

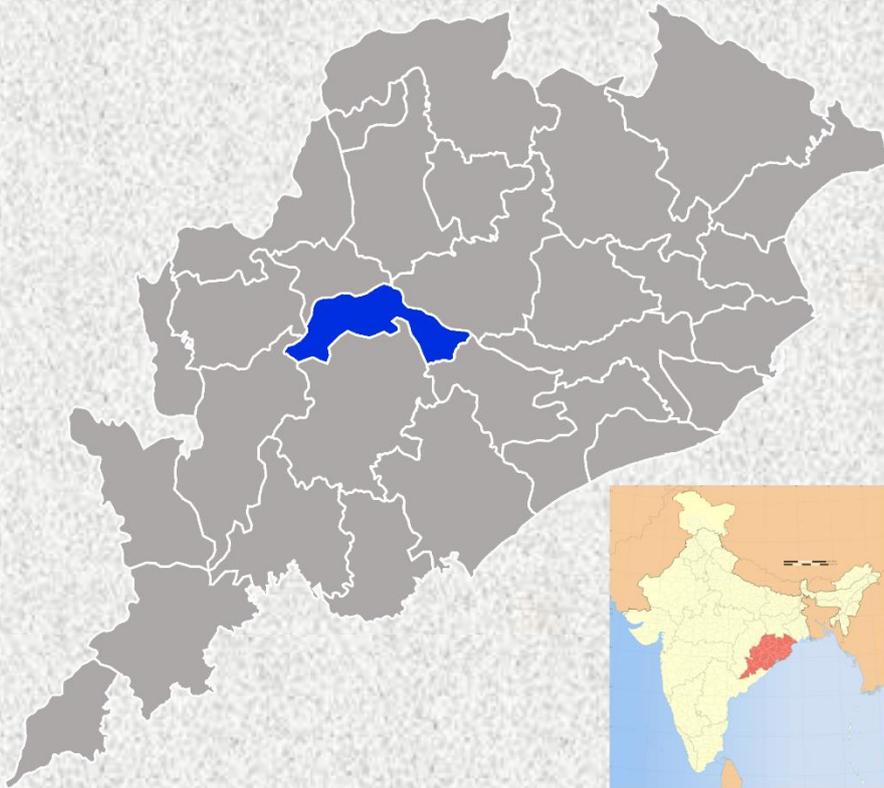


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# **DISTRICT SURVEY REPORT (DSR) OF BOUDH DISTRICT, ODISHA FOR RIVER SAND MINING**

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As per Notification No. S.O. 141(E), 15th January, 2016 & S.O. 3611(E), 25th July, 2018, New Delhi, MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE (MoEF & CC)



**COLLECTORATE, BOUDH  
AUGUST-2025**

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## **PREFACE**

The Erstwhile Ministry of Environment and Forests(MoEF), the Government of India, made Environmental Clearance (EC) for mining of minerals mandatory through its Notification of 27th January, 1994 under the provisions of Environment Protection Act, 1986. Keeping in view the experience gained in environmental clearance process over a period of one decade, the Ministry came out with Environmental Impact Notification, SO 1533 (E), dated 14th September 2006. The Ministry of Environment, Forests & Climate Change (MoEF&CC), Government of India had amended the said vide notification S.O. 141(E) Dated 15th January, 2016. Now again Ministry of Environment, Forests & Climate Change (MoEF & CC), Government of India amended the notification S.O. 141(E) Dated 15th January, 2016 vide S.O. 3611(E) Dated 25th July, 2018. It has been made mandatory to obtain environmental clearance for different kinds of development projects as listed in Appendix-X of the Notification. In compliance to the notification issued by the Ministry of Environment and Forest and Climate Change Notification no. S.O.3611 (E) NEW DELHI dated 25-07-2018 the preparation of district survey report of sand mining has been prepared in accordance with Clause II of Appendix X of the notification. Every effort has been made to cover river sand mining locations, future potential areas and overview of sand mining activities in the district with all its relevant features pertaining to geology and mineral wealth. This report will act as a compendium of available mineral resources, geological set up, environmental and ecological set up of the district and based on data of various departments like Revenue, Water Resources, Forest, Geology and Mining in the district as well as statistical data uploaded by various state Government departments for preparation for district survey report. The main purpose of preparation of District Survey Report is to identify the mineral resources and developing the mining activities along with other relevant data of the District.

## **OBJECTIVES**

The main objective of the preparation of District Survey Report is to ensure the following –

- Identification of mineral wealth in the district.
- Identification of areas of Minor Mineral having the potential mineral where mining can be allowed.
- Identification of areas of proximity to infrastructural structures and installations where mining should be prohibited.

## 01. INTRODUCTION.

An administrative District of Odisha in eastern India, Boudh District is also known as Baudha District. The District is bounded by River Mahanadi & Angul District to the north, Kandhamal District to the south, Nayagarh District to the east and River Tel & Subarnapur District to the west. Covering a geographical area of 3444.8 sq km, the District lies 20 degree 22' to 20 degree 50' North Latitude and 83 degree 34' to 84 degree 49' East Longitude.

Majority of the land area of Boudh district is under gross crop area i.e. 1,36,000 hectars (as per Statistical records 2012) and forest area covers 94,952.11 hectars. The district is well connected with other districts. The bounties of nature has endowed the district with rich forest abound in Sal, Sisal, Bija, Asana, Mahua flower trees etc. Forest produce of economic importance of the district mainly consists of Kendu Leaf, Tamarind, Mahua Flower and Seeds, Sal Seeds etc. tigers, elephants and spotted dears are the wild animal species residing in Boudh district. Collection of minor forest produce is the major source of livelihood of the people in the district. There is a crocodile sanctuary namely Satkosia Ganda at Tikarpada that attracts tourists from far places.

The climatic condition of Boudh is much varied. The district comes under the ambit of Western Central Table Land characterized by hot and moist sub-humid climate. It has mainly 4 seasons. The summer season is from March to Mid-June, the period from Mid-June to September is the Rainy season, October and November constitute the post monsoon season and winter is from December to February. The best time to visit this district is during winter.

## **02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.**

Mining activity for minor minerals in Boudh district, Odisha primarily involves the extraction of river sand, road metal and stone quarry, with formal regulation guided by District Survey Reports (DSRs) guideline. While several leases have been granted, especially for road metal and sand, past licenses for minerals like quartz have mostly expired. Lime Stone, Graphite and Quartz, which are found in Harabhanga and Boudh Blocks. But the commercial Production/exploitation of these minerals are not Viable.

Recent state-level directives in 2025 have pushed for stricter enforcement against illegal mining and unregulated transport, reflecting growing concerns over unauthorized extraction and revenue losses. Environmental safeguards such as site rehabilitation and dust control are included in planning documents, though actual implementation on the ground remains limited. Overall, while Boudh has a formal minor mineral framework in place, challenges persist in enforcement and sustainable operations.

**03. THE LIST OF MINING LEASES IN THE DISTRICT WITH LOCATION, AREA & PERIOD OF VALIDITY.**

Sl.No.	Name of River /Stream	Name of the Mineral	Name of the Lessee	Address & Contact No. of lessee	Mining lease Grant Order No. & date	Area of Mining lease (in Hc)	Period of Mining lease (Initial)		Date of commencement of mining operation	Status (Working Non-Working/Temp. working for despatch etc.)	Obtained Environmental clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitude)
							From	To				
1	2	3	4	5	6	7	8	9	10	11	13	14
<b>Boudh District</b>												
<b>A.Name of the Tahasil:- Harabhanga</b>												
A1	Mahanadi	Harabhanga Sand Quarry	Sri.Bikash Kumar Agrawalla	Bikash Kumar Agrawalla, At/Po- Harabhanga Dist-Boudh	No-10372100191, Dtd-08.01.2021	5.00	08.01.2020	07.01.2026	08.01.2020	Working	10092/SEIAA Dt.16.12.2020	At:- Harabhanga,Khata No-383(AJA), Plot No- 1641/A, Kissam- Nadi (84°36'45.37" to 84°36'56.02", & 20°37'49.40" to 20°38'00.04")
A2	Mahanadi	Surundi Sand Quarry	Sashmita Behera	Sashmita Behera At-Masterpada Po/Ps-Phulbani Dist-Kandhamal	No-10372102411, Dtd-24.11.2021	5.00	24.11.2021	23.11.2026	24.11.2021	Working	3285/SEIAA Dt.07.10.2021	At:- Surundi,Khata No-145, Plot No- 188, Kissam- Nadi (84°35'43.84" - 84°35'56.57", & 20°38'48.84" 20°38'54.29")
A3	Mahanadi	Kaleswar Sand Quarry	Sri R.J.Bharat kumar	Sri R.J.Bharat kumar Vamsi Apartment, Panthulugari meda Gajuwaka,Visakhapatnam	No-10372202757, Dtd-14.12.2022	5.00	14.12.2022	13.12.2027	14.12.2022	Working	2904/SEIAA Dt.28.09.2021	At:- Kaleswar,Khata No-118, Plot No- 379, Kissam- Nadi (84°19'35.79" - 84°19'43.04", & 20°48'49.83" 20°48'58.75")
A4	Mahanadi	Krushnamohanpur Sand Quarry	Sri Chintamani Samal	Sri Chintamani Samal At/Po – Ichhapur, Cuttack	No-10372201793, Dtd-22.07.2022	5.00	22.07.2022	21.07.2027	22.07.2022	Working	2908/SEIAA Dt.28.09.2021	At:- Krushnamohanpur, Khata No-43(AJA), Plot No- 215, Kissam- Nadi (84°20'33.74" - 84°20'45.13", & 20°46'39.71" 20°46'48.09")
A5	Mahanadi	Dianghat Sand Bed	Sri Chintamani Samal	Sri Chintamani Samal At/Po – Ichhapur, Cuttack	No-10372202172, Dtd-20.09.2022	5.00	20.09.2022	19.09.2027	20.09.2022	Working	SEIAA file no.249695/334-MINB 2/07-2022 Dt.20.08.2022	At:- Dianghat,Khata No-92, Plot No- 76/A, Kissam- Nadi (84°36' 28.50" - 84°36'39.81", & 20°38'3.45" 20°38'14.30")
A6	Mahanadi	Uanla Sand Bed	Sri Chintamani Samal	Sri Chintamani Samal At/Po – Ichhapur, Cuttack	No-10372202171, Dtd-19.09.2022	5.00	19.09.2022	18.09.2027	19.09.2022	Working	SEIAA file no. 249676/333-MINB 2/7/2022, Dt.22.08.2022	At:- Uanla,Khata No-81, Plot No- 221, Kissam- Nadi (84°28' 24.46" - 84°28'34.80", & 20°43'25.47" 20°43'36.36")
A7	Mahanadi	Karadi Sand Bed	Sri Chintamani Samal	Sri Chintamani Samal At/Po – Ichhapur, Cuttack	No-10372201794, Dtd-22.07.2022	5.00	22.07.2022	21.07.2027	22.07.2022	Working	2996/SEIAA Dt.28.09.2021	At:- Karadi,Khata No-92, Plot No- 466/A, Kissam- Nadi (84°22' 21.42" - 84°22'30.32", & 20°44'59.51" 20°45'05.85")

A8	Mahanadi	Kharasan kuloi Sand Bed	Sri Chintamani Samal	Sri Chintamani Samal At/Po – Ichhapur, Cuttack	No-10372300147, Dtd-24.01.2023	5.00	24.01.2023	23.01.2028	24.01.2023	Working	SIA/OR/MIN/458143/2024, Dt.17.02.2024	At:- Kharasankuloi,Khata No-107, Plot No- 100/A,118/A, Kissam- Nadi (20°41'51.27"N & 84°30'48.22"E)
A9	Mahanadi	Sakusinga Sand Bed	Sri Mohinnuddin Khan	Sri Mohinnuddin Khan At/Po-Jail Road, Athamalik Dist-Anugul, Pin-759125	Lease deed not done yet	5.00	Lease deed not done yet	Lease deed not done yet	Lease deed not done yet	Not Working	Not obtained	At:- Saakusinga,Khata No-166, Plot No- 239/A,240/A, Kissam- Nadi (20°42'21.93"N & 84°30'17.91"E)
A10	Mahanadi	Badaban kapada Sand Bed	Bidder not finalized	Bidder not finalized	Bidder not finalized	5.00	Bidder not finalized	Bidder not finalized	Bidder not finalized	Not working	Not obtained	At:- Badabankapada, Khata No- 113, Plot No-355 & 372, Kissam- Nadi (20°48'22.36"N & 84°19'48.07"E)
<b>B. Name of the Tahasil:- Boudh</b>												
B1	Salunki Nadi	Marjadpur sand bed	Sri Narendra kumar Deo	Sri Narendra kumar Deo At – Khandaip, Po- Rairakhol Dist-Sambalpur	No-10372202288, Dtd-11.10.2022	0.162	11.10.2022	10.10.2027	11.10.2022	Working	10087/SEIAA Dt.16.12.2020	At:- Marjadpur,Khata No-132, Plot No- 463/A, Kissam- Nadi (84°15' 38.96" - 84°15'40.63",& 20°52'01.08" 20°52'02.61")
B2	Salunki Nadi	Paljhar sand bed	Sri Sarat pradhan	Sri Sarat pradhan At/Po- Rajanpalli Dist- Boudh	Lease deed not done yet	5.261	Lease deed not done yet	Lease deed not done yet	Lease deed not done yet	Not working	SIA/OR/MIN/80988/2022	At:- Paljhar,Khata No-2, Plot No- 1, Kissam- Nadi (84°12' 52.26" - 84°13'8.57", & 20°45'4.81" 20°45'30.96")
B3	Mahana di	Tutursinga Sand bed -B	Sri Sarat pradhan	Sri Sarat pradhan At/Po- Rajanpalli Dist- Boudh	Lease deed not done yet	0.5	Lease deed not done yet	Lease deed not done yet	Lease deed not done yet	Not working	SIA/OR/MIN/532199/2025	At:-Tutursinga,Khata No-518, Plot No- 1/P, Kissam- Nadi (84°18' 08.04" - 84°18'10.21", & 20°51'12.66" 20°51'14.63")
B4	Mahana di	Tutursinga Sand bed -A	Bidder not finalized	Bidder not finalized	Bidder not finalized	5.22	Bidder not finalized	Bidder not finalized	Bidder not finalized	Not working	Not Obtained	At:-Tutursinga,Khata No-518, Plot No- 1, Kissam- Nadi ( 20°51'18.15"N,& 84°18'4.28"E)
B5	Mahana di	Amurda Sand Bed	Bidder not finalized	Bidder not finalized	Bidder not finalized	5	Bidder not finalized	Bidder not finalized	Bidder not finalized	Not working	Not Obtained	At:-Amurda ,Khata No-113, Plot No- 9, Kissam- Nadi 20°49'51.60"N& 84° 0'57.60"E)
<b>New source</b>												
B6	Mahanadi	Marjakud Sand Bed	New Proposed source	New Proposed source	New Proposed source	5	New Proposed source	New Proposed source	New Proposed source	Not working	New Proposed source	At:-Marjakud,Khata No-364, Plot No- 1, Kissam- Nadi (20°50'20.40"N,& 84°20'13.20"E)
<b>C. Name of the Tahasil:- Kantamal</b>												
C1	Tel Nadi	kirla sand bed	Sri Prakash Chandra Meher	Sri Prakash Chandra Meher At/Po- Manmunda distBoudh	No-10382200655, Dtd-15.10.2022	10	15.10.2022	14.10.2027	15.10.2022	Working	SIA/OR/MIN/59606/2021 Dt.22.09.2022	At:-Kirla,Khata No-137, Plot No- 214 , Kissam- Nadi (83°48' 27.29" - 83°48'40.73",& 20°48'21.34" 20°48'31.50")

C2	Tel Nadi	Gambharipadar fileimal closter sand bed	Madhusudan dan Bagh	Madhusudan Bagh At/Po-Kantamal	No-1038210058 5, Dtd-18.10.2021	4.046	18.10.2021	17.10.2026	18.10.2021	Not working	2601/SEIAA Dt.04.09.2021	At:-Gambharipadara, Tileimal cluster ,Khata No-73&99, Plot No- 1/659&382, Kissam- Nadi (83°45' 05.74" - 83°45'17.47", & 20°42'24.34" 20°42'33.63")
C3	Tel Nadi	Chapara sand bed	Sri Prakash Chandra Meher	Sri Prakash Chandra Meher At/Po-Manmunda distBoudh	No-1038210058 6, Dtd-21.10.2021	2.509	21.10.2021	20.10.2026	21.10.2021	Not working	2851/SEIAA Dt.22.09.2021	At:-Chapara,Khata No-126, Plot No- 65 , Kissam- Nadi (83°38' 0.94" - 83°38'10.69", & 20°31'59.49" 20°32'4.60")
C4	Tel Nadi	Lokapada sand bed	Chandramani rout	Parbati suppliers Chandramani rout, Proprietor Brahmanigaon, Mundamuhan Cuttack Pin-754005, Odisha	Lease deed not done yet	4.91	Lease deed not done yet	Lease deed not done yet	Lease deed not done yet	Not working	Not obtained	At:-Lokapada,Khata No-175, Plot No- 253 (P), Kissam- Nadi (83°46' 41.16" - 83°46'53.40", & 20°47'34.43" 20°47'45.74")
C5	Tel Nadi	Ghantapada sand bed	Mr. Jyotirmaya Pal	Mr. Jyotirmaya Pal At- Dolamandap Sahi, Radhakrishna Bazar Po/Dist-Dhenkanal Pin-759001	Lease deed not done yet	4.996	Lease deed not done yet	Lease deed not done yet	Lease deed not done yet	Not working	Not obtained	At:-Ghantapada,Khata No-275, Plot No- 1, Kissam- Nadi (83°40' 08.58" - 83°40'22.86", & 20°33'05.16" 20°33'15.62")
C6	Tel Nadi	Malikuda Sand Bed	Bidder not finalized	Bidder not finalized	Bidder not finalized	12.35	Bidder not finalized	Bidder not finalized	Bidder not finalized	Not working	Not obtained	At:-Malikuda,Khata No-197, Plot No- 1/A, Kissam- Nadi (20°36'28.80"N & 83°43'55.20"E)
C7	Tel Nadi	Fased Sand Bed	Ms Manaswita Ghosh Director-Gee Dee Mining Pvt.Ltd.	Ms Manaswita Ghosh Director- Gee Dee Mining Pvt.Ltd.347, Santosh Roy Road,Barisha Kolkata Pin-700008	Lease deed not done yet	10	Lease deed not done yet	Lease deed not done yet	Lease deed not done yet	Not working	Not obtained	At:-Fased,Khata No-144, Plot No- 109/A,110/A & 590/A, Kissam- Nadi ( 20°31'26.40"N & 83°35'20.40"E)
C8	Tel Nadi	Bukuramunda sand Bed	Bidder not finalized	Bidder not finalized	Bidder not finalized	5	Bidder not finalized	Bidder not finalized	Bidder not finalized	Not working	Not obtained	At:-Bukuramunda,Khata No-71, Plot No- 228,372,373,750, Kissam- Nadi ( 20°46'33.60"N & 83°55'58.80"E)

**NB: in the above table omitted Columns are,  
Column-12 Use (Captive/ Non-Captive) - All Non-Captive  
Column- 15 Method of Mining (Opencast/Underground) - All Open cast.  
Reason for non-working- refer Annexure-II**

#### 04. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS.

Sl. No.	Name of the Tahasil	Name of Source	Royalty for last three years ( in Rupees)		
			2022-23	2023-24	2024-25
1	Harabhanga	Harabhanga Sand Quarry	2392986	2392986	2145126
2		Surundi Sand Quarry	3000600	3000600	2654100
3		Kaleswar Sand Quarry	841532	2524600	2259100
4		Krushnamohanpur Sand Quarry	689535	919380	919380
5		Dianghat Sand Bed	2204698	3779480	3779480
6		Uanla Sand Bed	655196	1123195	1123195
7		Karadi Sand Bed	895875	2864280	2864280
8		Kharasankuloi Sand Bed	Nil	Nil	5213796
9		Sakusinga Sand Bed	5171160	5171160	5171160
10		Badabankapada Sand Bed	Not operational		
11	Boudh	Marjadpur sand bed	196468	392936	349773
12		Paljhar sand bed	Not operated		
13		Tutursinga Sand bed -B	Not operated		
14		Tutursinga Sand bed -A	Not operated		
15		Amurda Sand Bed	Not operated		
16	Kantamal	kirla sand bed	537785	1075570	959581
17		Gambharipadar tileimal closter sand bed	169646	169646	169646
18		Chapara sand bed	206760	206760	206760
19		Lokapada sand bed	Not operated		
20		Ghantapada sand bed	Not operated		
21		Malikuda Sand Bed	Not operated		
22		Fased Sand Bed	Not operated		
23		Bukuramunda sand Bed	Not operated		

#### 05. DETAIL OF PRODUCTION OF SAND IN LAST THREE YEARS.

PRODUCTION OF SAND					
Sl. No.	Name of the Tahasil	Name of Source	Production for last three years ( in Cum)		
			2022-23	2023-24	2024-25
1	Harabhanga	Harabhanga Sand Quarry	10200	10200	10200
2		Surundi Sand Quarry	6000	6000	6000
3		Kaleswar Sand Quarry	3333.33	10000	10000
4		Krushnamohanpur Sand Quarry	4500	6000	6000
5		Dianghat Sand Bed	4666.67	8000	8000
6		Uanla Sand Bed	3208	5500	5500
7		Karadi Sand Bed	6000	8000	8000
8		Kharasankuloi Sand Bed	Nil	Nil	7000
9		Sakusinga Sand Bed	12000	12000	12000
10		Badabankapada Sand Bed	Not operational		
11	Boudh	Marjadpur sand bed	602	1204	1204
12		Paljhar sand bed	Not operated		
13		Tutursinga Sand bed -B	Not operated		
14		Tutursinga Sand bed -A	Not operated		
15		Amurda Sand Bed	Not operated		
16	Kantamal	kirla sand bed	3033.7	6067.4	6002
17		Gambharipadar tileimal closter sand bed	2500	2500	2500
18		Chapara sand bed	3064	3064	3064
19		Lokapada sand bed	Not operated		
20		Ghantapada sand bed	Not operated		
21		Malikuda Sand Bed	Not operated		
22		Fased Sand Bed	Not operated		
23		Bukuramunda sand Bed	Not operated		

## 06. PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVERS OF THE DISTRICT.

There are four main rivers streams flows through this District. They are main River Mahanadi, River Tel and salunki river. During rainy season the river water carries sand which is formed due to disintegration of rock bodies along with other suspensions. After recession of the water flow the sand gets deposited in the locations where there is less energy.

The *Mahanadi River*, one of the major rivers of eastern India, originates in Chhattisgarh and flows through Odisha, including Boudh district. As it travels from the highlands to the plains, it erodes rocks and soil, carrying a heavy sediment load. During monsoon, its strong currents transport large quantities of sand downstream. When the river slows down in flatter areas, particularly near bends, confluences, and floodplains, it deposits coarse sediments like sand. Over time, this forms sandbars and river islands, especially noticeable in summer when water levels recede. The *Tel River*, a significant tributary of the Mahanadi, also carries sand from its hilly origin in the western Odisha region. As it enters flatter terrain near Boudh and converges with the Mahanadi, its reduced velocity results in localized sand deposition in inner banks and low-lying floodplains. Similarly, the *Salunki River*, a smaller tributary, contributes fine and medium sand into the Mahanadi system. Its shorter course means sand deposition occurs closer to its mouth, especially where the flow weakens due to flatter land or obstructions. In all three rivers, seasonal flow variation plays a major role: heavy sand transport occurs during monsoon, while significant deposition takes place in the post-monsoon and dry seasons, shaping the landscape and influencing sand availability for mining.

### **Methodology adopted for calculation of Mineral Potential: -**

Surface area method has been adopted for estimation of reserve i.e. multiplying the surface area of sand bed with the average sand bed thickness to obtain the total volume and reserve of sand in Cu.m. As per MoEF guide lines 60% of sand reserve area can be given for extraction of sand.

The replenished volume of sand sources are as following:

Lease No.	River Details	Lease Details	Area (in Ha)	Mineable Replenished Volume (in Cum)
A1	Mahanadi	Harabhanga Sand Quarry, At:- Harabhanga, Khata No-383(AJA), Plot No- 1641/A, Kissam- Nadi (84°36'45.37" to 84°36'56.02", & 20°37'49.40" to 20°38'00.04")	5.00	10200
A2	Mahanadi	Surundi Sand Quarry, At:- Surundi, Khata No-145, Plot No- 188, Kissam- Nadi (84°35'43.84" - 84°35'56.57", & 20°38'48.84" 20°38'54.29")	5.00	25825

A3	Mahanadi	Kaleswar Sand Quarry, At:- Kaleswar,Khata No-118, Plot No- 379, Kissam- Nadi (84°19'35.79" - 84°19'43.04", & 20°48'49.83" 20°48'58.75")	5.00	5945
A4	Mahanadi	Krushnamohanpur Sand Quarry, At:- Krushnamohanpur,Khata No-43(AJA), Plot No- 215, Kissam- Nadi (84°20'33.74" - 84°20'45.13", & 20°46'39.71" 20°46'48.09")	5.00	6000
A5	Mahanadi	Dianghat Sand Bed, At:- Dianghat,Khata No-92, Plot No- 76/A, Kissam- Nadi (84°36' 28.50" - 84°36'39.81", & 20°38'3.45" 20°38'14.30")	5.00	8000
A6	Mahanadi	Uanla Sand Bed, At:- Uanla,Khata No-81, Plot No- 221, Kissam- Nadi (84°28' 24.46" - 84°28'34.80", & 20°43'25.47" 20°43'36.36")	5.00	5500
A7	Mahanadi	Karadi Sand Bed, At:- Karadi,Khata No-92, Plot No- 466/A, Kissam- Nadi (84°22' 21.42" - 84°22'30.32", & 20°44'59.51" 20°45'05.85")	5.00	Replenishment study under process
A8	Mahanadi	Kharasankuloi Sand Bed, At:- Kharasankuloi,Khata No-107, Plot No- 100/A,118/A, Kissam- Nadi ((20°41'51.27"N & 84°30'48.22"E))	5.00	Replenishment study under process
A9	Mahanadi	Sakusinga Sand Bed, At:- Saakusinga,Khata No-166, Plot No- 239/A,240/A, Kissam- Nadi ((20°42'21.93"N & 84°30'17.91"E))	5.00	12000
A10	Mahanadi	Badabankapada Sand Bed, At:- Badabankapada,Khata No- 113, Plot No-355&372, Kissam- Nadi (20°48'22.36"N & 84°19'48.07"E)	5.00	Replenishment study report has not been done due to non-operational source
B1	Salunki Nadi	Marjadpur sand bed, At:- Marjadpur,Khata No-132, Plot No- 463/A, Kissam- Nadi (84°15' 38.96" - 84°15'40.63", & 20°52'01.08" 20°52'02.61")	0.162	Replenishment study under process
B2	Salunki Nadi	Paljhar sand bed, At:- Paljhar,Khata No-2, Plot No- 1, Kissam- Nadi (84°12' 52.26" - 84°13'8.57", & 20°45'4.81" 20°45'30.96")	5.261	Replenishment study report has not been done due to non-operational source
B3	Mahanadi	Tutursinga Sand bed -B,At:-Tutursinga,Khata No-518, Plot No- 1/P, Kissam- Nadi (84°18' 08.04" - 84°18'10.21", & 20°51'12.66" 20°51'14.63")	0.5	Replenishment study report has not been done due to non-operational source
B4	Mahanadi	Tutursinga Sand bed -A, At:-Tutursinga,Khata No-518, Plot No- 1, Kissam- Nadi ( 20°51'18.15"N, & 84°18'4.28"E)	5.22	Replenishment study report has not been done due to non-operational source
B5	Mahanadi	Amunda Sand Bed, At:-Amurda ,Khata No-113, Plot No- 9, Kissam- Nadi 20°49'51.60"N& 84° 0'57.60"E)	5	Replenishment study report has not been done due to non-operational source
B6	Mahanadi	Marjakud Sand Bed, At:-Marjakud,Khata No-364, Plot No- 1, Kissam- Nadi (20°50'20.40"N, & 84°20'13.20"E)	5	Replenishment study report has not been done due to New proposed source
C1	Tel Nadi	kirla sand bed, At:-Kirla,Khata No-137, Plot No- 214 , Kissam- Nadi (83°48' 27.29" - 83°48'40.73", & 20°48'21.34" 20°48'31.50")	10	6179
C2	Tel Nadi	Gambharipadar tileimal closter sand bed, At:-Gambharipadara, Tileimal cluster ,Khata No-73&99, Plot No- 1/659&382, Kissam- Nadi (83°45' 05.74" - 83°45'17.47", & 20°42'24.34" 20°42'33.63")	4.046	Replenishment study report has not been done due to non-operational source
C3	Tel Nadi	Chapara sand bed,At:-Chapara,Khata No-126, Plot No- 65 , Kissam- Nadi (83°38' 0.94" - 83°38'10.69", & 20°31'59.49" 20°32'4.60")	2.509	Replenishment study report has not been done due to non-operational source
C4	Tel Nadi	Lokapada sand bed, At:-Lokapada,Khata No-175, Plot No- 253 (P), Kissam- Nadi (83°46' 41.16" - 83°46'53.40", & 20°47'34.43" 20°47'45.74")	4.91	Replenishment study report has not been done due to non-operational source
C5	Tel Nadi	Ghantapada sand bed, At:-Ghantapada,Khata No-275, Plot No- 1, Kissam- Nadi (83°40' 08.58" - 83°40'22.86", & 20°33'05.16" 20°33'15.62")	4.996	Replenishment study report has not been done due to non-operational source
C6	Tel Nadi	Malikuda Sand Bed, At:-Malikuda,Khata No-197, Plot No- 1/A, Kissam- Nadi (20°36'28.80"N & 83°43'55.20"E)	12.35	Replenishment study report has not been done due to non-operational source
C7	Tel Nadi	Fased Sand Bed, At:-Fased,Khata No-144, Plot No- 109/A,110/A & 590/A, Kissam- Nadi ( 20°31'26.40"N & 83°35'20.40"E)	10	Replenishment study report has not been done due to non-operational source
C8	Tel Nadi	Bukuramunda sand Bed, At:-Bukuramunda,Khata No-71, Plot No- 228,372,373,750, Kissam- Nadi ( 20°46'33.60"N & 83°55'58.80"E)	5	Replenishment study report has not been done due to non-operational source

## 07. GENERAL PROFILE OF THE DISTRICT.

**a. Geographical Position:-** Longitude -83°34' to 84°49' E  
Latitude- 20° 22' to 20°50' N

**b. Area & Population: -**

The district has an area of 3098sq.kms, per the demography is concerned, the district has got total population of 441162 people with sex ratio 991 Females per 1000 Males (2011 Census), including total 221625 male population and 219537 female population. It ranks Boudh is 22nd in size and 29th in population among the thirty districts of Odisha. Total SC population of the district is 104934 and ST population is 55364 as per 2011 census.

**c. Climate: -**

There is a meteorological observatory in the district. The data of this observatory may be taken as representative of the meteorological condition of the whole district. The month of May as the hottest month reach to a daily maximum temperature of 44 degree Celsius. In association with the passage of western disturbances across north India during winter months, short spells of cold occur and the temperature drops down to 10 degrees Celsius. The average annual rainfall of the district is 1510.33 mm. However, there is a great variation of rainfall from year to year.

**d. Economy:**

The economy of Boudh district is supported both by agriculture and small-scale industries.

Economy of Boudh district is primarily agrarian in nature. Fisheries and animal husbandry also contribute greatly to the economy. Small scales industries are also a booming sector in the economic scenario of Boudh district especially the textiles and mining industries. Paddy is the principal crop and is grown in about 75% of the total cultivated land area. The different irrigation projects include Salki Medium Irrigation project, Minor Irrigation project, Lift Irrigation project, Diversion weir, Dug well and others.

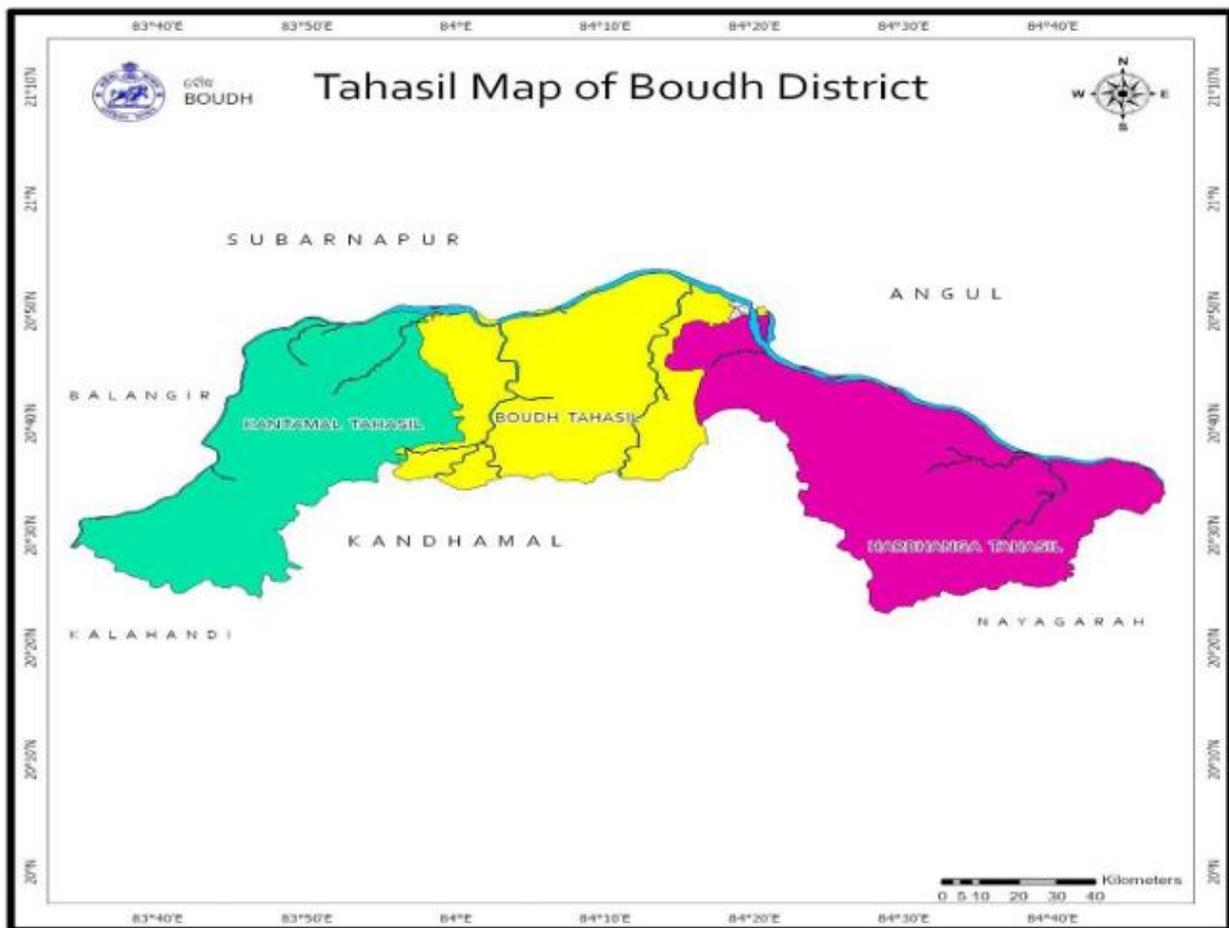
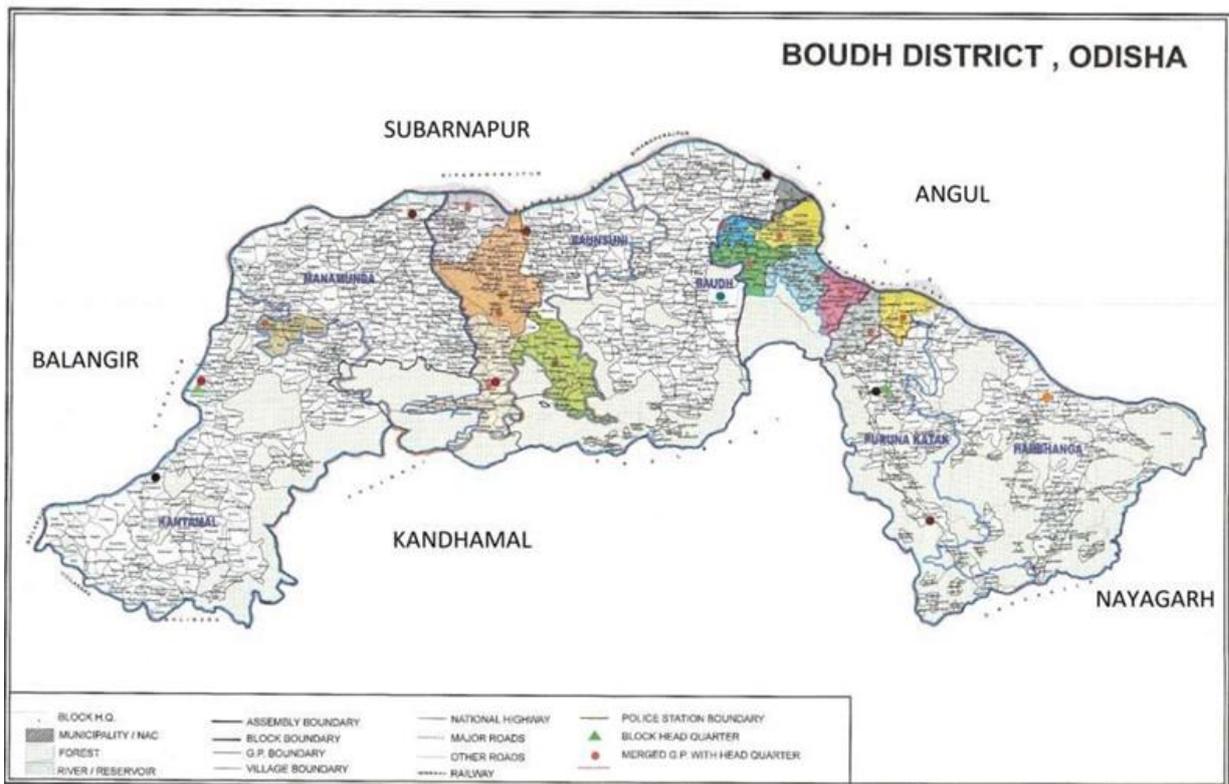
Fisheries are a huge profit-making sector of Boudh district. Available water resources have helped to enhance the growth of pisciculture in the district. Boudh fish farm is one of the good breeding and rearing government farm of the state of Odisha, having 8.5 acre of water area comprising 4.80 acre of breeder tanks and 3.70-acre nursery tanks. FFDA (fish farmers development agency) has been set up at Boudh district to popularize fish culture as an alternative way of employment generation and eradication of poverty. The institution provides training to the selected beneficiaries,

assists in construction and renovation water resources, arrange credit from nationalized banks. The most important gain from FFDA is that aquaculture as a commercially gainful activity has been fully established.

Animal husbandry is an indispensable part of Boudh district's economic system. The prime objective of this sector is to boost the production of milk, egg and meat by adopting modern scientific method. To improve the socio-economic condition by providing self-employment opportunities to unemployed youth and to raise the family income is also an important part of their agenda. More than 75% of the rural households' own livestock and earn their supplementary income. Livestock production is an essential part of the rural livelihood systems. Livestock production takes place in millions of small holders, scattered throughout Boudh District. Improvement in livestock production is an important alley for increasing the income of marginal and small farmers and landless labourers, for the uncertainties of crop production. Animal health care service, breeding service, feed and fodder development, and marketing facilities are among the services provided by this sector.

**e. Demography: -**

<b>description</b>	<b>Value</b>
Area	3098 sq.km
Area under forest	128.00 sq.km 4.13 %
No. of Sub-Division	1
No. of Block	3
Assembly Constituencies	2
No. of Police Station	6
No. of Tahasils	3
No. of Gram Panchayats	63
No. of NACs	1
No. of Revenue Villages	1187



#### **f. Industry:**

Industries are an upcoming sector to boost the economy of Boudh district. Small scale industries of boudh district include food-based industries, chemical based industries, engineering based industries, textile-based industries, forest-based industries and metallurgical based industries. The mining industry is quite a profit-making industry.

#### **g. Culture & Heritage:**

There are many festivals in the Boudh District that are celebrated by total population of Boudh with great enthusiasm and faith. Festivals like Chuda Khai Jatra, Ratha Yatra, Laxmi Puja, Nuakhai, Shivaratri, Dasahara, Dola Jatra, Puajjuntia and Bhajjuntia, Ramaleela, Kailashi Jatra, Christmas, Id-Ul-Fitre are the important festivals of the district.

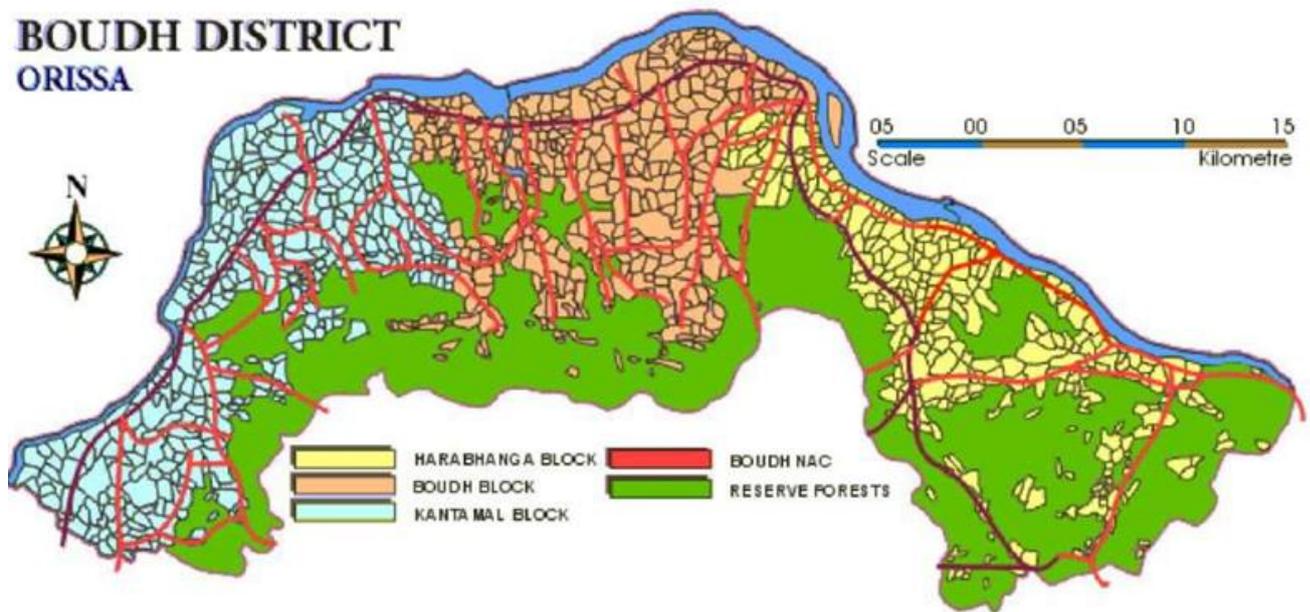
#### **h. Tourist places:**

Boudh is known for its century-old temples, ancient Buddha statues and caves. With the spread of saivism, Vaishnavism and numbers of other culture numerous shrines dedicated to various deities were found in this region. There are three remarkable Buddha statues in Boudh town and around, Ramnath Temple, Hanuman Temple, Madan Mohan Temple Jogindra villa places considered tourist places of district.

- (i) Chari Sambhu Temple, Jagati
- (ii) Bhairabi Mandir, Purunakatak
- (iii) Marjakuda Island
- (iv) Shyamsundarpur
- (v) Bagha Dam, Sagada
- (vi) Salnki Dam
- (vii) Hanuman Temple
- (viii) Dambarugada
- (ix) Narayan Nagar & Rajamunda
- (x) Rameswar Temple
- (xi) Padmatola Forest watch Tower
- (xii) Dedhaswr Bhai Bohu Rock hills, Kantamal



## BOUDH DISTRICT ORISSA

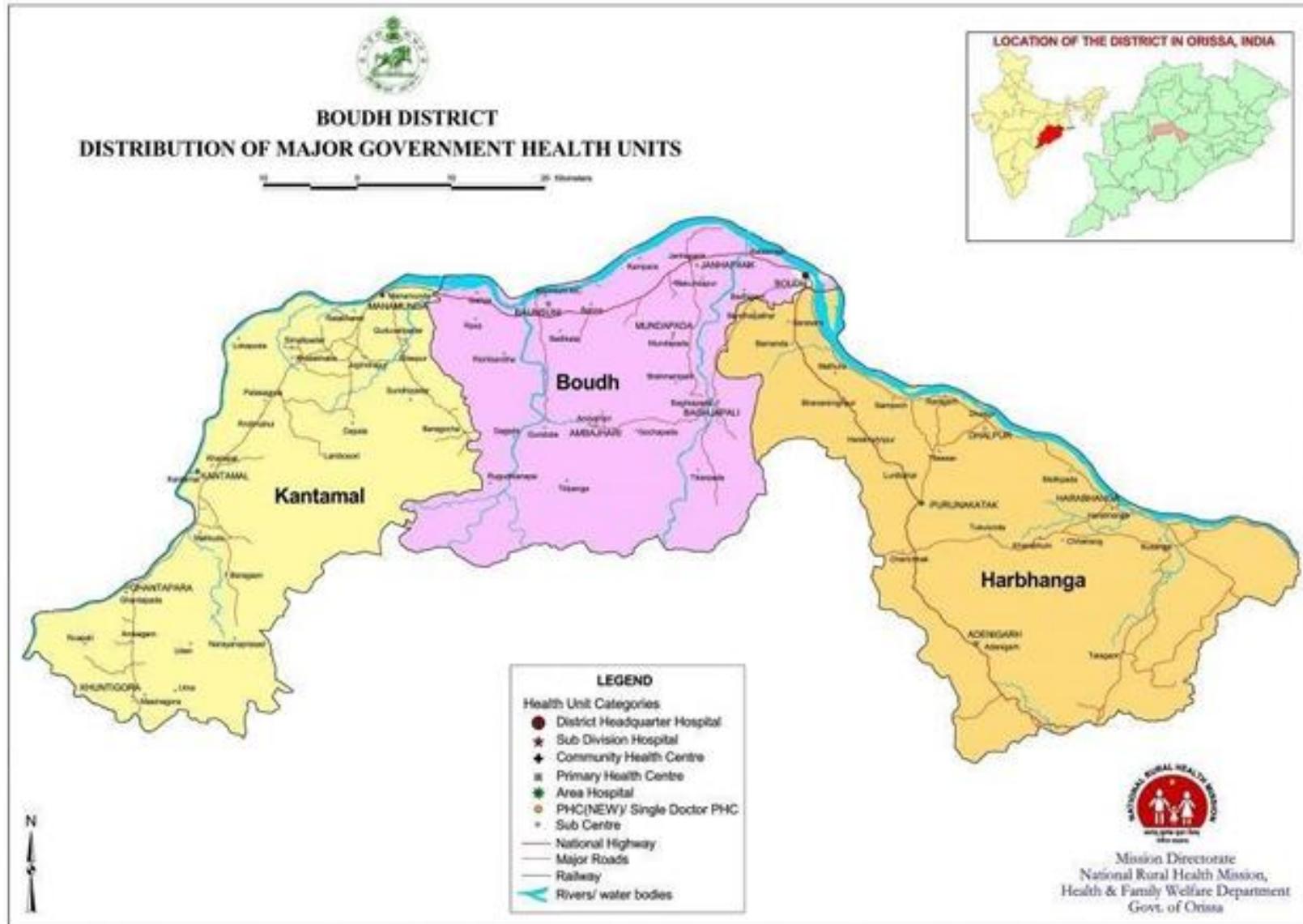


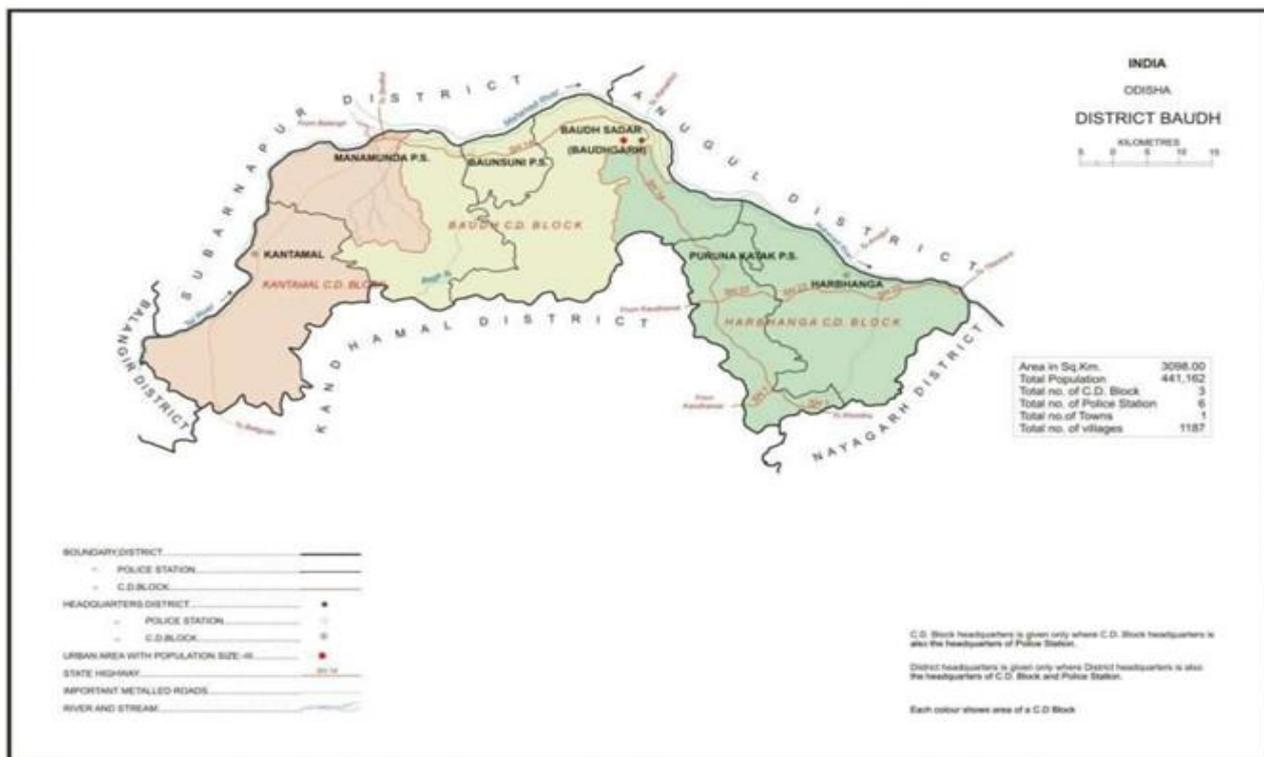
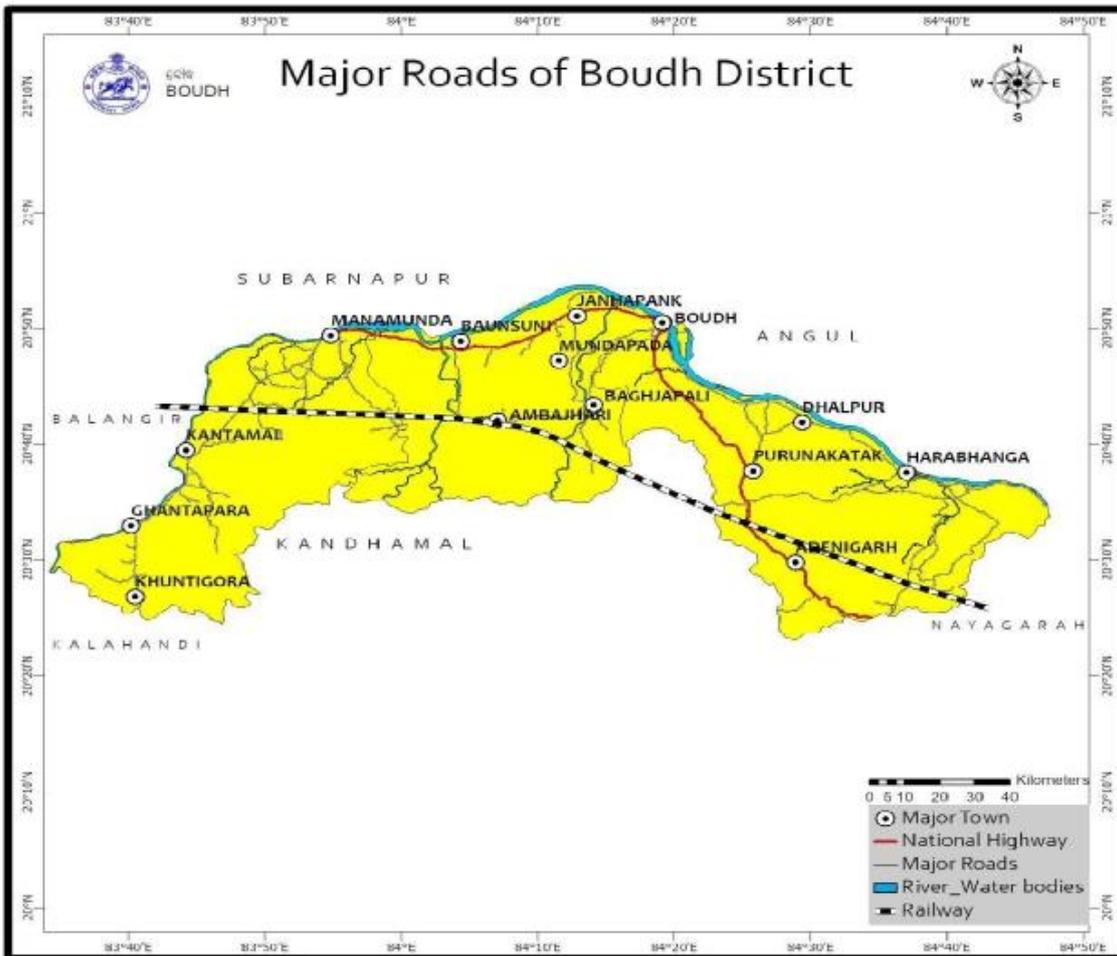
### **j. Education:**

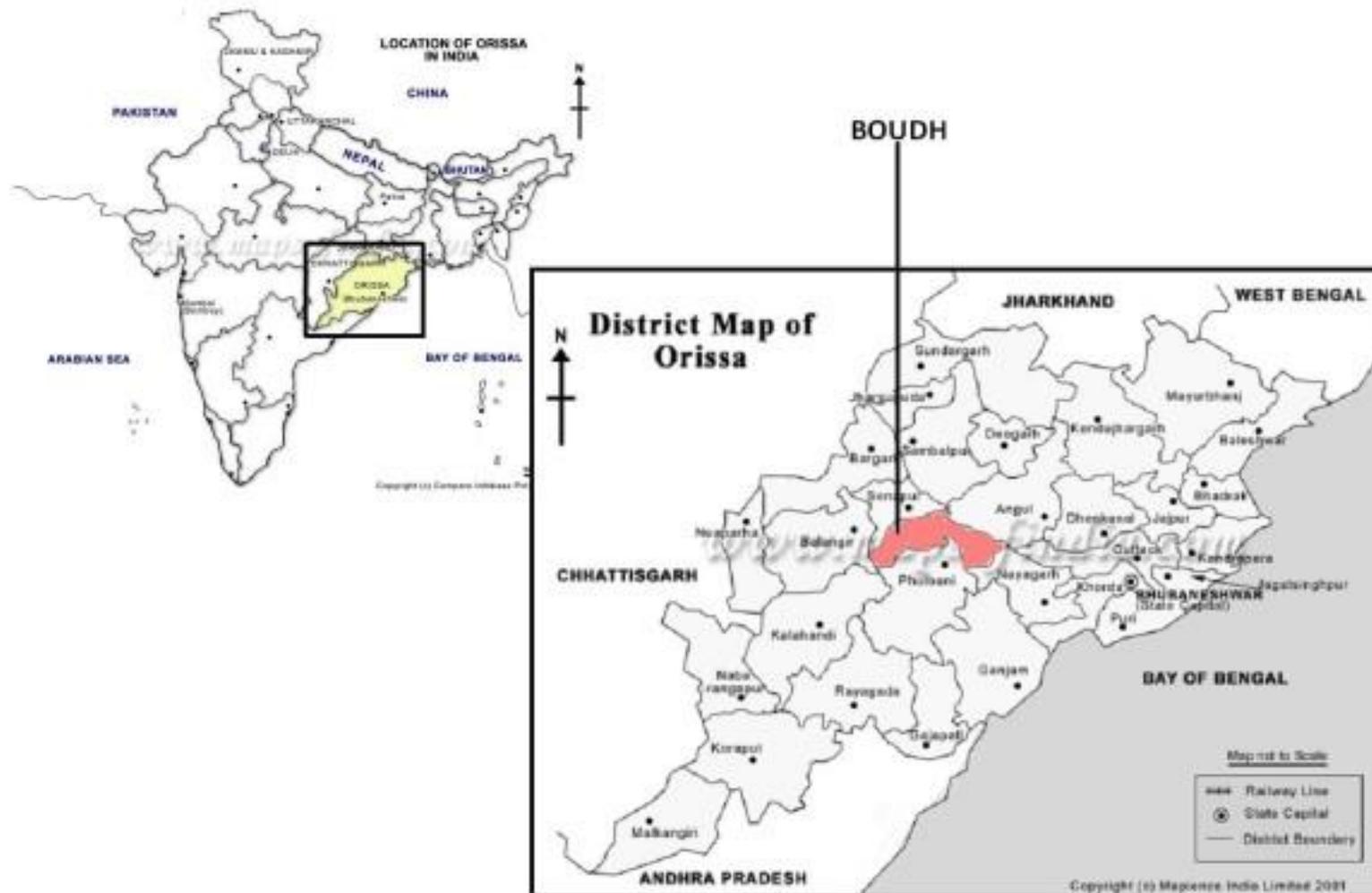
The District Education Office, Addl. District Education Officer, and the Block Education Officers Boudh looks after the General Administration of schools under school and Mass education Department in Boudh District. The DPC looks after the Elementary Education of Boudh District. A number of educational Institutions are established to impart education to the children of this District.

### **k. Health:**

The medical facilities are provided by different agencies like Govt. Private Individuals and voluntary organizations in the district. There are mainly five community health centre such as CHC, Baunsuni, CHC Harabhanga, CHC Kantamal, CHC Manamunda and CHC Purunakatak with its DDH at Boudh.







**8. LAND UTILIZATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURE, HORTICULTURE, MINING ETC.**

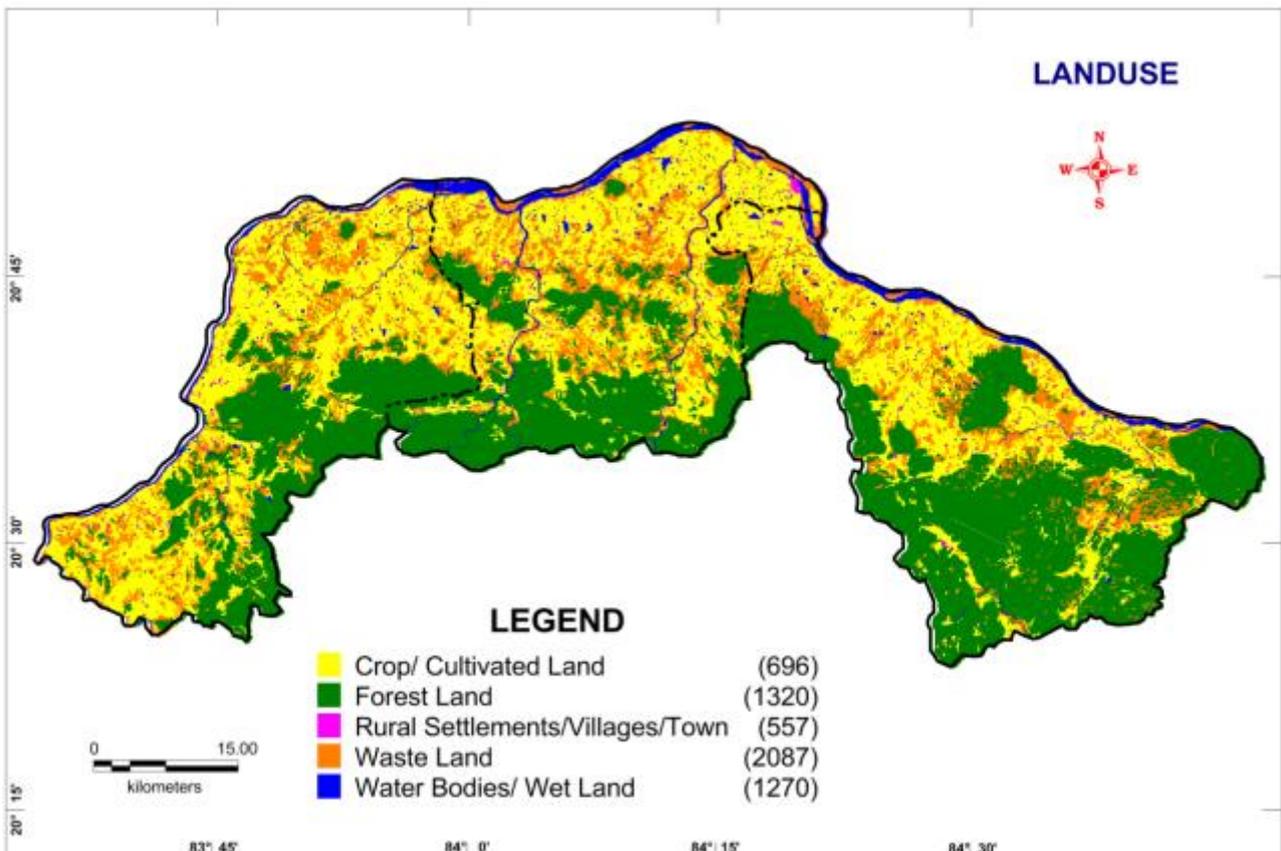
**FOREST: -**

**Land use Pattern**

Reserved Forests	92477 Ha.
Proposed Reserved Forests	2475.11 Ha.
Protected Forests	745.4071 Ha.
Undemarcated Protected Forests	24933.62 Ha.
Village Forests	1192.50 Ha.
Un-classed Forests	102.00 Ha.
Revenue Forests	1266.00 Ha.

Yours Sincerely,

*[Signature]*  
18/06/2015  
Divisional Forest Officer  
Boudh Division



**AGRICULTURAL: -**

Block wise Base Level Data on Crop Coverage for Kharif Season																																									
Name of Block	Geographical Area (ha)	Cultivable Area (ha)	Cultivated Land (ha)	Permanent Fallow	Irrigated Area (ha)								Crop wise cultivated area (ha)		Cultivated area (ha)				Irrigation Wise Cultivated Area (ha)																						
					Major	Medium	Minor	OLIC	QAIC	Megalift	Others	Total	Crop	Area	High	Medium	Low	Total	Irrigation Potential Created	Irrigation potential Utilised	Non Irrigated																				
Boudh	70829.86	34654.72	32531	4123.72	12039	7819	3251	4903	0	1995	0	30007	Paddy	19650	8017	16679	7855	32511	21290	21290	10022																				
													Maire	210																											
													Pulses	5290																											
													Oilseeds	520																											
													Millets	350																											
													Fibre Crops	3311																											
													Vegetables	2600																											
													Spices	500																											
													Fodder	100																											
													Total	32531																											
													Harabanga	60599								81258.36	25888	5119.71	6752.5	0	8536.06	5688	80.97	1432.95	0	22490.48	Cereals	15786	11249.71	13247.32	6510.86	31007.89	22490.28	22490.28	6089.26
Pulses	4726																																								
Oilseeds	1012																																								
Fibre Crops	398																																								
Vegetables & Spices	3967																																								
Total	25888																																								
Kantamal	72624	35225.51	28577.63	1110.56	11746.21	1036.99	3735	9673	761.05	0	1126.06	28076.31			Cereals	22947.83	11310.2	4614.86	7652.57	28111.23	28076.31												10032.72	25493.18							
															Pulses	3672.78																									
															Oilseeds	1491.81																									
															Fibre Crops	2771.64																									
															Horticultural Crops	4241.45																									
													Total	35125.51																											

1122  
3/6/25  
Chief District Engineer (Irrigation) Boudh

3/6/25  
Assistant District Engineer (Irrigation) Boudh

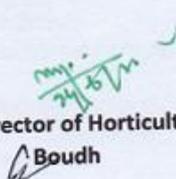
3/6/25  
Deputy District Engineer (Irrigation) Boudh

3/6/25  
Additional District Engineer (Irrigation) Boudh

3/6/25  
Additional District Engineer (Irrigation) Boudh

## HORTICULTURAL: -

Land Utilisation Pattern in Boudh District (Figure in Ha)					
Fruit Crops			Spices Crops		
Sl. No.	Name of the Crop	Area covered (in ha)	Sl. No.	Name of the Crop	Area covered (in ha)
1	Guava	144.0	1	Chilli	1372.5
2	Custard Apple	20.0	2	Coriander	428
3	K.Lime	27.7	3	Ginger	99.6
4	Mango	1049.6	4	Turmaric	425
5	Papaya	43.0		<b>Total</b>	<b>2325.1</b>
	<b>Total</b>	<b>1284.3</b>			
Vegetable			Plantation Crops		
Sl. No..	Name of the Crop	Area covered (in ha)	Sl. No.	Name of the Crop	Area covered (in ha)
1	Banana	148.3	1	Cashew	192.6
2	Bitter Gourd	435.5	2	Oil Plam	60.6
3	Brinjal	465.8		<b>Total</b>	<b>253.2</b>
4	Cabbage	290.7			
5	Cauliflower	345.9	Ornamental Crops		
6	Cucumber	280.9	Sl. No.	Name of the Crop	Area covered (in ha)
7	Mushroom		1	Marigold	60
8	Okra	675.8		<b>Total</b>	<b>60</b>
9	Onion	1057.2			
10	Potato	602.4			
11	Pumpkin	560.95			
12	Ridge gourd	235.65			
13	Tomato	585.7			
14	Watermelon	846.8			
	<b>Toatal</b>	<b>6531.6</b>			

  
 Asst. Director of Horticulture,  
 Boudh

## MINING: -

Boudh district in Odisha has both major and minor mineral resources. Major minerals include traces of gold, diamonds, and various gemstones such as topaz, zircon, moonstone, garnet, and tourmaline, mainly found along the Mahanadi and Tel riverbeds and in regions like Ramgarh and Kantamal. While these have been identified through surveys, commercial extraction has not yet been fully developed. The district also has deposits of pegmatite, quartz, graphite, manganese, and clay, some under formal leases. For minor minerals, such the major mining activities are dependent upon river sand and road metal mining.

## 9. PHYSIOGRAPHY OF THE DISTRICT.

The district has varied geomorphological features. The geomorphic units are

- (i) Lateritic Upland
- (ii) Pedi plane
- (iii) Denudational Hills
- (iv) Flood Plain
- (v) Structural Hills
- (vi) Inselberg
- (vii) Mesa & Butte
- (viii) Residual Hills
- (ix) Intermonane Valleys
- (x) Bazada

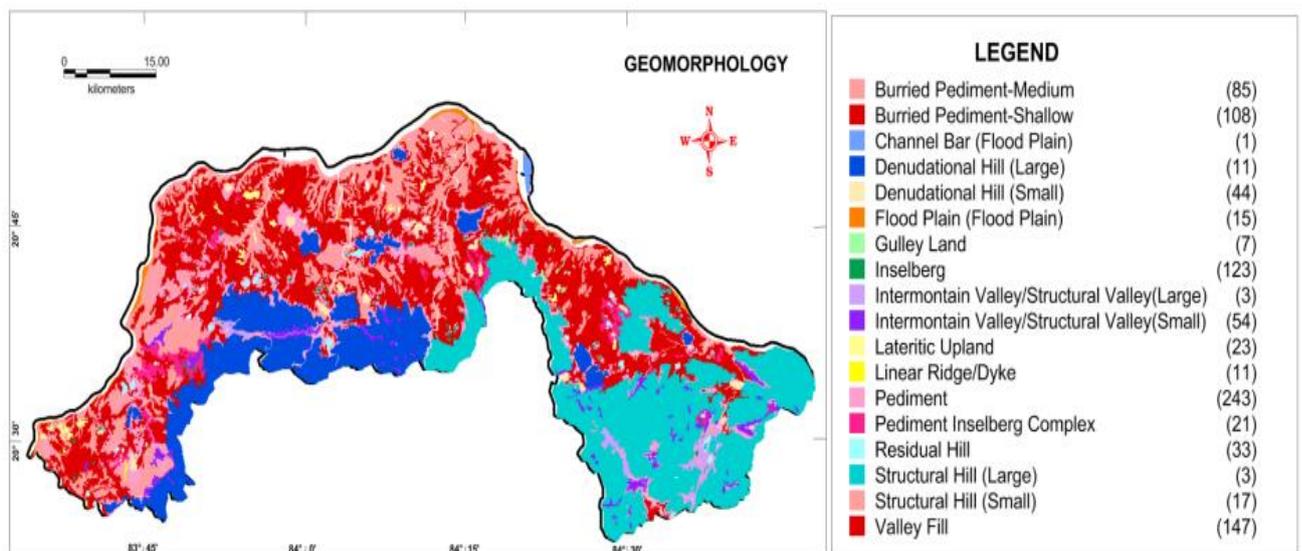


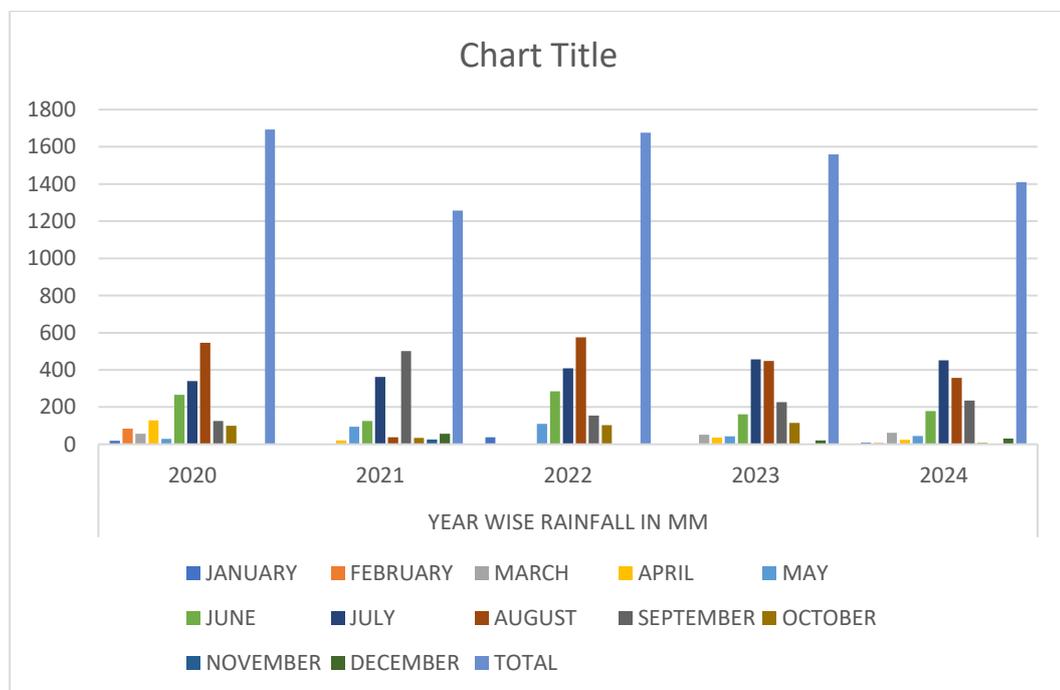
Fig. 1.4: Geomorphology of Boudh District.

## 10. RAINFALL: MONTH-WISE.

The climate of the district is typically to sub-tropical with three district seasons e.g. summer, winter and Monsoon. December is the coldest month with mean daily average temperature of 20-degree Celsius which reaches 42 degree Celsius in May. The rain fall in the area is mostly from the South west monsoon lats from middle of June to October. The average annal rainfall varies from 1256.4 mm to 1675.06 mm.

The rainfall statistics of the district for last four years is given below:

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	18.14	0	38.2	0	8.6
FEBRUARY	83.97	0	0.67	0	7.67
MARCH	57.24	0	0	51.31	61.57
APRIL	129.38	20.53	0	35.56	23.27
MAY	28.43	93.96	109.67	43.39	45.17
JUNE	266.26	124.7	284.74	161.1	177.86
JULY	339.63	362.66	408.46	457.16	451.45
AUGUST	546.15	37.4	575.85	448.8	357.35
SEPTEMBER	125.04	500.81	154.26	226.66	234.48
OCTOBER	99.01	34.21	103.21	115.41	7.33
NOVEMBER	0	25.6	0	0	3.57
DECEMBER	0	56.53	0	19.8	31
TOTAL	1693.25	1256.4	1675.06	1559.19	1409.32



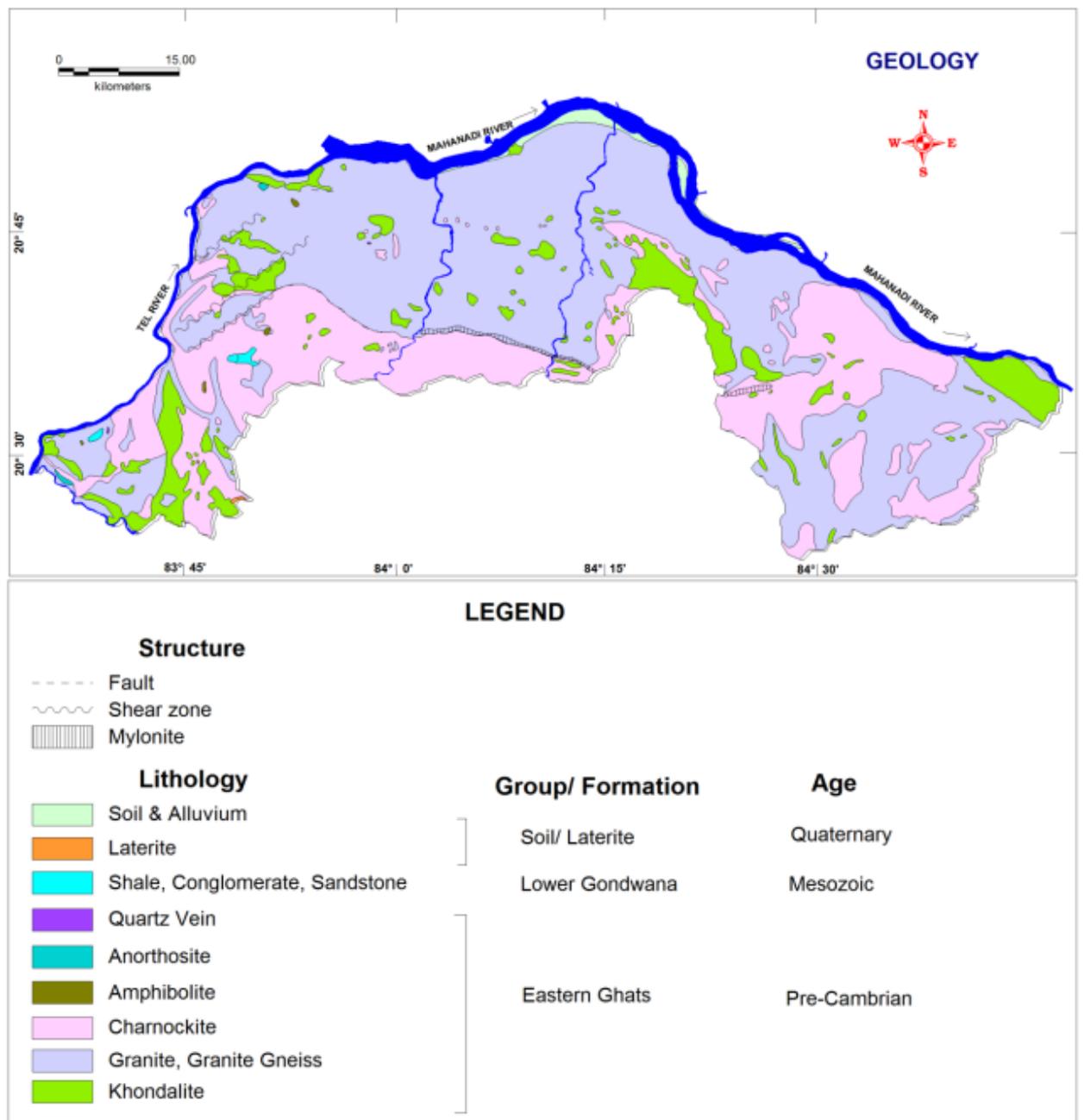
## 11. GEOLOGY AND MINERAL WEALTH.

Geologically the area forms part of the Eastern Ghats Super Group and is divided into khondalite group, Charnockite group and migmatite group. The alluvium is of Pleistocene to recent age. Khondalite group of rocks are of metasedimentary origin and represented by quartz garnet-sillimanite schist and gneisses without graphite, sillimanite quartzite and quartz sillimanite sericite schist occurring as enclaves within granite. Occurrences of basic charnockite are very restricted as bands or lensed patches within the granites. Intermediate or acid charnockite are common being distributed throughout the hilly area. Migmatite group comprising augengneiss, garnetiferous leucogranites are the most abundant rock types of the area. This constitutes high hill ranges at several places towards north and south and smooth rolling topography in the plains. Rocks of lower Gondwana group especially the Talchir formation is exposed in the northern part of the area. The contact between Talchir and older rocks is faulted at places. Pockets of laterites commonly found in khondalite bearing ridges mainly over the hill tops. The laterite exposed in the area is of Cainozoic age. The river beds of the area are covered by recent alluvium.

The general strike of the foliation is WNW-ESE to ENE-WSW through NE-SW and NS. The amount of dip ranges between 500 to sub-vertical. There is one major shear zone near Ranipathar area. Mylonite and silicification occur along this zone at several places. Both vertical as well as inclined joint planes are observed. Numbers of fault planes occur in the area with varieties of strike direction. A number of lineaments are deciphered in this area from LANDSAT imageries. Two major sets of these lineaments are deciphered running along NW-SE to NNWSSE and NS directions.

### Stratigraphy:

Age	Geological Unit		Lithology
Late Holocene		Present day Flood plain deposit	soil / Alluvium
Cainozoic			Laterite / Lateric bauxite Garnetiferous Granite gneiss Leptynite
Archaean	Eastern Ghat Super Group	Charnockite Group	Acid/intermediate Charnockite Basic Charnockite Quartz- granet- Sillimanite
		Khondalite Group	Schist/ gneiss Quartzite Calc silicate



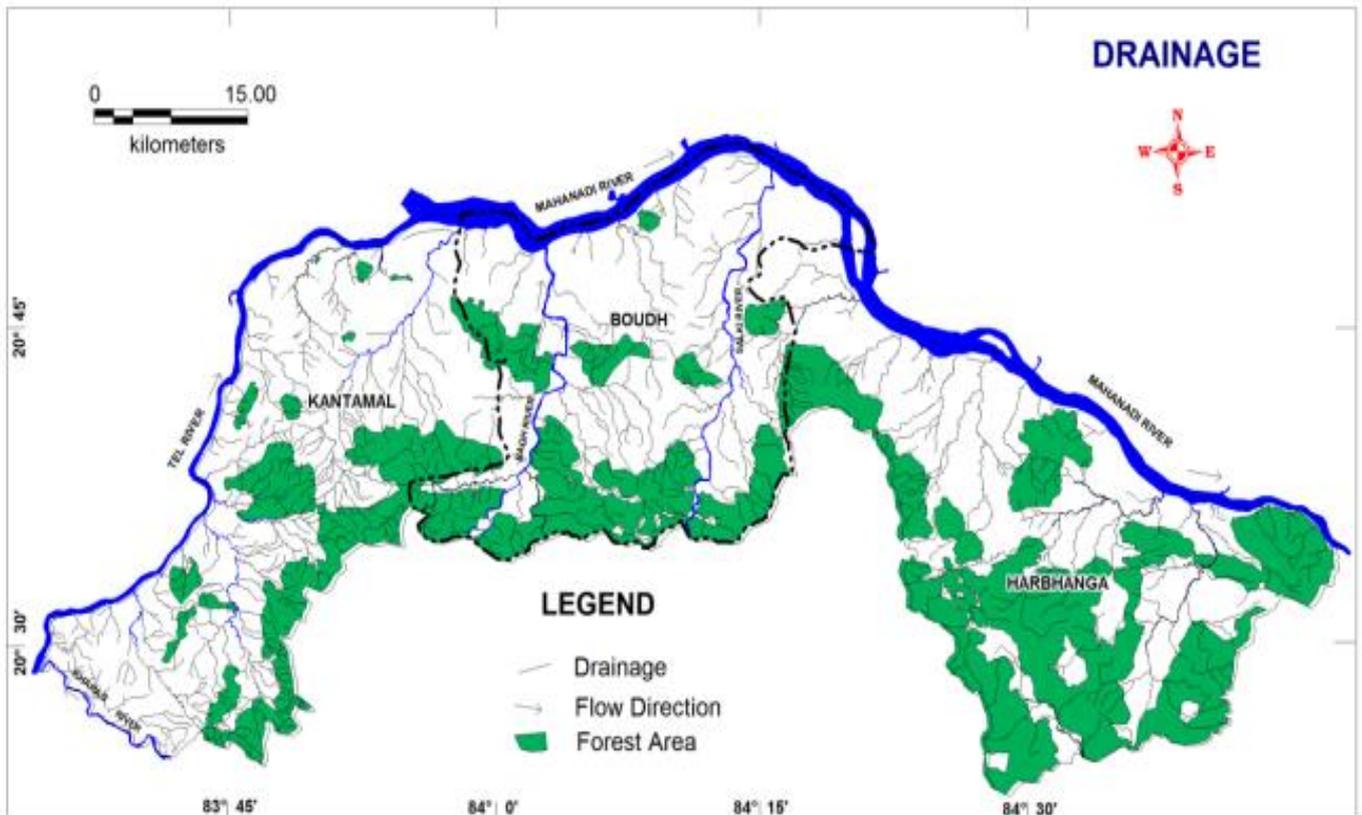
a. Detail of river/stream/other sand source- Sand mining in the district is confined to two rivers namely Mahanadi, Salki & Bagh.

**Drainage system with description of main river:**

Boudh district is rich in water resources. A series of check dams have been constructed across various distinct nallahs for in-stream storage, ground water recharge, incidental irrigation during late kharif and Rabi by storing water at the end of monsoon mainly through lifting devices as well as canal flow, irrigation use of water flowing down drainage channels, and other uses like bathing, washing, recreation etc. By the end of July 2019, 861 nos. of Check Dams have been

accorded administrative approval. Out of these, 789 nos. of check dams have been completed achieving an ayacut of 4973 Ha., 52 nos of Check Dams are in progress and 20 nos of Check dams are dropped due to various reasons.

<b>DRAINAGE SYSTEM WITH DESCRIPTION OF MAIN RIVER</b>				
<b>Sl. No</b>	<b>Name of the River</b>	<b>Place of origin</b>	<b>Total length in the district (in km)</b>	<b>Area drained (sq km)</b>
1	Mahanadi River	Chhattisgarh	106	81,196
2	Tel River	Dherapara	66	33,990
3	Salunki Nadi	Saradhapur	42	7,896



### Salient Features of Important Rivers & Streams:

Sl No.	River or Stream	Total length in the District(in Km)	Place of origin	Altitude at Origin	Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession(in mt)	Average width of area recommended for mineral concession(in meters)	Area recommended for mineral concession(in meters)	Mineable mineral potential (in Cum) (60% of total mineral potential)
A1	Mahanadi	106	Chhattisgarh	475	Harabhanga Sand Quarry	282.2	177.18	50000	75000
A2	Mahanadi	106	Chhattisgarh	475	Surundi Sand Quarry	255	196.08	50000	90000
A3	Mahanadi	106	Chhattisgarh	475	Kaleswar Sand Quarry	291.1	171.77	50000	90000
A4	Mahanadi	106	Chhattisgarh	475	Krushnamohanpur Sand Quarry	249	200.81	50000	90000
A5	Mahanadi	106	Chhattisgarh	475	Dianghat Sand Bed	277	180.51	50000	90000
A6	Mahanadi	106	Chhattisgarh	475	Uanla Sand Bed	286	174.83	50000	90000
A7	Mahanadi	106	Chhattisgarh	475	Karadi Sand Bed	272	183.82	50000	90000
A8	Mahanadi	106	Chhattisgarh	475	Kharasankuloi Sand Bed	239	209.21	50000	81990
A9	Mahanadi	106	Chhattisgarh	475	Sakusinga Sand Bed	267.1	187.2	50000	90000
A10	Mahanadi	106	Chhattisgarh	475	Badabankapada Sand Bed	272.1	183.76	50000	30000
B1	Salunki Nadi	42	Saradhapur	104	Marjadpur sand bed	54	30	1620	1942.8
B2	Salunki Nadi	42	Saradhapur	104	Paljhar sand bed	515.8	102	52610	31566.6
B3	Mahanadi	106	Chhattisgarh	475	Tutursinga Sand bed -B	98	51.04	5000	21390
B4	Mahanadi	106	Chhattisgarh	475	Tutursinga Sand bed -A	256	204	52200	31320
B5	Mahanadi	106	Chhattisgarh	475	Amurda Sand Bed	271	184.5	50000	30000
B6	Mahanadi	106	Chhattisgarh	475	Marjakud Sand Bed	279	179.2	50000	30000
C1	Tel Nadi	66	Dherapara	132	kirla sand bed	402.1	248.7	100000	60705
C2	Tel Nadi	66	Dherapara	132	Gambharipadar tileimal closter sand bed	334.4	121	40460	30105.6
C3	Tel Nadi	66	Dherapara	132	Chapara sand bed	275.7	91	25090	15055.2
C4	Tel Nadi	66	Dherapara	132	Lokapada sand bed	564.4	87	49100	29550.6
C5	Tel Nadi	66	Dherapara	132	Ghantapada sand bed	594	84.11	49960	29976
C6	Tel Nadi	66	Dherapara	132	Malikuda Sand Bed	643.2	192	123500	74100
C7	Tel Nadi	66	Dherapara	132	Fased Sand Bed	628	159	100000	60000
C8	Tel Nadi	66	Dherapara	132	Bukuramunda sand Bed	340	147	50000	30000

**b. Availability of sand or gravel or aggregate resources-  
Mineral Potential:**

Boulder(MT)	Bajari(MT)	Sand(Cum)	Total Mineable Mineral Potential(Cum)	Annual Deposition
NA	NA	2154503	1681229	-

SI No.	River or Stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession(in mt)	Average width of area recommended for mineral concession(in mt.)	Area recommended for mineral concession(in sq. m)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
A1	Mahanadi	Harabhanga Sand Quarry	282.2	177.18	50000	75000
A2	Mahanadi	Surundi Sand Quarry	255	196.08	50000	90000
A3	Mahanadi	Kaleswar Sand Quarry	291.1	171.77	50000	90000
A4	Mahanadi	Krushnamohanpur Sand Quarry	249	200.81	50000	90000
A5	Mahanadi	Dianghat Sand Bed	277	180.51	50000	90000
A6	Mahanadi	Uanla Sand Bed	286	174.83	50000	90000
A7	Mahanadi	Karadi Sand Bed	272	183.82	50000	90000
A8	Mahanadi	Kharasankuloi Sand Bed	239	209.21	50000	81990
A9	Mahanadi	Sakusinga Sand Bed	267.1	187.2	50000	90000
A10	Mahanadi	Badabankapada Sand Bed	272.1	183.76	50000	30000
B1	Salunki Nadi	Marjadpur sand bed	54	30	1620	1942.8
B2	Salunki Nadi	Paljhar sand bed	515.8	102	52610	31566.6
B3	Mahanadi	Tutursinga Sand bed -B	98	51.04	5000	21390
B4	Mahanadi	Tutursinga Sand bed -A	256	204	52200	31320
B5	Mahanadi	Amurda Sand Bed	271	184.5	50000	30000
B6	Mahanadi	Marjakud Sand Bed	279	179.2	50000	30000
C1	Tel Nadi	kirla sand bed	402.1	248.7	100000	60705
C2	Tel Nadi	Gambharipadar tileimal closter sand bed	334.4	121	40460	30105.6
C3	Tel Nadi	Chapara sand bed	275.7	91	25090	15055.2
C4	Tel Nadi	Lokapada sand bed	564.4	87	49100	29550.6
C5	Tel Nadi	Ghantapada sand bed	594	84.11	49960	29976
C6	Tel Nadi	Malikuda Sand Bed	643.2	192	123500	74100
C7	Tel Nadi	Fased Sand Bed	628	159	100000	60000
C8	Tel Nadi	Bukuramunda sand Bed	340	147	50000	30000

**c. Detail of existing mining leases of sand and aggregates-**

For details, please refer Point no-3 & Annexure I to VII.

### Details of Sand/M-Sand Sources

#### a) Rivers:

River Name/M-Sand plant	Total Stretch of River (in KM)	Type of River (Perennial or Non-Perennial)
Mahanadi	108	Perennial
Salki	83	Perennial
Bagh	78	Perennial

#### b) De-Siltation Location: (Lakes/Ponds/Dams etc.)

Name of Reservoir/Dams	Maintain/Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size(Ha)
NIL	NIL	NIL	NIL	NIL	NIL	NIL

#### c) Patta Lands/Khatedari Land:

Owner	Sy. No	Area (Ha)	District	Tehsil	Village	Agricultural Land (Yes/No)
NIL	NIL	NIL	NIL	NIL	NIL	NIL

#### d) M-Sand Plants:

PLANT NAME	OWNER	DISTRICT	TEHSIL	VILLAGE	GEO-LOCATION	QUANTITY TONNES/ANNUM
NIL	NIL	NIL	NIL	NIL	NIL	NIL

## List of Potential Mining Leases (existing &amp; proposed)

## Rivers:

Lease No.	River Details	Lease Details	Area (in Ac/Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in Cum /Annum considering digging depth max as 3 meters	Mineral to be mined in Cum (Sand/ Bajri/ RBM etc.)	Existing/ Proposed	Remarks
A1	Mahanadi	Harabhanga Sand Quarry, At:- Harabhanga, Khata No-383(AJA), Plot No- 1641/A, Kissam- Nadi (84°36'45.37" to 84°36'56.02", & 20°37'49.40" to 20°38'00.04")	5.00	PA-6.1 / BR-13.1	6.1	NO	10200	108525	Existing	Operational
A2	Mahanadi	Surundi Sand Quarry, At:- Surundi, Khata No-145, Plot No- 188, Kissam- Nadi (84°35'43.84" - 84°35'56.57", & 20°38'48.84" 20°38'54.29")	5.00	PA-7.2 / BR-10.8	7.2	NO	6000	128685	Existing	Operational
A3	Mahanadi	Kaleswar Sand Quarry, At:- Kaleswar, Khata No-118, Plot No- 379, Kissam- Nadi (84°19'35.79" - 84°19'43.04", & 20°48'49.83" 20°48'58.75")	5.00	PA-8.8 / BR-4.6	8.8	NO	10000	130926	Existing	Operational
A4	Mahanadi	Krushnamohanpur Sand Quarry, At:- Krushnamohanpur, Khata No-43(AJA), Plot No- 215, Kissam- Nadi (84°20'33.74" - 84°20'45.13", & 20°46'39.71" 20°46'48.09")	5.00	PA- 7.1/ BR-9.3	7.1	NO	6000	123984	Existing	Operational
A5	Mahanadi	Dianghat Sand Bed, At:- Dianghat, Khata No-92, Plot No- 76/A, Kissam- Nadi (84°36' 28.50" - 84°36'39.81", & 20°38'3.45" 20°38'14.30")	5.00	PA-6.1 / BR-12.3	6.1	NO	8000	130482	Existing	Operational
A6	Mahanadi	Uanla Sand Bed, At:- Uanla, Khata No- 81, Plot No- 221, Kissam- Nadi (84°28' 24.46" - 84°28'34.80", & 20°43'25.47" 20°43'36.36")	5.00	PA- 6.8/ BR-4.9	6.8	NO	5500	129486	Existing	Operational
A7	Mahanadi	Karadi Sand Bed, At:- Karadi, Khata No-92, Plot No- 466/A, Kissam- Nadi (84°22' 21.42" - 84°22'30.32", & 20°44'59.51" 20°45'05.85")	5.00	PA-4.4 / BR- 9.8	4.4	NO	8000	132120	Existing	Operational
A8	Mahanadi	Kharasankuloi Sand Bed, At:- Kharasankuloi, Khata No-107, Plot No- 100/A, 118/A, Kissam- 20°41'51.27"N & 84°30'48.22"E)	5.00	PA-1.2 / BR-0.35	1.2	NO	7000	118950	Existing	Operational

A9	Mahanadi	Sakusinga Sand Bed, At:- Saakusinga ,Khata No-166, Plot No- 239/A,240/A, Kissam- Nadi (20°42'21.93"N & 84°30'17.91"E)	5.00	PA-2.4 / BR-0.93	2.4	NO	12000	131334	Existing	Operational
A10	Mahanadi	Badabankapada Sand Bed, At:- Badabankapada,Khata No-113 , Plot No-355&372, Kissam- Nadi , (20°48'22.36"N & 84°19'48.07"E)	5.00	PA-7.8 / BR-2.7	7.8	NO	Not-operational	30000	Existing	Bidder not Finalized
B1	Salunki Nadi	Marjadpur sand bed, At:- Marjadpur,Khata No-132, Plot No- 463/A, Kissam- Nadi (84°15' 38.96" - 84°15'40.63",& 20°52'01.08" 20°52'02.61")	0.162	PA- 4.6/ BR-0.61	4.6	NO	1204	1278	Existing	Operational
B2	Salunki Nadi	Paljhar sand bed, At:- Paljhar,Khata No-2, Plot No- 1, Kissam- Nadi (84°12' 52.26" - 84°13'8.57",& 20°45'4.81" 20°45'30.96")	5.261	PA-1.9 / BR-0.54	1.9	NO	Not-operational	35985	Existing	Bidder Finalized but lease deed not done yet
B3	Mahanadi	Tutursinga Sand bed -B,At:- Tutursinga,Khata No-518, Plot No- 1/P, Kissam- Nadi (84°18' 08.04" - 84°18'10.21",& 20°51'12.66" 20°51'14.63")	0.5	PA-9.8 / BR-0.52	9.8	NO	Not-operational	3045	Existing	Bidder Finalized but lease deed not done yet
B4	Mahanadi	Tutursinga Sand bed -A, At:- Tutursinga,Khata No-518, Plot No- 1, Kissam- Nadi ( 20°51'18.15"N,& 84°18'4.28"E)	5.22	PA-2.84 / BR-0.7	2.84	YES	Not-operational	31320	Existing	Bidder not Finalized
B5	Mahanadi	Amunda Sand Bed, At:-Amurda ,Khata No-113, Plot No- 9, Kissam- Nadi 20°49'51.60"N& 84° 0'57.60"E)	5	PA-7.7 / BR-12	7.7	NO	Not-operational	30000	Existing	Bidder not Finalized
B6	Mahanadi	Marjakud Sand Bed, At:- Marjakud,Khata No-364, Plot No- 1, Kissam- Nadi (20°50'20.40"N,& 84°20'13.20"E)	5	PA-2.73 / BR-0.9	2.73	NO	New Proposed Source	30000	Proposed	New Proposed Source
C1	Tel Nadi	kirla sand bed, At:-Kirla,Khata No-137, Plot No- 214 , Kissam- Nadi (83°48' 27.29" - 83°48'40.73",& 20°48'21.34" 20°48'31.50")	10	PA- 17.3/ BR-1.4	17.3	NO	6002	91714	Existing	Operational
C2	Tel Nadi	Gambharipadar tileimal cluster sand bed, At:-Gambharipadara,Tileimal cluster ,Khata No-73&99, Plot No- 1/659&382, Kissam- Nadi (83°45' 05.74" - 83°45'17.47",& 20°42'24.34" 20°42'33.63")	4.046	PA- 8.4/ BR-4.8	8.4	NO	2500	43468	Existing	EC not transferred from Tahasildar
C3	Tel Nadi	Chapara sand bed,At:- Chapara,Khata No-126, Plot No- 65 , Kissam- Nadi (83°38' 0.94" - 83°38'10.69",& 20°31'59.49" 20°32'4.60")	2.509	PA-12.9 / BR-2.5	12.9	NO	3064	19807	Existing	Statutory clearance not done yet

C4	Tel Nadi	Lokapada sand bed, At:- Lokapada,Khata No-175, Plot No- 253 (P), Kissam- Nadi (83°46' 41.16" - 83°46'53.40",& 20°47'34.43" 20°47'45.74")	4.91	PA- 17.5/ BR-2.2	17.5	NO	Not-operational	36044	Existing	Lease deed not done yet
C5	Tel Nadi	Ghantapada sand bed, At:- Ghantapada,Khata No-275, Plot No- 1, Kissam- Nadi (83°40' 08.58" - 83°40'22.86",& 20°33'05.16" 20°33'15.62")	4.996	PA-11.6 / BR-1.2	11.6	NO	Not-operational	29976	Existing	Lease deed not done yet
C6	Tel Nadi	Malikuda Sand Bed, At:- Malikuda,Khata No-197, Plot No- 1/A, Kissam- Nadi (20°36'28.80"N & 83°43'55.20"E)	12.35	PA-2.3/ BR-7	2.3	NO	Not-operational	74100	Existing	Bidder not Finalized
C7	Tel Nadi	Fased Sand Bed, At:-Fassed,Khata No- 144, Plot No- 109/A, 110/A & 590/A, Kissam- Nadi ( 20°31'26.40"N & 83°35'20.40"E)	10	PA-5.8 / BR-1.2	5.8	NO	Not-operational	60000	Existing	Lease deed not done yet
C8	Tel Nadi	Bukuramunda sand Bed, At:- Bukuramunda, Khata No-71, Plot No- 228,372,373,750, Kissam- Nadi ( 20°46'33.60"N & 83°55'58.80"E)	5	PA-15.5 / BR-0.1	15.5	NO	Not-operational	30000	Existing	proposed for Extinction

## Cluster &amp; Contiguous Cluster details

## Clusters:

RIVER NAME	CLUSTER NO.	LEASE NO	LOCATION (RIVERBED / PATTA LAND)	VILLAGE	AREA (IN HA)	TOTAL EXCAVATION (Cum)	TOTAL MINERAL EXCAVATION (Cum)
Mahanadi	1	B3	Tutursinga Sand bed -B,At:-Tutursinga,Khata No-518, Plot No- 1, Kissam- Nadi (84°18' 08.04" - 84°18'10.21",& 20°51'12.66" 20°51'14.63")	Tutursinga	0.5	Not-operational	Not-operational
Mahanadi		B4	Tutursinga Sand bed -A, At:-Tutursinga,Khata No-518, Plot No- 1, Kissam- Nadi ( 20°51'18.15"N,& 84°18'4.28"E)	Tutursinga	5.22	Not-operational	Not-operational

## 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 (Ha)	Total Mineral Excavation. (Ton)
NA	NA	NA	NA	NA	NA	NA	NA	NA

## Transportation Routes for individual leases and leases in Cluster

Lease No.	Transportation Route No.	Number 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)	Recommend/Mouzaion for road (Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & LocMouzaion
A1	SH-23	1	2	6.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Harabhanga,SH-23-6.2
A2	SH-23	1		8.7	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Surundi,SH-23-8.7
A3	NH-57	1	2	2.75	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Kaleswar,NH-57-2.75
A4	NH-57	1		4.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Krushnamohanpur,NH-57-4.2
A5	SH-23	1	1	9.1	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- DianghMouza,SH-23-9.1
A6	NH-57	1	5	17.8	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Uanla, NH-57-17.8
A7	NH-57	1		4.8	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Karadi
A8	NH-57	1		15.3	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Kharasankuloi
A9	NH-57	1		14.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Saakusinga
A10	NH-57	1		4.5	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Badabankapada
B1	NH-57	1	6	3.5	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Marjadpur,NH-57-3.5
B2	NH-57	1		15.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Paljhar,NH-57-15.2
B3	NH-57	1		0.95	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.95
B4	NH-57	1		0.79	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.79
B5	NH-57	1		2.07	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Amurda,NH-57-2.07
B6	NH-57	1		6.16	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Marjadpur,NH-57-6.16
C1	SH-41	1	8	10.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Kirla,SH-41-10.2
C2	SH-41	1		6.1	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-GambhariPadara,SH-41-6.1
C3	SH-41	1		5.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Chapara,SH-41-5.2
C4	SH-41	1		8.5	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Lokapada,SH-41-8.5
C5	SH-41	1		1.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Ghantapada,SH-41-1.2
C6	SH-41	1		1.6	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Malikuda,SH-41-1.6

C7	SH-41	1		12.54	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Fassed,SH-41-12.54
C8	SH-41	1		6.16	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Bukuramunda,SH-41-6.16

Cluster No.	Transportation Route No.	Number of tippers/day of cluster	Number of tippers/day of all the cluster 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	NH-57	1	2	0.95	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.95
	NH-57	1		0.79	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.79

## Final List of Potential Mining Leases (existing &amp; proposed)

## Rivers:

Lease No.	River Details	Lease Details	Area (in Ac/Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in Cum /Annum considering digging depth max as 3 meters	Mineral to be mined in Cum (Sand/ Bajri/ RBM etc.)	Existing/ Proposed	Remarks
A1	Mahanadi	Harabhanga Sand Quarry, At:- Harabhanga, Khata No-383(AJA), Plot No- 1641/A, Kissam- Nadi (84°36'45.37" to 84°36'56.02", & 20°37'49.40" to 20°38'00.04")	5.00	PA-6.1 / BR-13.1	6.1	NO	10200	108525	Existing	Operational
A2	Mahanadi	Surundi Sand Quarry, At:- Surundi, Khata No-145, Plot No- 188, Kissam- Nadi (84°35'43.84" - 84°35'56.57", & 20°38'48.84" 20°38'54.29")	5.00	PA-7.2 / BR-10.8	7.2	NO	6000	128685	Existing	Operational
A3	Mahanadi	Kaleswar Sand Quarry, At:- Kaleswar, Khata No-118, Plot No- 379, Kissam- Nadi (84°19'35.79" - 84°19'43.04", & 20°48'49.83" 20°48'58.75")	5.00	PA-8.8 / BR-4.6	8.8	NO	10000	130926	Existing	Operational
A4	Mahanadi	Krushnamohanpur Sand Quarry, At:- Krushnamohanpur, Khata No-43(AJA), Plot No- 215, Kissam- Nadi (84°20'33.74" - 84°20'45.13", & 20°46'39.71" 20°46'48.09")	5.00	PA- 7.1/ BR-9.3	7.1	NO	6000	123984	Existing	Operational
A5	Mahanadi	Dianghat Sand Bed, At:- Dianghat, Khata No-92, Plot No- 76/A, Kissam- Nadi (84°36' 28.50" - 84°36'39.81", & 20°38'3.45" 20°38'14.30")	5.00	PA-6.1 / BR-12.3	6.1	NO	8000	130482	Existing	Operational
A6	Mahanadi	Uanla Sand Bed, At:- Uanla, Khata No-81, Plot No- 221, Kissam- Nadi (84°28' 24.46" - 84°28'34.80", & 20°43'25.47" 20°43'36.36")	5.00	PA- 6.8/ BR-4.9	6.8	NO	5500	129486	Existing	Operational
A7	Mahanadi	Karadi Sand Bed, At:- Karadi, Khata No-92, Plot No- 466/A, Kissam- Nadi (84°22' 21.42" - 84°22'30.32", & 20°44'59.51" 20°45'05.85")	5.00	PA-4.4 / BR- 9.8	4.4	NO	8000	132120	Existing	Operational
A8	Mahanadi	Kharasankuloi Sand Bed, At:- Kharasankuloi, Khata No-107, Plot No-100/A, 118/A, Kissam- 20°41'51.27"N & 84°30'48.22"E)	5.00	PA-1.2 / BR-0.35	1.2	NO	7000	118950	Existing	Operational

A9	Mahanadi	Sakusinga Sand Bed, At:- Saakusinga ,Khata No-166, Plot No- 239/A,240/A, Kissam- Nadi (20°42'21.93"N & 84°30'17.91"E)	5.00	PA-2.4 / BR-0.93	2.4	NO	12000	131334	Existing	Bidder Finalized but lease deed not done yet
A10	Mahanadi	Badabankapada Sand Bed, At:- Badabankapada,Khata No-113 , Plot No-355&372, Kissam- Nadi , (20°48'22.36"N & 84°19'48.07"E)	5.00	PA-7.8 / BR-2.7	7.8	NO	Not-operational	30000	Existing	Bidder not Finalized
B1	Salunki Nadi	Marjadpur sand bed, At:- Marjadpur,Khata No-132, Plot No-463/A, Kissam- Nadi (84°15' 38.96" - 84°15'40.63",& 20°52'01.08" 20°52'02.61")	0.162	PA- 4.6/ BR-0.61	4.6	NO	1204	1278	Existing	Operational
B2	Salunki Nadi	Paljhar sand bed, At:- Paljhar,Khata No-2, Plot No- 1, Kissam- Nadi (84°12' 52.26" - 84°13'8.57",& 20°45'4.81" 20°45'30.96")	5.261	PA-1.9 / BR-0.54	1.9	NO	Not-operational	35985	Existing	Bidder Finalized but lease deed not done yet
B3	Mahanadi	Tutursinga Sand bed -B,At:- Tutursinga,Khata No-518, Plot No- 1/P, Kissam- Nadi (84°18' 08.04" - 84°18'10.21",& 20°51'12.66" 20°51'14.63")	0.5	PA-9.8 / BR-0.52	9.8	NO	Not-operational	3045	Existing	Bidder Finalized but lease deed not done yet
B4	Mahanadi	Tutursinga Sand bed -A, At:- Tutursinga,Khata No-518, Plot No- 1, Kissam- Nadi ( 20°51'18.15"N,& 84°18'4.28"E)	5.22	PA-2.84 / BR-0.7	2.84	YES	Not-operational	31320	Existing	Bidder not Finalized
B5	Mahanadi	Amunda Sand Bed, At:-Amurda ,Khata No-113, Plot No- 9, Kissam- Nadi 20°49'51.60"N& 84° 0'57.60"E)	5	PA-7.7 / BR-12	7.7	NO	Not-operational	30000	Existing	Bidder not Finalized
B6	Mahanadi	Marjakud Sand Bed, At:- Marjakud,Khata No-364, Plot No- 1, Kissam- Nadi (20°50'20.40"N,& 84°20'13.20"E)	5	PA-2.73 / BR-0.9	2.73	NO	New Proposed Source	30000	Proposed	New Proposed Source
C1	Tel Nadi	kirla sand bed, At:-Kirla,Khata No-137, Plot No- 214 , Kissam- Nadi (83°48' 27.29" - 83°48'40.73",& 20°48'21.34" 20°48'31.50")	10	PA- 17.3/ BR-1.4	17.3	NO	6002	91714	Existing	Operational
C2	Tel Nadi	Gambharipadar tileimal cluster sand bed, At:-Gambharipadara,Tileimal cluster ,Khata No-73&99, Plot No-1/659&382, Kissam- Nadi (83°45' 05.74" - 83°45'17.47",& 20°42'24.34" 20°42'33.63")	4.046	PA- 8.4/ BR-4.8	8.4	NO	2500	43468	Existing	EC not transferred from Tahasildar
C3	Tel Nadi	Chapara sand bed,At:- Chapara,Khata No-126, Plot No- 65 , Kissam- Nadi (83°38' 0.94" - 83°38'10.69",& 20°31'59.49" 20°32'4.60")	2.509	PA-12.9 / BR-2.5	12.9	NO	3064	19807	Existing	Statutory clearance not done yet

C4	Tel Nadi	Lokapada sand bed, At:- Lokapada,Khata No-175, Plot No- 253 (P), Kissam- Nadi (83°46' 41.16" - 83°46'53.40",& 20°47'34.43" 20°47'45.74")	4.91	PA- 17.5/ BR-2.2	17.5	NO	Not-operational	36044	Existing	Lease deed not done yet
C5	Tel Nadi	Ghantapada sand bed, At:- Ghantapada,Khata No-275, Plot No- 1, Kissam- Nadi (83°40' 08.58" - 83°40'22.86",& 20°33'05.16" 20°33'15.62")	4.996	PA-11.6 / BR-1.2	11.6	NO	Not-operational	29976	Existing	Lease deed not done yet
C6	Tel Nadi	Malikuda Sand Bed, At:- Malikuda,Khata No-197, Plot No- 1/A, Kissam- Nadi (20°36'28.80"N & 83°43'55.20"E)	12.35	PA-2.3/ BR-7	2.3	NO	Not-operational	74100	Existing	Bidder not Finalized
C7	Tel Nadi	Fased Sand Bed, At:-Fassed,Khata No- 144, Plot No- 109/A, 110/A & 590/A, Kissam- Nadi ( 20°31'26.40"N & 83°35'20.40"E)	10	PA-5.8 / BR-1.2	5.8	NO	Not-operational	60000	Existing	Lease deed not done yet
C8	Tel Nadi	Bukuramunda sand Bed, At:- Bukuramunda, Khata No-71, Plot No- 228,372,373,750, Kissam- Nadi ( 20°46'33.60"N & 83°55'58.80"E)	5	PA-15.5 / BR-0.1	15.5	NO	Not-operational	30000	Existing	proposed for Extinction

## Final Cluster &amp; Contiguous Cluster details

## Clusters:

RIVER NAME	CLUSTER NO.	LEASE NO	LOCATION (RIVERBED / PATTI LAND)	VILLAGE	AREA (IN HA)	TOTAL EXCAVATION (TON)	TOTAL MINERAL EXCAVATION (TON)
Mahanadi	1	B3	Tutursinga Sand bed -B, At:-Tutursinga, Khata No-518, Plot No- 1, KISSAM- NADI (84°18' 08.04" - 84°18'10.21", & 20°51'12.66" 20°51'14.63")	Tutursinga	0.5	Not-operational	Not-operational
Mahanadi		B4	Tutursinga Sand bed -A, At:-Tutursinga, Khata No-518, Plot No- 1, KISSAM- NADI ( 20°51'18.15"N, & 84°18'4.28"E)	Tutursinga	5.22	Not-operational	Not-operational

## Contiguous Clusters:

River Name	Contiguous Cluster No.	Cluster No	Number of leases in the cluster	Location (Riverbed/ Patti Land)	Distance between clusters	Village	Area of Cluster (Ha)	Total Mineral Excavation. (Ton)
NA	NA	NA	NA	NA	NA	NA	NA	NA

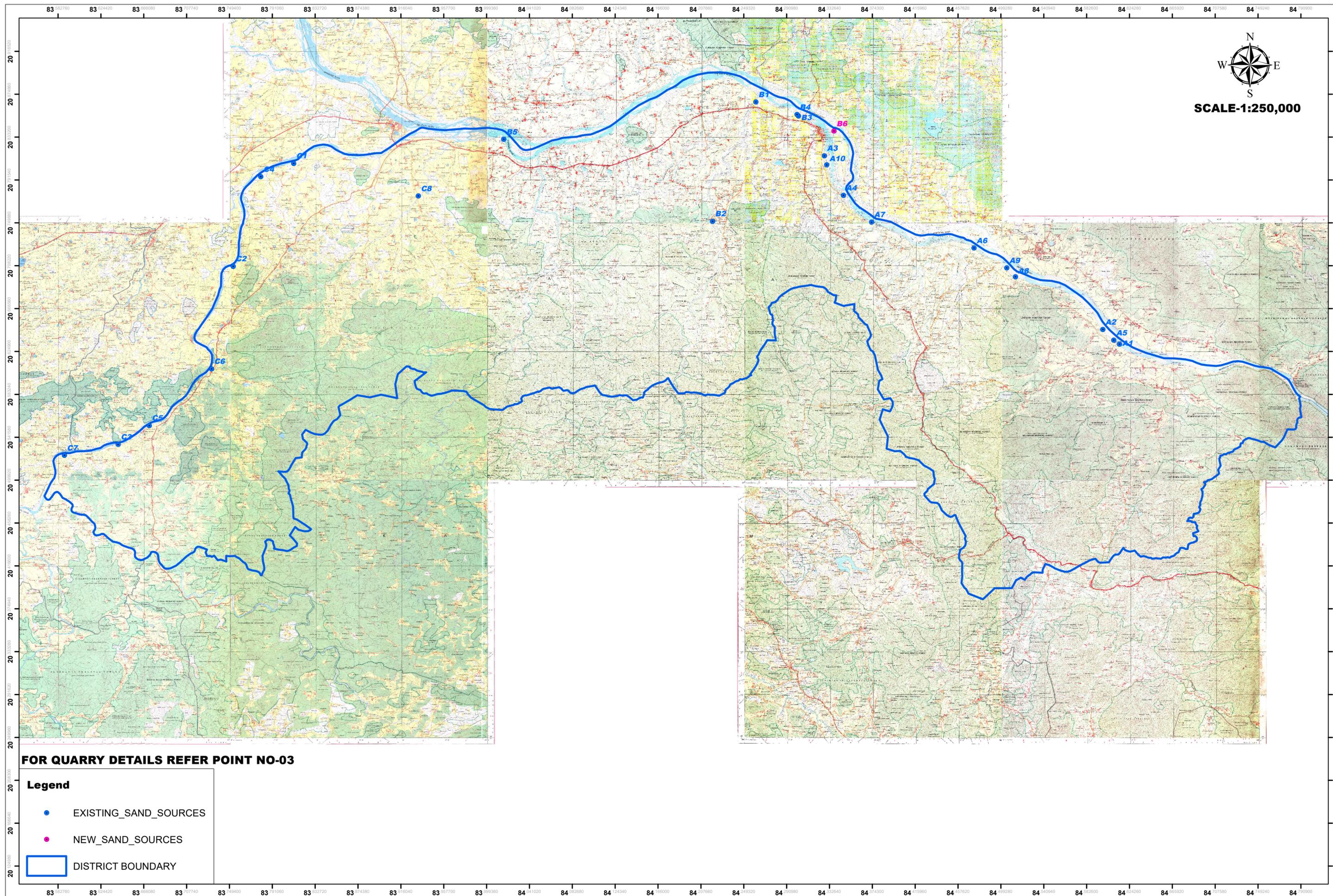
## Final Transportation Routes for individual leases and leases in Cluster

Lease No.	Transportation Route No.	Number 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)	Recommend/Mouzaion for road (Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & LocMouzaion
A1	SH-23	1	2	6.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Harabhanga,SH-23-6.2
A2	SH-23	1		8.7	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Surundi,SH-23-8.7
A3	NH-57	1	2	2.75	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Kaleswar,NH-57-2.75
A4	NH-57	1		4.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Krushnamohanpur,NH-57-4.2
A5	SH-23	1	1	9.1	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- DianghMouza,SH-23-9.1
A6	NH-57	1	5	17.8	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Uanla, NH-57-17.8
A7	NH-57	1		4.8	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Karadi
A8	NH-57	1		15.3	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Kharasankuloi
A9	NH-57	1		14.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Saakusinga
A10	NH-57	1		4.5	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Badabankapada
B1	NH-57	1	6	3.5	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Marjadpur,NH-57-3.5
B2	NH-57	1		15.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:- Paljhar,NH-57-15.2
B3	NH-57	1		0.95	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.95
B4	NH-57	1		0.79	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.79
B5	NH-57	1		2.07	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Amurda,NH-57-2.07
B6	NH-57	1		6.16	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Marjadpur,NH-57-6.16
C1	SH-41	1	8	10.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Kirta,SH-41-10.2
C2	SH-41	1		6.1	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-GambhariPadara,SH-41-6.1
C3	SH-41	1		5.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Chapara,SH-41-5.2
C4	SH-41	1		8.5	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Lokapada,SH-41-8.5
C5	SH-41	1		1.2	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Ghantapada,SH-41-1.2
C6	SH-41	1		1.6	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Malikuda,SH-41-1.6

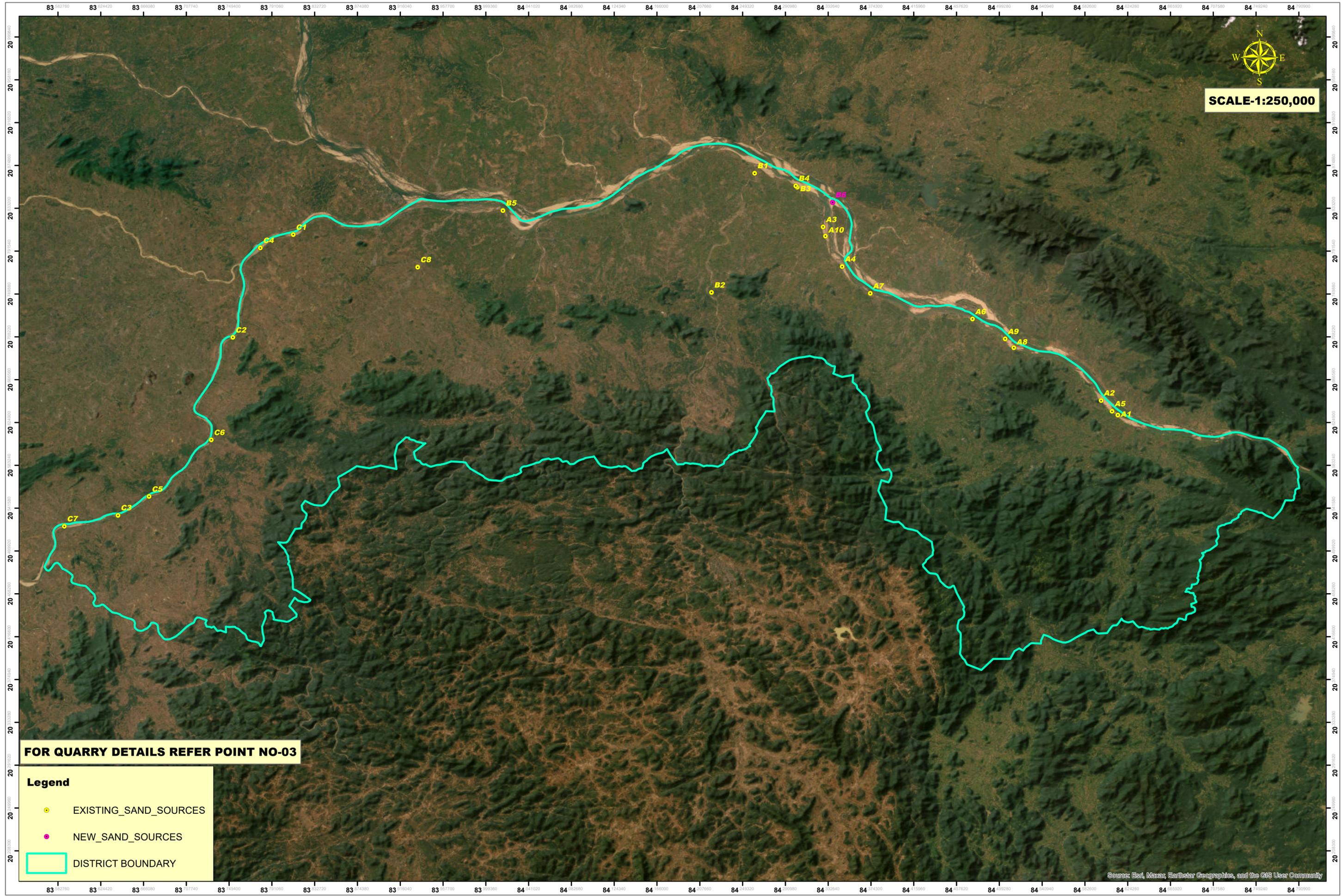
C7	SH-41	1		12.54	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Fassed,SH-41-12.54
C8	SH-41	1		6.16	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Bukuramunda,SH-41-6.16

Cluster No.	Transportation Route No.	Number of tippers/day of cluster	Number of tippers/day of all the cluster 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	NH-57	1	2	0.95	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.95
	NH-57	1		0.79	BLACK TOPPED	BLACK TOPPED	Govt	Mouza:-Tutursinga,NH-57-0.79

# 18. MINING LEASES (SAND) MARKED ON THE DISTRICT TOP-MAP OF BOUDH



# MINING LEASES (SAND) MARKED ON THE DISTRICT SATELLITE-MAP OF BOUDH



SCALE-1:250,000

FOR QUARRY DETAILS REFER POINT NO-03

**Legend**

- EXISTING\_SAND\_SOURCES
- NEW\_SAND\_SOURCES
- DISTRICT BOUNDARY