



DISTRICT SURVEY REPORT (DSR)
OF
BALANGIR DISTRICT, ODISHA
FOR
RIVER SAND

(FOR PLANNING & EXPLOITATION OF MINOR MINERAL RESOURCES)



As per Notification No. S.O. 3611(E) New Delhi
dated 25th July 2018 of
Ministry of Environment, Forest & Climate Change
(MoEF& CC)
COLLECTORATE BALANGIR

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PREAMBLE

In pursuance of MoEF & CC Notification S.O. 141(E) dated 15th Jan. 2016, District level Expert Appraisal Committee (DEAC) has been formed for Category –B2 Minor Minerals having area less than or equal to 5 ha. Prior to the formation of Odisha Minor Mineral Concession Rule 2004, (OMMCR -2004) the mining operation for minor mineral were carried out in unscientific manner. Identifying this fact in exercise of power, Conferred by Section 15 by Mines and Minerals (Development and Regulation) Act 1957 as amended in 2015 and all other powers enabling it in that behalf, the industry Mines & Geology Department, Govt. of Odisha framed the aforementioned rule, which has been amended with period of times in the year 2014, 2015 and 2016.

Keeping in view of experience gained in period of decade, the MoEF & CC came out with Environmental Impact Assessment Notification S.O.-1533(E) dated 14th Sept. 2006. It has been made mandatory to obtain environmental clearance for different kinds of development projects as listed in Scheduled -I of notification. Further, pursuance of the order of Hon' ble Supreme Court Petition (C) No. 19628- 19629 of 2009, dated 27th Feb. 2012 In the matter of Deepak Kumar etc., Vs State of Haryana and others etc., Prior Environmental Clearance has now become mandatory for mining of Minor Minerals irrespective of the area of Mining Lease. And also in view of the Hon' ble National Green Tribunal, order dated the 13th Jan. 2015 the matter regarding Sand, Road metal, & Burrowed Earth cutting for Road Construction has to take prior E.C. for Mining Lease irrespective of the fact that whether the area involved is more or less than 5 hectares. They also suggested to make a policy on E.C for minor minerals lease in cluster.

Subsequently, Hon'ble Supreme Court vide their order dt. 18.01.2022 in connection with Civil Appeal Nos. 3661-3662 of 2020, the State of Bihar and others Vrs- Pawan Kumar and others at Paragraph 14 " We therefore find it appropriate to substitute the directions issued by Tribunal vide judgment and order dated 14th October-2020 with the following directions,

- (i). The exercise of preparation of DSR for the purpose of mining of the State of Bihar in all the Districts shall be under taken afresh. The Draft DSRs shall be prepared by the Sub-Divisional Committees consisting of the Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board or Committee, Forest Department, Geological or Mining Officer. The same shall be prepared by undertaking site visits and also using by modern technology. After the Draft DSRs are prepared the District Magistrate of the concerned District shall forward the same for examination and evaluation by the SEAC. The same shall be examined by the SEAC and its report shall

be forwarded to SEIAA. The SEIAA will thereafter consider the grant of approval such DSRs.

- (ii). Needless to state that while preparing DSRs and appraisal thereof by SEAC and SEIAA. It should be ensured that a strict adherence to the procedure and parameters laid down in the policy of January-2020 should be followed.

The District Survey Report will form the basis for application for Environmental Clearance, preparation of reports and appraisal of projects. District Survey Reports are to be reviewed once in every five years as per statute.

In lieu of above guideline and orders of Hon'ble Supreme Court and in compliance to the orders of Hon'ble NGT, EZ, Kolkata, in connection with O.A No. 63/2020, the Member Secretary, SEIAA, Bhubaneswar issued a Letter on 27th December, 2022 to Collector & District Magistrate, Balangir with a direction " the DSR is to be signed afresh by the Collector and District Magistrate, along with members of the designated sub-committee consisting of Sub-Divisional Magistrate, and District Level Officers from Irrigation Department, State Pollution Control Board, Forest Department, Geology and /or Mining Department. Keeping in view of the orders of Hon'ble Supreme Court, Hon'ble NGT and directions of SEIAA, Bhubaneswar a fresh DSR has been prepared observing all formalities in the year,2023

The Main objective of the preparation of District Survey Report is to ensure the following: -

1. Identification of Mineral Resources in the District.
2. Identification of areas of minor minerals having the potentiality where mining can be allowed.
3. Identification of area and proximity to infrastructure and installations where mining should be prohibited.

1.0 INTRODUCTION

Balangir at a Glance:

1.1 Location and Geographical Area:

The Balangir District is surrounded by Subarnapur district in east, Nuapada District in the west, Balangir District in the south and Bargarh District in the north. The District lies between 20° 11'40 to 21° 05'08 degree north latitude and 82° 41'15 to 83° 40'22 East longitude. The District covers an area of 6575 sq.km.

The district of Balangir is flanked in the north-west by the Gandhamardan hills, a name of the Ramayana Fame, and in the north-east by the rock-infested Mahanadi. It is traversed by many hill streams and is interspersed with the evergreen woodlands, the shelter of Bison and Sambar. The main forest area stretches along the western boundary bordering the Nuapada, Balangir district and then turns to the east running parallel to the Gandhamardan range. This forest track is broken by occasional clearings and small settlements, but it mostly consists of thick vegetation in which bamboo of excellent quality grows and Sal, Sahaj, Piasal, Dhaura and Ebony form the principal timber. The crest of the range of Gandhamardan hills is fine plateau, some ten miles long, with an average height of 3000 feet. For most part of this district lies on the north-west bank of river Tel, which form the boundary between his district and the district of Balangir, Sonepur, Boudh and Kandhamal.

The district has many rivers and perennial streams. Almost the entire Bolangir district is drained by nine rivers namely Mahanadi, Tel, Undar, Lanth, Sungadh and Sukhtel (Tributaries of the Tel), Ang, Jira, Saleshing.

Hill System

Mathkhai, The Sacred Hill on the outskirts of Balangir City also a Landmark of the District.

- Gandhamardan (3,296 ft)
- Butel (2,670 ft)
- Chahdli (2,630 ft)
- Thuta (2,056 ft)
- Bender (1,920 ft)
- Patpani
- Chhatardandi
- Matkhai (2,591)

It is best known for Harisankar Temple. The Ordnance Factory is located 45 km South of Balangir. It is the largest city of Western Odisha. The District is divided into 3 Sub-Divisions namely 1) Balangir, 2) Patnagarh and , 3) Titalagarh. It has 1794 villages covering 14 Blocks, 14 Tahasils. Balangir is the main town of the District and is also its centre of economic growth. The primary occupation of people in the District is cultivation. This District is mainly known for cultivation of paddy. Because rice is the staple cereal of the local people. Hybrid varieties of seeds are being developed and land reform programs are being planned for the maximum usage of the wastelands, promising to enhance the District's economic stability in the near future. Industries, Agriculture and Tourism are the four major Revenue Sources of Balangir District. The District Industries Centre, Balangir has been functioning since 1978, in order to provide service to the people of Balangir District in all respects of industrial promotion i.e. preparation of project reports, facilitating financial assistance from financing institutions, marketing assistance, allotment of Govt. land and shed, Raw-material recommendation, imparting of Entrepreneurship Development Training to prospective entrepreneurs and providing different technical know-how etc under one roof. There are no of industries are present in the Bolangir District.

1. No. of Small-Scale Industries (Working) – 1066
2. No. of Large / Medium Industries – 6

Table-1

Different Types Of Industries Existing In Balangir (Item Wise)		
Sl. No.	Type of Industries existing.	No.of units.
1	ALUMUNIUUM UTENSILS	4
2	AUTOMOBILESERVICING STATION	5
3	COLD STORAGE	3
4	CORRUGATED PAPER BOX	4
5	COTTON GINNING AND WEAVING INDUSTRY	18
6	COUNTRY LIQUOR SHOP	66
7	DAIRY FARM	6

8	FOOD PROCESSING INDUSTRY (BAKERY, SWEETS, MILK PRODUCTS)	12
9	GRANITE CUTTING AND POLISHING	10
10	HOT MIX PLANTS	5
11	HOTELS& RESTAURANT	10
12	OTHER INDUSTRIES	53
13	PACKAGED DRINKING WATER INDUSTRY	4
14	PARBOILED RICE MILL	58
15	PHARMACEUTICAL INDUSTRY	1
16	POULTRY FARM	31
17	RAW RICE MILL	20
18	READY MIX CONCRETE	5
19	STONE CRUSHERS	63

Bolangir district is situated in the western side of the state of Odisha, extending from 82 °41' to 83°42' East longitude and 200 9' to 210 05' north latitude. Generally the climate of the district is hot & moist sub-humid. Broadly the district has Red & Yellow, Red & Black, Black, Late-rite, Black Cotton Soil and Brown forest soil with alluvium soil and intersected by the perennial rivers, which collectively provides conducive infrastructure for the growth of agriculture in the region. Rice, Pulses, oil seeds like Groundnut, Mustard, Castor and linseed are grown in the District of Bolangir. The District has a rich mineral base of soft stones, limestone; stone chips are available in the District, which are mainly used in industrial units in the District. The huge deposit of granite stones at all the tahasil regions provides tremendous scope for development of few more industries.

Bolangir district with its fascinating natural beauty, rich tribal cultural heritage has a potential reserve of graphite, bauxite, Galena, & manganese.

**1.2 Administrative Units:-**

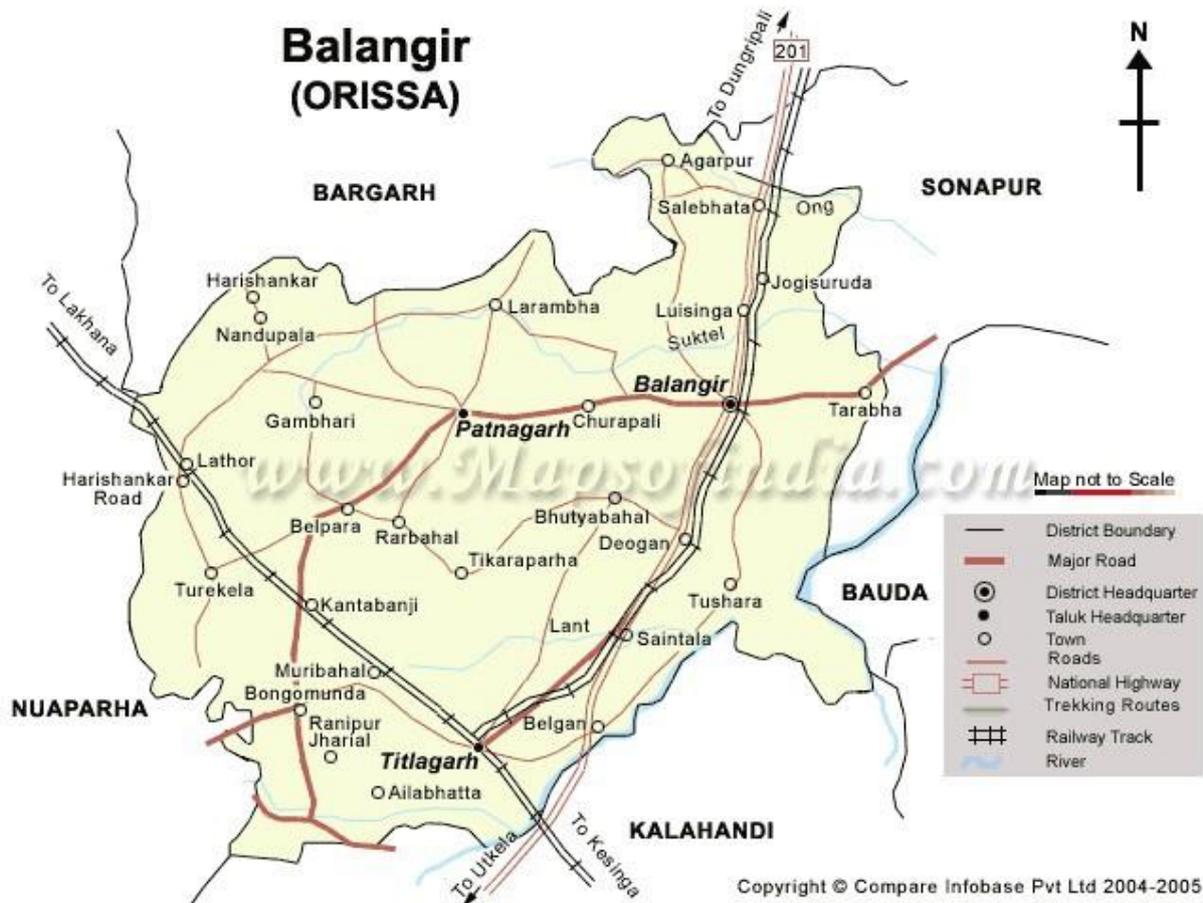
Balangir is the Administrative Headquarter Balangir District. It is located at a distance of 319 km from Bhubaneswar, state capital of Odisha. In accordance to the area, the District is the 3rd largest western Odisha Districts of Odisha. It has 1794 villages covering 14 Blocks, 14 Tahasils and 3 sub divisions. The district is divided into 3 Sub-Divisions namely 1) Balangir, 2) Patnagarh and, 3) Titalagarh. The population of the District is 1379647 according to the 2011 Census. The District accounts for 4.22% of the State's territory and about 3.93% of State's population. The density of population of the District is 251 per square km as against 270 per square km of the state. As per 2011 census, the population of Scheduled Caste is (17.88%), and Scheduled Tribe is (21.05%). The literacy percentage of the District covers 64.70 against 72.90 of the state.



1.3 Connectivity facilities:-

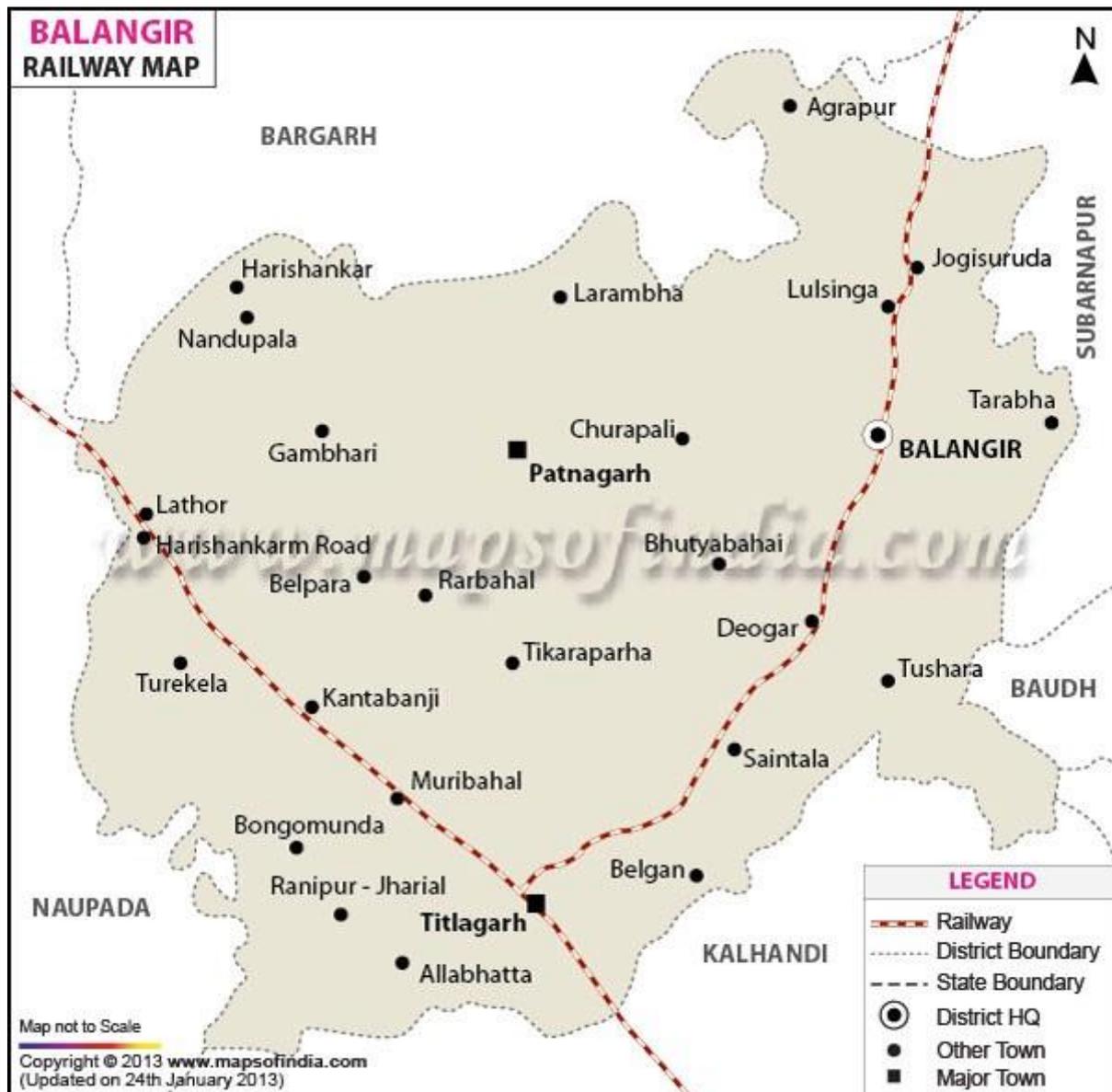
Road Network

The District is well served by a network of good roads. The chief road emanating from Balangir town is NH-201 passes through the District. Balangir Town is about 79 Kms from Bargarh, 119 Kms from Nuapada, 237 Kms from Kalahandi, 98 Kms from Boudh, and 49 Kms from Subarnapur. It is also connected with other cities such as Nabarangpur, Koraput, Ganjam, Khordha, Nayagarh, and Boudh via Odisha State Road Transport Corporation and some private travel services.



Rail Network

Balangir District is well connected by Rail link to different places, Balangir railway station is a railway station which serves Balangir district in Indian state of Odisha. The Jharsuguda–Vizianagaram line is a railway line in western India. It connects Jharsuguda, on the Howrah–Nagpur–Mumbai line, and Titlagarh, which in turn is connected with Vizianagaram, on the Howrah–Chennai main line, and Raipur, There are several branch lines, like the one connecting Rayagada with Koraput on the Kothavalasa–Kirandul line. The Khurda Road–Balangir line is a rail line between Khurda Road Junction and Balangir which is under construction. The distance to Raipur is approximately 283 km, while the distance to Bhubaneswar is about 317 km; the city of Balangir is well connected to many places in India like Nayagarh, Phulbani, Baragarh, and Jharsuguda, Rourkela with Bhubaneswar sambalpur.



Air Network

The Jharsuguda Airport at Jharsuguda is the nearest airport to the city while Swami Vivekananda Airport at Raipur, Chhattisgarh is 234 km away. Biju Patnaik International Airport in the state capital, Bhubaneswar is 327 km away by road and 397 km by rail.



2. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT:

A great variety of ores and minerals occur in this district. Of these, the important ones are graphite, Galena (Lead ore), Manganese ore and Bauxite. Balangir District is a transition land features of both coastal plain and hilly region. Most of the mineralized area coming under Eco-Sensitive Zone, mining activity only confined out of safety zone of Eco-Sensitive Zone. The mining activity in the District is only restricted to minor minerals i.e. of sand, stone, granite and brick clays. Altogether there are leases of stone, granite and sand which has been granted to the District is regulated as per minerals concession rules of Odisha, there is no lease of major mineral in the District. At present Leases of stone, sand and bricks making units are operational in the District. Stone chips, granite stones, ordinary sand constitute the principal mining activity of all the tahasil area of Balangir District. which have been provides tremendous scope for development of few more Industries based on this resources.

3. The List of Mining Leases in the District with locations, area and period of Validity

TABLE-2

List of Minor Mineral sources operational, non-operational & Proposed (New) in Balangir District														
Tahasil	S I N O	Name of the Quarry Lease	Village, Khata No, Plot No & Kسام	Latitude	Longitude	Date & Registration No of Lease Deed	Number & Date of Grant of ENV Clearance	Total Area recommended for Mineral concession (in Sq. Meter/Ha.)	Mine able Mineral potential in Metric Tones /Cum s(60% of Total Minerals/potential)	Ge ological mineral potential in Metric tones/ Cums	Name of the Lessee with address despatch	Period of Lease		Stat us of working or non working /Temp permit working for
												From	To	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Loisingha	1	Kusmel Sand Quarry	Khat a No.- 330, Plot No. - 2151, Kسام-Nadi, Mouz a-Kusmel	20° 47'16 .1188 0"N to 20°47 '05.6 0279" N	83° 23'52 .3260 8"E to 83°23 '43.6 5722" E	1031 2201 781 02.0 6.20 22	237808/ 65- MINB2/ 11-2021	5.0 0 12. 355 ac	MR- 4339 8	GR - 50 00 0	Sri Satyak am Singh AT/PO- Kusmel ,PS- Loisingha,Balangir, Odisha	02.06.2022	01.06. 2027	Working
Loisingha	2	Hirapur Sand Quarry	Khat a No.- 115, Plot No. - 1382 , Kسام-Nadi, Mouz a-Hirapur	20°49 '17.2 1725" N to 20°49 '11.0 4968" N	83°31 '24.8 6562" E to 83°31 '06.1 5735" E	1036 2200 528 22.0 7.20 22	253161/ 211- MINB2/ 01-2022 04.04.2 022	5.0 0 12. 355 ac	MR- 4080 4	GR - 50 00 0	Manas Ranjan Mishra, AT/PO- Clubpara, Balangir,76700 1	22.07.2022	21.07.2027	Working
Loisingha	3	Chelbahal Sand Quarry	Khat a No.- 112, Plot No. -	20°50 '46.7 6738" N to 20°50 '41.4	83°33 '34.5 8550" E to 83°33 '21.3	1031 2304 180 30.0 6.20	237420/ 50- MINB2/ 11-2021 25.01.2	5.0 0 12. 355	MR- 4360 5	GR - 53 26 5	Sri Rames h Mahak ur, At-Ainlasa	30.06.2023	29.06.2028	Working

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			1076, Kisa m- Nadi, Mouz a- Chel bahal	2216" N	1110" E	23	022	ac			ri,Po- Saunt ur, Balangi r, Odisha			
Lois ing ha	4	Tebhad unguri sand Quarry	Khat a No.- 86, Plot No. - 482/5 04, Kisa m- Nadi, Mouz a- Tebh adun guri	20°50 '31.6 9220" N to 20°50 '15.5 9266" N	83°33 '08.9 6500" E to 83°32 '54.7 4535" E	1036 1900 085 07.0 2.20 19	Non- Operati onal	5.0 0Ha 12. 355 ac	MR- 2606 8	GR - 50 00 0	Sri Rames h Mahak ur, At- Ainlasi ri,Po- Saunt ur, Balangi r, Odisha	07.02.2019	06.02.2024	Not Wor king Res erv e for Fut ure Auc tion
Belp ada	5	Mandal Sand Quarry	Khat a No.- 229, Plot No. - 1623 & 1635, Kisa m- Nadi, Mouz a- Mandal	20°33 '52.6 4614" N to 20°34 '03.2 5093" N	83°00 '34.8 1621 E to 83°00 '57.8 4178" E	1032 2100 568 26.0 3.20 21	SIA/OR/ MIN/28 0461/20 22 02.08.2 022	4.5 3ha 11. 193 ac	MR- 3772 5	GR - 49 97 9	Sankar Prasad Jain AT/PO- Belpad a, Dist- Balangi r, 767026	26.03.2021	25.03.2026	Wor king
Belp ada	6	Nunhad Sand Quarry	Khat a No.- 204, Plot No. - 814 , Kisa m- Nadi, Mouz a- Nunh ad	20°34 '56.2 4634" N to 20°34 '47.7 0298" N	82°57 '09.5 3961 E to 82°57 '28.4 8473" E	1032 2001 424 06.1 1.20 20	SEIAA- 355/07- 2020 27.10.2 020	5.0 0ha 12. 355 ac	MR- 4209 2	GR - 49 97 9	Mahad eba Meher T/PO/P S- Belpad a, Balangi r	06.11.2020	05.11.2025	Wor king
Belp ada	7	Dhuma bhata Sand Quarry	Khat a No.- 295, Plot No. - 2520, Kisa m- Nadi, Mouz a-	20°32 '26.3 5423" N to 20°32 '45.3 8802" N	83°03 '49.2 6467 E to 83°04 '10.5 9416" E	1032 2100 386 02.0 3.20 21	SIA/OR/ MIN/26 2387/20 22 28.03.2 022	5.0 0ha 12. 355 ac	MR- 3489 9	GR - 49 97 9	Jitesh Tank AT- Burom al, PO- Bichhu bahali, PS- Kantab anji,	02.03.2021	01.03.2026	Wor king

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			Dhumabhata								767039			
Belpada	8	Belpada sand Quarry	Khat No.-480, Plot No.-2401, Kisa m-Nadi, Mouz a-Belpada	20°34'50.1" N to 20°34'59.8" N 82°57'58.3" E to 82°58'12.4" E	1032200134214.10.2020	SEIAA-289/07-202030.09.2020	4.451ha 11.00ac	MR-71618	GR-89032	Ghanashyam Putel AT/PO/PS-Belpada Balangir	14.10.2020	13.10.2025	Working	
Belpada	9	Parlimal Sand Quarry	Khat No.-201, Plot No.-1188, Kisa m-Nadi, Mouz a-Parlimal	20°35'7.94" N to 20°34'54.5" N 85°58'20.2" E to 85°58'8.04" E	1032230197621.08.2023	422188/899-MINB2/03-202325.07.2023	4.435ha 10.96ac	MR-35928	GR-44353	Prabir Kumar Mahahud At/PO-Ghagurly PS-Belpada	21.08.2023	20.08.2028	Working	
Belpada	10	Chacherbenga Sand Quarry	Khat No.-169, Plot No.-1224, Kisa m-Nadi, Mouz a-Chacherbenga	20°35'24.7" N to 20°35'49.6" N 82°56'53.9" E to 82°57'01.9" E	Not Required as it is a proposed source	Not Required as it is a proposed source	4.856Ha 12.00Ac	MR-58231	GR-95874	Not Required as it is a proposed source	Not Required as it is a proposed source	Not Required as it is a proposed source	New Source for future Auction	
Deogaon	11	Chatapipal Sand Quarry	Khat No.-32, Plot No.-1, Kisa m-Nadi, Mouz a-chata pipal	20°35'58.0" N to 20°35'46.9" N 83°17'15.7" E to 83°16'58.1" E	1035210002012.01.2021	SEIAA-410/07-202016.12.2020	5.00ha 12.35ac	MR-34260	GR-49978	Jojanpradhan, At-Laxmanpur, PO-Ramchandrapur, PS-Deogaon Dist-Balangir, Odisha	12.01.2021	11.01.2026	Working	

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Deoganon	12	Bandhapada Sand Quarry	Khat a No.- 53, Plot No. - 1, Kisa m- Nadi, Mouz a- Band hapa da	20°36 '00.7 1311" N to 20°35 '44.4 9469" N	83°16 '14.6 6944" E to 83°16 '03.7 9055" E	1035 2000 641 09.1 2.20 20	SEIAA- 345/07- 2020 27.10.2 020	5.0 ha 12. 35a c	MR- 3044 7	GR - 75 00 0	Jojan pradha n, At- Laxma npur, P O- Ramch andrap ur, PS- Deoga on Dist- Balangi r, Odisha	09.12.2020	08.12.2025	Wor king
Deoganon	13	Sarasmal/Siletkani Sand Quarry	Khat a No.- 113, Plot No. - 88,1 Kisa m- Nadi, Mouz a- Sara smal, Siletk ani	20°34 '54.4 4134" N to 20°34 '42.8 4290" N	83°21 '21.3 8612" E to 83°20 '18.2 0286" E	1035 2200 429 02.0 6.20 22	246135/ 143- MINB2/ 12-2021 08.03.2 022	5.0 ha 12. 35a c	MR- 2249 6	GR - 36 94 0	Rakesh Nanda, At- Saras mal, PO - Sikuan, PS- Deoga on Dist- Balangi ri, Odisha	02.06.2022	01.06.2027	Wor king
Deoganon	14	Gaibahal Sand Quarry	Khat a No.- 81, Plot No. - 493,2 ,683 Kisa m- Nadi, Mouz a- Gaib ahal	20°34 '16.1 3837" N to 20°34 '39.5 0658" N	83°22 '56.8 3960" E to 83°23 '06.1 2521" E	1035 2000 642 19.1 2.20 20	SEIAA- 348/07- 2020 25.11.2 020	5.0 ha 12. 35a c	MR- 3716 1	GR - 50 00 0	Saaha deb Pradha n, AT- Indrana gar, PS/ PS/DIS T- Balangi r	19.12.2020	18.12.2025	Wor king
Deoganon	15	Ratakhandi Sand Quarry	Khat a No.- 119, Plot No. - 1027, Kisa m- Nadi, Mouz a- Rata khan di	20°28 '46.1 0636" N to 20°28 '34.4 8907" N	83°33 '57.8 2161" E to 83°33 '48.9 3292" E	1035 2000 603 25.1 1.20 20	SEIAA- 392/07- 2020 03.11.2 020	5.0 ha 12. 35a c	MR- 3068 8	GR - 49 97 8	Prabha t Kumar Mishra, At- Bramh anapad a, Po/PS- Balangi r, balan giri, Odisha	25.11.2020	24.11.2025	Non Wor king

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Deo gao n	1 6	Kendhu ghat Sand Quarry	Khat a No.- 50, Plot No. - 362, Kisa m- Nadi, Mouz a- Kend ughat	20°31 '24.2 9894" N to 20°31 '10.9 7223" N	83°34 '47.7 9423" E to 83°34 '37.0 2769" E	1035 2200 430 01.0 6.20 22	EC22B 001OR 131698 245998/ 138- MINB2/ 12-2021 22.02.2 022	5.0 ha 12. 35a c	MR- 4120 5	GR - 49 98 0	Benud har singh, At/Po- Arjun ur PS- Tusura Balangi ri	01.06.2022	31.05.2027	Wor king
Deo gao n	1 7	Arda Sand Quarry	Khat a No.- 181, Plot No. - 494 & 496, Kisa m- Nadi, Mouz a- Arda	20°34 '42.0 9205" N to 20°34 '33.9 9717" N	83°22 '54.1 2959" E to 83°22 '30.0 8182" E	1032 5000 638 07.1 2.20 20	SEIAA- 393/07- 2020 03.11.2 020	5.0 ha 12. 35a c	MR- 1075 2	GR - 49 97 8	Abhise k Panigr ahi AT- Rajend rapada PO/PS- Balangi r DIST- Balangi r	07.12.2020	06.12.2025	Wor king
Deo gao n	1 8	Antarla Sand Quarry	Khat a No.- 73, Plot No. - 1059, Kisa m- Nadi, Mouz a- Antar la	20°35 '36.0 4252" N to 20°35 '21.1 3758" N	83°18 '43.1 8521" E to 83°18 '11.8 6770" E	1035 2121 0011 4 23.0 2.20 21	SEIAA- 409/07- 2020 17.12.2 020	4.5 32h a 11. 20a c	MR- 7754	GR - 45 32 5	Banam ali Behera AT- Antarla PO- Dhand amal PS- Deoga on DIST- Balangi r	23.02.2021	22.02.2026	Wor king
Deo gao n	1 9	Sikuan Sand Quarry	Khat a No.- 166, Plot No. - 382/1 290, Kisa m- Nadi, Mouz a- Sikua n	20°34 '18.8 3265" N to 20°34 '01.1 2146" N	83°23 '05.5 5173" E to 83°22 '59.6 6685" E	1035 2000 637 07.1 2.20 20	SEIAA- 408/07- 2020 03.11.2 020	5.0 ha 12. 35a c	MR- 2826 0	GR - 49 97 8	Abhise k Panigr ahi AT- Rajend rapada ,PO/PS - Balangi r, Dist- Balangi r	07.12.2020	06.12.2025	Wor king
Deo gao n	2 0	Kachhar palli Sand Quarry	Khat a No.- 242, Plot No. - 915 &	20°32 '25.6 7155" N to 20°32 '11.4 6132"	83°24 '27.9 0248" E to 83°24 '11.4 7827"	1035 2000 604 25.1 1.20 20	SEIAA- 399/07- 2020 16.07.2 020	5.0 ha 12. 35a c	MR- 2575 0	GR - 49 97 8	Debasi sh Behera AT- sudpad a Balangi	25.11.2020	24.11.2025	Wor king

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		794 , Kisa m- Nadi, Mouz a- Kach harpa li	N	E					r					
Deo gao n	2 1	Kuturla Sand Quarry	Khat a No.- 132, Plot No. - 1, 271 , Kisa m- Nadi, Mouz a- Kutur la	20°32 '18.7 0897" N to 20°32 '43.4 4884" N	83°23 '57.5 7896" E to 83°24 '14.9 5645" E	Non- Oper- ation- al	Under Process	5.0 ha 12. 35a c	MR- 7243 6	GR - 12 07 28	G.D Mining Pvt. Ltd. Kolkata	Non- Operational	Non- Operational	Non Wor king
Deo gao n	2 2	Ghatul Sand Quarry	Khat a No.- 25, Plot No. - 335 &269 , Kisa m- Nadi, Mouz a- Ghat ul	20°35 '15.2 4363" N to 20°35 '30.0 1574" N	83°15 '24.6 9426" E to 83°15 '44.2 8132" E	Non- Oper- ation- al	Non- Operati onal	5.0 ha 12. 35a c	MR- 4725 1	GR - 78 75 2	Non- Operati onal	Non- Operational	Non- Operational	Non Wor king
Deo gao n	2 3	Tepran Sand Quarry	Khat a No.- 99, Plot No. - 500 & 1082 , Kisa m- Nadi, Mouz a- Tepr en	20°32 '25.6 7155" N to 20°32 '11.4 6132" N	83°24 '27.9 0248" E to 83°24 '11.4 7827" E	02.1 2.20 22	Non- Operati onal	0.6 27h a 1.5 49a c	MR- 2575 0	GR - 49 97 8	Non- Operati onal	02.12.2022	01.12.2027	Non Wor king
Aga lpu r	2 4	Salebha ta Sand Quarry	Khat a No.- 410 & 79, Plot No. - 2291 &	20°58 '56.5 10"N to 20°58 '48.0 97" N	83°32 '12.5 43"E to 83°32 '21.1 03"E	Reg d. No.- 2102 3002 06 Dt- 15.0	EC23B0 01OR12 9237 File No.- 403463/ 844- MINB2/ 12-2022	4.8 56h a 12. 00a c	MR- 8343 2	GR - 97 12 4	Shri Umesh Mahaku r, At- Ainlasar i, Po- Sauntpu r, Dist-	15.07.2023	14.07.2028	Wor king

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		931 , Kisa m- Nadi, Mouz a- Saleb hata & Raph akhal			7.20 23	Dt- 31.05.2 023				Balangir , 767061				
Aga lpur	2 5	Tentulig aon Sand Quarry	Khat a No.- 82, Plot No. - 1 , Kisa m- Nadi, Mouz a- Tentu ligao n	20°58 '55.3 3284" N to 20°58 '45.6 0507" N	83°36 '04.4 3612" E to 83°35 '56.9 1431" E	Reg d. No.- 3620 0032 5 Dt- 25.0 9.20 20	SEIAA- 173/06- 2020 Dt- 21.08.2 020	5.0 0ha 12. 355 ac	MR- 1086 00	GR - 12 50 00	Shri Umesh Mahaku r, At- Ainlasar i, Po- Sauntpu r, Dist- Balangir , 767061	Dt- 25.09.2020	24.09.2025	Wor king
Aga lpur	2 6	Banjipal i Sand Quarry	Khat a No.- 91, Plot No. - 1032, 846/1 041 , Kisa m- Nadi, Mouz a- Banji pali	21°00 '12.5 4155" N to 21°00 '02.0 9828" N	83°22 '30.8 4420" E to 83°22 '13.0 7810" E	Reg d. No.- 3622 0014 6 Dt- 08.0 3.20 22	EC22B0 01OR11 0054 File No- 237137/ 60- MINB2/ 11-2021 Dt- 25.01.2 022	5.0 0ha 12. 355 ac	MR- 4086 6	GR - 49 99 9	Shri Umesh Mahaku r, At- Ainlasar i, Po- Sauntpu r, Dist- Balangir , 767062	Dt- 08.03.2022	07.03.2027	Wor king
Aga lpur	2 7	Fasad Sand Quarry	Khat a No.- 93, Plot No. - 2 , Kisa m- Nadi, Mouz a- Fasa d	20°59 '00.0 0194" N to 20°58 '57.9 5526" N	83°30 '08.6 0012" E to 83°29 '53.7 3872" E	Reg d. No.- 1036 2200 389 Dt- 03.0 6.20 22	EC22B0 01OR15 9069 File No- 239156/ 77- MINB2/ 11-2021 Dt- 18.02.2 022	5.0 0ha 12. 355 ac	MR- 6194 8.5	GR - 74 99 8.5	Shri Ganga Shankar Sahu, At/Po- Salebha ta, Dist- Balangir	Dt- 03.06.2022	02.06.2027	Wor king
Aga lpur	2 8	Fatamu nda Sand Quarry	Khat a No.- 191, Plot No. - 2527, 2528 , Kisa	21°00 '38.6 3565" N to 21°00 '51.0 7357" N	83°27 '03.5 4686" E to 83°27 '18.9 6577" E	Reg d. No.- 3620 0044 6 Dt- 01.1 2.20	SEIAA- 291/07- 2020 Dt- 19.10.2 020	5.0 0ha 12. 355 ac	MR- 4327 5	GR - 49 99 9	Shri Rikash Kumar Agrawal , At/Po- Salebha ta, Dist- Balangir	Dt- 01.12.2020	30.11.2025	Wor king

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			m-Nadi, Mouz a-Fata munda		20									
Aga lpur	29	Kutasin ga Sand Quarry	Khat a No.- 384, Plot No. - 1, Kisa m-Nadi, Mouz a-Kutas inga	20°58 '49.9 5784" N to 20°58 '58.0 7204" N	83°37 '59.8 6992" E to 83°38 '12.7 4471" E	Reg d. No.- 1036 2000 443 Dt- 01.1 2.20 20	SEIAA- 256/06- 2020 Dt- 27.10.2 020	5.0 Oha 12. 355 ac	MR- 4359 4	GR - 50 58 6	Shri Rikash Kumar Agrawal , At/Po- Salebha ta, Dist- Balangir	Dt- 01.12.2020	30.11.2025	Wor king
Aga lpur	30	Nagaon Sand Quarry	Khat a No.- 269, Plot No. - 1001, Kisa m-Nadi, Mouz a-Naga on	21°0' 23.25 9"N to 21°0' 36.11 8" N	83°17 '56.8 69"E to 83°18 '7.80 5"E	Not Req uired as it is a propos ed sour ce	Not Require d as it is a propose d source	4.9 97 ha 12. 350 Ac	MR- 5997 3	GR - 99 95 6	Not Require d as it is a propos ed source	Not Required as it is a proposed source	Not Required as it is a proposed source	Ne w Sou rce for futu re Auc tion
Aga lpur	31	Mahulap ali Sand Quarry	Khat a No.- 92, Plot No. - 1, Kisa m-Nadi, Mouz a-Mahu lapali	20°59 '44.8 03"N to 20°59 '55.5 62" N	83°27 '45.3 39"E to 83°27 '56.2 63"E	Not Req uired as it is a propos ed sour ce	Not Require d as it is a propose d source	4.9 97 ha 12. 350 Ac	MR- 6195 4	GR - 10 12 44	Not Require d as it is a propos ed source	Not Required as it is a proposed source	Not Required as it is a proposed source	Ne w Sou rce for futu re Auc tion
Bal ang ir	32	Chanda nbhati Sand Quarry	Khat a No.- 280, Plot No. - 85, Kisa m-Nadi, Mouz a-Chan danb hati	20°46 '55.1 5637" N to 20°46 '50.7 9990" N	83°26 '17.1 9629" E to 83°26 '00.7 8562" E	Reg d. No.- 3120 0274 0 Dt- 17.1 2.20 20	SEIAA- 311/07- 2020 Dt- 25.11.2 020	4.8 56h a 12. 00a c	MR- 4077 3	GR - 48 56 2	Pritam Kumar Panigra hi, Po- Chanda nabhati, Dist- Balangir	Dt- 17.12.2020	18.12.2025	Wor king

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Balangir	33	Kutumdola Sand Quarry	Khat a No.- 170 & 105 Plot No. - 725 & 1, Kisan-Nadi, Mouza- Kutumdola & Duanapali	20°46'18.09875" E to 20°46'30.73712" E	83°23'49.07337" N to 83°23'59.21558" N	Regd. No.- 312002887 Dt- 30.12.2020	SEIAA-317/07-2020 Dt- 25.11.2020	3.256ha 8.00 AC	MR-24325	GR - 32375	Kailash Chandra Singhdeo At- Kutumdola, Poghankarpali, Dist - Balangir, 767065	30.12.2020	29.12.2025	Non Working
Khapra khol	34	Luhasingha Sand Quarry	Khat a No.- 242, Plot No. - 1018/1027, Kisan-Nadi, Mouza- Luhasingha	20°49'25.59345" N to 20°50'04.33503" N	83°03'27.00405" E to 83°03'34.77064" E	Regd. No.- 10322200394 Dt- 04.03.2022	SEIAA-1337/02-2021 Dt- 04.09.2021	4.856ha 12.00ac	MR-9196	GR - 29728	Shri Bijaya Kumar Maher At- Banjipali, Poghenda monda, Pskhaprakhol, Dist - Balangir	04.03.2022	08.12.2027	Working
Khapra khol	35	Goudapali Sand Quarry	Khat a No.- 99, Plot No. - 1129/859, Kisan-Nadi, Mouza- Goudapali	20°48'49.41930" N to 20°48'46.11066" N	83°01'49.30834" E to 83°01'23.25384" E	Regd. No.- 10322202079 Dt- 28.12.2022	EC22B001OR172446 File no- 241813/116-MINB2/12-2021 Dt- 06.04.2022	4.856ha 12.00ac	MR-24979	GR - 32044	Shri Dhrubasaraf At- Karalamal, Poghelenpali, Pskhaprakhol, Dist - Balangir	28.12.2022	27.12.2027	Working
Muribahal	36	Godighat Sand Quarry	Khat a No.- 145, Plot No. - 1, Kisan-Nadi, Mouza- Godighat	20°27'43.83092" N to 20°27'38.22015" N	83°02'45.90928" E to 83°02'25.45781" E	Regd. No.- 332102094 Dt- 10.12.2021	SEIAA-1704/06-2021 Dt- 28.09.2021	3.982ha 9.84ac	MR-29168	GR - 39821	Pruthiraj Patra At- Andaldarah, Poghadasaimara, Dist- Balangir	10.12.2021	09.12.2026	Working

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Muribahal	37	Jampadar Sand Quarry	Khat a No.- 52, Plot No. - 283/317, Kisan-Nadi, Mouza-Jampadar	20°29'17.3" N to 20°29'00.8" N	83°07'30.0" E to 83°07'21.5" E	10332001780, Dt. 17.12.2020	EC25C0107OR5905175T, SEIAA-362/07-2020	3.447ha 8.52ac	MR-41364	GR-68940	Sri Pritam Kumar Patra, At/Po-Kantab anji, Dist-Balangir	17.12.2020	16.12.2025	Working
Muribahal	38	Bandupala Sand Quarry	Khat a No.- 50,125, Plot No. - 207,142, Kisan-Nadi, Mouza-Bandupala	20°28'33.2" N to 20°28'38.8" N	83°05'43.8" E to 83°06'02.3" E	Non-Operational	Non Working	2.832ha 7.00ac	MR-17274	GR-28790	Sri Pritam Kumar Patra, At/Po-Kantab anji, Dist-Balangir	Non-Operational	Non-Operational	Non Working
Puintala	39	Shankarbhoji Sand Quarry	Khat a No.- 106, Plot No. - 1072, Kisan-Nadi, Mouza-Shankarbhoji	20°48'21.8" N to 20°48'53.1" N	83°29'37.8" E to 83°29'51.5" E	Regd. No.- 10312100175 Dt- 19.01.2021	SEIAA-411/07-2020 Dt- 16.12.2020	4.856ha 12.00ac	MR-30767	GR-48562	Shri Abinash Babu At-Satyan arayan para, Po/Dist - Balangir	19.01.2021	18.01.2026	Working
Puintala	40	Pipirda Sand Quarry	Khat a No.- 170, Plot No. - 142/1370 & 142/1377, Kisan-Nadi, Mouza-Pipirda	20°49'48.3" N to 20°49'30.3" N	83°32'00.5" E to 83°31'53.6" E	Regd. No.- 10312100327 Dt- 01.02.2021	SEIAA-679/09-2020 Dt- 17.12.2020	4.850ha 12.00ac	MR-39898	GR-48562	Shri Smarak Ranjan Mishra At-Clubpada, Po/Dist - Balangir	01.02.2021	31.01.2026	Working

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Pu ntal a	4 1	Durgap ali Sand Quarry	Khat a No.- 256, Plot No. - 6/P, Kisa m- Nadi, Mouz a- Durg apali	20°49 '11.8 2914" N to 20°49 '06.5 5612" N	83°31 '15.4 7804" E to 83°30 '58.7 5196" E	Reg d. No.- 1031 2100 174 Dt- 10.0 1.20 21	SEIAA- 412/07- 2020 Dt- 16.12.2 020	4.8 50h a 12. 00a c	MR- 3922 1	GR - 48 56 2	Shri Abinas h Babu At- Satyan arayan para, Po/Dist - Balangi r	10.01.2021	09.01.2026	Wor king
Pu ntal a	4 2	Bilaisar da Sand Quarry	Khat a No.- 280, Plot No. - 1768(P), Kisa m- Nadi, Mouz a- Bilais arda	20°50 '19.7 6600" N to 20°50 '34.6 7095" N	83°34 '51.0 3154" E to 83°35 '13.0 3918" E	Reg d. No.- 1031 2102 227 Dt- 13.0 8.20 21	SIA/OR/ MIN276 317/202 2 Dt- 30.06.2 022	4.8 56h a 12. 00a c	MR- 3768 5	GR - 48 57 4	Shri Debasi sh Behera At- Sudpa da, Po/Dist - Balangi r	13.08.2021	09.01.2026	Wor king
Tit ila ga rh	4 3	Mahada San+A5 5+D55: P58	Khat a No.- 106, Plot No. - 927, Kisa m- Nadi, Mouz a- Maha da	20°11 '37.6 1235" N to 20°11 '47.3 2626" N	83°12 '02.3 3558" E to 83°12 '11.9 9809" E	Reg d. No.- 3322 0185 2 Dt- 08.0 9.20 22	EC22B 001OR 196426 File No- 257216/ 577- MINB2/ 02-2022 Dt- 22.07.2 022	4.0 48h a 10. 00a c	MR- 4497 3	GR - 50 69 3.5	Shri Rajat Patra At- Braha mnbati, Po- Badam ulai, Dist- Cuttack	08.09.2022	07.09.2027	Wor king
Tit ila ga rh	4 4	Patharla Sand Quarry	Khat a No.- 118, Plot No. - 1270, Kisa m- Nadi, Mouz a- Path arla	20°12 '56.6 0316" N to 20°12 '46.8 6336" N	83°04 '09.6 7656" E to 83°03 '56.9 7000" E	Reg d no.- 3321 0094 5 Dt.2 8.06. 2021 Reg d. No.- 3322 0203 4 Dt- 30.0 9.20 22	SEIAA- 951/12- 2020 Dt- 09.03.2 021	3.6 42h a 9.0 0ac	MR- 1968 9	GR - 36 42 2	Shri Manoj Kumar Goel At- Sargig uda, Titilaga rh, Dist- Balkan gir	30.09.2022	27.06.2024	Wor king

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Tit ila ga rh	4 5	Turukbh ata Sand Quarry	Khat a No.- 75, Plot No. - 1, Kisa m- Nadi, Mouz a- Turuk bhata	20°12 '37.9 4071" N to 20°12 '28.5 3517" N	82°56 '49.6 0485" E to 82°56 '40.1 7362" E	Reg d. No.- 3323 0154 7 Dt- 02.0 9.20 23	EC23B 001OR 192020 Dt- 27.04.2 023	4.0 46h a 10. 00a c	MR- 4335 0	GR - 48 69 7.5	Shri Rajat Patra At- Braha mnbati, Po- Badam ulai, Dist- Cuttack	02.09.2023	01.09.2028	Wor king
Tit ila ga rh	4 6	Sukuna bhata Sand Quarry	Khat a No.- 104, Plot No. - 21, Kisa m- Nadi, Mouz a- Suku nabh ata	20°13 '23.8 9004" N to 20°13 '14.5 3190" N	83°06 '18.9 1016" E to 83°06 '10.3 9700" E	Reg d. No.- 3322 0237 8 Dt- 15.1 2.20 22	EC22B 001OR 118066 File no- 284794/ 368- MINB2/ 07-2022 Dt- 05.11.2 022	4.0 46h a 10. 00a c	MR- 5154 1.5	GR - 59 55 1.5	Shri Rasmi ranjan Patra At- Braha mnbati, Po- Badam ulai, Dist- Cuttack	15.12.2022	14.12.2027	Wor king
Tit ila ga rh	4 7	Saguna munda- A Sand Quarry	Khat a No.- 71, Plot No. - 504, Kisa m- Nadi, Mouz a- Sagu namu nda	20°12 '05.5 6562" N to 20°11 '56.3 3997" N	83°11 '21.2 0565" E to 83°11 '14.9 9440" E	Reg d. No.- 3322 0161 4 Dt- 26.0 7.20 22	EC22B 001OR 124646 File no- 257165/ 604- MINB2/ 02-2022 Dt- 03.06.2 022	4.0 46h a 10. 00a c	MR- 3033 3	GR - 35 82 9	Shri Rajat Patra At- Braha mnbati, Po- Badam ulai, Dist- Cuttack	26.07.2022	25.07.2027	Wor king
Tit ila ga rh	4 8	Saguna munda- B Sand Quarry	Khat a No.- 71, Plot No. - 504, Kisa m- Nadi, Mouz a- Sagu namu nda	20°12 '17.9 0553" N to 20°12 '08.4 5483" N	83°10 '57.0 5084" E to 83°10 '49.1 8707" E	Reg d. No.- 3322 0161 3 Dt- 26.0 7.20 22	EC22B 001OR 110127 File no- 257224/ 605- MINB2/ 02-2022 Dt- 07.06.2 022	4.0 46h a 10. 00a c	MR- 3391 9.5	GR - 39 13 0.5	Shri Rasmi ranjan Patra At- Braha mnbati, Po- Badam ulai, Dist- Cuttack	26.07.2022	25.07.2027	Wor king

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Titilagarh	49	Parasara Sand Quarry	Khat a No.- 132, Plot No. - 669, Kisa m-Nadi, Mouz a-Parasara	20°11'55.88636" N to 20°12'07.68375" N	83°00'23.28419" E to 83°00'32.18264" E	Reg d. No.- 3321 0176 1 Dt- 25.10.2021	SEIAA- 1138/01 -2021 Dt- 24.05.2021	4.046ha 10.00ac	MR- 23055	GR - 40469	Shri Gourav Sabhra wal At/ Po- Titilagarh, Dist- Balangir	25.10.2021	25.10.2026	Working
Titilagarh	50	Antarla Sand Quarry	Khat a No.- 150, Plot No. - 1440, Kisa m-Nadi, Mouz a- Antarla	20°13'26.31635" N to 20°13'20.51099" N	83°06'53.82924" E to 83°06'47.17030" E	Reg d. No.- 3322 0156 3 Dt- 19.07.2022	EC22B 001OR 191516 File no- 257402/ 601- MINB2/ 03-2022 Dt- 07.05.2022	4.046ha 10.00ac	MR- 48918	GR - 56106	Shri Debashi Sahu At/ Po- Sargiguda, Malipada(war d no- 2), Titilagarh, Dist- Balangir	19.07.2022	18.07.2027	Working
Titilagarh	51	Gandhargala Sand Quarry	Khat a No.- 54, Plot No. - 160/766 & 27, Kisa m-Nadi, Mouz a- Gandhargala	20°13'57.29548" N to 20°14'14.68492" N	83°01'50.32074" E to 83°02'06.49580" E	Reg d. No.- 3322 0236 2 Dt- 13.12.2022	SEIAA- 1126/12 -2020 Dt- 26.03.2021	3.642ha 9.00ac	MR- 212093	GR - 18211	Shri Pravat Kumar Routray Authorised Signatory of Rajlaxmi Construction Ltd. , Jagatpur , Cuttack	13.12.2022	12.12.2027	Working
Titilagarh	52	Naren Sand Quarry	Khat a No.- 312, Plot No. - 1759, Kisa m-Nadi, Mouz a- Naren	20°13'49.21808" N to 20°13'44.67164" N	83°05'45.26895" E to 83°05'41.39416" E	Reg d. No.- 3321 0163 9 Dt- 29.09.2021	SEIAA- 1108/12 -2020 Dt- 19.05.2021	3.925ha 9.70ac	MR- 23425	GR - 39255	Smt. Manju Sikka W/o Rameet Kumar Sikka At/Po- Titilagarh, Bloc kpada, Dist- Balangir	29.09.2021	28.09.2026	Working

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Titilagarh	53	Ghodar Sand Quarry	Khat No.-284, Plot No.-2015, Kisan-Nadi, Mouza-Ghodar	20°13'10.33668" N to 20°13'00.98254" N	83°08'14.50037" E to 83°08'03.19817" E	Non-Operational	EC Under Process	4.856Ha 12.00ac	MR-57928	GR-96548	Shri Sanjay Kumar Agrawal At-Hatpada, Titilagarh, Dist-Balangir	Non-Operational	Non-Operational	Non Working
Titilagarh	54	Khairkhunta Sand Quarry	Khat No.-79, Plot No.-442 & 305/459, Kisan-Nadi, Mouza-Khairkhunta	20°12'27.665960"N to 20°12'39.59498"N	83°09'57.1868" E to 83°10'11.59005" E	Non-Operational	Non-Operational	4.046ha 10.00ac	MR-23153	GR-40469	For Future Auction	Non-Operational	Non-Operational	Non Working
Titilagarh	55	Udepur Sand Quarry	Khat No.-329, Plot No.-1862, Kisan-Nadi, Mouza-Udepur	20°12'40.48791" N to 20°12'33.48088" N	83°09'34.70752" E to 83°09'23.96568" E	Non-Operational	Non-Operational	4.046ha 10.00ac	MR-21433	GR-40469	For Future Auction	Non-Operational	Non-Operational	Non Working
Bangomunda	56	Bhuslad Sand Bed-B	Khat No.-132, Plot No.-1 Kisan-Nadi, Mouza-Bhuslad	20°14'52.86039" N to 20°14'42.16235" N	82°52'09.21122" E to 82°51'56.92207" E	10342101257Dt-21.10.2021	SEIAA-1651/05-2021 Dt-22.09.2021	11.00Ac 4.45Ha	MR-53784	GR-66774	Sri Subrat Agrawal MD of M/s D.D Builders Ltd.At/Poladugan, Pskoksar, Dist-Kalahandi-766024	21.10.2021	20.10.2026	Working

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Ban go mu nda	5 7	Palaskh and Sand Quarry	Khat a No.- 85 Plot No. - 249 Kisa m- Nadi, Mouz a- Palas khan d	20°15 '12.5 0892" N to 20°15 '26.8 4820" N	82°51 '31.6 3572" E to 82°51 '39.0 1176" E	1034 2000 838 Dt- 01.0 4.20 20	SEIAA- 1651/05 -2021 Dt- 22.09.2 021	12. 355 Ac 5.0 0 Ha	MR- 4226 8	GR - 50 00 0	Sri Tapan Kumar Boe, At/Po- Chatua nka Ps- Kantab anji Dist- Balangi r- 767039	22.09.2021	31.03.2025	Wor king
Ban go mu nda	5 8	Sriram Sand Quarry	Khat a No.- 135 Plot No. - 148 Kisa m- Nadi, Mouz a- Srira m	20°15 '12.3 98"N to 20°14 '51.1 25" N	82°51 '45.4 00"E to 82°51 '32.7 96"E	1034 2000 816 Dt- 01.0 4.20 20	SEIAA- 342/07- 2020 Dt- 27.10.2 020	12. 355 Ac 5.0 0 Ha	MR- 3952 5	GR - 50 00 0	Sri Suresh Kumar Agrawa I, At/po- Dhanm andang a, Ps- Kantab anji, Balangi r- 767039	01.04.2020	31.03.2025	Wor king
Ban go mu nda	5 9	Bhuslad Sand Bed-A	Khat a No.- 132, Plot No. - 1 Kisa m- Nadi, Mouz a- Bhusl ad	20°15 '15.1 4908" N to 20°14 '55.9 5597" N	82°51 '41.4 8286" E to 82°51 '34.5 5549" E	1034 2000 793 Dt- 01.0 4.20 20	SIA/OR/ MIN/27 1818/20 22 Dt- 20.06.2 022	12. 355 Ac 5.0 0 Ha	MR- 4045 4	GR - 50 00 0	Sri Kunja Bihari Behera , At- Talbhata, Po- Kapilab hata, Ps- Bango munda, Balangi r	01.04.2020	31.03.2025	Wor king
Ban go mu nda	6 0	Bhatasa r Sand Quarry	Khat a No.- 56, Plot No. - 518 Kisa m- Nadi, Mouz a- Bhat asar	20°12 '47.8 2177" N to 20°12 '39.7 0628" N	82°57 '23.9 0859" E to 82°57 '13.7 2334" E	1034 2000 761 Dt- 01.0 4.20 20	SEIAA- 296/07- 2020 Dt- 27.10.2 020	7.4 90 Ac 3.0 3 Ha	MR- 2485 4	GR - 30 31 1	Sri Jaldhar Meher, At- Kansil, Po- Munda padar, Ps- Bango munda, Balangi r- 767040	01.04.2020	31.03.2025	Wor king

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Ban go mu nda	6 1	Paruab hadi Sand Quarry	Khat a No.- 79, Plot No. - 411 Kisa m- Nadi, Mouz a- Paru abha di	20°14 '18.2 9405" N to 20°14 '02.5 5178" N	82°52 '15.3 7993" E to 82°52 '08.2 3241" E	1034 2101 258 Dt- 21.1 0.20 21	SEIAA- 1668/05 -2021 Dt- 22.09.2 021	7.4 90 Ac 3.0 3 Ha	MR- 4197 7.5	GR - 52 87 9.5	Sri Subrat Agrawa IMD of M/s D.D Builde rs Ltd.At/ Po- Laduga on, Ps- Koksar a, Dist- Kalaha ndi- 766024	21.10.2021	20.10.2026	Wor king
Ban go mu nda	6 2	Asurla Sand Quarry	Khat a No.- 131 Plot No. - 142,3 23, Kisa m- Nadi, Mouz a- Asurl a	20°17 '21.3 2795" N to 20°16 '59.9 2778" N	82°51 '10.6 7107" E to 82°50 '50.9 9553" E	1034 2000 808 Dt- 01.0 4.20 20	SIA/OR/ MIN/27 1851/20 22 Dt- 02.06.2 022	12. 355 Ac 5.0 0 ha	MR- 3884 6	GR - 50 00 0	Sri Jogipra sad Bag, At/Po/P s- Kantab anji, Balangi r	01.04.2020	31.03.2025	Wor king
Ban go mu nda	6 3	Chando tara Sand Bed-B	Khat a No.- 145 Plot No. - 1011, Kisa m- Nadi, Mouz a- Chan dotar a	20°12 '38.3 2706" N to 20°12 '26.8 2805" N	82°55 '16.2 3740" E to 82°56 '01.5 8388" E	1034 2000 934 Dt- 24.1 2.20 20	SEIAA- 801/10/ 2020 Dt- 17.12.2 020	11. 00 Ac 4.4 51 ha	MR- 3952 5	GR - 44 51 6	Sri Kanhey alal Agrawa l At/Po/P s- Bango munda, Balangi r	24.12.2020	23.12..2025	Wor king
Ban go mu nda	6 4	Chando tara Sand Bed-A	Khat a No.- 145 Plot No. - 693/1 204 Kisa m- Nadi, Mouz a- Chan dotar a	20°12 '53.4 76"N to 20°13 '5.43 4" N	82°55 '44.1 49"E to 82°55 '52.1 73"E	Non- Oper ation al	For Future Auction	8.0 0 Ac 3.2 37 ha	MR- 2556 3	GR - 32 37 4	Non- Operati onal	Non- Operational	Non- Operational	Non - Wor king

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Ban go mu nda	6 5	Telsarai Sand Bed	Khat a No.- 31 Plot No. - 218/2 45 Kisa m- Nadi, Mouz a- Telsa rai	20°12 '42.8 9235" N to 20°12 '29.9 8419" N	82°56 '49.7 5457" E to 82°56 '38.1 0044" E	1034 2000 932 Dt- 01.0 4.20 20	SEIAA- 791/10- 2020 Dt- 17.12.2 020	12. 00 Ac 4.8 56 ha	MR- 2660 4	GR - 48 56 2	Sri Sujaj Kumar Agrawa I, Ap/Po/ Ps- Bango munda, Balangi r	01.04.2020	31.03.2025	Wor king
Ban go mu nda	6 6	Salebar at Sand Bed	Khat a No.- 119 Plot No. - 1147, Kisa m- Nadi, Mouz a- Saleb arat	20°13 '06.5 0016" N to 20°13 '01.9 2687" N	82°54 '18.9 4285" E to 82°54 '04.6 8199" E	1034 2100 988 Dt- 21.1 0.20 21	SIA/OR/ MIN/27 5541/20 22, Dt- 04.06.2 022	11. 00 Ac 4.4 51 ha	MR- 5477 5.5	GR - 66 77 4	Sri Kanhey alal Agrawa I At/Po/P s- Bango munda, Balangi r	21.10.2021	20.10.2026	Wor king
Ban go mu nda	6 7	Sanmul a Sand Bed	Khat a No.- 124, Plot No. - 696, Kisa m- Nadi, Mouz a- San mula	20°18 '36.6 9948" N to 20°18 '59.6 0088" N	82°50 '02.1 6204" E to 82°50 '13.0 4880" E	1034 2000 760 Dt- 01.0 4.20 20	SEIAA- 341/07- 2020 Dt- 27.10.2 020	12. 355 Ac 5.0 0 ha	MR- 3901 3	GR - 50 00 0	Sri Tapan Kumar Boe, At/Po- Chatua nka Ps- Kantab anji Dist- Balangi r- 767039	01.04.2020	31.03.2025	Wor king
Ban go mu nda	6 8	Tureikel a Sand Quarry	Khat a No.- 164, Plot No. - 622, Kisa m- Nadi, Mouz a- Turei kela	20°13 '0.78 0"N to 20°13 '10.0 44" N	82°52 '42.1 84"E to 82°52 '52.1 04"E	1034 2000 759 Dt- 01.0 4.20 20	SEIAA- 297/07- 2020 Dt- 27.10.2 020	7.4 9 Ac 3.0 3 ha	MR- 2496 9	GR - 30 31 1	Smt. Sujata Mohon aty, At/Po/P s- Kantab anji, Balangi r- 767039	01.04.2020	31.03.2025	Wor king

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Kantab anji	6 9	Tikrapada Sand Bed	Khat a No.- 54 Plot No. - 684, Kisa m- Nadi, Mouz a- Tikra pada	20°23 '20.0 1"N to 20°23 '25.3 9N	82°45 '09.0 8"E to 82°45 '12.1 3"E	1034 1800 091, Dt- 01.0 1.20 18	Non Working	3.0 0 Ac 1.2 1 ha	MR- 7311	GR - 12 14 0	Sri Munna Aham mad, At/Po/P s- Kantab anji,Bal angir	Dt- 01.01.2018	31.03.2023	Non - Wor king
Kantab anji	7 0	Bharuak ani Sand Bed	Khat a No.- 46 Plot No. - 2 Kisa m- Jore Mouz a- Bhar uaka ni	20°21 '58.1 2"N to 20°22 '04.1 9"N	82°46 '04.7 3"E to 82°46 '08.3 5"E	1034 2100 143, Dt- 02.0 2.20 21	SEIAA- 509/09- 2020, Dt- 14.12.2 020	5.7 6 Ac 2.3 3 ha	MR- 1650 7	GR - 23 31 0	Sri Munna Aham mad, At/Po/P s- Kantab anji,Bal angir	02.02.2021	01.02.2026	Wor king
Sai ntal a	7 1	Kuikedada Sand Quarry	Khat a No.- 68 Plot No. - 317/5 63 Kisa m- Nadi Mouz a- Kuike da	20°25 '59.0 3350" N to 20°26 '12.8 9620" N	83°17 '46.0 3258" E to 83°17 '57.7 5064" E	1033 2001 734 Dt- 09.1 2.20 20	SEIAA- 381/07- 2020, Dt- 27.10.2 020	8.1 4 Ac 3.2 98 ha	MR- 1820 0	GR - 20 80 0	Smt. Umaka nti Behera , At/Po- Kumbh ari, Ps- Saintal a	09.12.2020	08.12.2025	Wor king
Sai ntal a	7 2	Tikrapada Sand Quarry	Khat a No.- 248 Plot No. - 554,6 88, Kisa m- Nadi Mouz a- Tikra pada	20°30 '02.2 5126" N to 20°30 '25.6 9657" N	83°06 '58.9 0665" E to 83°07 '05.0 9135" E	1033 2001 735 Dt- 09.1 2.20 20	SEIAA- 377/07- 2020, Dt- 27.10.2 020	12. 00 Ac 4.8 5 ha	MR- 3743 3	GR - 48 56 2	Smt. Umaka nti Behera , At/Po- Kumbh ari, Ps- Saintal a	09.12.2020	08.12.2025	Wor king

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Saintala	73	Kamarlaga Sand Quarry	Khat a No.- 75 Plot No. - 668, Kisa m-Nadi Mouz a-Kamarlaga	20°25'57.1" N to 20°25'52.6" N	83°19'04.0" E to 83°18'50.4" E	10332001828 Dt- 21.12.2020	SIA/OR/ MIN/27 1547/2022, Dt- 22.06.2022	8.10 Ac 3.278 ha	MR-24780	GR - 31450	Sri Swagat Sourav Behera , At/Po/Ps- Saintala, Balangir	21.12.2020	20.12.2025	Working
Saintala	74	Mahagon Sand Quarry	Khat a No.- 49 Plot No. - 102, Kisa m-Nadi Mouz a-Mahagon	20°24'39.2" N to 20°24'33.0" N	83°20'28.1" E to 83°20'07.3" E	10332001827 Dt- 21.12.2020	SIA/OR/ MIN/27 1676/2022, Dt- 02.06.2022	12.00Ac 4.85 ha	MR-37423	GR - 48562	Sri Arun Kumar Singbhoi, At/Po/Ps- Saintala, Balangir	21.12.2020	21.12.2025	Working
Saintala	75	Saintala Sand Quarry	Khat a No.- 485 Plot No. - 3017, Kisa m-Nadi, Mouz a-Saintala	20°26'33.8" N to 20°26'18.5" N	83°22'06.8" E to 83°22'00.0" E	10332001783 Dt- 17.12.2020	SIA/OR/ MIN/27 1705/2022, dt- 02.06.2022	12.35Ac 4.99 ha	MR-20751.5	GR - 24989	Sri Badal Agrawala, At/Po/Ps- Saintala, Balangir	17.12.2020	16.12.2025	Working
Saintala	76	Belgaon Sand Quarry	Khat a No.- 233 Plot No. - 1100/1255, Kisa m-Nadi, Mouz a-Belgaon	20°18'34.7" N to 20°18'25.5" N	83°19'15.3" E to 83°19'08.8" E	10332001729 Dt- 11.12.2020	SEIAA-363/07-2020, Dt- 27.10.2020	9.50Ac 2.844 ha	MR-14100	GR - 18010	Sri Lokeswar Majhi, At/Po-Belgaon, Ps- Saintala, Balangir	11.11.2020	10.11.2025	Working

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Saintala	77	Chhanchhada Sand Quarry	Khat No.- 247, Plot No. - 1951, Kisan-Nadi, Mouza-Chhanchhada	20°26'02.0 4834" N to 20°25'52.1 0538" N	83°15'05.6 1587" E to 83°14'53.1 1609" E	1033 2001 730 Dt- 07.1 2..20 20	SIA/OR/ MIN/27 1680/20 22, Dt- 02.06.2 022	12. 00 Ac 4.8 5 ha	MR- 2059 1.5	GR - 24 28 1	Sri Rajkishore Singh Budek, At/po-Karamtala, Ps-Saintala, Balangir	07.12..2020	06.12.2025	Working
Saintala	78	Ampali Sand Quarry	Khat No.- 156, Plot No. - 901, Kisan-Nadi, Mouza-Ampali	20°25'41.3 7374" N to 20°25'36.9 7507" N	83°26'30.5 7"E to 83°26'16.4 7"E	Non-Operational, For Future Auction	SIA/OR/ MIN/27 6224/20 22, Dt- 30.06.2 022	7.1 0 Ac 2.8 7 ha	MR- 1210 0	GR - 15 80 0	Sri Rajkishore Singh Budek, At/po-Karamtala, Ps-Saintala, Balangir	Non-Operational	Non-Operational	Non-Working
Saintala	79	Karamtala Sand Quarry	Khat No.- 211, Plot No. - 1101, Kisan-Nadi, Mouza-Karamtala	20°25'57.4 3915" N to 20°26'05.7 6536" N	83°15'33.1 3774" E to 83°16'01.0 7908" E	Not Required as it is a proposed source	Not Required as it is a proposed source	3.5 16 Ha 8.6 9 Ac	MR- 4220 0	GR - 70 33 4	Not Required as it is a proposed source	Not Required as it is a proposed source	Not Required as it is a proposed source	New Source for future Auction
Patnagarh	80	Tamian Sand Quarry	Khat No.- 286, Plot No. - 1847, Kisan-Nadi, Mouza-Tamian	20°46'43.1 1380" N to 20°47'06.2 2908" N	83°14'18.5 8855" E to 83°14'38.4 6536" E	1032 2001 487, Dt- 05.1 1.20 20	SEIAA- 257/06- 2020, Dt- 07.10.2 020	12. 00 Ac 4.8 5 ha	MR- 5444 7	GR - 72 54 3	Sri Bhakta Charan Patel, At-Pilatimahul, Po-Dumerpita, Ps-Balangir, Dist-Balangir	05.11.2020	04.11.2025	Working

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Patnagarh	81	Naktasar Sand Quarry	Khat a No.- 56, Plot No. - 220, Kisa m- Nadi, Mouz a- Nakt asar	20°43 '27.2 4845" N to 20°43 '13.7 8346" N	83°12 '33.7 8623" E to 83°12 '11.4 5108" E	1032 2100 001, Dt- 01.0 1.20 21	SEIAA- 356/07- 2020, Dt- 17.12.2 020	12. 35 Ac 5.0 0 ha	MR- 3766 8	GR - 49 97 8	Sri Jenam ani Sahu, At- Rugudi munda, Po- Kutmu nda, Ps- Patnag arh, Balangi r- 767041	01.01.2021	31.12.2026	Wor king
Patnagarh	82	Sunamudi Sand Quarry	Khat a No.- 172, Plot No. - 1186, Kisa m- Nadi, Mouz a- Suna mudi	20°43 '15.0 0986" N to 20°43 '25.0 4036" N	83°11 '28.7 1014" E to 83°11 '37.5 2461" E	1032 2100 088, Dt- 19.0 1.20 21	SEIAA- 508/09- 2020, Dt- 17.12.2 020	13. 00 Ac 5.0 0 ha	MR- 2240 0	GR - 25 25 3	Sri Bimale ndu Bikash Meher, At/Po- Tendap adar, Ps- Patnag arh, Balangi r	19.01.2021	18.01.2026	Wor king
Patnagarh	83	Pudapadar Sand Quarry	Khat a No.- 48, Plot No. - 78, Kisa m- Nadi, Mouz a- Puda padar	20°49 '16.0 4599" N to 20°49 '03.0 7368" N	83°13 '13.2 2451" E to 83°13 '01.6 6198" E	1032 2101 751, Dt- 15.1 1.20 21	SEIAA- 1283/01 -2021, Dt- 08.10.2 021	12. 00 Ac 4.8 5 ha	MR- 4074 4	GR - 48 56 2	Sri Bimale ndu Bikash Meher, At/Po- Tendap adar, Ps- Patnag arh, Balangi r	15.11.2021	14.11.2026	Wor king
Patnagarh	84	Koudia Sand Quarry-B	Khat a No.- 48, Plot No. - 302, Kisa m- Nadi, Mouz a- Koudi a	20°43 '37.5 4621" N to 20°43 '24.1 9130" N	83°10 '17.0 9807" E to 83°09 '59.1 7624" E	1032 2100 087, Dt- 19.0 1.20 21	SEIAA- 671/07- 2020, Dt- 05.10.2 020	7.5 7 Ac 3.0 63 ha	MR- 2027 0	GR - 30 63 5	Sri Bimale ndu Bikash Meher, At/Po- Tendap adar, Ps- Patnag arh, Balangi r	19.01.2021	18.01.2026	Wor king

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Patnagarh	85	Koudia Sand Quarry-A	Khat No.-48, Plot No.-1, 302, Kisan-Nadi, Mouza-Koudia	20°43'46.54938" N to 20°43'27.60469" N	83°09'45.74077" E to 83°09'21.99052" E	10322001656, Dt-05.11.2020	SEIAA-372/07-2020, Dt-07.10.2020	12.35Ac5.00ha	MR-35499	GR-49978	Sri Asish Kumar Patra, At-Ramje Chowk, Po/Ps-Patnagarh, Balangir	05.11.2020	04.11.2025	Working
Patnagarh	86	Ghasian Sand Quarry	Khat No.-228, Plot No.-394,3, Kisan-Nadi, Mouza-Ghasian	20°50'06.40121" N to 20°50'15.38324" N	83°10'08.40611" E to 83°10'22.22257" E	10322100014, Dt-05.01.2020	SEIAA-259/06-2020, Dt-17.12.2020	12.00Ac4.85ha	MR-53490	GR-102810	Sri Bhakta Charan Patel, At-Pilatimahul, Po-Dumerpita, Ps-Balangir, Dist-Balangir	05.01.2020	04.01.2026	Working
Patnagarh	87	Dhubalpara Sand Quarry	Khat No.-155, Plot No.-112, Kisan-Jore, Mouza-Dhubalpara	20°43'13.17704" N to 20°43'29.59817" N	83°13'29.75207" E to 83°13'40.85883" E	10322100631, Dt-07.04.2020	SEIAA-1116/12-2020, Dt-26.03.2021	10.00Ac4.046ha	MR-48562	GR-80937	Sri Premnada Pradhan, At-Shantipada, Po-Rajendra College, Ps-Balangir, Dist-Balangir	07.04.2020	06.04.2026	Working
Tusura	88	Atigaon Sand Quarry	Khat No.-88, Plot No.-1, Kisan-Nadi, Mouza-Atigaon	20°28'18.95804" N to 20°28'11.24095" N	83°32'40.77695" E to 83°32'32.57622" E	10352200712, Dt-05.10.2019	SIA/OR/MIN/456945/2023	12.00Ac4.86ha	MR-41300	GR-47500	Sri Sundarmani Sahu, At/Po-Atigaon, Ps-Tusura, Balangir	05.10.2019	04.10.2024	Working

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Tus ura	8 9	Kharda Sand Quarry	Khat a No.- 76, Plot No. - 1/530 , Kisa m- Nadi, Mouz a- Khar da	20°30 '30.8 0232" N to 20°30 '23.3 0064" N	83°29 '02.3 7984" E to 83°28 '38.7 3180" E	1035 2100 560, Dt- 01.1 0.20 21	SEIAA- 1166/01 -2021, Dt- 01.07 2021	12. 35 Ac 5.0 0 ha	MR- 3741 1	GR - 49 97 9	Sri Barun Sahu, At- Likhiria , Ps- Tusura, Balangi r	01.10.2021	30.09.2026	Wor king
Tus ura	9 0	Sargad a Sand Quarry	Khat a No.- 81, Plot No. - 453,4 54,1, Kisa m- Nadi, Mouz a- Sarg ada	20°31 '08.3 1237" N to 20°30 '43.4 7255" N	83°27 '39.9 3416 7"E to 83°27 '23.2 2956 9"E	1035 0005 32, Dt- 29.1 0.20 20	SEIAA- 295/07- 2020, Dt- 27.10 2020	12. 00 Ac 4.8 6 ha	MR- 3521 4	GR - 49 97 9	Sri Dayani dhi Padha n, At- Sargad a, Ps- Tusura, Balangi r	29.10.2020	28.10.2025	Wor king
Tus ura	9 1	Kukedm al Sand Quarry	Khat a No.- 84, Plot No. - 653/6 55, Kisa m- Nadi, Mouz a- Kuke dmal	20°25 '31.5 5875" N to 20°25 '22.9 6132" N	83°27 '04.0 2375" E to 83°26 '53.5 7717" E	1035 2000 531, Dt- 29.1 0.20 20	SEIAA- 294/07- 2020, Dt- 27.10 2020	8.0 0 Ac 3.2 3 ha	MR- 2594 4	GR - 32 37 5	Sri Pragya n Kumar Bhoi, At/Po- Sarsar a, Ps/Dist - Bargar h	29.10.2020	28.10.2025	Wor king

4. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS:

Table-3

SI No	Name Of Tahasil	Name Of Source	2021-22(Rs.)	2022-23(Rs.)	2023-24(Rs.)
1	Loisingha	Kusmel Sand Quarry	Non-Operational	446527	535575
2	Loisingha	Hirapur Sand Quarry	Non-Operational	Non-Operational	Non-Operational
3	Loisingha	Chelbahal Sand Quarry	Non-Operational	Non-Operational	Non-Operational
4	Loisingha	Tebhadunguri sand Quarry	Non-Operational	Non-Operational	Non-Operational
5	Belpada	Mandal Sand Quarry	206550	206550	62923
6	Belpada	Nunhad Sand Quarry	109440	109440	109440
7	Belpada	Dhumabhata Sand Quarry	97740	97740	97740
8	Belpada	Belpada sand Quarry	59634.36	59634.36	59634.36
9	Belpada	Parlimal Sand Quarry	Non-Operational	Non-Operational	150667
10	Deogan	Chatapipal Sand Quarry	Non-Operational	Non-Operational	Non-Operational
11	Deogan	Bandhapada sand Quarry	Non-Operational	Non-Operational	Non-Operational
12	Deogan	Sarasma/Siletkani Sand Quarry	Non-Operational	Non-Operational	Non-Operational
13	Deogan	Gaibahal Sand Quarry	Non-Operational	Non-Operational	Non-Operational
14	Deogan	Ratakhandi Sand Quarry	Non-Operational	Non-Operational	Non-Operational
15	Deogan	Kendhughat Sand Quarry	Non-Operational	Non-Operational	Non-Operational
16	Deogan	Arda Sand Quarry	Non-Operational	Non-Operational	Non-Operational

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17	Deogan	Antarla Sand Quarry	Non-Operational	Non-Operational	Non-Operational
18	Deogan	Sikuan Sand Quarry	Non-Operational	Non-Operational	Non-Operational
19	Deogan	Kachharpalli Sand Quarry	Non-Operational	Non-Operational	Non-Operational
20	Deogan	Kuturla Sand Quarry	Non-Operational	Non-Operational	Non-Operational
21	Deogan	Ghatul Sand Quarry	Non-Operational	Non-Operational	Non-Operational
22	Deogan	Tepren Sand Quarry	Non-Operational	Non-Operational	Non-Operational
23	Agalpur	Salebhata Sand Quarry	Non-Operational	Non-Operational	1205241.8
24	Agalpur	Tentuligaon Sand Quarry	451080	451080	435480
25	Agalpur	Banjipali Sand Quarry	1381125	165735	165735
26	Agalpur	Fasad Sand Quarry	Non-Operational	2060957.31	2473290
27	Agalpur	Fatamunda Sand Quarry	203040	203040	203040
28	Agalpur	Kutasinga Sand Quarry	202986	202986	202986
29	Balangir	Chandanbhati Sand Quarry	451028	451028	451028
30	Balangir	Kutumdola Sand Quarry	347485	347485	347485
31	Khaprakhhol	Luhasingha Sand Quarry	22083.17	270848	276698
32	Khaprakhhol	Goudapali Sand Quarry	Non-Operational	662509.5	662461.5
33	Muribahal	Godighat Sand Quarry	29547.11	89691.66	89691.66

River Sand Mining**DSR of Balangir District**

34	Muribahal	Jampadar Sand Quarry	121241	121241	121241
35	Muribahal	Bandupala Sand Quarry	Non-Operational	Non-Operational	Non-Operational
36	Puintala	Shankarbhoji Sand Quarry	603595.71	603595.71	603595.71
37	Puintala	Pipirda Sand Quarry	1112540	1111230	1109440
38	Puintala	Durgapali Sand Quarry	Non-Operational	Non-Operational	Non-Operational
39	Puintala	Bilaisarda Sand Quarry	Non-Operational	Non-Operational	Non-Operational
40	Titilagarh	Mahada Sand Quarry	Non-Operational	86328.16	1013011
41	Titilagarh	Patharla Sand Quarry	754604.3	905352	905352
42	Titilagarh	Turukbhata Sand Quarry	Non-Operational	Non-Operational	27084876
43	Titilagarh	Sukunabhata Sand Quarry	Non-Operational	46115.67	138231.33
44	Titilagarh	Sagunamunda-A Sand Quarry	Non-Operational	180102.75	173198.25
45	Titilagarh	Sagunamunda-B Sand Quarry	Non-Operational	35316	138348
46	Titilagarh	Parasara Sand Quarry	60691	121382	121382
47	Titilagarh	Antarla Sand Quarry	Non-Operational	106684.6	144365.15
48	Titilagarh	Gandhargala Sand Quarry	Non-Operational	130415.71	391251
49	Titilagarh	Naren Sand Quarry	529674.87	908221.26	908221.26
50	Titilagarh	Ghodar Sand Quarry	Non-Operational	Non-Operational	Non-Operational

River Sand Mining**DSR of Balangir District**

51	Titilagarh	Khairkhunta Sand Quarry	Non-Operational	Non-Operational	Non-Operational
52	Titilagarh	Udepur Sand Quarry	Non-Operational	Non-Operational	Non-Operational
53	Bangomunda	Bhuslad Sand Bed-B	73997.07	186129.72	194916.72
54	Bangomunda	Palaskhand Sand Quarry	Non-Operational	Non-Operational	Non-Operational
55	Bangomunda	Sriram Sand Quarry	247500	155000	247500
56	Bangomunda	Bhuslad Sand Bed-A	Non-Operational	Non-Operational	Non-Operational
57	Bangomunda	Bhatasar Sand Quarry	Non-Operational	Non-Operational	10800
58	Bangomunda	Paruabhadi Sand Quarry	59224.13	186381.91	193058.4
59	Bangomunda	Asurla Sand Quarry	93060	9675	9675
60	Bangomunda	Chandotara Sand Bed-B	47653	47653	47653
61	Bangomunda	Chandotara Sand Bed-A	Non-Operational	Non-Operational	Non-Operational
62	Bangomunda	Telsarai Sand Bed	179640	179640	179640
63	Bangomunda	Salebarat Sand Bed	Non-Operational	Non-Operational	112114
64	Bangomunda	Sanmula Sand Bed	156830.4	67437	6300
65	Bangomunda	Tureikela Sand Quarry	284654	269579	276000
66	Kantabanji	Tikrapada Sand Bed	Non-Operational	Non-Operational	Non-Operational

River Sand Mining**DSR of Balangir District**

67	Kantabanji	Bharuakani Sand Bed	Non-Operational	Non-Operational	Non-Operational
68	Saintala	Kuikeda Sand Quarry	165924	171072	176220
69	Saintala	Tikrapada Sand Quarry	202431	202431	202431
70	Saintala	Kamarlaga Sand Quarry	140656.46	103275	132600
71	Saintala	Mahagaon Sand Quarry	132278.92	117000	117000
72	Saintala	Saintala Sand Quarry	112508.95	112508.95	112508.95
73	Saintala	Belgaon Sand Quarry	120565	1136.25	0
74	Saintala	Chhanchhada Sand Quarry	157086	108559.86	0
75	Saintala	Ampali Sand Quarry	Non-Operational	Non-Operational	Non-Operational
76	Patnagarh	Tamian Sand Quarry	59546	59546	59546
77	Patnagarh	Naktasar Sand Quarry	265050	265050	265050
78	Patnagarh	Sunamudi Sand Quarry	Non-Operational	Non-Operational	Non-Operational
79	Patnagarh	Pudapadar Sand Quarry	83909.79	201320.46	201320.5
80	Patnagarh	Koudia Sand Quarry-B	Non-Operational	Non-Operational	Non-Operational
81	Patnagarh	Koudia Sand Quarry-A	Non-Operational	Non-Operational	Non-Operational

82	Patnagarh	Ghasian Sand Quarry	112899	112899	112899
83	Patnagarh	Dhubalpara Sand Quarry	717497	755685.8	575713
84	Tusura	Atigaon Sand Quarry	Non-Operational	Non-Operational	Non-Operational
85	Tusura	Kharda Sand Quarry	583037.01	1166074.02	996906
86	Tusura	Sargada Sand Quarry	242770	242770	142770
87	Tusura	Kukedmal Sand Quarry	Non-Operational	Non-Operational	Non-Operational

5. DETAILS OF PRODUCTION OF MINOR MINERALS IN LAST THREEYEARS:

Table-4

SI No	Name Of Tahasil	Name Of Source	2021-22(cum.)	2022-23(cum.)	2023-24(cum.)
1	Loisingha	Kusmel Sand Quarry	Non-Operational	4584	5500
2	Loisingha	Hirapur Sand Quarry	Non-Operational	Non-Operational	Non-Operational
3	Loisingha	Chelbahal Sand Quarry	Non-Operational	Non-Operational	Non-Operational
4	Loisingha	Tebhadunguri sand Quarry	Non-Operational	Non-Operational	Non-Operational
5	Belpada	Mandal Sand Quarry	3500	3500	3500
6	Belpada	Nunhad Sand Quarry	2000	2000	2000
7	Belpada	Dhumabhata Sand Quarry	2000	2000	2000
8	Belpada	Belpada sand Quarry	1240	1240	1240

River Sand Mining**DSR of Balangir District**

9	Belpada	Parlimal Sand Quarry	Non-Operational	Non-Operational	2333
10	Deogan	Chatapipal Sand Quarry	Non-Operational	Non-Operational	Non-Operational
11	Deogan	Bandhapada sand Quarry	Non-Operational	Non-Operational	Non-Operational
12	Deogan	Sarasmal/Siletkani Sand Quarry	Non-Operational	Non-Operational	Non-Operational
13	Deogan	Gaibahal Sand Quarry	Non-Operational	Non-Operational	Non-Operational
14	Deogan	Ratakhandi Sand Quarry	Non-Operational	1330.83	1630
15	Deogan	Kendhughat Sand Quarry	Non-Operational	Non-Operational	Non-Operational
16	Deogan	Arda Sand Quarry	Non-Operational	Non-Operational	Non-Operational
17	Deogan	Antarla Sand Quarry	Non-Operational	Non-Operational	Non-Operational
18	Deogan	Sikuan Sand Quarry	Non-Operational	Non-Operational	Non-Operational
19	Deogan	Kachharpalli Sand Quarry	Non-Operational	Non-Operational	Non-Operational
20	Deogan	Kuturla Sand Quarry	Non-Operational	Non-Operational	Non-Operational
21	Deogan	Ghatul Sand Quarry	Non-Operational	Non-Operational	Non-Operational
22	Deogan	Tepren Sand Quarry	Non-Operational	Non-Operational	Non-Operational
23	Agalpur	Salebhata Sand Quarry	Non-Operational	Non-Operational	3000
24	Agalpur	Tentuligaon Sand Quarry	8000	8000	8000
25	Agalpur	Banjipali Sand Quarry	125	1500	1500
26	Agalpur	Fasad Sand Quarry	Non-Operational	5833.33	7000

River Sand Mining**DSR of Balangir District**

27	Agalpur	Fatamunda Sand Quarry	4000	4000	4000
28	Agalpur	Kutasinga Sand Quarry	4000	4000	4000
29	Balangir	Chandanbhati Sand Quarry	4000	4000	4000
30	Balangir	Kutumdola Sand Quarry	4000	4000	4000
31	Khaprakhol	Luhasingha Sand Quarry	375	4600	4700
32	Khaprakhol	Goudapali Sand Quarry	Non-Operational	1300	2600
33	Muribahal	Godighat Sand Quarry	667	2000	2000
34	Muribahal	Jampadar Sand Quarry	2000	2000	2000
35	Muribahal	Bandupala Sand Quarry	Non-Operational	Non-Operational	Non-Operational
36	Puintala	Shankarbhoji Sand Quarry	3850	3850	3850
37	Puintala	Pipirda Sand Quarry	3000	3000	3000
38	Puintala	Durgapali Sand Quarry	3850	3850	3850
39	Puintala	Bilaisarda Sand Quarry	Non-Operational	Non-Operational	Non-Operational
40	Titilagarh	Mahada Sand Quarry	Non-Operational	1750	3000
41	Titilagarh	Patharla Sand Quarry	1667	2000	2000
42	Titilagarh	Turukbhata Sand Quarry	Non-Operational	Non-Operational	1750
43	Titilagarh	Sukunabhata Sand Quarry	Non-Operational	1000	3000

River Sand Mining**DSR of Balangir District**

44	Titilagarh	Sagunamunda-A Sand Quarry	Non-Operational	2250	3000
45	Titilagarh	Sagunamunda-B Sand Quarry	Non-Operational	750	3000
46	Titilagarh	Parasara Sand Quarry	1250	2500	2500
47	Titilagarh	Antarla Sand Quarry	Non-Operational	2250	3100
48	Titilagarh	Gandhargala Sand Quarry	Non-Operational	666.66	2000
49	Titilagarh	Naren Sand Quarry	2333.33	4000	4000
50	Titilagarh	Ghodar Sand Quarry	Non-Operational	Non-Operational	Non-Operational
51	Titilagarh	Khairkhunta Sand Quarry	Non-Operational	Non-Operational	Non-Operational
52	Titilagarh	Udepur Sand Quarry	Non-Operational	Non-Operational	Non-Operational
53	Bangomunda	Bhuslad Sand Bed-B	833	2100	2200
54	Bangomunda	Palaskhand Sand Quarry	Non-Operational	Non-Operational	Non-Operational
55	Bangomunda	Sriram Sand Quarry	1500	1500	1500
56	Bangomunda	Bhuslad Sand Bed-A	1500	1500	1500
57	Bangomunda	Bhatasar Sand Quarry	1500	1500	1500
58	Bangomunda	Paruabhadi Sand Quarry	667	2100	2200.5
59	Bangomunda	Asurla Sand Quarry	1500	1500	1500

River Sand Mining**DSR of Balangir District**

60	Bangomunda	Chandotara Sand Bed-B	1000	1000	1000
61	Bangomunda	Chandotara Sand Bed-A	Non-Operational	Non-Operational	Non-Operational
62	Bangomunda	Telsarai Sand Bed	4000	4000	4000
63	Bangomunda	Salebarat Sand Bed	1000	2100	2200
64	Bangomunda	Sanmula Sand Bed	1200	1200	1200
65	Bangomunda	Tureikela Sand Quarry	2500	2500	2500
66	Kantabanji	Tikrapada Sand Bed	Non-Operational	Non-Operational	Non-Operational
67	Kantabanji	Bharuakani Sand Bed	Non-Operational	Non-Operational	Non-Operational
68	Saintala	Kuikeda Sand Quarry	3200	3300	3400
69	Saintala	Tikrapada Sand Quarry	2000	2000	2000
70	Saintala	Kamarlaga Sand Quarry	3200	3300	3400
71	Saintala	Mahagaon Sand Quarry	3000	3000	3000
72	Saintala	Saintala Sand Quarry	2365	2365	2365
73	Saintala	Belgaon Sand Quarry	2200	2300	2400
74	Saintala	Chhanchhada Sand Quarry	2000	2000	2000
75	Saintala	Ampali Sand Quarry	Non-Operational	Non-Operational	Non-Operational

River Sand Mining**DSR of Balangir District**

76	Patnagarh	Tamian Sand Quarry	1300	1300	1300
77	Patnagarh	Naktasar Sand Quarry	2500	2500	2500
78	Patnagarh	Sunamudi Sand Quarry	2100	2250	2300
79	Patnagarh	Pudapadar Sand Quarry	1042	2500	2500
80	Patnagarh	Koudia Sand Quarry-B	Non-Operational	Non-Operational	Non-Operational
81	Patnagarh	Koudia Sand Quarry-A	560	560	560
82	Patnagarh	Ghasian Sand Quarry	2500	2500	2500
83	Patnagarh	Dhubalpara Sand Quarry	1800	1896	1998
84	Tusura	Atigaon Sand Quarry	Non-Operational	Non-Operational	Non-Operational
85	Tusura	Kharda Sand Quarry	3741	7482	7482
86	Tusura	Sargada Sand Quarry	2000	2000	2000
87	Tusura	Kukedmal Sand Quarry	Non-Operational	Non-Operational	Non-Operational

6. PROCESS OF DEPOSITION OF SAND OR BAJRI OR MINOR MINERAL IN LAST THREE YEARS:

Table-5

Sl. No.	Name of the River	Financial Year	Process of Deposition of Sediments
Total Volume of Sand in three years			
1	Tel	2021-22	moderate
		2022-23	moderate
		2023-24	moderate
Total Volume of Sand in three years			
2	Suktel	2021-22	moderate
		2022-23	moderate
		2023-24	moderate
Total Volume of Sand in three years			
3	Lant	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			
4	Ong	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			
5	Indra	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			
6	Sundar	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			
7	Songad	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			
8	Arjun	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			
9	Laul	2021-22	Slow
		2022-23	Slow
		2023-24	Slow
Total Volume of Sand in three years			

1. Tel River

- Areas of Aggradation/Deposition for Sand Mining:
 - Middle and lower reaches near Belgaon, Gunsar & Kukedmal show moderate sediment deposition due to wider channels and reduced flow velocity, suitable for controlled sand mining.
 - Mining permissible in identified sandbars, with depths not exceeding 1-3 meters, based on annual sediment replenishment rates.
- Areas of Erosion and Prohibited Zones:
 - Upper reaches near Tarbha and Kantamal area prone to bank erosion due to high monsoon flows and narrow channels, mining may be prohibited to prevent bank collapse.
 - Ideally ,No mining within 500 meters of bridges in its upstream and 350 meters from bridges ,embankments, or irrigation structures to avoid structural damage. Major bridges in the river in Balangir district include Brlgaon Bridge and Dhanghara Bridge.
 - Mining banned within 1 km of ecologically sensitive areas, including potential buffer zones near the Sunabeda Wildlife Sanctuary.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Annual replenishment rate as surveyed time to time during pre and post monsoon from the existing sand quarries using sediment transport models +and field surveys, estimating moderate deposition of 0.5-1.0 meters/year in identified zones.
 - Post-mining, a minimum of 12-18 months cessation period is required to allow natural sediment replenishment during monsoon cycles, monitored through bathymetric and drone surveys.

2. Suktel River

- Areas of Aggradation/Deposition for Sand Mining:
 - Middle reaches near Puintala exhibit moderate sediment deposition, with sandbars forming during low-flow seasons, suitable for regulated mining.
 - Extraction limited to replenishment rates, monitored via GIS-based mapping.
- Areas of Erosion and Prohibited Zones:
 - Erosion-prone areas near the confluence with the Tel River and upstream near the Suktel Dam; mining prohibited to prevent riverbed destabilization and dam safety risks.
 - No mining within 500 meters of the Loisingha bridge or irrigation structures.

- Restricted zones near settlements to avoid flooding risks.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Replenishment rate estimated at 0.4-0.8 meters/year in depositional zones, calculated using hydrological data and sediment load studies.
 - A 12-18 month post-mining cessation period is mandatory to allow sediment replenishment, with regular monitoring to ensure riverbed recovery.

3. Lanth River

- Areas of Aggradation/Deposition for Sand Mining:
 - Localized depositional zones in middle reaches with slow sediment deposition, suitable for small-scale mining.
 - Extraction strictly limited to low replenishment rates to avoid ecological imbalance.
- Areas of Erosion and Prohibited Zones:
 - Upper reaches with steep gradients prone to erosion; mining banned to prevent bank instability and flooding.
 - No mining within 500 meters of culverts, small bridges, or irrigation canals.
 - Avoid areas near agricultural lands to prevent soil loss.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Slow replenishment rate of 0.1-0.3 meters/year, assessed through field surveys and remote sensing.
 - Post-mining cessation of 18-24 months required to ensure sediment recovery, with periodic monitoring to confirm replenishment.

4. Ong River

- Areas of Aggradation/Deposition for Sand Mining:
 - Slow sediment deposition in broader floodplains near Agalpur, suitable for limited mining.
 - Mining regulated by sediment load studies to prevent over-extraction.
- Areas of Erosion and Prohibited Zones:
 - Upper reaches near Pandakital prone to erosion where Suktel River meets Mahanadi river mining prohibited to avoid bank collapse.

- No mining within 1 km of the Sunabeda Wildlife Sanctuary to protect wildlife corridors.
- Restricted zones within 500 meters of bridges and embankments. Major bridges include Ong river bridges Lachhipur, Ong bridge Julunda, Kutrasingha –Kapasira bridge, Salebhata bridge, Ghuchipali barrage.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Replenishment rate estimated at 0.1-0.3 meters/year, based on hydrological and sediment transport studies.
 - A 18-24 month cessation period post-mining is required for sediment replenishment, monitored via drone surveys.

5. Indra River

- Areas of Aggradation/Deposition for Sand Mining:
 - Localized sand deposition in middle reaches, suitable for minimal extraction due to slow deposition rates.
 - Mining to align with replenishment rates, identified through field surveys.
- Areas of Erosion and Prohibited Zones:
 - Narrow, high-gradient sections prone to erosion; mining banned to prevent flooding.
 - No mining within 500 meters of minor bridges or irrigation structures.
 - Avoid areas near settlements.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Slow replenishment rate of 0.1-0.2 meters/year, calculated using sediment load data.
 - Post-mining cessation of 18-24 months required to allow sediment recovery, monitored regularly.

6. Sundar River

- Areas of Aggradation/Deposition for Sand Mining:
 - Slow deposition in middle reaches in Bangomunda and Titilagarh area with wider channels, suitable for regulated mining.
 - Extraction guided by sediment transport modeling to ensure sustainability.
- Areas of Erosion and Prohibited Zones:

- Upper reaches and areas near the Sunabeda Wildlife Sanctuary prone to erosion; mining prohibited.
- No mining within 500 meters of bridges and embankments or irrigation canals. Major bridge include Sindhikela bridge and Titilagarh bridge.
- Restricted zones near agricultural lands.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Replenishment rate of 0.1-0.3 meters/year, assessed through hydrological studies.
 - A 18-24 month cessation period post-mining is mandatory, with monitoring to ensure sediment recovery.

7. Songad River

- Areas of Aggradation/Deposition for Sand Mining:
 - Localized sandbars in middle reaches with slow deposition, suitable for small-scale mining in Deogaon area.
 - Extraction limited to replenishment rates, monitored via remote sensing.
- Areas of Erosion and Prohibited Zones:
 - Erosion-prone narrow sections; mining banned to prevent bank destabilization.
 - No mining within 500 meters of small bridges or irrigation structures.
 - Avoid ecologically sensitive zones and settlements.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Replenishment rate of 0.1-0.2 meters/year, based on field surveys.
 - Post-mining cessation of 18-24 months required, with regular monitoring.

8. Arjun River

- Areas of Aggradation/Deposition for Sand Mining:
 - Slow deposition in middle reaches, suitable for controlled mining based on hydrological studies.
 - Mining restricted to environmentally safe depths (1-3 meters).
- Areas of Erosion and Prohibited Zones:
 - Upper reaches with steep gradients prone to erosion; mining prohibited.
 - No mining within 500 meters of culverts or embankments.

- Avoid areas near agricultural fields.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Replenishment rate of 0.1-0.2 meters/year, calculated using sediment data.
 - A 18-24 month cessation period post-mining is required, with monitoring for replenishment.

9. Laul River

- Areas of Aggradation/Deposition for Sand Mining:
 - Localized depositional zones in middle reaches with slow deposition, suitable for minimal extraction in Saintala area.
 - Mining to comply with replenishment rates, identified through field surveys.
- Areas of Erosion and Prohibited Zones:
 - Erosion-prone narrow sections; mining banned to prevent bank collapse.
 - No mining within 500 meters of minor infrastructure like culverts.
 - Avoid areas near settlements.
- Calculation of Annual Replenishment Rate and Time for Replenishment:
 - Replenishment rate of 0.1-0.2 meters/year, assessed via hydrological studies.
 - Post-mining cessation of 18-24 months required, with regular monitoring.

Environmental and Regulatory Framework

- Mapping and Monitoring: GIS-based mapping, drone surveys, and bathymetric studies to delineate permissible and prohibited zones, updated annually in the DSR.
- Replenishment Studies: Annual replenishment rates to be calculated using sediment transport models, field measurements, and remote sensing, ensuring mining does not exceed natural deposition.
- Ecological Safeguards: Mining prohibited in groundwater recharge zones and within 1 km of protected areas like the Sunabeda Wildlife Sanctuary to preserve aquatic ecosystems and wildlife corridors.
- Compliance: Adherence to the Environment (Protection) Act, 1986, and Wildlife Protection Act, 1972, with mandatory environmental clearances for all mining activities.
- Enforcement and Community Engagement: Illegal sand mining, reported in Tel and Ong rivers, to be curbed through strict enforcement, regular audits, and community consultations to balance conservation and developmental needs.

This framework ensures sustainable sand mining in Balangir's rivers, prioritizing moderate deposition zones in the Tel and Suktel rivers, cautious extraction in slow-deposition rivers, and strict protection of erosion-prone areas, infrastructure, and ecologically sensitive zones, while incorporating replenishment strategies for long-term river health.

Sand deposition, a crucial part of the natural rock cycle, involves the settling of sand particles from a transporting medium, typically wind, water, or ice, when the medium loses energy. This process leads to the accumulation of layers of sediment that can eventually solidify into sedimentary rock.

The detailed process of sand deposition are,

6.1 Weathering

Weathering is the breakdown of rocks at the Earth's surface, by the action of rainwater, extremes of temperature, and biological activity. It does not involve the removal of rock material.

There are three types of weathering, physical, chemical and biological.

Physical Weathering: Physical weathering is caused by the effects of changing temperature on rocks, causing the rock to break apart. The process is sometimes assisted by water.

Physical weathering is of two types. These are, (i) Freeze-thaw occurs when water continually seeps into cracks, freezes and expands, eventually breaking the rock apart. (ii) Exfoliation occurs as cracks develop parallel to the land surface a consequence of the reduction in pressure during uplift and erosion.

Physical weathering happens especially in places where there is little soil and few plants grow, such as in mountain regions and hot deserts.

Either through repeated melting and freezing of water (mountains and tundra) or through expansion and contraction of the surface layer of rocks that are baked by the sun (hot deserts).

Chemical Weathering: Chemical weathering is caused by rain water reacting with the mineral grains in rocks to form new minerals (clays) and soluble salts. These reactions occur particularly when the water is slightly acidic. These chemical processes need water, and occur more rapidly at higher temperature, so warm, damp climates are best. Chemical weathering (especially hydrolysis and oxidation) is the first stage in the production of soils.

There are different types of chemical weathering, the most important are:

Solution- Removal of rock in solution by acidic rainwater. In particular, limestone is weathered by rainwater containing dissolved CO₂, (this process is sometimes called carbonation).

Hydrolysis- The breakdown of rock by acidic water to produce clay and soluble salts.

Oxidation- The breakdown of rock by oxygen and water, often giving iron rich rocks a rusty-coloured weathered surface.

Biological Weathering: Living organisms contribute to the weathering process in many ways:

Trees put down roots through joints or cracks in the rock in order to find moisture. As the tree grows, the roots gradually prize the rock apart. Even the tiniest bacteria, algae and lichens produce chemicals that help break down the rock on which they live, so they can get the nutrients they need. Many animals, such as these Piddock shells, bore into rocks for protection either by scraping away the grains or secreting acid to dissolve the rock.

6.2. Erosion and Transportation:

Erosion is the process by which soil and rock particles are worn away and moved elsewhere by gravity, or by a moving transport agent – wind, water or ice.

Wind: Wind-blown sand, a process called aeolian deposition, can transport sand over long distances, forming sand dunes and other landforms.

Water: Rivers, lakes, and oceans are major agents of sand transport. Rivers deposit sand in floodplains and alluvial fans, while waves and currents move sand along shorelines, creating beaches and bars.

Ice: Glaciers can carry and deposit sand, and the resulting deposits are known as glacial sediments.

6.3. Deposition:

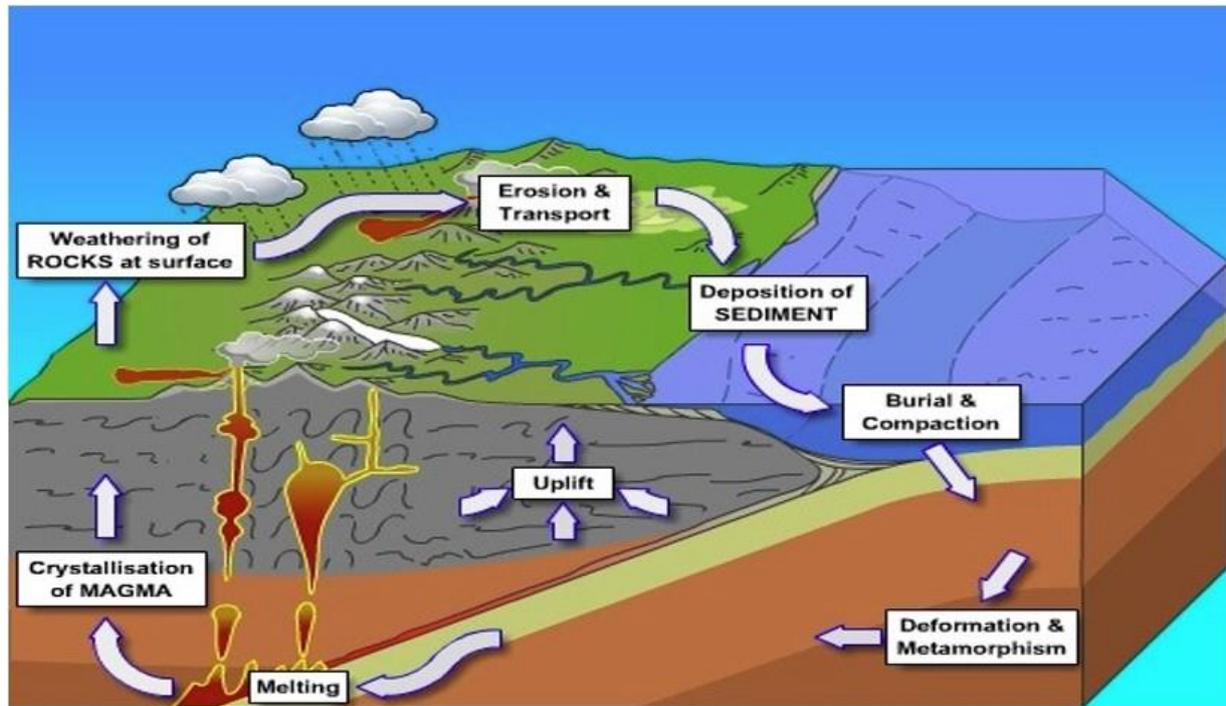
When the transporting medium loses energy (e.g., wind slows down, river current decreases, or ice melts), the sand particles settle out of the medium and accumulate. The specific location and conditions of deposition can vary significantly, influencing the type and size of sand deposits.

For example, rivers may deposit sand in bars along their channels, while the ocean may deposit sand on beaches or on the continental shelf. Sand dunes are formed by wind depositing sand behind obstacles or in areas where wind speed decreases.

6.4. Formation of Sedimentary Rocks:

Over time, the accumulated layers of sand can be compacted and cemented together, forming sedimentary rocks like sand stone. This process is a key part of the rock cycle, where rocks are formed, broken down, and reformed over geological time.

Sand deposition is a continuous process that shapes the Earth's surface, forming various landforms and contributing to the formation of sedimentary rocks.



• **Method of Mining**

Extracting gravel from an excavation that does not penetrate the water table and is located away from an active stream channel should cause little or no change to the natural hydrologic processes unless the stream captures the pit during periods of flooding. The exception is that changes in evapo-transpiration, recharge, and runoff may create minor changes to the ground-water system, which may in turn affect stream flow.

- a) Limiting extraction of material in floodplains to an elevation above the water table generally disturbing more surface area than allowing extraction of material below the water table.
- b) In-stream extraction of gravel from below the water level of a stream generally causes more changes to the natural hydrologic processes than limiting extraction to a reference point above the water level.
- c) In-stream extraction of gravel below the deepest part of the channel (the thalweg) generally causes more changes to the natural hydrologic processes than limiting extraction to a reference point above the thalweg.
- d) Excavating sand and gravel from a small straight channel with a narrow floodplain generally will have a greater impact on the natural hydrologic processes than excavations on a braided channel with a wide floodplain.

- e) Extracting sand and gravel from a large river or stream will generally create less Impact than extracting the same amount of material from a smaller river or stream.

Table-6

SI No	Name Of Tahasil	Name Of Source	Name of River	Area In Ac.	Replenishment Volume/Mineable Volume in Cum	Remark
1	Loisingha	Kusmel Sand Quarry	Suktel Nadi	12.355	27317.00	Replenishment study report has been done
2	Loisingha	Hirapur Sand Quarry	Suktel Nadi	12.355	35186.0349	Replenishment study report has been done
3	Loisingha	Chelbahal Sand Quarry	Suktel Nadi	12.355	7688.98	Replenishment study report has been done
4	Loisingha	Tebhadunguri sand Quarry	Suktel Nadi	12.355	Non-Operational	It's for Fresh Auction & To be submitted by 31/03/2026
5	Belpada	Mandal Sand Quarry	Lant Nadi	11.193	18677.70	Replenishment study report has been done
6	Belpada	Nunhad Sand Quarry	Lant Nadi	12.355	Non-Operational	Data is not available & To be submitted by 31/03/2026
7	Belpada	Dhumabhata Sand Quarry	Lant Nadi	12.355	12189.06	Replenishment study report has been done
8	Belpada	Belpada sand Quarry	Lant Nadi	11.00	50588.14	Replenishment study report has been done
9	Belpada	Parlimal Sand Quarry	Lant Nadi	10.96	25085.0640	Replenishment study report has been done
10	Belpada	Chacherbenga Sand Quarry	Lant Nadi	12.00	As it is a new source, Replenishment Study has not been done yet	Identified as New Source in the District Level Committee & To be

River Sand Mining**DSR of Balangir District**

						submitted by 31/03/2026
11	Deogaon	Chatapipal Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be s submitted by 31/03/2026
12	Deogaon	Bandhapada sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
13	Deogaon	Sarasmal/Siletkani Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
14	Deogaon	Gaibahal Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
15	Deogaon	Ratakhandi Sand Quarry	Tel Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
16	Deogaon	Kendhughat Sand Quarry	Tel Nadi	12.35	11124.96	Replenishment study report has been done
17	Deogaon	Arda Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
18	Deogaon	Antarla Sand Quarry	Songad Nadi	11.20	Non-Operational	Data is not available & To be submitted by 31/03/2026
19	Deogaon	Sikuan Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
20	Deogaon	Kachharpalli Sand Quarry	Songad Nadi	12.65	Non-Operational	Data is not available & To be submitted by 31/03/2026
21	Deogaon	Kuturla Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available &

River Sand Mining

DSR of Balangir District

						To be submitted by 31/03/2026
22	Deogaon	Ghatul Sand Quarry	Songad Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
23	Deogaon	Tepren Sand Quarry	Songad Nadi	1.549	Non-Operational	Reserve for Auction & To be submitted by 31/03/2026
24	Agalpur	Salebhata Sand Quarry	Ong Nadi	12.00	28456.61	Replenishment study report has been done
25	Agalpur	Tentuligaon Sand Quarry	Ong Nadi	12.355	52789.14	Replenishment study report has been done
26	Agalpur	Banjipali Sand Quarry	Ong Nadi	12.355	17058.95	Replenishment study report has been done
27	Agalpur	Fasad Sand Quarry	Ong Nadi	12.355	25206.59	Replenishment study report has been done
28	Agalpur	Fatamunda Sand Quarry	Ong Nadi	12.355	31969.91	Replenishment study report has been done
29	Agalpur	Kutasinga Sand Quarry	Ong Nadi	12.355	10763.52	Replenishment study report has been done
30	Agalpur	Nagaon Sand Quarry	Ong Nadi	12.350	As it is a new source, Replenishment Study has not been done yet	Identified as New Source in the District Level Committee & To be submitted by 31/03/2026
31	Agalpur	Mahulapali Sand Quarry	Ong Nadi	12.350	As it is a new source, Replenishment Study has not been done yet	Identified as New Source in the District Level Committee & To be submitted by 31/03/2026

River Sand Mining**DSR of Balangir District**

32	Balangir	Chandanbhati Sand Quarry	Suktel Nadi	12.00	6429.26	Replenishment study report has been done
33	Balangir	Kutumdola Sand Quarry	Suktel Nadi	8.00	9811.11	Replenishment study report has been done
34	Khaprakhol	Luhasingha Sand Quarry	Suktel Nadi	12.00	13132.466	Replenishment study report has been done
35	Khaprakhol	Goudapali Sand Quarry	Suktel Nadi	12.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
36	Muribahal	Godighat Sand Quarry	Lant Nadi	9.84	2694.81	Replenishment study report has been done
37	Muribahal	Jampadar Sand Quarry	Lant Nadi	8.52	24507.87	Replenishment study report has been done
38	Muribahal	Bandupala Sand Quarry	Lant Nadi	7.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
39	Puintala	Shankarbhoji Sand Quarry	Suktel Nadi	12.00	10927.10	Replenishment study report has been done
40	Puintala	Pipirda Sand Quarry	Suktel Nadi	12.00	9144.98	Replenishment study report has been done
41	Puintala	Durgapali Sand Quarry	Suktel Nadi	12.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
42	Puintala	Bilaisarda Sand Quarry	Suktel Nadi	12.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
43	Titilagarh	Mahada Sand Quarry	Tel Nadi	10.00	7494.64	Replenishment study report has been done

River Sand Mining**DSR of Balangir District**

44	Titilagarh	Patharla Sand Quarry	Sundar Nadi	9.00	24680.32	Replenishment study report has been done
45	Titilagarh	Turukbhata Sand Quarry	Sundar Nadi	10.00	20658.38	Replenishment study report has been done
46	Titilagarh	Sukunabhata Sand Quarry	Sundar Nadi	10.00	37715.55	Replenishment study report has been done
47	Titilagarh	Sagunamunda-A Sand Quarry	Sundar Nadi	10.00	21053.27	Replenishment study report has been done
48	Titilagarh	Sagunamunda-B Sand Quarry	Sundar Nadi	10.00	15769.79	Replenishment study report has been done
49	Titilagarh	Parasara Sand Quarry	Sundar Nadi	10.00	30484.29	Replenishment study report has been done
50	Titilagarh	Antarla Sand Quarry	Sundar Nadi	10.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
51	Titilagarh	Gandhargala Sand Quarry	Sundar Nadi	9.00	8990.50	Replenishment study report has been done
52	Titilagarh	Naren Sand Quarry	Sundar Nadi	9.70	Non-Operational	Data is not available & To be submitted by 31/03/2026
53	Titilagarh	Ghodar Sand Quarry	Sundar Nadi	12.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
54	Titilagarh	Khairkhunta Sand Quarry	Sundar Nadi	10.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
55	Titilagarh	Udepur Sand Quarry	Sundar Nadi	10.00	Non-Operational	Data is not available & To be submitted by 31/03/2026

River Sand Mining**DSR of Balangir District**

56	Bangomunda	Bhuslad Sand Bed-B	Sundar Nadi	11.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
57	Bangomunda	Palaskhand Sand Quarry	Sundar Nadi	12.355	9577.45	Replenishment study report has been done
58	Bangomunda	Sriram Sand Quarry	Sundar Nadi	12.355	18049.15	Replenishment study report has been done
59	Bangomunda	Bhuslad Sand Bed-A	Sundar Nadi	12.355	Non-Operational	Data is not available & To be submitted by 31/03/2026
60	Bangomunda	Bhatasar Sand Quarry	Sundar Nadi	7.490	9962.21	Replenishment study report has been done
61	Bangomunda	Paruabhadi Sand Quarry	Sundar Nadi	7.490	Non-Operational	Data is not available & To be submitted by 31/03/2026
62	Bangomunda	Asurla Sand Quarry	Sundar Nadi	12.355	4951.12	Replenishment study report has been done
63	Bangomunda	Chandotara Sand Bed-B	Sundar Nadi	11.00	8784.74	Replenishment study report has been done
64	Bangomunda	Chandotara Sand Bed-A	Sundar Nadi	8.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
65	Bangomunda	Telsarai Sand Bed	Sundar Nadi	12.00	19749.97	Replenishment study report has been done
66	Bangomunda	Salebarat Sand Bed	Sundar Nadi	11.00	10174.77	Replenishment study report has been done
67	Bangomunda	Sanmula Sand Bed	Sundar Nadi	12.355	14140.54	Replenishment study report has been done

River Sand Mining

DSR of Balangir District

68	Bangomunda	Tureikela Sand Quarry	Sundar Nadi	7.49	11845.70	Replenishment study report has been done
69	Kantabanji	Tikrapada Sand Bed	Arjun Nadi	3.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
70	Kantabanji	Bharuakani Sand Bed	Arjun Nadi	5.76	Non-Operational	Data is not available & To be submitted by 31/03/2026
71	Saintala	Kuikeda Sand Quarry	Laul Nadi	8.14	17224.06	Replenishment study report has been done
72	Saintala	Tikrapada Sand Quarry	Laul Nadi	12.00	4397.84	Replenishment study report has been done
73	Saintala	Kamarlaga Sand Quarry	Lant Nadi	8.10	17310.37	Replenishment study report has been done
74	Saintala	Mahagaon Sand Quarry	Laul Nadi	12.00	98880.133	Replenishment study report has been done
75	Saintala	Saintala Sand Quarry	Laul Nadi	12.35	18912.39	Replenishment study report has been done
76	Saintala	Belgaon Sand Quarry	Tel Nadi	9.50	46976.00	Replenishment study report has been done
77	Saintala	Chhanchhada Sand Quarry	Lant Nadi	12.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
78	Saintala	Ampali Sand Quarry	Lant Nadi	7.10	Non-Operational	Reserve for Auction & To be submitted by 31/03/2026
79	Saintala	Karamtala Sand Quarry	Laul Nadi	8.69	As it is a new source, Replenishment Study has not been done yet	Identified as New Source in the District Level Committee &

River Sand Mining**DSR of Balangir District**

						To be submitted by 31/03/2026
80	Patnagarh	Tamian Sand Quarry	Suktel Nadi	12.00	46731.31	Replenishment study report has been done
81	Patnagarh	Naktasar Sand Quarry	Suktel Nadi	12.35	27272.85	Replenishment study report has been done
82	Patnagarh	Sunamudi Sand Quarry	Suktel Nadi	13.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
83	Patnagarh	Pudapadar Sand Quarry	Suktel Nadi	12.00	17788.17	Replenishment study report has been done
84	Patnagarh	Koudia Sand Quarry-B	Suktel Nadi	7.57	Non-Operational	Data is not available & To be submitted by 31/03/2026
85	Patnagarh	Koudia Sand Quarry-A	Suktel Nadi	12.35	Non-Operational	Data is not available & To be submitted by 31/03/2026
86	Patnagarh	Ghasian Sand Quarry	Suktel Nadi	12.00	24786.90	Replenishment study report has been done
87	Patnagarh	Dhubalpara Sand Quarry	Suktel Nadi	10.00	9665.00	Replenishment study report has been done
88	Tusura	Atigaon Sand Quarry	Tel Nadi	12.00	Non-Operational	It's for Fresh Auction & To be submitted by 31/03/2026
89	Tusura	Kharda Sand Quarry	Songad Nadi	12.35	38233.63	Replenishment study report has been done
90	Tusura	Sargada Sand Quarry	Songad Nadi	12.00	29515.54	Replenishment study report has been done

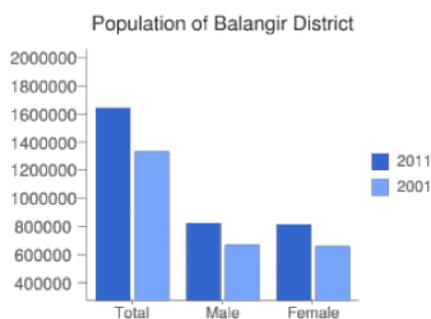
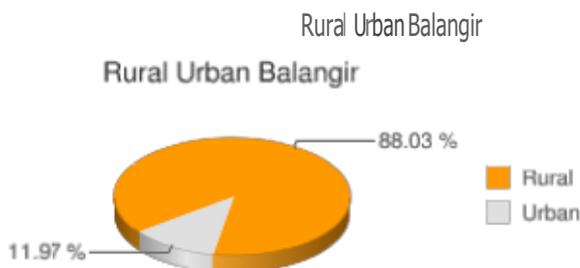
91	Tusura	Kukedmal Sand Quarry	Songad Nadi	8.00	Non-Operational	Data is not available & To be submitted by 31/03/2026
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7.0 GENERAL PROFILE OF THE DISTRICT:

7.1 Demography:

Table-7

Census - 2011	
Geographical Area	3806 Sq. Km.
Total population	1,648,997
Male Population	830,097
Female Population	818,900
Male Literacy	545,672
Female Literacy	381,588
SC Male	148,356
SC Female	146,421
ST Male	1,72,489
ST Female	1,74,675
Illiterate Male	2,84,425
Illiterate Female	437312

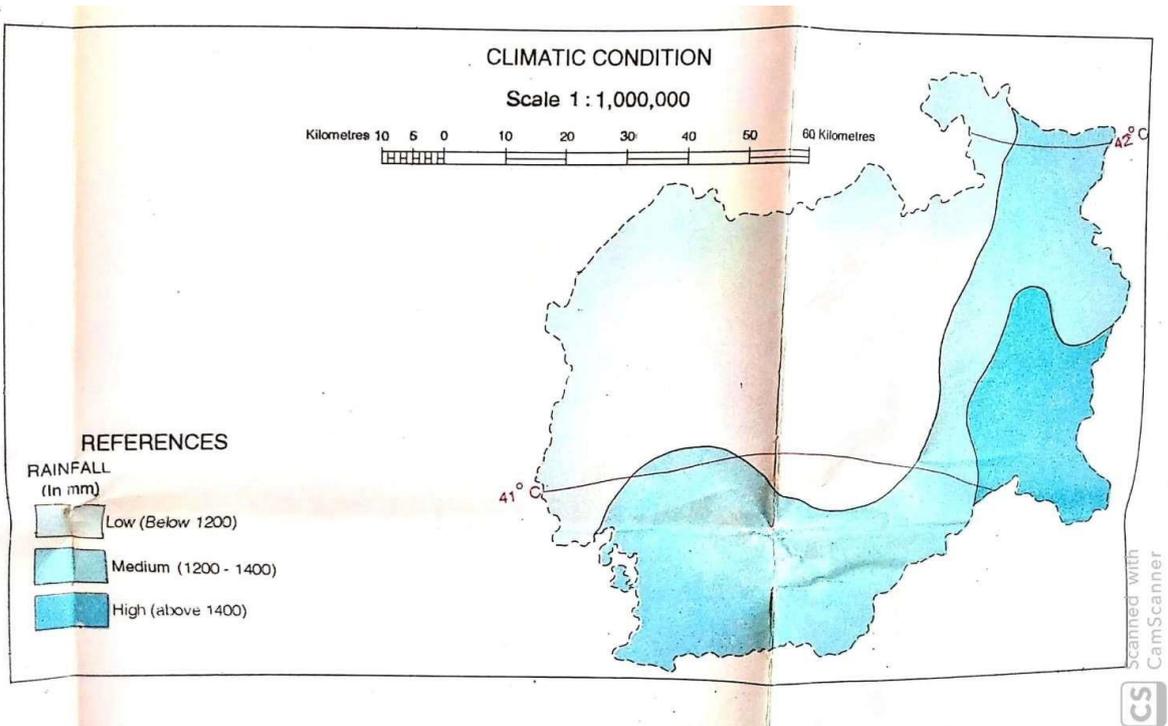


7.2 Climate

The climate of the district is tropical with hot and dry summer and pleasant winter. The summer season extends from March to middle of June followed by the rainy season from June to September. The winter season extends from November till the end of February. Humidity is high during middle of June and it's less in post-monsoon period. The relative humidity in the district varies from 26% to 84% through out the year. The mean monthly potential evapotranspiration value ranges from 45mm in December to 470 mm in May. Wind is generally light to moderate. During summer and Southwest monsoon months wind velocity increases. The mean annual wind speed is 3.3 Km/hr.

Temperature Graph- Balangir:

May is the warmest month of the year. The temperature in May averages 32.3 °C. January has the lowest average temperature of the year. It is 16.5 °C.



8.0 LAND UTILIZATION PATTERN IN THE DISTRICT

8.1 Forest and non-forest land

The important forest produce of Balangir are timber , fuelwood and bamboo while others include Tenduleaves, Charcoal, bramgrass, Mahua flowers and seeds etc. The forest of Balangir district correspond to "Tropical forests" according to Champion's classification. These forests depict generally two main types, viz; moist and dry deciduous, which cover different regions of the tract and indicate the origin of a broad pattern very much in

consonance with the configuration and geology of the tract and also to a large extent with its climate and rainfall. The peculiar situation of the tract, the "Tension Zones" between the Northern and Southern Indian form, represented by sal and teak respectively, is again an interesting feature of the tract.

Although, as would be expected, local variations due to edaphic factors is quite common in each of the general formations much of the originality in considerable portions of these forests, has been lost due to continued biotic influence, the most deciding of which has been shifting cultivation, locally known as Podu, practised in this tract since many years. Indulged in moderate proportion this practice has hastened the formation of sal forests which are generally taken as climax types. But when podu is prolonged and over done, the result has been rapid retrogression and appearance of secondary seral types of much poorer forests. This is amply evident by comparison of similar areas inside reserved forest, protected from podu during the past nearly half a century, and those outside reserved forest under active expanding Podu.

The "Moist sal forests" are found in luxuriant climax patches often showing pure pockets of quality class II and I, sheltered inside reserved forests. The entire region of the tract lying on the east and stretching from the north-eastern end of the tract to the southern most limit of the southern high lands, had at one time, most certainly been covered in large continuous stretches by moist deciduous forests predominated by sal. Natural Teak forest is interspersed with big chunks of dry deciduous miscellaneous forest in some forest blocks where patches of sal are alone present in the vicinity. Podu had a considerable hand in shaping the forests of this region before the advent of Forestry. With the beginning of forest consciousness in the ex-state regime, many of those forests, generally less disturbed by podu, got reserved. These form now the control to assess the extent of retrogression that has been the result of repeated podu. The usual process is passage through secondary seral type of dry deciduous forests, often gradually changing to pure bamboo brakes, which again is replaced by dry scrub jungle area and finally became waste land and hill slopes of which large areas are seen in the southern high lands.

The transition from the Northern to Southern India form is seen in between the "Moist Sal" in the eastern part of the tract and "Dry Teak" in western boarder. In this zone in some isolated pockets sal and teak are seen growing together. The transition from "Moist Sal" to dry mixed deciduous forests is of both, northern and southern form. In the southern high

land also the transition from the northern to southern form is indicated by increasing occurrence of various species more akin to South Indian flora.

The forest of Balangir District is full of variety of medicinal plants, Kendu leaves, Bamboo, Sal, Teak, other timber species and a wide range of carnivorous & herbivorous wild animals.

**Table-8
District-wise Forest Cover Area in Odisha (Area in Km2)**

2023 Assessment								
District	Geographical Area Km2	Very Dense Forest	Moderate. Dense Forest	Open Forest	Total	Percent of GA	Change	Scrub
Angul	6375	371	1380	1004	2755	43.22	43	84
Bolangir	6575	70	224	837	1131	17.2	151	142
Subarnapur	3806	23	127	234	380	9.98	30	48
Bargarh	5837	176	371	484	1031	17.66	88	47
Bouda	3098	263	546	480	1289	41.61	27	57
Bhadrak	2505	0	9	66	75	2.99	2	0
Cuttack	3932	53	226	517	796	20.24	11	68
Deogarh	2940	191	667	614	1472	50.07	-3	14
Dhenkanal	4452	174	418	825	1417	31.83	9	82
Gajapati	4325	84	1490	946	2520	58.27	12	262
Ganjam	8206	164	1075	864	2103	25.63	15	655
Jagatsinghpur	1668	0	5	131	136	8.15	6	0
Jajpur	2899	6	72	225	303	10.45	3	so
Jharsugada	2114	3	140	179	322	15.23	9	36
Kalahandi	7920	362	729	1327	2418	30.53	36	362
Kandhamal	8021	661	2588	2143	5392	67.22	16	380
Kendrapada	2644	84	88	133	305	11.54	14	2
Keonjhar	8303	289	1404	1519	3212	38.68	4	55
Khorda	2813	21	186	250	457	16.25	0	92
Koraput	8807	94	740	1255	2089	23.72	120	944
Malkangiri	5791	158	709	1475	2342	40.44	20	45
Mayurbhanj	10418	1335	1718	1027	4080	39.16	42	34
Nabarangpur	5291	168	428	507	1103	20.85	8	47
Nayagarh	3890	189	965	556	1710	43.96	28	173
Nuapada	3852	86	482	705	1273	33.05	33	109
Puri	3479	0	54	160	214	6.15	8	11
Rayagada	7073	422	853	1851	3126	44.2	7	349
Sambalpur	6624	499	1675	1106	3280	49.52	13	40
Subarnapur	2337	2	187	161	350	14.98	26	29
Sundargarh	9712	1019	1814	1431	4264	43.9	107	89
Grand Total	155707	6967	21730	23008	51345	32.98	885	4306

(Source: India state of forest report 2023-Odisha)

The major portion of the District is covered by forest (9.98 % of TGA) and has scattered settlement pattern. The forest is full of variety of medicinal plants, Kendu leaves, Bamboo, Sal, Teak and other timber species. The District has considerable flat land, which provides suitable site for agricultural use. The hilly areas are mostly under forest with patches of cultivation on scarp areas. Major crops grown in the District are rice and pulses. Only 12.50 percent area of agricultural use are net irrigated and major source of irrigations are well and tube wells.

8.2 Mining Land: Balangir district in Odisha is not particularly rich in mineral resources compared to other mineral-intensive districts like Keonjhar, Sundargarh, or Angul. However, the district does have some limited and localized occurrences of minerals that fulfill local industrial and construction needs. Sand and Clay (Most Abundant) River sand from the Mahanadi, Suktel, Tel and Ong rivers is extensively used in construction. Clay deposits are found in several areas, useful for making bricks and pottery. Laterite and morrum are found in small patches, primarily used for road construction and embankments. Gravel and stone chips are quarried in limited quantities for local infrastructure work. Total land covered for all these above mineral is chalked out tentatively 205.276 hectares which may increase in future with reconnaissance survey.

8.3 Agriculture Land:

The primary objective of Agriculture Department is to increase of production as well as productivity of major crops like Paddy, Groundnut, Mustard, Mung, Biri & vegetables which is widely covered in this District in both Kharif & Rabi season. Another key objective is to make all round development of the farming community of the District. The Deputy Director of Agriculture is the Head of office so far as agriculture is concerned & he is the Principal Agriculture Officer of the District. There are 5 District Agriculture Officers & the Block Level Officers are working under him. As it has already been pointed out, that agriculture is the main livelihood of the people in Balangir District, it is therefore designated as the food bowl of Odisha. Rice is the principal crop grown in this District, followed by other cereals, pulses, oilseeds, vegetables, spices and sugarcane. The agricultural statistics for the District is shown in subsequent tables below: in subsequent tables below:

Table – 9: Crop Coverage Area of Balangir District, Odisha

Major field crops cultivated	Area('000ha)							
	Kharif			Rabi			Summer	Grand total
	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total		
Paddy	161097	43361	204.458	61.95	Data is not Available	61.950	39.42	305.828
Green gram	Data is not Available	6514	6.514	1.353	71.832	73.185	Data is not Available	79.699
Black gram	800	19741	20.541	0.238	3.972	4.210	Data is not Available	24.751
Cotton	Data is not Available	60988	60.988	Data is not Available	60.988			
Arhar	Data is not Available	20322	20.322	Data is not Available	20.322			

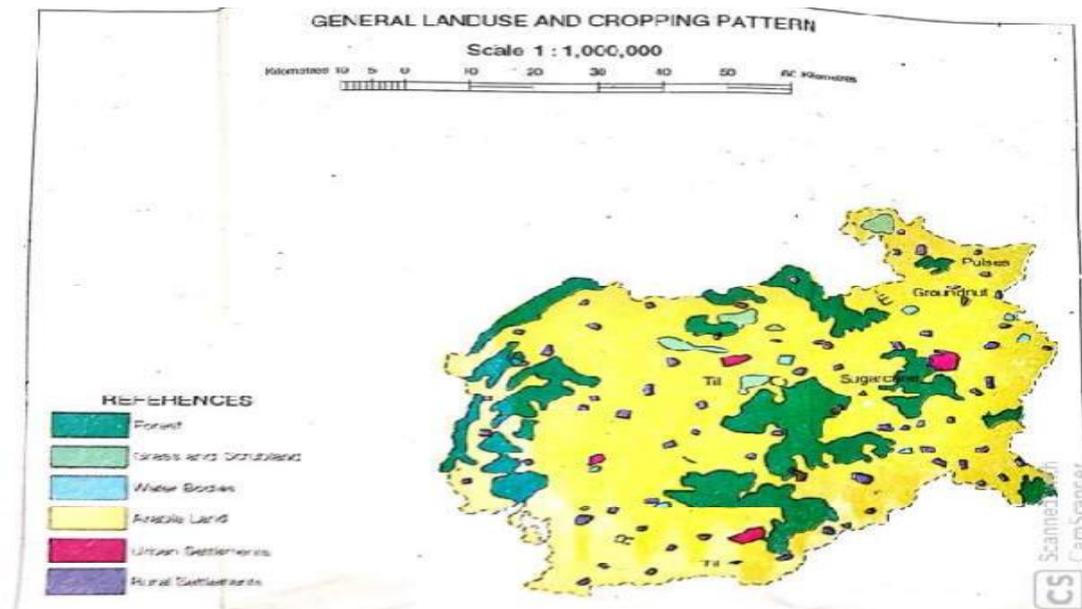
8.4 Horticulture Land:

The primary objective of Horticulture Department is increase of production as well as productivity of major fruits like Mango, Guava, Citrus etc., which is widely covered in this District. Another key objective is the all round development of the farming community of the District. The Deputy Director of Horticulture is the head of office.

Table-10

Horticulture crops	Total Area (hectares)
Mango	6.985
Guava	1.009
Banana	0.509
Papaya	0.60
Litchi	0.60
Brinjal	7.690
Tomato	6.260
Onion	2.45
Chilli	1.888
Okra	0.749
Ginger	0.150
Turmeric	0.248

Source: SREP, Balangir. Orissa Agric.



9.0 PHYSIOGRAPHY OF THE DISTRICT:

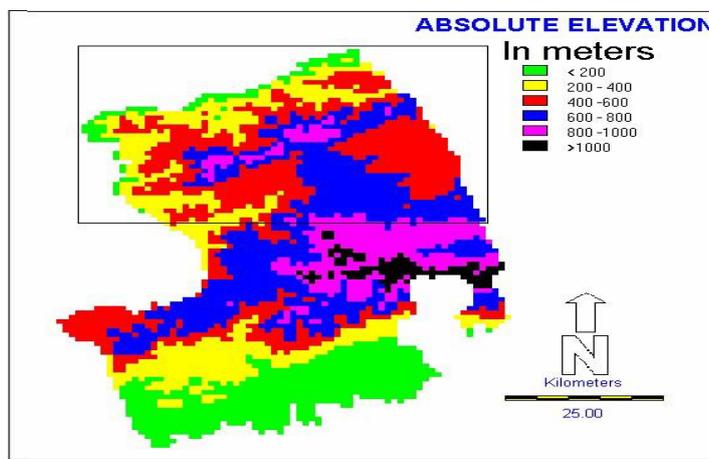
Physiography:

The areas examined in the course of the investigation fall south of the arcuate Gandhamardan range forming a water divide. The different hill ranges in the area have NE-SW to ENE-WSW trends in the northern part which swerves to the general N-S direction in the southern part. The Gandhamardan range is a table land having the highest elevation of about 1000m above the MSL. To the SW lies the Chandil range, known as Patpani range in its southern extension. In between the two (Gandhamardan and Patpani ranges) lies a narrow valley. The Patpani range marks the boundary between the two districts of Kalahandi and Bolangir many prominent peaks of heights ranging from 560m to 715m above the MSL make the range quite conspicuous.

Another prominent hill, the Chatradandi (810m), lies in the south eastern part of the area. The intervening valleys are extensively soil covered and have a few isolated hills. The area around Saptmund, at the south-eastern foot hills of the Gandhamardan range, has two prominent hills (816m and 518m). Elsewhere in the areas, there are many small hillocks and mounds which range in altitude from 400m to 600m. The general elevation in the areas is about 300m above the MSL.

The drainages of the areas are mostly controlled by joints. In the northern part (also known as Katanginala) flow north-easterly and joins the Suktel River. Perennial nalas descending from the Gandhamardan range feed this higher order stream. In the South, the Lant river forms the major drainage flows to the NE to join the Tel river further SE. In the

southernmost part, the Arjunnala flows and joins the Udanti river. The southern streams are ephemeral in nature.



10.0 RAINFALL OF THE DISTRICT:

The south-west monsoon is the principal source of rainfall in the district. Average annual rainfall of the district is 1378.2mm. About 80 to 85% of the total rainfall is received during the period from June-September. Droughts are quite common in the district. Block-wise average annual rainfall varies from 1111.8 mm to 2712.9 mm. The south-west monsoon contributes about 80 to 85% of the total rainfall of the district.

10.1 Month wise rainfall:

The driest month is December, with very less amount of rain. There is on average 16.64 mm of precipitation in February. In August, the precipitation reaches its peak, with an average of 317.54 mm.

Table-11

Year		2021	2022	2023	Average
Sl. No.	Month	(mm)	(mm)	(mm)	(mm)
1	Jan	18.33	00	00	6.11
2	Feb	49.92	00	00	16.64
3	Mar	6.42	105.29	6.23	39.32
4	Apr	18.33	18.50	162.62	64.48
5	May	224.33	165.98	144.39	178.23
6	Jun	165.05	164.28	268.94	199.42
7	Jul	303.49	317.98	320.48	313.98
8	Aug	334.98	276.51	341.13	317.54
9	Sep	308.00	198.01	346.48	284.16
10	Oct	153.10	251.58	243.31	215.99
11	Nov	46.43	47.20	00	31.21
12	Dec	00	5.08	4.97	3.35
Total		1628.38	1550.41	1838.55	1672.44

The Indian Meteorological Department, Bhubaneswar, vide letter No. BBS/RMC/CS-312, dated 18th January, 2016 has provided the period of Rainy Season viz. Normal dates of Onset and Withdrawal of South West Monsoon over India as state-wise. The duration for the period is 10th June to 15th October.

11.0 GEOLOGY AND MINERAL WEALTH OF THE DISTRICT:

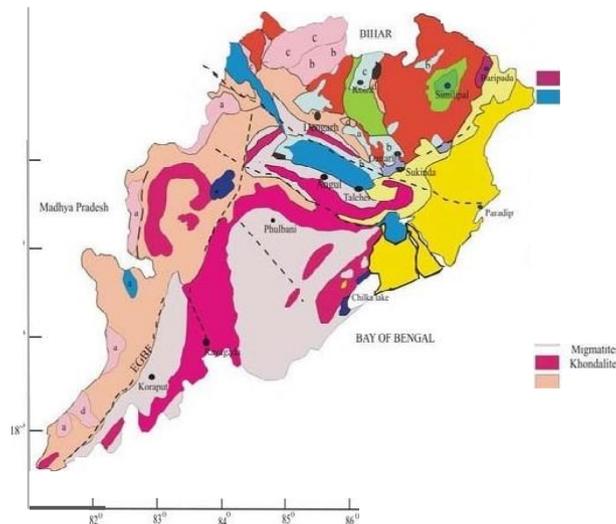
11.1 Regional Geology:

Balangir district constitutes a portion of the peninsular reunion. It has largely remained a table-land, a mass of great rigidity and has not been affected by inner movements of the earth through some portions of the peninsular India has been affected by structural disturbance of vertical nature.

The Archean formations of the eastern Ghat region, represented mainly by the rocks of the Khondalite series, extend up to the western limit of the district. The next younger series of rocks, in this area consisting of garnetiferous gneisses are thought to be the products of hybridism between the calc silicate rocks and aplitic solutions. The concluding phases of the Archean in the Mahanadi tracts have been marked by a large scale intrusion of very coarse grained, often porphyritic granite with the accompanying pegmatite facies. Large scale feldspathisation of the older rocks, particularly the granulitic rocks and the leptynitic gneisses resulted in a variety of injection gneisses.

The next younger formations in this area consists of certain fresh water sediments perhaps of lower Gondwana (Talchir stage) age and are exposed as isolated sandstone patches in the Tel Valley. The youngest geological formations of the area are laterite and alluvium, the former occurring extensively as surface capping on the plains as well as on the 3,000 foot high Gandhamardan Plateau.

The areas represent parts of the Eastern Ghat Super Group comprising strongly metamorphosed rocks viz. Khondalites (and their migmatitic derivatives), calc granulites and garnetiferous quartzite associated with granite gneisses, pegmatites and quartz veins. The stratigraphic sequence established by earlier workers and confirmed by the present authors for these areas is as follows:-



Khondalite formations:

Khondalites, sensu stricto, are as various in the areas as a result of extensive migmatitisation. Portions of these rocks, which are much less migmatitised with leucosomes 10% or less, form in general, high conical hills that support thick vegetation and stand out prominently in an otherwise undulating rolling country.

Such hills are generally made up of gneissic khondalite. The Kalinili hill west of Sanbanki as well as the hill further north and the hill east of Saptmund are made up of this type of rock. The schistose variety, on the other hand, is exposed in the valleys and foothills close to those hills. The rock is greyish to reddish brown in colour, medium grained, foliated and consists of quartz, garnet, sillimanite, graphite and a little feldspars. The reddish brown colour is the result of limonitisation of garnet. Under the microscope, it consists of xenomorphic and strained, quartz, stumpy needles of sillimanite with transverse cracks, limonitised garnet showing diablastic structure and biotite altering from garnet mostly along cracks and peripheries. Graphite occurs as greyish black flakes. Both perthite and K-feldspar are present.

The garnetiferous quartzite forms small hillocks east and NE of Bariali, east of Dholmandal and west of Mahulpati. The rock stands out prominently as hills and ranges because of its resistant nature. The quartzite is a granular rock, greyish in colour and dotted with conspicuous reddish garnet. In some cases, e.g. on the hill near Bariali, a little biotite is present in the rock. Sometimes occasional sillimanite needles are noticed. It is generally devoid of graphite except for a few flakes as noted in the east of Dholmandal.

The calc-granulite forms linear bands within the migmatitised khondalite terrain and is intricately folded. This rock is exposed in the west Bariali and extends discontinuously along

the strike further NE following the course of the Lant river (Plate-II.). The total strike length of the band between Bariali and east of 1561 hill is about 10km. Another band is continuous for about 4km between east of Debriamunda and east 1561 hill. The other bands are exposed near Kharli, Debriamunda, and north of Harishankar Road (foot hills of 1561). The width of the bands are varies from 3m to 10m. Bands of 1m or less width are exposed in Thongajhar nala east of Jamki and Sanbanki. Differential weathering has given the rock a serrated appearance. Megascopically, the rock is medium grained and pale in colour. Under the microscope, it shows granulitic texture and is found to contain diopside, quartz, calcite, scapolite and sphene. Garnet is rarely present.

Pyroxene granulite:

Pyroxene granulite occurs as isolated small outcrop on either side of the forest road connecting Harishankar Road Rly. Station with Ghagruli, about 6km away. This is the only outcrop of pyroxene granulite where it forms small humps standing out from the surrounding soil cover area. Its contact with the other litho-units is concealed.

The rock is medium grained, dark in colour and very compact. It shows granulitic texture under the microscope and consists of hypersthene, diopside, plagioclase (andesine to labradorite), garnet and quartz with some opaque. Incipient alteration of garnet to biotite at the margin it noticed.

Migmatites:

Migmatite is hybrid rock containing an admixture of palaeosomes and leucosomes (neosomes) in various proportions. Strictly speaking, all the lithounits of the areas examined are migmatized to some extent or the other. But the khondalitic rocks being most prominent of the metasedimentaries, the migmatites formed after Khondalites are by far more conspicuous and prominently developed. The migmatite bodies are concordant to the regional trend of the rock units and are confined to the low lying soil covered tracts where these are exposed mainly in nala cuttings. Outcrops of migmatites are in Thongajhar nala east or Sanbanki and Jamki, Pandrapatranala, Palsakaninala and the nalas east of Gargarbahal, Lant river sections, south and north of Telenpali (Plate I). In all these outcrops the rocks considered to be migmatites have leucosomes varying from 10% and above. The ratio of palaeosomes, leucosome varies from more than 80:20 to as low as 20:80. The known graphite deposits fall within the migmatite zones.

The various migmatitic structures noted are stromatic, schollen and schollen types (Mehnerter, 1968). Of these, the stromatic in which veins of neosome alternate with

palaeosomes is the most common. The schollen structure is noted in Pandrapatra and Palsakaninala where small sillimanite lumps are included within the leucosome. Development of biotite and garnet at the contact of leucosomes and palaeosomes is common.

Megascopically, the migmatites have a general gneissic appearance as a result of alternation of the paleosomes and neosomes. Under the microscope, the schistose structure is prominent. A mineral assemblage of K-feldspar, microperthite, quartz and garnet with minor amounts of biotite, sillimanite and opaques are seen. The feldspars are later developed and enclose sillimanite needle and biotite flakes partially or fully. Garnet alters to biotite at the margin. Graphite normally occupies the inter-granular space.

Granite gneisses:

Granite gneisses occupy a major part of the areas examined. Two distinct types of granite gneisses are discernible non-porphyroblastic (garnetiferous) and porphyroblastic, of which the latter is predominant.

The non-porphyroblastic granite gneiss is exposed on a small ridge south-west of Dhusamunda and has a few isolated outcrops further west. Small concordant tongues of this rock within the migmatites are exposed in Pandrapatra, Thongajhor and Palsakaninalas. Relicts of the rock within porphyroblastic granite gneiss are observed on the hill in Patpani R.F area indicating an older age of the former.

The rock is leucocratic, medium grained and shows well developed gneissosity. It contains Kfeldspar, perthite, quartz garnet and biotite. The quartz grains in the rock are stretched (flattened) at some places.

The porphyroblastic granite forms a continuous ridge in Patpani and Chandil R.F. areas apart from the small ters, Whalebacks and ruwares in the planes between Bardakle on the south of Jalpankel on the north (Plate I).It has intruded into all other units described above along their foliation planes.

The rock is leucocratic and consists of large porphyroblasts of feldspar (long axis varying from 2cm to 15cm, showing a crude gneissosity), quartz, garnet and biotite. At the contact with the older rocks, segregated zones of garnet and biotite are noticed. Sometimes growth of feldspar is impeded by garnets suggesting a later origin of porphyroblasts. This may be due to alkali metasomatism at a deeper tectonic level after the development of garnet.Under the microscope, it shows porphyroblastic texture and consists of plagioclase

(oligocaseandesine), perthite, quartz, garnet, biotite with apatite as accessory. The rock is granodioritic in composition.

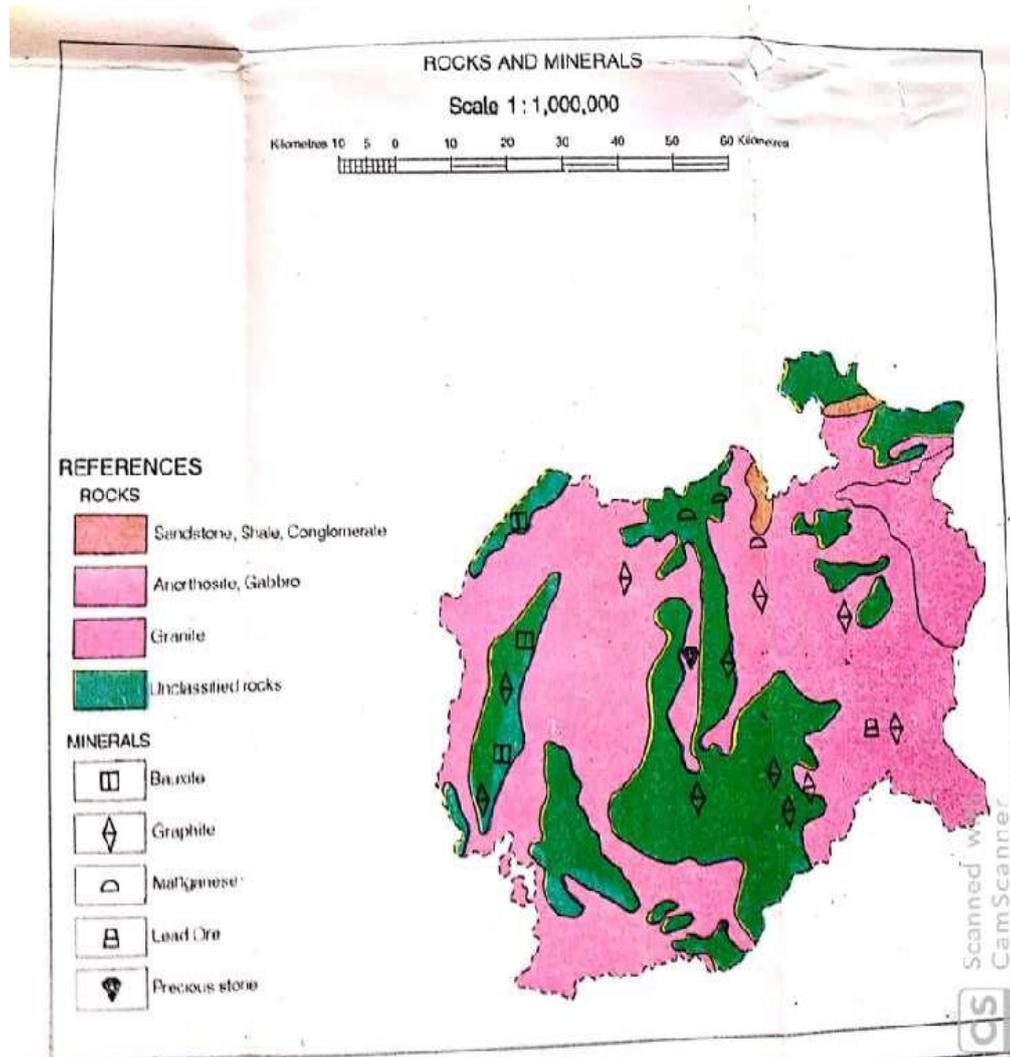
Pegmatite and quartz veins:

Depending upon the mineral assemblages, three types of pegmatites are identified. These have the following compositions:

- i) Quartz-feldspar-biotite-garnet with or without clots of graphite
- ii) Quartz-feldspar-garnet -biotite -muscovite-tourmaline.
- iii) Quartz-feldspar-with or without garnet and graphite

The pegmatite bodies are frequent within the migmatite zone and run parallel to the host rock foliation with sharp contact as seen east, west and north of Jamki.

The third type has a gradational contact with the host rock and is exposed mainly in graphite quarries near Chormunda and Sapmand and to the south of Sanbanki, The second type has mainly E-W to NW-SE trends. This type of pegmatite is reported to be clandestinely excavated for precious stones (mainly aquamarine and topaz). The width of pegmatite bodies vary from less than a meter to more than 3m. One such excavation was noted in the nala NNW of Karuanajhor. Two quartz veins are noted about 2.5km south-east of Lathor and 1.5km SW of Gargarbahal. These are highly fractured and sheared. The quartz is milky white in colour.



Structure:

Foliation: The Khondalite and the associated rocks display well developed foliation as a result of preferred orientation of sillimanite needles graphite flakes and other platy minerals. Alternation of quartz-feldspathic bands with garnet rich bands is also quite prominent. The regional trend of foliation varies from NNE-SSW to NE-SW with steep easterly dips 35° to 70° (Plate I). In the Bakbahal R.F. area the strike is confined between N-S and NNE-SSW directions with local variation to NW-SSE (Plate I). The dip is sometimes as low as 10° in this part. The porphyroblastic granite displays a crude gneissosity with a linear arrangement of feldspar porphyroblasts.

Folds:

The general parallelism of foliation indicates isoclinal to overturned nature of the regional fold pattern. Such folds on minor scale are well preserved in calc-granulites. The tight folds preserved in this rock have axial plane parallel or sub-parallel to the foliation with fold axes plunging 15° to 30° towards NNE. Later warping with plunge at 35° to 45° towards east,

among along NW-SE and E-W axes is observed in calc-granulites. This explains the swing in strike locally from NNW-SSE to NNESSW in Bakbahal R.F. area.

Joints:

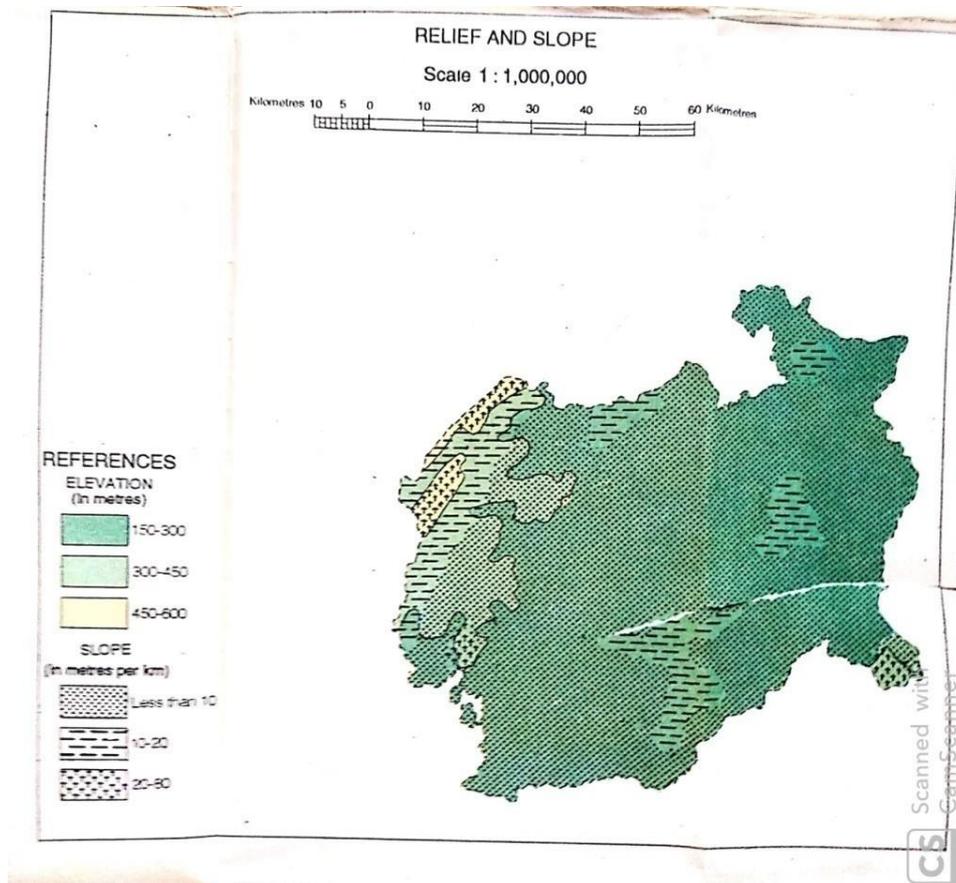
The following three prominent sets of joint sets are noted in the areas examined of which the latter two sets are tension joints:

- a) NE-SW to NNE-SSW, parallel to foliation
- b) NW-SW vertical joint set
- c) E - W vertical joint set

These joints are sometimes filled up by pegmatite veins and other quartzo-feldspathic material as seen in Thongajhor, Palsakani and Pandrapatranalas.

Shear Zones:

Shearing parallel to the foliation is evident at many places. As a result of shearing, close spaced joints had developed along with mylonitisation of the rocks. The quartz reef replaced along the shear zone SW of Gargarbahal and SE of Lathor is much crushed and has close spaced joints parallel to the regional foliation trend. Shearing in migmatites is noted along Thongajhor, Pandrapatranala, Karusnjhar, village, Lant river and WNW of Kandagadh village.



11.2 Geomorphology :

The district can be divided into two broad physiographic units (i) undulating plains (Pediments) dotted with residual hills and (ii) scattered hills and areas with high relief. The undulating plains occupy the central and eastern parts of the district the western, western and south eastern parts of the district average elevation being 200m to 300m above mean sea level with a general slope towards east. The areas with high relief and high hills are situated in the north western, western and south eastern parts of the district (Plate-V).The hill ranges belong to the Eastern Ghats having a general trend of Northeast-Southwest. The highest peak is Gandhamardan situated 983 m above mean sea level.

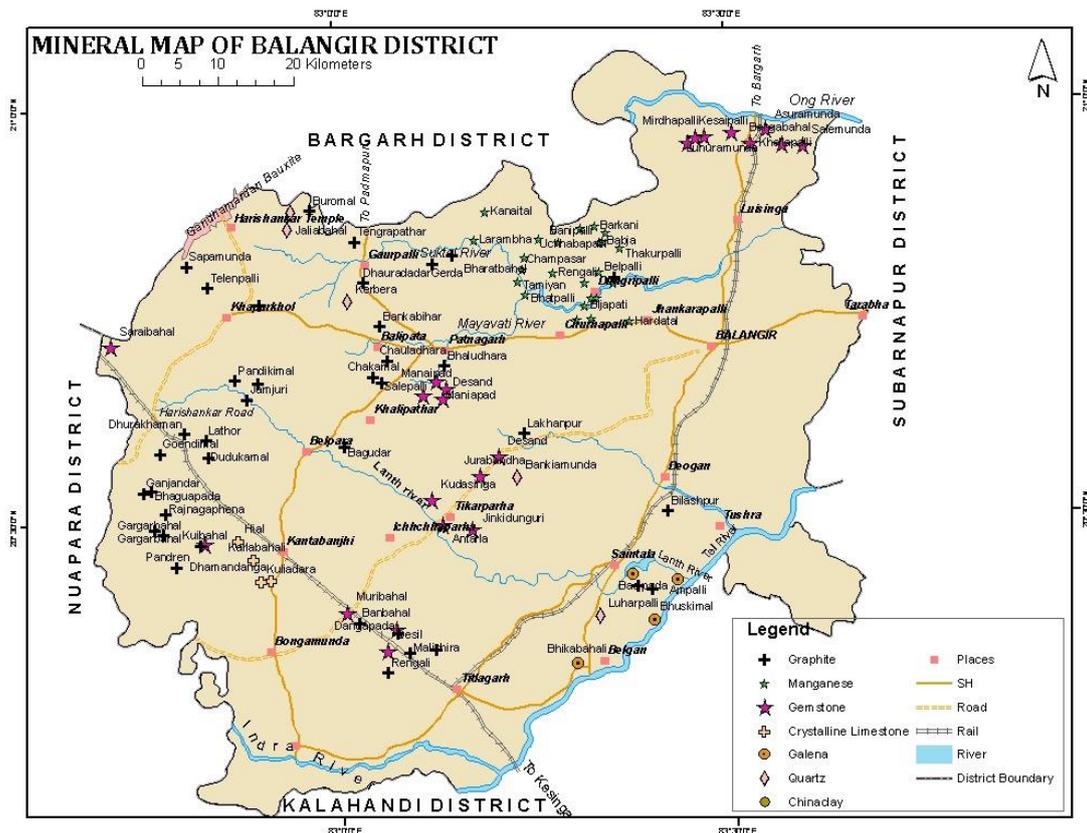
11.3 Stratigraphy:

Event Stratigraphy of the Eastern Ghat Mobile Belt is as follows;

	Age(Ma)	Event
	550-650	Exhumation & Stabilisation(Pan-African)
	800-850	Emplacement of Anorthosite Massifs,Some Alkaline Rocks(?) Younger Granitoids are Charnokites
	950-1100	Main EasternGhat Orogeny(=Grenville)
Group	Khondalite Calc-silicates	Garnet-Sillimanite-Graphite Gneiss(khondalite)with minor cordierite-Saphrine-Spinel Gneiss(Mg-AI) rocks & rare Marbles Quartzite (Garnet ±Sillimanite)
	~1500	Emplacement of Alkaline rocks along with the rift Margin
	Evolution of platform	(Purana) basins like Cuddahpah,Chhatishgarh, Indravati etc.
	1600-1800	Evolution of Nellore-Khemmam schist belt in Dharwar Craton
	2600-2800	Charnokite & Gneisses of the basement (WCZ)

11.4 Mineral Resources:

Minerals like soft stones, limestone, stone chips are available in the District, which are mainly used in industrial units in the District. The huge deposits of granite stones at all the tahasil area provide tremendous scope for development of few more Industries based on this resources. Except these, no minerals in large quantity which can be explored for commercial purpose found in the District.



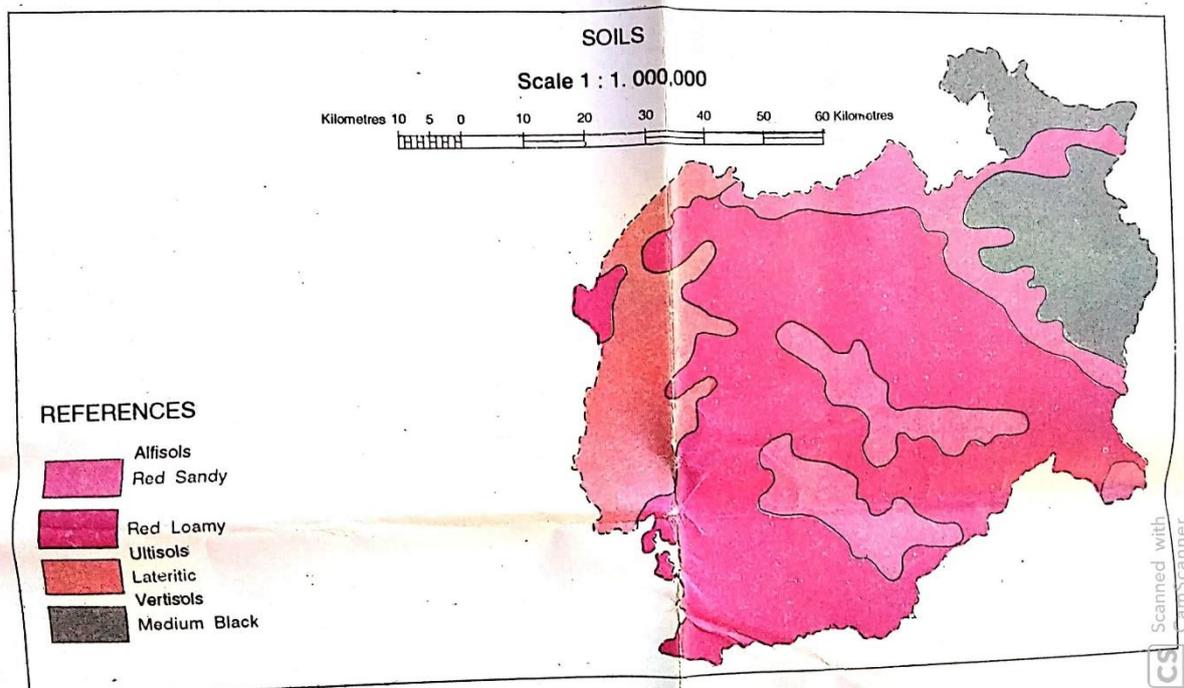
11.5 Soil:

The soils in the district are mainly classified into two major groups 1) Alfisols and 2) Vertisols. The Alfisols includes Red loamy soil and red Sandy Soil and are generally light textured with a PH ranging from 6.5 to 7.3. These soils are usually deficient in nitrogen, phosphate, organic matter and lime. The soils are in general having average to good fertility. These soil are suitable for cultivation of paddy and other crops. The Vertisols are medium black soil found around the course of Mahanadi and Tel rivers in the southern part of the district. These soils are highly argillaceous and contain high amount of iron, calcium and magnesium. The PH varies from neutral to alkaline and texture varies from loam to clay loam. These soil are highly argillaceous and contain high amount of iron, calcium and magnesium.

The distribution of different soil types in the district depends much on its physiographic and lithologic variations. Based on the physical and chemical characteristics, mode of origin and occurrence **Alfisols** : It includes red sandy soils and red loamy soils. The red loamy and sandy soils are occurring in major parts of the district. The characteristic features of red soils are (1) light texture, porous and friable structure, (2) absence of lime Kankar and free carbonates and (3) soluble salts in a small quantity usually not exceeding 0.05%. These are usually deficient in nitrogen, phosphate, organic matter and paddy and other crops.

Ultisols : These are lateritic soils occurring in northwestern part of the district in Khaprakhol block in a limited area. These are characterized by compact to vesicular mass in the subsoil horizons composed essentially of a mixture of the hydrated oxides of aluminum and iron. Due to peculiar granular nature, these soils can be cultivated immediately after heavy rains.

Vertisols : These are medium black soils found in the blocks of Loisinga, Bolangir and Puntala especially in the areas mostly underlain by anorthosite. The soils are highly argillaceous and contain high amount of iron, calcium and magnesium. These are poor in organic matter, nitrogen and phosphorous but rich in potash and lime. The pH varies from neutral to alkaline and texture varies from loam to clayey loam. These are quite fertile soils and the crops grown are generally cotton, wheat, tobacco and chilly , soils of the district may be classified into three groups namely Alfisols, Ultisols and Vertisols



12.0 DISTRICT WISE DETAILS OF RIVER OR STREAM AND OTHER SAND SOURCES

12.1 DRAINAGE SYSTEM WITH DESCRIPTION OF MAIN RIVERS

The District has considerable flat land, which provide suitable site for agricultural use. The hilly areas are mostly under forest with patches of cultivation on scarp areas. The district has many rivers and perennial streams. Almost the entire Bolangir district is drained by nine rivers namely Mahanadi, Tel, Undar, Lanth, Sungadh and Sukhtel (Tributaries of the Tel), Ang, Jira, Saleshing. Major crops grown in the District are rice, Only. 12.21 percent area of agricultural use are net irrigated and major source of irrigations are well and tube wells.

Table-12

IRRIGATION BY DIFFERENT SOURCES(Areas and Number of Structures)				
	Sources of Irrigation	Number	Area in hectare	Percentage of total irrigated area
	Canals	142	129118	65.31
	Tanks	Data not available	Data not available	Data not available
	Open wells	13547	10.486	53.04
	Bore wells	4159	7.884	3.99
	Lift irrigation schemes	2127	23.890	12.08
	Micro-irrigation	78	0.058	0.029
	Other	Data not available	8.681	4.39
	Total Irrigated Area	Data not available	190.917	96.56
	Pump sets	253	Data not available	Data not available
	No. of Tractors	56	Data not available	Data not available
	Irrigation	Area in hectares		
	Net irrigated area	Net irrigated area 190.9(30.38%)		

	Gross irrigated area	Gross irrigated area 197.7(32.95%)
	Rainfed area	402.3(67.04%)
Source: Agriculture Strategy of Balangir District, Kharif, 2020-21		



12.2 SALIENT FEATURES OF IMPORTANT RIVERS AND STREAMS:

The district has many rivers and perennial streams. Almost the entire Bolangir district is drained by nine rivers namely Mahanadi, Tel, Undar, Lanth, Sungadh and Sukhtel (Tributaries of the Tel), Ang, Jira, Saleshing.

The river Tel and its tributaries flow from West to East. The river Ong which is a tributary of Mahanadi is flowing in the northern part of the district following an easterly course. The rivers are generally perennial in nature with a very nominal flow during summer months. Drainage pattern is dendritic.



13.0 AVAILABILITY OF SAND OR GRAVEL OR AGGREGATE RESOURCES

13.1 Mineral Potential

Table- 13 Attached

13.2 Annual Deposition

Boulder (Cum)	Bajari (Cum)	Sand (Cum)	Total Mineable Mineral Potential (Cum)
Not Available	Not Available	3517186	3517186

Table- 13.2 Attached

13.3

Table-13

The list of Portion of the River or Stream Recommended for Mineral Concession

SL NO	NAME OF TAHASIL	NAME OF SOURCE	Portion of the River or Stream Recommended for Mineral Concession		Length of area recommended for mineral concession (in mtr)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in Square meter)	Mineable Mineral potential (in Cum.) (60% of total mineral potential)
			Khata No.	Plot No.				
1	2	3	4	5	6	7	8	9
1	Loisingha	Kusmel Sand Quarry	330	2151	276.81	198.58	50000	43398
2	Loisingha	Hirapur Sand Quarry	115	1382	532	100	50000	40804
3	Loisingha	Chelbahal Sand Quarry	112	1076	532.79	94	50000	43605
4	Loisingha	Tebhadunguri sand Quarry	86	482/504	529.52	84.22	50000	26068

River Sand Mining**DSR of Balangir District**

5	Belpada	Mandal Sand Quarry	229	1623 & 1635	709	55.24	45300	37725
6	Belpada	Nunhad Sand Quarry	204	814	473	68.73	50000	42092
7	Belpada	Dhumabhata Sand Quarry	295	2520	800	60.56	50000	34899
8	Belpada	Belpada sand Quarry	480	2401	415	97	44510	71618
9	Belpada	Parlimal Sand Quarry	201	1188	410.80	151	44350	35928
10	Belpada	Chacherbenga Sand Quarry	169	1224	766	58	48560	58231
11	Deogaon	Chatapipal Sand Quarry	32	1	555	85.81	50000	34260
12	Deogaon	Bandhapa da sand Quarry	53	1	516	76	50000	30447
13	Deogaon	Sarasmal/ Siletkani Sand Quarry	113	88,1	692.70	41	50000	22496
14	Deogaon	Gaibahal Sand Quarry	81	493,2,683	741.48	82	50000	37161
15	Deogaon	Ratakhand i Sand Quarry	119	1027	315	158	50000	30688
16	Deogaon	Kendhugh at Sand Quarry	50	362	388.84	127.19	50000	41205
17	Deogaon	Arda Sand Quarry	181	494 & 496	673	60	50000	10752

River Sand Mining**DSR of Balangir District**

18	Deogaon	Antarla Sand Quarry	73	1059	978.77	45	45320	7754
19	Deogaon	Sikuan Sand Quarry	166	382/1290	527.58	75	50000	28260
20	Deogaon	Kachharpa Ili Sand Quarry	242	915 & 794	576.74	104.63	50000	25750
21	Deogaon	Kuturla Sand Quarry	132	1, 271	850	62	50000	72436
22	Deogaon	Ghatul Sand Quarry	25	335 & 269	790	65.85	50000	47251
23	Deogaon	Tepren Sand Quarry	99	500 & 1082	584.5	48	6270	25750
24	Agalpur	Salebhata Sand Quarry	410 & 79	2291 & 931	333.91	150.68	48560	83432
25	Agalpur	Tentuligaon Sand Quarry	82	1	177.92	273.32	50000	108600
26	Agalpur	Banjipali Sand Quarry	91	1032, 846/1041	554.23	104	50000	40866
27	Agalpur	Fasad Sand Quarry	93	2	416	132	50000	61948.5
28	Agalpur	Fatamunda Sand Quarry	191	2527,2528	480	103	50000	43275
29	Agalpur	Kutasinga Sand Quarry	384	1	378	132	50000	43594
30	Agalpur	Nagaon Sand Quarry	269	1001	390	135	49970	59973

River Sand Mining**DSR of Balangir District**

31	Agalpur	Mahulapali Sand Quarry	92	1	257	190	49970	61954
32	Balangir	Chandanbhati Sand Quarry	280	85	464.34	103.27	48560	40773
33	Balangir	Kutumdola Sand Quarry	170	1	254.49	148	32560	24325
34	Khaprakhol	Luhasingha Sand Quarry	242	1018/1027	653.40	61.34	48560	9196
35	Khaprakhol	Goudapali Sand Quarry	99	1129/859	747.27	62	48560	24979
36	Muribahal	Godighat Sand Quarry	145	1	587	48.63	39820	29168
37	Muribahal	Jampadar Sand Quarry	52	283/317	491.90	65.55	34470	41364
38	Muribahal	Bandupala Sand Quarry	50,125	207,142	520.6	45.3	28320	17274
39	Puintala	Shankarbhaji Sand Quarry	106	1072	532.77	93.76	48560	30767
40	Puintala	Pipirda Sand Quarry	170	142/1370 & 142/1377	537.37	103.74	48500	39898
41	Puintala	Durgapali Sand Quarry	256	6/P	473	94.75	48500	39221
42	Puintala	Bilaisarda Sand Quarry	280	1768(P)	712.23	68.91	48500	37685
43	Titilagarh	Mahada Sand Quarry	106	927	242.11	168.49	40480	44973

River Sand Mining**DSR of Balangir District**

44	Titilagarh	Patharla Sand Quarry	118	1270	395.49	95.44	36420	19689
45	Titilagarh	Turukbhat a Sand Quarry	75	1	205.40	198	40460	43350
46	Titilagarh	Sukunabhata Sand Quarry	104	21	165.24	248	40460	51541.5
47	Titilagarh	Sagunamunda-A Sand Quarry	71	504	208.36	188	40460	30333
48	Titilagarh	Sagunamunda-B Sand Quarry	71	504	212.51	192.51	40460	33919.5
49	Titilagarh	Parasara Sand Quarry	132	669	341	122.29	40460	23055
50	Titilagarh	Antarla Sand Quarry	150	1440	181.56	157	40460	48918
51	Titilagarh	Gandhargala Sand Quarry	54	160/766 & 27	648.36	80	36420	212093
52	Titilagarh	Naren Sand Quarry	312	1759	346	104.25	39250	23425
53	Titilagarh	Ghodar Sand Quarry	284	2015	275.28	201.84	48560	57928
54	Titilagarh	Khairkhunta Sand Quarry	79	442 & 305/459	448	86.61	40460	23153
55	Titilagarh	Udepur Sand Quarry	329	1862	296.65	122.99	40460	21433

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56	Bangomunda	Bhuslad Sand Bed-B	132	1	409.49	109.77	44500	53784
57	Bangomunda	Palaskhand Sand Quarry	85	249	329.88	125.95	50000	42268
58	Bangomunda	Sriram Sand Quarry	135	148	760.63	160	50000	39525
59	Bangomunda	Bhuslad Sand Bed-A	132	1	577.14	82.22	50000	40454
60	Bangomunda	Bhatasar Sand Quarry	56	518	303.73	99.16	30300	24854
61	Bangomunda	Paruabhadri Sand Quarry	79	411	456.21	108.90	30300	41977.5
62	Bangomunda	Asurla Sand Quarry	131	142,323	831.55	76.71	50000	38846
63	Bangomunda	Chandotara Sand Bed-B	145	1011	289	154.29	44510	39525
64	Bangomunda	Chandotara Sand Bed-A	145	693/1204	304.76	93.84	32370	25563
65	Bangomunda	Telsarai Sand Bed	31	218/245	397.94	130.22	48560	26604
66	Bangomunda	Salebarat Sand Bed	119	1147	406.58	105.59	44510	54775.5
67	Bangomunda	Sanmula Sand Bed	124	696	734.56	74.54	50000	39013
68	Bangomunda	Tureikela Sand Quarry	164	622	256.43	116.79	30300	24969
69	Kantabanji	Tikrapada Sand Bed	54	684	284	143.61	12100	7311

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70	Kantabanji	Bharuakan i Sand Bed	46	2	382.55	60	23300	16507
71	Saintala	Kuikeda Sand Quarry	68	317/563	485.44	61.62	32980	18200
72	Saintala	Tikrapada Sand Quarry	248	554,688	972.24	45.84	48500	37433
73	Saintala	Kamarlaga Sand Quarry	75	668	394.91	94	32780	24780
74	Saintala	Mahagaon Sand Quarry	49	102	679.27	80.58	48500	37423
75	Saintala	Saintala Sand Quarry	485	3017	464.53	110.26	49900	20751.5
76	Saintala	Belgaon Sand Quarry	233	1100/1255	160.93	264	28440	14100
77	Saintala	Chhanchh ada Sand Quarry	247	1951	340.68	155.26	48500	20591.5
78	Saintala	Ampali Sand Quarry	156	901	400.93	65.78	28700	12100
79	Saintala	Karamtala Sand Quarry	211	1101	821	60	86900	42200
80	Patnagarh	Tamian Sand Quarry	286	1847	446.76	61.51	48500	54447
81	Patnagarh	Naktasar Sand Quarry	56	220	744.33	65.95	50000	37668
82	Patnagarh	Sunamudi Sand Quarry	172	1186	211.83	248.96	50000	22400

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83	Patnagarh	Pudapadar Sand Quarry	48	78	377.68	153	48500	40744
84	Patnagarh	Koudia Sand Quarry-B	48	302	607	52.84	30630	20270
85	Patnagarh	Koudia Sand Quarry-A	48	1,302	857.73	66.92	50000	35499
86	Patnagarh	Ghasian Sand Quarry	228	394,3	442.99	59.64	48500	53490
87	Patnagarh	Dhubalpara Sand Quarry	155	112	531.84	68.92	40460	48562
88	Tusura	Atigaon Sand Quarry	88	1	257.29	129.92	48600	41300
89	Tusura	Kharda Sand Quarry	76	1/530	685.86	66.29	50000	37411
90	Tusura	Sargada Sand Quarry	81	453,454,1	1010.97	128	48600	35214
91	Tusura	Kukedmal Sand Quarry	84	653/655	296.66	108.86	32300	25944

Methodology adopted for calculation of Mineral Calculation:

The mineral potential is calculated based on field investigation and geology of the catchment area of the river or streams. As per the site conditions and location, depth of minable mineral is defined. The area for removal of the mineral in a river or stream can be decided depending on geo-morphology and other factors, it can be 50 % to 60 % of the area of a particular river or stream. For Example, in some hill States mineral constituents like boulders, river born Bajri, sand up to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

The District Survey Report shall be prepared in the district and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on the district's website for twenty-one days. The comments received shall be considered and if found correct, shall be incorporated in the final Report to be finalised within six months by the State Environment Impact Assessment Authority.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years.

CONCLUSION:

To meet the requirement of minerals in the present scenario, it is proposed to identify such potential areas at certain interval and get the data bank of DSR to be updated regularly. The insitu mining activity in any area is on one hand bring revenue and employment (Direct and indirect) and on other hand if not done properly potential pollution and ecological imbalance increases, the ability of the ecosystem can also be reduced. Particulate matter transported by the wind as a result of excavations, blasting, transportation of materials, heavy equipment used raise these particulate levels; and Gas emissions from the combustion of fuels in stationary and mobile sources, explosions, and mineral processing. All these activities indirectly affected the biodiversity of area. Larger potential and smaller areas have been identified in Balangir District on the basis of geological study carried out during field observation, which can be considered for mining concession after all the parameters for statutory clearances are verified by consulting with concerned authorities.

The District Survey Report for River Sand (Minor Mineral) in respect of Balangir District in accordance with Appendix-X, Para-7 (iii) (a) of S.O. 3611(E) dt. 25.07.2018 of Ministry of Environment, Forest and Climate Change, New Delhi, Enforcement & Monitoring Guideline for Sand Mining-2020 and in compliance with the orders of Hon'ble Supreme Court dt. 10.11.2021 in connection with C.A Nos. 3661-3662 of 2020. Before preparation of this report, a survey has been conducted by State Environment Impact Assessment Authority (SEIAA) with the assistance of Irrigation Department, Forest Department, Public Works Department, Mining Department, Ground Water Boards, Remote Sensing Department, Mining Departments. The DSR is being submitted to SEIAA, Odisha, Bhubaneswar for necessary evaluation and approval.

Annexure-I

Details of Sand/M-Sand Sources

A. Rivers

SL NO	Name of the River or Stream	Total Length in the District in KM (approx.)	Type of River (Perennial or Non-Perennial)
1	2	3	4
1	Tel	50.63	Non-perennial
2	Suktel	150.45	Non-perennial
3	Lant	117.25	Non-perennial
4	Indra	243.17	Non-perennial
5	Ong	204.30	Non-perennial
6	Songad	110.68	Non-perennial
7	Sundar	102.34	Non-perennial
8	Arjun	88.78	Non-perennial
9	Laul	89.41	Non-perennial

NA-it is denoted as data is not available

B. De-Siltation Location:

Name of Reservoir /Dams	Maintain by State Govt./PSU etc.	Location	District	Tehsil	Village	Size
Lower Suktel Dam	State Government	Dunguripali	Balangir	Balangir	Dunguripali	42300 m ²

C. Patta Lands/Khatedari Lands:

Sl no	Name of the Owner	Area(Ha)	District	Tehsil	Village	Agricultural Land (Yes/No)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

D. M-Sand Plants:

Plant Name	Owner	District	Tehsil	Village	Geo-Location	Quantity Tonnes/Annum
Not Applicable						

ANNEXURE-V

FINAL LIST OF POTENTIAL MINING LEASES (Existing and Proposed) OF SAND SAIRAT SOURCES IN BALANGIR DISTRICT

Sl. No.	River Details	Lease Details	Area (in Ac/Ha)	Distance (in KM) from PA/BR/WC/ Forest	Mining leases within 500 meters (if yes cluster area)	Total excavation in Tonnes /Annum considering digging depth max as 3 meters	Mineral to be mined in tonnes (Sand/ Bajri/ RBM etc.)	Existing/ Proposed
Tahasil: Loisingha								
1	Suktel River	Kusmel Sand Quarry Khata No.-330, Plot No. - 2151, Kisam-River, Mouza-Kusmel Lat:20°47'16.11880"N to 20°47'05.60279" N Long: 83°23'52.32608"E to 83°23'43.65722"E	5.00 Ha.	Ostali RF- 31.45	NO	27317.00	Sand 25000	Existing
2	Suktel River	Hirapur Sand Quarry Khata No.-115, Plot No. -1382, Kisam-River, Mouza-Hirapur Lat: 20°49'17.21725"N to 20°49'11.04968" N Long: 83°31'24.86562"E to 83°31'06.15735"E	5.00 Ha.	Ostali RF- 43.93	NO	35186.03	Sand 25000	Existing
3	Suktel River	Chelbahal Sand Quarry Khata No.-112, Plot No. - 1076, Kisam-River, Mouza-Chelbahal Lat: 20°50'46.76738"N to 20°50'41.42216" N Long: 83°33'34.58550"E to 83°33'21.31110"E	5.00 Ha.	Ostali RF- 48.06 km	NO	7688.98	Sand 25000	Existing

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4	Suktel River	Tebhadunguri sand Quarry Khata No.-86, Plot No. -482/504, Kisam-River, Mouza- Tebhadunguri Lat: 20°50'31.69220"N to 20°50'15.59266" N Long: 83°33'08.96500"E to 83°32'54.74535"E	5.00 Ha.	Ostali RF- 47.08 km	NO	75000.00	Sand 50000	Existing
Tahasil: Belpada								
5	Lant River	Mandal Sand Quarry Khata No.-229, Plot No. - 1623 & 1635, Kisam-River, Mouza- Mandal Lat: 20°33'52.64614"N to 20°34'03.25093" N Long: 83°00'34.81621E to 83°00'57.84178"E	4.53 Ha.	Ostali RF- 17.32	NO	18677.70	Sand 10000	Existing
6	Lant River	Nunhad Sand Quarry Khata No.-204, Plot No. - 814 , Kisam-River, Mouza-Nunhad Lat: 20°34'56.24634"N to 20°34'47.70298" N Long: 82°57'09.53961E to 82°57'28.48473"E	5.00 Ha.	Ostali RF- 22.54	NO	40000.00	Sand 10000	Existing
7	Lant River	Dhumabhata Sand Quarry Khata No.-295, Plot No. - 2520, Kisam-River, Mouza- Dhumabhata Lat: 20°32'26.35423"N to 20°32'45.38802" N Long: 83°03'49.26467E to 83°04'10.59416"E	5.00 Ha.	Ostali RF- 12.40	NO	12189.06	Sand 10000	Existing
8	Lant River	Belpada sand Quarry Khata No.-480, Plot No. -2401 , Kisam-River, Mouza-Belpada	4.451 Ha.	Ostali RF- 21.56	NO	50588.14	Sand 20000	Existing

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		Lat: 20°34'50.11807"N to 20°34'59.87653" N Long: 82°57'58.35755"E to 82°58'12.43213"E						
9	Lant River	Parlimal Sand Quarry Khata No.-201, Plot No. -1188, Kisam-River, Mouza-Parlimal Lat: 20°35'7.945"N to 20°34'54.567" N Long: 85°58'20.226"E to 85°58'8.042"E	4.435 Ha.	Ostali RF-27.36	NO	25085.0640	Sand 10000	Existing
10	Lant River	Chacherbenga Sand Quarry Khata No.-169, Plot No. -1224, Kisam-River, Mouza-Chacherbenga Lat: 20°35'24.76070"N to 20°35'49.68108" N Long: 82°56'53.95676"E to 82°57'01.97673"E	4.856 Ha.	Ostali RF-22.13	NO	60000.00	Sand 50000	Proposed
Tahasil: Deogaon								
11	Songad River	Chatapipal Sand Quarry Khata No.-32, Plot No. -1, Kisam-River, Mouza-chatapipal Lat: 20°35'58.09120"N to 20°35'46.99559" N Long: 83°17'15.73736"E to 83°16'58.13341"E	5.00 Ha.	RF-11.55	NO	70000.00	Sand 25000	Existing
12	Songad River	Bandhapada sand Quarry Khata No.-53, Plot No. -1, Kisam-River, Mouza-Bandhapada Lat: 20°36'00.71311"N to 20°35'44.49469" N Long: 83°16'14.66944"E to 83°16'03.79055"E	5.00 Ha.	RF-9.87	NO	30000.00	Sand 15000	Existing
13	Songad River	Sarasmal/Siletkani Sand Quarry	5.00 Ha.	RF-17.10	NO	67000.00	Sand 25000	Existing

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		Khata No.-113, Plot No. -88,1 Kisam-River, Mouza- Sarasmal,Siletkani Lat: 20°34'54.44134"N to 20°34'42.84290" N Long: 83°21'21.38612"E to 83°20'18.20286"E						
14	Songad River	Gaibahal Sand Quarry Khata No.-81, Plot No. - 493,2,683 Kisam-River, Mouza- Gaibahal Lat: 20°34'16.13837"N to 20°34'39.50658" N Lat: 83°22'56.83960"E to 83°23'06.12521"E	5.00 Ha.	RF-21.64	NO	50000.00	Sand 20000	Existing
15	Tel River	Ratakhandi Sand Quarry Khata No.-119, Plot No. -1027, Kisam-River, Mouza-Ratakhandi Lat: 20°28'46.10636"N to 20°28'34.48907"N Long: 83°33'57.82161"E to 83°33'48.93292"E	5.00 Ha.	RF-42.33	NO	92000.00	Sand 50000	Existing
16	Tel River	Kendhughat Sand Quarry Khata No.-50, Plot No. -362, Kisam-River, Mouza-Kendughat Lat: 20°31'24.29894"N to 20°31'10.97223"N Long: 83°34'47.79423"E to 83°34'37.02769"E	5.00 Ha.	RF-42.57	NO	40000.00	Sand 30000	Existing
17	Songad River	Arda Sand Quarry Khata No.-181, Plot No. -494 & 496, Kisam-River, Mouza-Arda Lat: 20°34'42.09205"N to 20°34'33.99717"N	5.00 Ha.	RF-20.86	NO	51000.00	Sand 25000	Existing

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		Long: 83°22'54.12959"E to 83°22'30.08182"E						
18	Songad River	Antarla Sand Quarry Khata No.-73, Plot No. -1059, Kisam-River, Mouza-Antarla Lat: 20°35'36.04252"N to 20°35'21.13758"N Long: 83°18'43.18521"E to 83°18'11.86770"E	4.532 Ha.	RF-13.21	NO	45000.00	Sand 20000	Existing
19	Songad River	Sikuan Sand Quarry Khata No.-166, Plot No. - 382/1290, Kisam-River, Mouza-Sikuan Lat: 20°34'18.83265"N to 20°34'01.12146"N Long: 83°23'05.55173"E to 83°22'59.66685"E	5.00 Ha.	RF-21.64	NO	75000.00	Sand 50000	Existing
20	Songad River	Kachharpalli Sand Quarry Khata No.-242, Plot No. -915 & 794, Kisam-River, Mouza-Kachharpali Lat: 20°32'25.67155"N to 20°32'11.46132"N Long: 83°24'27.90248"E to 83°24'11.47827"E	5.00 Ha.	RF-24.37	NO	64000.00	Sand 40000	Existing
21	Songad River	Kuturla Sand Quarry Khata No.-132, Plot No. -1, 271, Kisam-River, Mouza-Kuturla Lat: 20°32'18.70897"N to 20°32'43.44884"N Long: 83°23'57.57896"E to 83°24'14.95645"E	5.00 Ha.	RF-24.36	NO	58000.00	Sand 50000	Existing
22	Songad River	Ghatul Sand Quarry	5.00 Ha.	RF-8.44	NO	65000.00	Sand 25000	Existing

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		Khata No.-25, Plot No. -335 &269, Kisam-River, Mouza-Ghatul Lat: 20°35'15.24363"N to 20°35'30.01574"N Long: 83°15'24.69426"E to 83°15'44.28132"E						
23	Songad River	Tepren Sand Quarry Khata No.-99, Plot No. -500 & 1082, Kisam-River, Mouza-Tepren Lat: 20°32'25.67155"N to 20°32'11.46132"N Long: 83°24'27.90248"E to 83°24'11.47827"E	0.627 Ha.	RF-20.55	NO	10000.00	Sand 7000	Existing
Tahasil: Agalpur								
24	Ong River	Salebhata Sand Quarry Khata No.-410 & 79, Plot No. - 2291 & 931, Kisam-River, Mouza- Salebhata & Raphakhal Lat: 20°58'56.510"N to 20°58'48.097" N Long: 83°32'12.543"E to 83°32'21.103"E	4.856 Ha.	RF-56.95	NO	90000.00	Sand 15000	Existing
25	Ong River	Tentuligaon Sand Quarry Khata No.-82, Plot No. -1, Kisam-River, Mouza- Tentuligaon Lat: 20°58'55.33284"N to 20°58'45.60507" N Long: 83°36'04.43612"E to 83°35'56.91431"E	5.00 Ha.	RF-61.58	NO	150000.00	Sand 30000	Existing
26	Ong River	Banjipali Sand Quarry Khata No.-91, Plot No. -1032, 846/1041, Kisam-River, Mouza-Banjipali	5.00 Ha.	RF-49.74	NO	50000.00	Sand 20000	Existing

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		Lat: 21°00'12.54155"N to 21°00'02.09828" N Long: 83°22'30.84420"E to 83°22'13.07810"E						
27	Ong River	Fasad Sand Quarry Khata No.-93, Plot No. -2, Kisam-River, Mouza- Fasad Lat: 20°59'00.00194"N to 20°58'57.95526" N Long: 83°30'08.60012"E to 83°29'53.73872"E	5.00 Ha.	RF-54.88	NO	100000.00	Sand 50000	Existing
28	Ong River	Fatamunda Sand Quarry Khata No.-191, Plot No. - 2527,2528, Kisam-River, Mouza- Fatamunda Lat: 21°00'38.63565"N to 21°00'51.07357" N Long: 83°27'03.54686"E to 83°27'18.96577"E	5.00 Ha.	RF-54.12	NO	45000.00	Sand 25000	Existing
29	Ong River	Kutasinga Sand Quarry Khata No.-384, Plot No. -1, Kisam-River, Mouza-Kutasinga Lat: 20°58'49.95784"N to 20°58'58.07204" N Long: 83°37'59.86992"E to 83°38'12.74471"E	5.00 Ha.	RF-63.76	NO	100000.00	Sand 50000	Existing
30	Ong River	Nagaon Sand Quarry Khata No.-269, Plot No. -1001, Kisam-River, Mouza-Nagaon Lat: 21°0'23.259"N to 21°0'36.118" N Long: 83°17'56.869"E to 83°18'7.805"E	4.997 Ha.	RF-46.86	NO	100000.00	Sand 50000	Proposed
31	Ong River	Mahulapali Sand Quarry	4.997 Ha.	RF-54.11	NO	110000.00	Sand 60000	Proposed

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		Khata No.-92, Plot No. -1, Kisam-River, Mouza-Mahulapali Lat: 20°59'44.803"N to 20°59'55.562" N Long: 83°27'45.339"E to 83°27'56.263"E						
Tahasil: Balangir								
32	Suktel River	Chandanbhati Sand Quarry Khata No.-280, Plot No. -85, Kisam-River, Mouza- Chandanbhati Lat: 20°46'55.15637"N to 20°46'50.79990" N Long: 83°26'17.19629"E to 83°26'00.78562"E	4.856 Ha.	RF-34.08	NO	70000.00	Sand 50000	Existing
33	Suktel River	Kutumdola Sand Quarry Khata No.-170 & 105 Plot No. - 725 & 1, Kisam- Nadi, Mouza- Kutumdola & Duanapali Lat: 20°46'18.09875"E to 20°46'30.73712"E Long: 83°23'49.07337"N to 83°23'59.21558"N	3.256 Ha.	RF-31.34	NO	80000.00	Sand 40000	Existing
Tahasil: Khaprakhol								
34	Suktel River	Luhasingha Sand Quarry Khata No.-242, Plot No. - 1018/1027, Kisam-River, Mouza- Luhasingha Lat: 20°49'25.59345"N to 20°50'04.33503" N Long: 83°03'27.00405"E to 83°03'34.77064"E	4.856 Ha.	RF-19.90	NO	75000.00	Sand 50000	Existing
35	Suktel River	Goudapali Sand Quarry	4.856 Ha.	RF-17.44	NO	80000.00	Sand 60000	Existing

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		Khata No.-99, Plot No. - 1129/859, Kisam-River, Mouza-Goudapali Lat: 20°48'49.41930"N to 20°48'46.11066" N Long: 83°01'49.30834"E to 83°01'23.25384"E						
Tahasil: Muribahal								
36	Lant River	Godighat Sand Quarry Khata No.-145, Plot No. -1, Kisam-River, Mouza-Godighat Lat: 20°27'43.83092"N to 20°27'38.22015" Long: 83°02'45.90928"E to 83°02'25.45781"E	3.928 Ha.	RF-19.11	NO	65000.00	Sand 40000	Existing
37	Lant River	Jampadar Sand Quarry Khata No.-52, Plot No. -283/317, Kisam-River, Mouza-Jampadar Lat: 20°29'17.36952"N to 20°29'00.84120" Long: 83°07'30.09324"E to 83°07'21.53784"E	3.447 Ha.	RF-12.39	NO	50000.00	Sand 30000	Existing
38	Lant River	Bandupala Sand Quarry Khata No.-50,125, Plot No. -207,142, Kisam-River, Mouza-Bandupala Lat: 20°28'33.23"N to 20°28'38.85"N Long: 83°05'43.83"E to 83°06'02.33"E	2.832 Ha.	RF-20.74	NO	50000.00	Sand 30000	Existing
Tahasil: Puintala								
39	Suktel River	Shankarbhoji Sand Quarry Khata No.-106, Plot No. -1072, Kisam-River, Mouza-Shankarbhoji	4.856 Ha.	RF-41.78	NO	80000.00	Sand 70000	Existing

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		Lat: 20°48'21.85311"N to 20°48'21.85311" N Long: 83°29'37.81715"E to 83°29'51.54426"E						
40	Suktel River	Pipirda Sand Quarry Khata No.-170, Plot No. - 142/1370 & 142/1377, Kisam-River, Mouza-Pipirda Lat: 20°49'48.33454"N to 20°49'30.32091" N Long: 83°32'00.50925"E to 83°31'53.64783"E	4.850 Ha.	RF-44.95	NO	90000.00	Sand 50000	Existing
41	Suktel River	Durgapali Sand Quarry Khata No.-256, Plot No. -6/P, Kisam-River, Mouza-Durgapali Lat: 20°49'11.82914"N to 20°49'06.55612" N Long: 83°31'15.47804"E to 83°30'58.75196"E	4.850 Ha.	RF-43.45	NO	85000.00	Sand 55000	Existing
42	Suktel River	Bilaisarda Sand Quarry Khata No.-280, Plot No. - 1768(P), Kisam-River, Mouza-Bilaisarda Lat: 20°50'19.76600"N to 20°50'34.67095" N Long: 83°34'51.03154"E to 83°35'13.03918"E	4.856 Ha.	RF-50.88	NO	90000.00	Sand 50000	Existing
Tahasil: Titilagarh								
43	Tel River	Mahada Sand Quarry Khata No.-106, Plot No. -927, Kisam-River, Mouza-Mahada Lat: 20°11'37.61235"N to 20°11'47.32626" N Long: 83°12'02.33558"E to 83°12'11.99809"E	4.048 Ha.	RF-43.42	NO	80000.00	Sand 70000	Existing

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44	Sundar River	Patharla Sand Quarry Khata No.-118, Plot No. -1270, Kisam-River, Mouza-Patharla Lat: 20°12'56.60316"N to 20°12'46.86336" N Long: 83°04'09.67656"E to 83°03'56.97000"E	3.642 Ha.	RF-42.07	NO	75000.00	Sand 50000	Existing
45	Sundar River	Turukbhata Sand Quarry Khata No.-75, Plot No. -1, Kisam-River, Mouza-Turukbhata Lat: 20°12'37.94071"N to 20°12'28.53517" N Long: 82°56'49.60485"E to 82°56'40.17362"E	4.046 Ha.	RF-46.97	NO	70000.00	Sand 45000	Existing
46	Sundar River	Sukunabhata Sand Quarry Khata No.-104, Plot No. -21, Kisam-River, Mouza- Sukunabhata Lat: 20°13'23.89004"N to 20°13'14.53190" N Long: 83°06'18.91016"E to 83°06'10.39700"E	4.046 Ha.	RF-41.19	NO	60000.00	Sand 35000	Existing
47	Sundar River	Sagunamunda-A Sand Quarry Khata No.-71, Plot No. -504, Kisam-River, Mouza- Sagunamunda Lat: 20°12'05.56562"N to 20°11'56.33997" N Long: 83°11'21.20565"E to 83°11'14.99440"E	4.046 Ha.	RF-42.53	NO	70000.00	Sand 45000	Existing
48	Sundar River	Sagunamunda-B Sand Quarry Khata No.-71, Plot No. -504, Kisam-River, Mouza- Sagunamunda	4.046 Ha.	RF-42.36	NO	75000.00	Sand 50000	Existing

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		Lat: 20°12'17.90553"N to 20°12'08.45483" N Long: 83°10'57.05084"E to 83°10'49.18707"E						
49	Sundar River	Parasara Sand Quarry Khata No.-132, Plot No. -669, Kisam-River, Mouza-Parasara Lat: 20°11'55.88636"N to 20°12'07.68375" N Long: 83°00'23.28419"E to 83°00'32.18264"E	4.046 Ha.	RF-45.91	NO	85000.00	Sand 60000	Existing
50	Sundar River	Antarla Sand Quarry Khata No.-150, Plot No. -1440, Kisam-River, Mouza-Antarla Lat: 20°13'26.31635"N to 20°13'20.51099" N Long: 83°06'53.82924"E to 83°06'47.17030"E	4.046 Ha.	RF-40.92	NO	75000.00	Sand 30000	Existing
51	Sundar River	Gandhargala Sand Quarry Khata No.-54, Plot No. -160/766 & 27, Kisam-River, Mouza-Gandhargala Lat: 20°13'57.29548"N to 20°14'14.68492" N Long: 20°13'57.29548"N to 20°14'14.68492" N	3.642 Ha.	RF-41.45	NO	60000.00	Sand 30000	Existing
52	Sundar River	Naren Sand Quarry Khata No.-312, Plot No. -1759, Kisam-River, Mouza-Naren Lat: 20°13'49.21808"N to 20°13'44.67164" N Long: 83°05'45.26895"E to 83°05'41.39416"E	3.925 Ha.	RF-40.71	NO	55000.00	Sand 35000	Existing
53	Sundar River	Ghodar Sand Quarry	4.856 Ha.	RF-41.48	NO	65000.00	Sand 50000	Existing

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		Khata No.-284, Plot No.-2015, Kisam-River, Mouza-Ghodar Lat: 20°13'10.33668"N to 20°13'00.98254" N Long: 83°08'14.50037"E to 83°08'03.19817"E						
54	Sundar River	Khairkhunta Sand Quarry Khata No.-79, Plot No. -442 & 305/459, Kisam-River, Mouza- Khairkhunta Lat: 20°12'278.65960"N to 20°12'39.59498" N Long: 83°09'57.11868"E to 83°10'11.59005"E	4.046 Ha.	RF-42.16	NO	60000.00	Sand 40000	Existing
55	Sundar River	Udepur Sand Quarry Khata No.-329, Plot No. -1862, Kisam-River, Mouza-Udeipur Lat: 20°12'40.48791"N to 20°12'33.48088" N Long: 83°09'34.70752"E to 83°09'23.96568"E	4.046 Ha.	RF-42.14	NO	64000.00	Sand 30000	Existing
Tahasil: Bangomunda								
56	Sundar River	Bhuslad Sand Bed-B Khata No.-132, Plot No. - 1 Kisam-River, Mouza-Bhuslad Lat: 20°14'52.86039"N to 20°14'42.16235" N Long: 82°52'09.21122"E to 82°51'56.92207"E	4.45 Ha.	RF-3.66	NO	90000.00	Sand 50000	Existing
57	Sundar River	Palaskhand Sand Quarry Khata No.-85 Plot No. - 249 Kisam-River, Mouza-Palaskhand Lat: 20°15'12.50892"N to 20°15'26.84820" N	5.00 Ha.	RF-2.86	NO	90000.00	Sand 55000	Existing

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		Long: 82°51'31.63572"E to 82°51'39.01176"E						
58	Sundar River	Sriram Sand Quarry Khata No.-135 Plot No. - 148 Kisam-River, Mouza-Sriram Lat: 20°15'12.398"N to 20°14'51.125" N Long: 82°51'45.400"E to 82°51'32.796"E	5.00 Ha.	RF-3.54	NO	80000.00	Sand 60000	Existing
59	Sundar River	Bhuslad Sand Bed-A Khata No.-132, Plot No. - 1 Kisam-River, Mouza-Bhuslad Lat: 20°15'15.14908"N to 20°14'55.95597" N Long: 82°51'41.48286"E to 82°51'34.55549"E	5.00 Ha.	RF-2.65	NO	85000.00	Sand 55000	Existing
60	Sundar River	Bhatasar Sand Quarry Khata No.-56, Plot No. - 518 Kisam-River, Mouza-Bhatasar Lat: 20°12'47.82177"N to 20°12'39.70628" N Long: 82°57'23.90859"E to 82°57'13.72334"E	3.03 Ha.	RF-1.02	NO	54000.00	Sand 40000	Existing
61	Sundar River	Paruabhadi Sand Quarry Khata No.-79, Plot No. - 411 Kisam-River, Mouza-Paruabhadi Lat: 20°14'18.29405"N to 20°14'02.55178" N Long: 82°52'15.37993"E to 82°52'08.23241"E	3.03 Ha.	RF-2.78	NO	50000.00	Sand 25000	Existing
62	Sundar River	Asurla Sand Quarry Khata No.-131 Plot No. - 142,323, Kisam-River, Mouza-Asurla	5.00 Ha.	RF-4.70	NO	75000.00	Sand 60000	Existing

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		Lat: 20°17'21.32795"N to 20°16'59.92778" N Long: 82°51'10.67107"E to 82°50'50.99553"E						
63	Sundar River	Chandotara Sand Bed-B Khata No.-145 Plot No. - 1011, Kisam-River, Mouza-Chandotara Lat: 20°12'38.32706"N to 20°12'26.82805" N Long: 82°55'16.23740"E to 82°56'01.58388"E	4.451 Ha.	RF-2.08	NO	68000.00	Sand 55000	Existing
64	Sundar River	Chandotara Sand Bed-A Khata No.-145 Plot No. - 693/1204 Kisam-River, Mouza- Chandotara Lat: 20°12'53.476"N to 20°13'5.434" N Long: 82°55'44.149"E to 82°55'52.173"E	3.237 Ha.	RF-2.31	NO	51000.00	Sand 40000	Existing
65	Sundar River	Telsarai Sand Bed Khata No.-31 Plot No. - 218/245 Kisam-River, Mouza-Telsarai Lat: 20°12'42.89235"N to 20°12'29.98419" N Long: 82°56'49.75457"E to 82°56'38.10044"E	4.856 Ha.	RF-1.99	NO	72000.00	Sand	Existing
66	Sundar River	Salebarat Sand Bed Khata No.-119 Plot No. - 1147, Kisam-River, Mouza-Salebarat Lat: 20°13'06.50016"N to 20°13'01.92687" N Long: 82°54'18.94285"E to 82°54'04.68199"E	4.451 Ha.	RF-2.71	NO	70000.00	Sand 45000	Existing
67	Sundar River	Sanmula Sand Bed	5.00 Ha.	RF-2.98	NO	80000.00	Sand 60000	Existing

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		Khata No.-124, Plot No. - 696, Kisam-River, Mouza-Sanmula Lat: 20°18'36.69948"N to 20°18'59.60088" N Long: 82°50'02.16204"E to 82°50'13.04880"E						
68	Sundar River	Tureikela Sand Quarry Khata No.-164, Plot No. - 622, Kisam-River, Mouza-Tureikela Lat: 20°13'0.780"N to 20°13'10.044" N Long: 82°52'42.184"E to 82°52'52.104"E	3.03 Ha.	RF-2.30	NO	60000.00	Sand	Existing
Tahasil: Kantabanji								
69	Arjun River	Tikrapada Sand Bed Khata No.-54 Plot No. - 684, Kisam-River, Mouza-Tikrapada Lat: 20°23'20.01"N to 20°23'25.39N Long: 82°45'09.08"E to 82°45'12.13"E	1.21 Ha.	RF-6.92	NO	14000.00	Sand 5000	Existing
70	Arjun River	Bharuakani Sand Bed Khata No.-46 Plot No. - 2 Kisam- Jore Mouza-Bharuakani Lat: 20°21'58.12"N to 20°22'04.19"N Long: 82°46'04.73"E to 82°46'08.35"E	2.33 Ha.	RF-6.78	NO	15000.00	Sand 7000	Existing
Tahasil: Sainatala								
71	Laul River	Kuikeda Sand Quarry Khata No.-68 Plot No. - 317/563 Kisam-Nadi Mouza-Kuikeda Lat: 20°25'59.03350"N to 20°26'12.89620"N	3.298 Ha.	RF-5.55	NO	47000.00	Sand 30000	Existing

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		Long: 83°17'46.03258"E to 83°17'57.75064"E						
72	Laul River	Tikrapada Sand Quarry Khata No.-248 Plot No. - 554,688, Kisam-Nadi Mouza-Tikrapada Lat: 20°30'02.25126"N to 20°30'25.69657"N Long: 83°06'58.90665"E to 83°07'05.09135"E	4.85 Ha.	RF-4.85	NO	50000.00	Sand 35000	Existing
73	Lant River	Kamarlaga Sand Quarry Khata No.-75 Plot No. - 668, Kisam-Nadi Mouza-Kamarlaga Lat: 20°25'57.12079"N to 20°25'52.6001"N Long: 83°19'04.00856"E to 83°18'50.41477"E	3.278 Ha.	RF-5.26	NO	50000.00	Sand 20000	Existing
74	Laul River	Mahagaon Sand Quarry Khata No.-49 Plot No. - 102, Kisam-Nadi Mouza-Mahagaon Lat: 20°24'39.28190"N to 20°24'33.09806"N Long: 83°20'28.15010"E to 83°20'07.31659"E	4.85 Ha.	RF-4.54	NO	70000.00	Sand 45000	Existing
75	Laul River	Saintala Sand Quarry Khata No.-485 Plot No. - 3017, Kisam-Nadi, Mouza-Saintala Lat: 20°26'33.87056"N to 20°26'18.55257"N Long: 83°22'06.89832"E to 83°22'00.06423"E	4.99 Ha.	RF-8.71	NO	40000.00	Sand 20000	Existing
76	Tel River	Belgaon Sand Quarry Khata No.-233 Plot No. - 1100/1255, Kisam-Nadi, Mouza-Belgaon	2.844 Ha.	RF-5.46	NO	60000.00	Sand 40000	Existing

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DSR of Balangir District

		Lat: 20°18'34.71705"N to 20°18'25.55416"N Long: 83°19'15.30791"E to 83°19'08.87267"E						
77	Lant River	Chhanchhada Sand Quarry Khata No.-247, Plot No. - 1951, Kisam-Nadi, Mouza- Chhanchhada Lat: 20°26'02.04834"N to 20°25'52.10538"N Long: 83°15'05.61587"E to 83°14'53.11609"E	4.85 Ha.	RF-6.95	NO	65000.00	Sand 35000	Existing
78	Lant River	Ampali Sand Quarry Khata No.-156, Plot No. - 901, Kisam-Nadi, Mouza-Ampali Lat: 20°25'41.37374"N to 20°25'36.97507"N Long: 83°26'30.57"E to 83°26'16.47"E	2.87 Ha.	RF-15.55	NO	40000.00	Sand 25000	Existing
79	Laul River	Karamtala Sand Quarry Khata No.-211, Plot No. -1101, Kisam-Nadi, Mouza-Karamtala Lat: 20°25'57.43915"N to 20°26'05.76536" N Long: 83°15'33.13774"E to 83°16'01.07908"E	3.516 Ha.	RF-5.67	NO	48000.00	Sand 30000	Proposed
Tahasil: Patnagarh								
80	Suktel River	Tamian Sand Quarry Khata No.-286, Plot No. - 1847, Kisam-Nadi, Mouza-Tamian Lat: 20°46'43.11380"N to 20°47'06.22908"N Long: 83°14'18.58855"E to 83°14'38.46536"E	4.85 Ha.	RF-4.55	NO	75000.00	Sand 50000	Existing
81	Suktel River	Naktasar Sand Quarry	5.00 Ha.	RF-9.56	NO	80000.00	Sand 65000	Existing

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		Khata No.-56, Plot No. - 220, Kisam-Nadi, Mouza-Naktasar Lat: 20°43'27.24845"N to 20°43'13.78346"N Long: 83°12'33.78623"E to 83°12'11.45108"E						
82	Suktel River	Sunamudi Sand Quarry Khata No.-172, Plot No. - 1186, Kisam-Nadi, Mouza-Sunamudi Lat: 20°43'15.00986"N to 20°43'25.04036"N Long: 83°11'28.71014"E to 83°11'37.52461"E	5.00 Ha.	RF-9.64	NO	80000.00	Sand 50000	Existing
83	Suktel River	Pudapadar Sand Quarry Khata No.-48, Plot No. - 78, Kisam-Nadi, Mouza-Pudapadar Lat: 20°49'16.04599"N to 20°49'03.07368"N Long: 83°13'13.22451"E to 83°13'01.66198"E	4.85 Ha.	RF-22.03	NO	75000.00	Sand 50000	Existing
84	Suktel River	Koudia Sand Quarry-B Khata No.-48, Plot No. - 302, Kisam-Nadi, Mouza-Koudia Lat: 20°43'37.54621"N to 20°43'24.19130"N Long: 83°10'17.09807"E to 83°09'59.17624"E	3.063 Ha.	RF-10.89	NO	60000.00	Sand 45000	Existing
85	Suktel River	Koudia Sand Quarry-A Khata No.-48, Plot No. - 1, 302, Kisam-Nadi, Mouza-Koudia Lat: 20°43'46.54938"N to 20°43'27.60469"N Long: 83°09'45.74077"E to 83°09'21.99052"E	5.00 Ha.	RF-10.75	NO	80000.00	Sand 40000	Existing
86	Suktel River	Ghasian Sand Quarry	4.85 Ha.	RF-23.10	NO	70000.00	Sand 52000	Existing

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		Khata No.-228, Plot No. - 394,3, Kisam-Nadi, Mouza-Ghasian Lat: 20°50'06.40121"N to 20°50'15.38324"N Long: 83°10'08.40611"E to 83°10'22.22257"E						
87	Suktel River	Dhubalpara Sand Quarry Khata No.-155, Plot No. - 112, Kisam-Jore, Mouza-Dhubalpara Lat: 20°43'13.17704"N to 20°43'29.59817"N Long: 83°13'29.75207"E to 83°13'40.85883"E	4.046 Ha.	RF-11.99	NO	60000.00	Sand 50000	Existing
Tahasil: Tusura								
88	Tel River	Atigaon Sand Quarry Khata No.-88, Plot No. - 1, Kisam-Nadi, Mouza-Atigaon Lat: 20°28'18.95804"N to 20°28'11.24095"N Long: 83°32'40.77695"E to 83°32'32.57622"E	4.86 Ha.	RF-10.19	NO	90000.00	Sand 65000	Existing
89	Songad River	Kharda Sand Quarry Khata No.-76, Plot No. - 1/530, Kisam-Nadi, Mouza-Kharda Lat: 20°30'30.80232"N to 20°30'23.30064"N Long: 83°29'02.37984"E to 83°28'38.73180"E	5.00 Ha.	RF-9.71	NO	85000.00	Sand 60000	Existing
90	Songad River	Sargada Sand Quarry Khata No.-81, Plot No. - 453,454,1, Kisam-Nadi, Mouza- Sargada Lat: 20°31'08.31237"N to 20°30'43.47255"N	4.86 Ha.	RF-8.60	NO	80000.00	Sand 55000	Existing

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		Long: 83°27'39.934167"E to 83°27'23.229569"E						
91	Songad River	Kukedmal Sand Quarry Khata No.-84, Plot No. - 653/655, Kisam-Nadi, Mouza- Kukedmal Lat: 20°25'31.55875"N to 20°25'22.96132"N Long: 83°27'04.02375"E to 83°26'53.57717"E	3.23 Ha.	RF-10.63	NO	65000.00	Sand 50000	Existing

Annexure- VI

**List of Cluster & Contiguous Cluster
Clusters:**

Name of Tahasil	River Name	Cluster No	Lease No	Location (River Bed/Patta Land)	Village	Name of Minor Minerals in Cluster	Area (in Ha)	Total Area in (Ha)	Total Excavation (Cum)	Existing / Proposed
Deogaon	Songad	Cluster No-1	20	River Bed	Kachharpalli	Kachharpalli Sand Quarry	5.00	10.00	25750	Existing
			21		Kuturla	Kuturla Sand Quarry	5.00		72436	
Bangomunda	Sundar	Cluster No-2	56	River Bed	Bhuslad	Bhuslad Sand Bed-B	4.45	19.45	53784	Existing
			57		Palaskhand	Palaskhand Sand Quarry	5.00		42268	
			58		Sriram	Sriram Sand Quarry	5.00		39525	
			59		Bhuslad	Bhuslad Sand Bed-A	5.00		40454	
Deogaon	Songad	Cluster No-3	14	River Bed	Gaibahal	Gaibahal Sand Quarry	5.00	10.00	37161	Existing
			17		Arda	Arda Sand Quarry	5.00		10752	
Titilagarh	Sundar	Cluster No-4	45	River Bed	Turukbhata	Turukbhata Sand Quarry	4.046	8.902	43350	Existing
Bangomunda			65		Telsarai	Telsarai Sand Bed	4.856		26604	

Contiguous Clusters:

River Name	Contiguous Cluster No	Cluster No	Number of leases in the cluster	Location (Riverbed/Patta Land)	Distance between clusters	Village	Area of Cluster (in Ha)	Total Mineral Excavation (Ton)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
No contiguous Cluster Situation available in respect of Balangir District								

Annexure-VII

Transportation Routes for individual leases

SL NO	NAME OF TAHASIL	NAME OF SOURCE	Transportation Route No	No of tippers/day of Lease	Number of tippers /day of all the lease on route	Length of Route in KM	Type of Road (Black Topped/unpaved)	Recommendation for road (Black Topped/unpaved)	The road will be Constructed by Govt/ Lease Owner	Route Map & Location
1	Loisingha	Kusmel Sand Quarry	Village Road	4	7	3	Unpaved	Unpaved	Lease Owner	Map Attached
2	Loisingha	Hirapur Sand Quarry	Village Road	2	3	5	Unpaved	Unpaved	Lease Owner	Map Attached
3	Loisingha	Chelbahal Sand Quarry	Village Road	4	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
4	Loisingha	Tebhadunguri sand Quarry	Village Road	2	4	2	Unpaved	Unpaved	Lease Owner	Map Attached
5	Belpada	Mandal Sand Quarry	Village Road	3	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
6	Belpada	Nunhad Sand Quarry	Village Road	2	4	4	Unpaved	Unpaved	Lease Owner	Map Attached
7	Belpada	Dhumabhata Sand Quarry	Village Road	4	5	2	Unpaved	Unpaved	Lease Owner	Map Attached
8	Belpada	Belpada sand Quarry	Village Road	4	6	3	Unpaved	Unpaved	Lease Owner	Map Attached
9	Belpada	Parlimal Sand Quarry	Village Road	3	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
10	Belpada	Checherbenga Sand Quarry	Village Road	5	7	2	Unpaved	Unpaved	Lease Owner	Map Attached
11	Deogan	Chatapipal Sand Quarry	Village Road	4	12	3	Unpaved	Unpaved	Lease Owner	Map Attached
12	Deogan	Bandhapada sand Quarry	Village Road	3	8	2	Unpaved	Unpaved	Lease Owner	Map Attached
13	Deogan	Sarasmal/Siletkani Sand Quarry	Village Road	4	10	3	Unpaved	Unpaved	Lease Owner	Map Attached
14	Deogan	Gaibahal Sand Quarry	Village Road	2	7	2	Unpaved	Unpaved	Lease Owner	Map Attached

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15	Deogan	Ratakhandi Sand Quarry	Village Road	4	12	4	Unpaved	Unpaved	Lease Owner	Map Attached
16	Deogan	Kendhughat Sand Quarry	Village Road	7	15	3	Unpaved	Unpaved	Lease Owner	Map Attached
17	Deogan	Arda Sand Quarry	Village Road	3	7	3	Unpaved	Unpaved	Lease Owner	Map Attached
18	Deogan	Antarla Sand Quarry	Village Road	6	10	2	Unpaved	Unpaved	Lease Owner	Map Attached
19	Deogan	Sikuan Sand Quarry	Village Road	2	4	4	Unpaved	Unpaved	Lease Owner	Map Attached
20	Deogan	Kachharpalli Sand Quarry	Village Road	4	12	3	Unpaved	Unpaved	Lease Owner	Map Attached
21	Deogan	Kuturla Sand Quarry	Village Road	3	11	4	Unpaved	Unpaved	Lease Owner	Map Attached
22	Deogan	Ghatul Sand Quarry	Village Road	2	10	3	Unpaved	Unpaved	Lease Owner	Map Attached
23	Deogan	Tepren Sand Quarry	Village Road	4	11	3	Unpaved	Unpaved	Lease Owner	Map Attached
24	Agalpur	Salebhata Sand Quarry	Village Road	4	10	3	Unpaved	Unpaved	Lease Owner	Map Attached
25	Agalpur	Tentuligaon Sand Quarry	Village Road	3	12	4	Unpaved	Unpaved	Lease Owner	Map Attached
26	Agalpur	Banjipali Sand Quarry	Village Road	2	4	4	Unpaved	Unpaved	Lease Owner	Map Attached
27	Agalpur	Fasad Sand Quarry	Village Road	4	5	2	Unpaved	Unpaved	Lease Owner	Map Attached
28	Agalpur	Fatamunda Sand Quarry	Village Road	4	6	3	Unpaved	Unpaved	Lease Owner	Map Attached
29	Agalpur	Kutasinga Sand Quarry	Village Road	3	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
30	Agalpur	Nagaon Sand Quarry	Village Road	2	7	4	Unpaved	Unpaved	Lease Owner	Map Attached
31	Agalpur	Mahulpali Sand Quarry	Village Road	4	11	3	Unpaved	Unpaved	Lease Owner	Map Attached
32	Balangir	Chandanbhati Sand Quarry	Village Road	4	12	3	Unpaved	Unpaved	Lease Owner	Map Attached

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33	Balangir	Kutumdola Sand Quarry	Village Road	5	11	4	Unpaved	Unpaved	Lease Owner	Map Attached
34	Khaprakhol	Luhasingha Sand Quarry	Village Road	5	14	4	Unpaved	Unpaved	Lease Owner	Map Attached
35	Khaprakhol	Goudapali Sand Quarry	Village Road	3	6	5	Unpaved	Unpaved	Lease Owner	Map Attached
36	Muribahal	Godighat Sand Quarry	Village Road	2	2	3	Unpaved	Unpaved	Lease Owner	Map Attached
37	Muribahal	Jampadar Sand Quarry	Village Road	2	3	4	Unpaved	Unpaved	Lease Owner	Map Attached
38	Muribahal	Bandupala Sand Quarry	Village Road	3	7	2	Unpaved	Unpaved	Lease Owner	Map Attached
39	Puintala	Shankarbhoji Sand Quarry	Village Road	3	3	3	Unpaved	Unpaved	Lease Owner	Map Attached
40	Puintala	Pipirda Sand Quarry	Village Road	3	6	4	Unpaved	Unpaved	Lease Owner	Map Attached
41	Puintala	Durgapali Sand Quarry	Village Road	4	5	6	Unpaved	Unpaved	Lease Owner	Map Attached
42	Puintala	Bilaisarda Sand Quarry	Village Road	5	4	2	Unpaved	Unpaved	Lease Owner	Map Attached
43	Titilagarh	Mahada Sand Quarry	Village Road	5	10	4	Unpaved	Unpaved	Lease Owner	Map Attached
44	Titilagarh	Patharla Sand Quarry	Village Road	8	4	3	Unpaved	Unpaved	Lease Owner	Map Attached
45	Titilagarh	Turukbhata Sand Quarry	Village Road	4	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
46	Titilagarh	Sukunabhata Sand Quarry	Village Road	3	6	4	Unpaved	Unpaved	Lease Owner	Map Attached
47	Titilagarh	Sagunamunda-A Sand Quarry	Village Road	6	4	5	Unpaved	Unpaved	Lease Owner	Map Attached
48	Titilagarh	Sagunamunda-B Sand Quarry	Village Road	3	9	3	Unpaved	Unpaved	Lease Owner	Map Attached
49	Titilagarh	Parasara Sand Quarry	Village Road	2	4	2	Unpaved	Unpaved	Lease Owner	Map Attached

River Sand Mining**DSR of Balangir District**

50	Titilagarh	Antarla Sand Quarry	Village Road	5	7	4	Unpaved	Unpaved	Lease Owner	Map Attached
51	Titilagarh	Gandhargala Sand Quarry	Village Road	6	10	3	Unpaved	Unpaved	Lease Owner	Map Attached
52	Titilagarh	Naren Sand Quarry	Village Road	4	4	6	Unpaved	Unpaved	Lease Owner	Map Attached
53	Titilagarh	Ghodar Sand Quarry	Village Road	3	6	5	Unpaved	Unpaved	Lease Owner	Map Attached
54	Titilagarh	Khairkhunta Sand Quarry	Village Road	4	5	6	Unpaved	Unpaved	Lease Owner	Map Attached
55	Titilagarh	Udepur Sand Quarry	Village Road	5	4	2	Unpaved	Unpaved	Lease Owner	Map Attached
56	Bangomunda	Bhuslad Sand Bed-B	Village Road	3	8	6	Unpaved	Unpaved	Lease Owner	Map Attached
57	Bangomunda	Palaskhand Sand Quarry	Village Road	8	4	5	Unpaved	Unpaved	Lease Owner	Map Attached
58	Bangomunda	Sriram Sand Quarry	Village Road	5	2	3	Unpaved	Unpaved	Lease Owner	Map Attached
59	Bangomunda	Bhuslad Sand Bed-A	Village Road	4	6	8	Unpaved	Unpaved	Lease Owner	Map Attached
60	Bangomunda	Bhatasar Sand Quarry	Village Road	6	10	4	Unpaved	Unpaved	Lease Owner	Map Attached
61	Bangomunda	Paruabhadi Sand Quarry	Village Road	3	3	5	Unpaved	Unpaved	Lease Owner	Map Attached
62	Bangomunda	Asurla Sand Quarry	Village Road	4	2	2	Unpaved	Unpaved	Lease Owner	Map Attached
63	Bangomunda	Chandotara Sand Bed-B	Village Road	2	9	7	Unpaved	Unpaved	Lease Owner	Map Attached
64	Bangomunda	Chandotara Sand Bed-A	Village Road	5	6	4	Unpaved	Unpaved	Lease Owner	Map Attached
65	Bangomunda	Telsarai Sand Bed	Village Road	6	8	7	Unpaved	Unpaved	Lease Owner	Map Attached
66	Bangomunda	Salebarat Sand Bed	Village Road	3	7	5	Unpaved	Unpaved	Lease Owner	Map Attached

River Sand Mining**DSR of Balangir District**

67	Bangomunda	Sanmula Sand Bed	Village Road	4	4	6	Unpaved	Unpaved	Lease Owner	Map Attached
68	Bangomunda	Tureikela Sand Quarry	Village Road	3	6	5	Unpaved	Unpaved	Lease Owner	Map Attached
69	Kantabanji	Tikrapada Sand Bed	Village Road	8	5	5	Unpaved	Unpaved	Lease Owner	Map Attached
70	Kantabanji	Bharuakani Sand Bed	Village Road	3	6	6	Unpaved	Unpaved	Lease Owner	Map Attached
71	Saintala	Kuikeda Sand Quarry	Village Road	6	10	5	Unpaved	Unpaved	Lease Owner	Map Attached
72	Saintala	Tikrapada Sand Quarry	Village Road	7	12	4	Unpaved	Unpaved	Lease Owner	Map Attached
73	Saintala	Kamarlaga Sand Quarry	Village Road	7	11	4	Unpaved	Unpaved	Lease Owner	Map Attached
74	Saintala	Mahagaon Sand Quarry	Village Road	6	9	7	Unpaved	Unpaved	Lease Owner	Map Attached
75	Saintala	Saintala Sand Quarry	Village Road	8	16	5	Unpaved	Unpaved	Lease Owner	Map Attached
76	Saintala	Belgaon Sand Quarry	Village Road	9	17	7	Unpaved	Unpaved	Lease Owner	Map Attached
77	Saintala	Chhanchhada Sand Quarry	Village Road	9	18	8	Unpaved	Unpaved	Lease Owner	Map Attached
78	Saintala	Ampali Sand Quarry	Village Road	6	10	5	Unpaved	Unpaved	Lease Owner	Map Attached
79	Saintala	Karamtala Sand Quarry	Village Road	5	12	7	Unpaved	Unpaved	Lease Owner	Map Attached
80	Patnagarh	Tamian Sand Quarry	Village Road	8	4	3	Unpaved	Unpaved	Lease Owner	Map Attached
81	Patnagarh	Naktasar Sand Quarry	Village Road	4	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
82	Patnagarh	Sunamudi Sand Quarry	Village Road	3	6	4	Unpaved	Unpaved	Lease Owner	Map Attached
83	Patnagarh	Pudapadar Sand Quarry	Village Road	6	4	5	Unpaved	Unpaved	Lease Owner	Map Attached

River Sand Mining**DSR of Balangir District**

84	Patnagarh	Koudia Sand Quarry-B	Village Road	3	9	3	Unpaved	Unpaved	Lease Owner	Map Attached
85	Patnagarh	Koudia Sand Quarry-A	Village Road	2	4	2	Unpaved	Unpaved	Lease Owner	Map Attached
86	Patnagarh	Ghasian Sand Quarry	Village Road	5	7	4	Unpaved	Unpaved	Lease Owner	Map Attached
87	Patnagarh	Dhubalpara Sand Quarry	Village Road	6	10	3	Unpaved	Unpaved	Lease Owner	Map Attached
88	Tusura	Atigaon Sand Quarry	Village Road	6	10	5	Unpaved	Unpaved	Lease Owner	Map Attached
89	Tusura	Kharda Sand Quarry	Village Road	7	12	4	Unpaved	Unpaved	Lease Owner	Map Attached
90	Tusura	Sargada Sand Quarry	Village Road	7	11	4	Unpaved	Unpaved	Lease Owner	Map Attached
91	Tusura	Kukedmal Sand Quarry	Village Road	6	9	7	Unpaved	Unpaved	Lease Owner	Map Attached

River Sand Mining

DSR of Balangir District

Cluster No	Lease No	Transportation Route No	Number of tippers / days of cluster	Number of tippers/days of all the clusters on route	Length of Route in KM	Type of Road (Black Topped/Unpaved)	Recommendation for road (Black/Topped/Unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location
Cluster No-1	20	Village Road to State Highway	4	12	3	Unpaved	Unpaved	Lease Owner	Map Attached
	21	Village Road to State Highway	3	11	4	Unpaved	Unpaved	Lease Owner	Map Attached
Cluster No-2	56	Village Road to State Highway	3	8	6	Unpaved	Unpaved	Lease Owner	Map Attached
	57	Village Road to State Highway	8	4	5	Unpaved	Unpaved	Lease Owner	Map Attached
	58	Village Road to State Highway	5	2	3	Unpaved	Unpaved	Lease Owner	Map Attached
	59	Village Road to State Highway	4	6	8	Unpaved	Unpaved	Lease Owner	Map Attached
Cluster No-3	14	Village Road to State Highway	2	7	2	Unpaved	Unpaved	Lease Owner	Map Attached
	17	Village Road to State Highway	3	7	3	Unpaved	Unpaved	Lease Owner	Map Attached
Cluster No-4	45	Village Road to State Highway	4	5	3	Unpaved	Unpaved	Lease Owner	Map Attached
	65	Village Road to State Highway	6	8	7	Unpaved	Unpaved	Lease Owner	Map Attached

CERTIFICATION REGARDING PREPARATION OF DSR

The District Survey Report for Minor Mineral (Sand) in respect of Balangir District is in accordance with Appendix-X. (I)- For river sand & (II)- for other than River Sand of S.O 3611 (E) dt. 25.07.2018 of Ministry of Environment, Forest and Climate Change, New Delhi, Enforcement & Monitoring Guideline for Sand Mining-2020 and in compliance with the orders of Hon'ble Supreme Court dt. 10.11.2021 in connection with C.A. Nos. 3661-3662 of 2020. Before preparation of District Survey report of Minor Minerals (Sand), field verification has been conducted by the Sub-Divisional Committees of Balangir, Titilagarh & Patnagarh Consisting of Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board, Forest Department, Geology Department & Mining Officer. The DSR is being submitted to SEIAA, Odisha, Bhubaneswar for necessary evaluation and approval.


Sub-Collector & SDM
Balangir


Sub-Collector
Patnagarh, Balangir

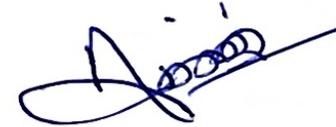

Regional Officer
OSPCB, Balangir
Regional Office, Balangir


Mining Officer (Minor Mineral)
Balangir Circle, Balangir
Geologist & Mining Officer (I/C)
Dist. Balangir


Geologist
O/o Joint Director of Geology
Balangir
Geologist
Joint Director Geology
Balangir


Collector & DM
Balangir

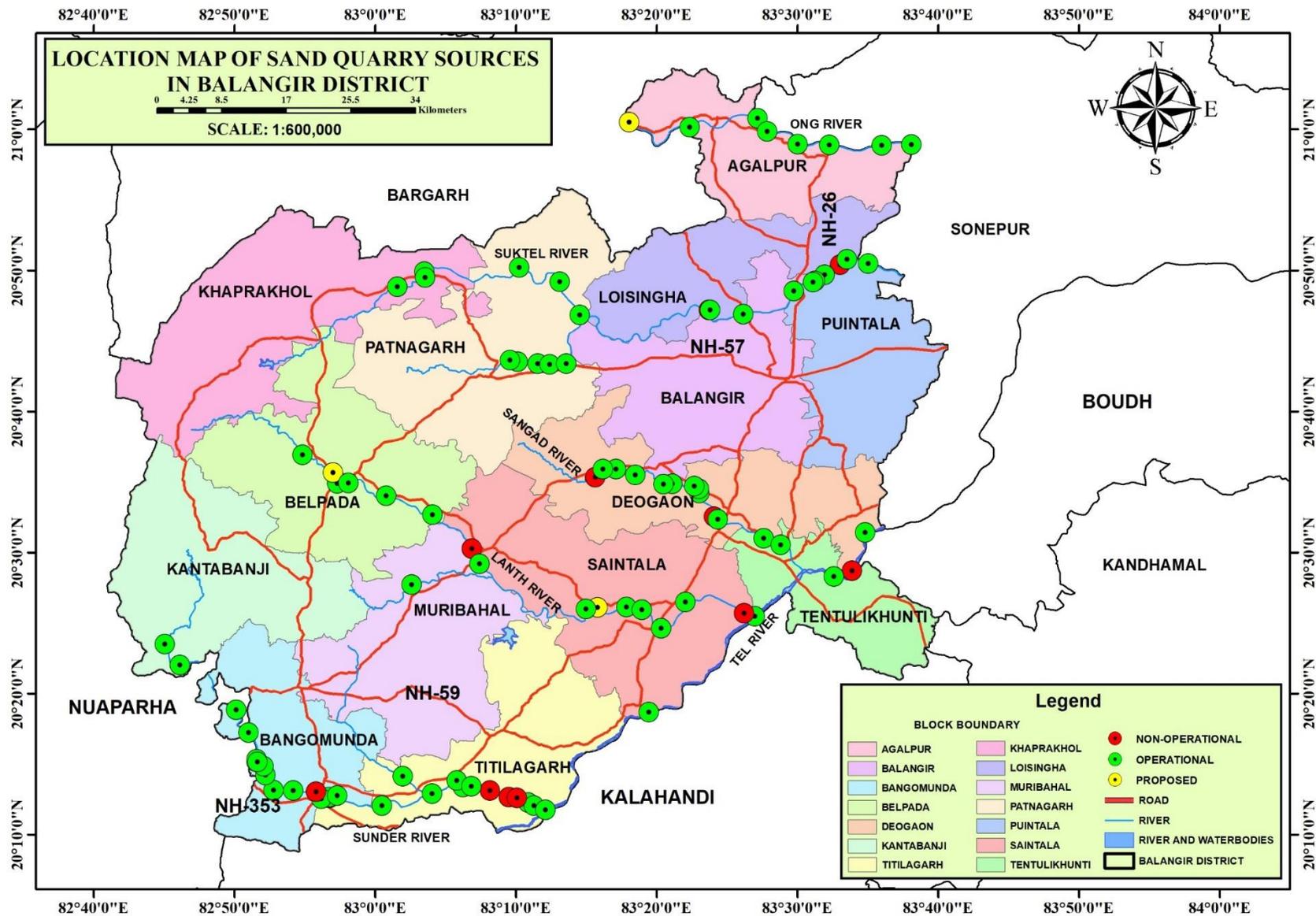

Sub-Collector & SDM
Titilagarh, Balangir
Deputy Director of Mines
Balangir Circle, Balangir


Divisional Forest Officer/
Assistant Conservator of Forest, Balangir


Superintending Engineer
Executive Engineer (Water Resource Dept.)
Balangir

LOCATION MAP OF SAND QUARRY SOURCES OF BALANGIR DISTRICT

PLATE-1



River Sand Mining
TRANSPORTING ROUTE MAP OF BALANGIR DISTRICT

DSR of Balangir District
PLATE-2

