Note :- All Calculation has been done without Mining Zone

Mineral Potential Used for Unsettled Sand Ghats of Panchayat

Boulder (MT)	Bajrai (MT)	Sand (Metric Ton)	Total Mineable Mineral Potential(Metric Ton)
NIL	NIL	1487700	1487700

Annual Deposition

Boulder (MT)	Bajrai (MT)	Sand (MT)	Total Mineable Mineral Potential(MT)
NIL	NIL	446310	446310

18. LIST OF SAND STOCK YARD

Sl. No.	Circle	Panchayat	Mouza	Khata No.	Plot No.	Area (in Acer)
1	Jama	Mahulbana	Mahulbana	45	1209	1.45
2	Jama	Mahulbana	Mahulbana	45	549	0.56
3	Jama	Mahulbana	Mahulbana	45	1544	1.05
4	Jama	Palasi	Muswack	39	618	1.61
5	Shikaripara	Shikarpara	Kesargarth	23	616	5.00
6	Masaliya	Amghachi	Lakhyadih	17	384	2.00
7	Kathikund	Jhikra	Masaniya	28	511	1.25
8	Kathikund	Dhawadanga	Musabile	31	1087	5.00

19. Guidelines and Methodology.

The Sustainable sand mining guidelines as per SEIAA Proceeding dated 07.05.13 and MoEF & CC Guidelines, 2016 have been followed where in following criteria were observed for delineation of new Sandghat, namely :-

- a) Should be at a distance of 10 Km from forest Sanctuary
- b) At a distance of 250m from the Reserve / Protected Forest
- c) At a distance of 10km from Interstate boundary
- d) At a distance of 500m from habitation, reservoir, archaeological monuments
- e) 15m distance from river bank or 1/5th of the total width of the river whichever is more
- f) For contiguous area, certification and availability of sand in less than 05 Hectare area.
- g) High Tension (33kb) transmission line not to pass above the Sandghat.
- h) The maximum mineable depth not to exceed 03m from river bed for quantification of sand.
- i) Natural building meanders to be preferred.

The present survey have been completed by observing the above guidelines and taking following considerations as directed in the State level Workshop held on 23.08.17.

1. Survey of Unsettled sand ghats.
2. Identification of Stream orders for division in Category I and Category 2 streams.
3. Identification of sand ghats for Panchayats.
4. Identification of site for Stockyard.
5. Physical verification of settled ghats using Hand Held GPS.