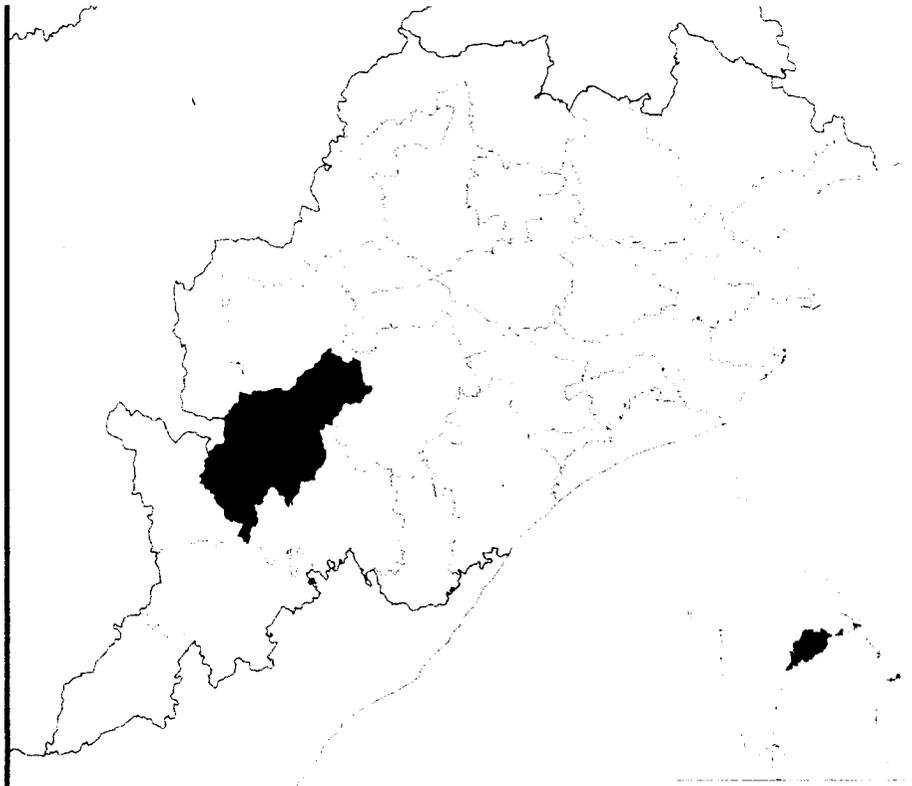




**DISTRICT SURVEY REPORT (DSR)
OF
KALAHANDI DISTRICT, ODISHA
FOR
RIVER SAND**

(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 KALAHANDI**

CONTENT

CH. NO.	DESCRIPTION	PAGE NO.
	Preamble	
1	Introduction	
	1.1 Location and Geographical Area	7
	1.2 Administrative Units	8
	1.3 Connectivity facilities	9
2	General Profile of the District	
	2.1 Demography	13
	2.2 Climate	13
3	Land Utilization Pattern in the District	
	3.1 Forest and non-forest land.	14
	3.2 Agricultural land.	16
	3.3 Horticultural land.	17
4	Physiography of the District	18
5	Drainage of Irrigation Pattern	
	5.1 River System	21
	5.2 Rainfall Of The District And Climate Condition	22
	5.2.1 Month wise Rainfall	22
6	Geology and Mineral Wealth	
	6.1 Regional Geology	23
	6.2 Geomorphology	26
	6.3 Stratigraphy.	27
	6.4 Mineral Resources.	28
	6.5 Soil	28
7	Overview of Mining Activity of the District	30
8	The list of Mining Leases in the District with location, area and period of validity.	
	8.1 List of Mines in operation in the District	32
	8.2 List of Mines not in operation in the District	32
9	Detail of Royalty or Revenue received in last 3 years	32
10	Detail of production of Sand or Bajor minor mineral in last 3 years.	33
11	District wise details of river or stream and other sand sources.	
	11.1 Drainage system with description in the District	33
	11.2 Salient features of important rivers and streams	35
12	District wise availability of sand and gravels or aggregate resources.	
	12.1 Mineral potential	36
	12.1 Annual Deposition	37
13	Process of Deposition of Sediments in the rivers of the District.	37
14	Conclusion	38
15	List of Annexure as per EMGSM-2020	
	15.1 ANNEXURE-I (Details of Sand/M-sand Sources)	Same as Annx-A

River Sand Mining**DSR of Kalahandi District**

	15.2	ANNEXURE-II [List of potential Mining Leases (existing & proposed)]	
	15.3	ANNEXURE-III (Cluster & Contiguous Cluster details)	
	15.4	ANNEXURE-IV(Transportation Routes for individual leases and leases inCluster)	
16	Annexure as per MoEF& CC, Govt. of India Guideline dt. 25.07.2018 & additional information there to.		
	16.1	ANNEXURE-A (List of Mines in operation & not in operation in the District)	

PREAMBLE

Odisha is one of the Major Mineral rich State in India. Archaeological evidence of stone Age and Iron Age human settlement has been recovered from the region. Asurgarh offered an advanced, well civilised, cultured and urban human settlement about 2000 years ago in the region. In South Asia it is believed that the lands of Kalahandi district and Koraput district were the ancient places where people started cultivation of paddy. In ancient time it was known as *Mahakantara* (meaning great forest) and *KarundaMandal*, which means treasure of precious stones like karandam (corundum/manik), garnet (red stone), beruz, neelam (sapphire/blue stone), and alexandrite, etc. MaaManikeswari (the goddess of Manikya or Karandam) is the clan deity of Kalahandi may also signify its historical name.

It was a princely state in British India and in post-independence period it merged with Odisha state in India as Kalahandi district comprising current Kalahandi district and Nuapada district. In 1967, Kashipur block from Kalahandi district was transferred to Rayagada district for administrative reasons. Despite its backwardness it is one of the rich regions in history, agriculture, forest resources, gemstone, bauxite, folk dance, folk music, folklore, handicrafts and arts. In 1993, Nuapada sub-division was carved out as a separate district, but Kalahandi (Lok Sabha constituency) continues to constitute present Kalahandi district and Nuapada district together.

The archaeological record of the Tel Valley reveals the presence of the primates in its zones during the Pleistocenephase. Paleolithic is being documented in Kalahandi, like Moter river basin in Dharamgarh region. One of the largest size axe of late Stone Age culture has been recovered from Kalahandi. Tel river civilisation put light towards a great civilisation existing in Kalahandi in the past that is recently getting explored. The discovered archaeological wealth of Tel Valley suggest a well civilised, urbanised, cultured people inhabited on this land mass around 2000 years ago and Asurgarh was its capital. Kalahandi along with Koraput and Bastar was part of Kantara referred in Ramayana and Mahabharata.

In pursuance of MoEF& CC Notification S.O. 141(E) dated 15th Jan. 2016, District Environment Impact Assessment Authority (DEIAA) & 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, Morrum, & 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.

MoEF & CC in consultation with State Government has prepared Guidelines on Sustainable Sand Mining & Minor minerals other than sand mining in 2016, detailing the provisions on Environmental Clearance for cluster. Creation of District Environmental Impact Assessment Authority (DEIAA) & proper monitoring of Minor Minerals. Mining, using Information Technology to track the mineral out material from source to destination.

DEAC will scrutinize and recommend the prior environmental clearance of mining of minor mineral to DEIAA on basis of District Survey Report. This will model and guiding document which is a compendium of available mineral resources, geographical setup, Environmental and Ecological set up of the District and replenishment of minerals and is based on data of various departments, published reports, Journal and websites.

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 SEAI. 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, Kalahandi 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

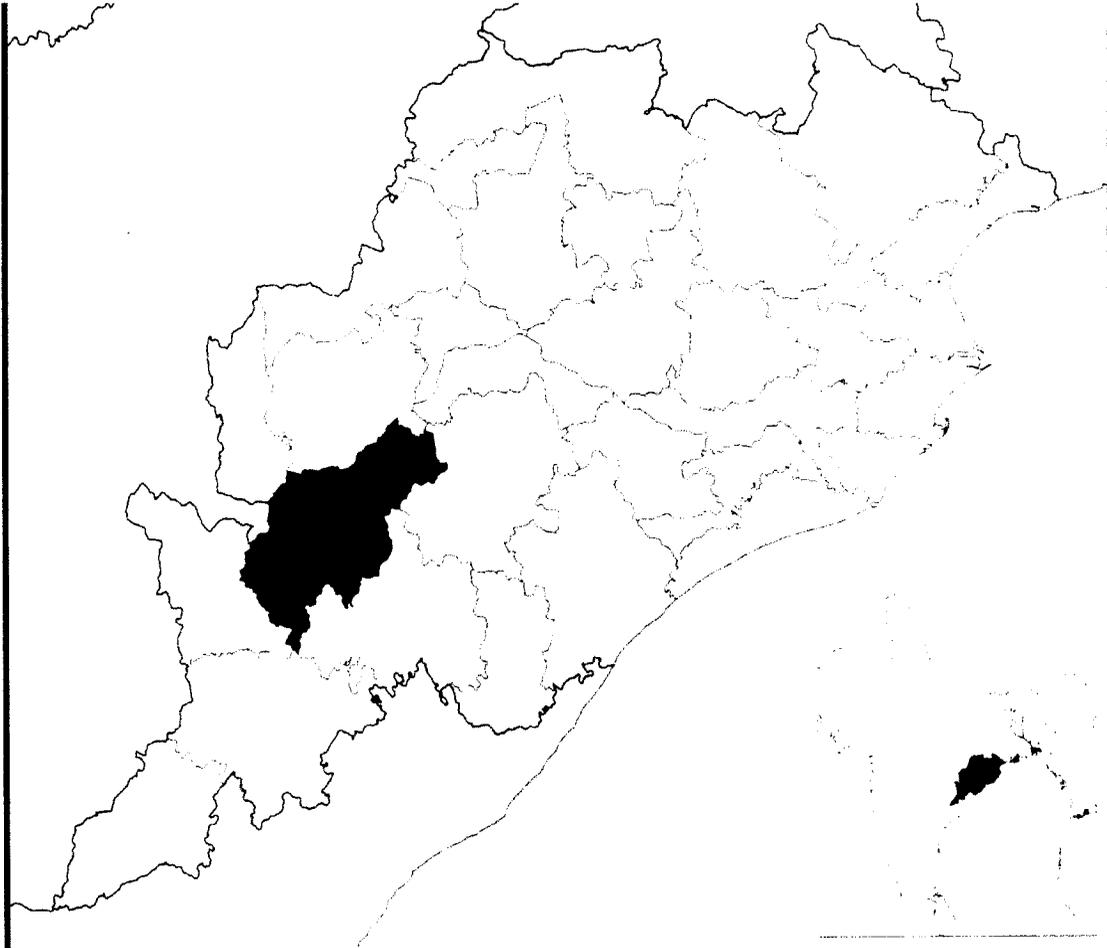
Kalahandi at a Glance:

1.1 Location and Geographical Area:

Kalahandi District, The first gazetteer (15 August 1980) of Kalahandi District says that the district comprised of the ex-State Kalahandi minus Kashipur Police Station (the Zamizari of Khariar as Nuapada Sub-division, now Nuapada District). With the merger of princely States with province of Odisha 1948, the ex-State of Kalahandi together with ex-State Patna and Sonepur formed the District of Kalahandi with headquarters at Balangir. On 1st November 1949 Patna and Sonepur areas were separated to form District Balangir; Patna (later Bolangir) Sonepur (later Subarnapur district). And ex-State of Kalahandi, together with Nuapada sub-division which formed a part of Sambalpur district since 1st April 1936, was reconstituted a separate District Kalahandi with Headquarters at Bhawanipatna. As the area comprising Kashipur Police station posed administrative difficulties due to lack of direct communications with the district headquarters, it was separated from Kalahandi on 1st August 1962. Further Nuapada Subdivision was separated on 27 March 1993 from Kalahandi to form new District as Nuapada.

Kalahandi lies in between 19.3 N and 21.5 N latitudes and 82.20 E and 83.47 E longitudes and occupies the south western portion of Odisha, bordered to the north by the Balangir district and Nuapada district, to the south by the Nabarangpur district, Koraput district and Rayagada district, and to the east by the Rayagada district, Kandhamal district and Boudh district. It has an area of 8,364.89 square kilometres and ranks 7th in area among the 30 districts of Odisha. The district headquarters is at Bhawanipatna which stands almost in the central location of the district. Bhawanipatna and Dharamgarh are two sub-divisions of Kalahandi. Junagarh, Jaipatna, Kesinga, Lanjigarh and Mukhiguda are other major towns in Kalahandi. **Te** is the main river of Kalahandi. Other notably rivers are ***Indravati, Udanti, Hati, Utei, Sagada, Rahul, Nagabali, Mudra***, etc. The topography of Kalahandi consists of plain land, hills & mountains. Kalahandi is surrounded by hills. Its border with Nabarangpur, Koraput, Rayagada and Kandhamal districts are hilly and mountainous. The district is primarily agricultural, with over one

third of the district area covered with dense jungle forest. Industry is very limited, but bauxite and graphite deposits can be commercially exploited.

**1.2 Administrative Units:-**

Bhawanipatna is the administrative headquarter of Kalahandi District. It is located at a distance of 400 km from Bhubaneswar, state capital of Odisha. It has 2253 villages covering 13 Blocks, 13 Tahasils and 2 Sub-Divisions. The District is divided into 2 sub-Divisions. The District is divided into 2 Sub-Divisions namely (1) Bhawanipatna, (2) Dharmagarh and into 13 Blocks & Tahasils, namely (i) Kalahand (ii) Kesinga (iii) Karlamunda (iv) M. Rampur (v) Narla (vi) Th. Rampur (vii) Lanjigarh (viii) Jaipatna, (ix) Junagarh, (x) Koksara, (xi) Golamunda, (xii) Kalampur and (xiii) Dharmagarh. The population of the District is 15,76,869 according to the 2011 Census. The District is about 1.45% of State's population. The density of population of the District is 169 per square km as against 269

per square km of the state. As per 2011 census, the population of Scheduled Caste is (18.17%), and Scheduled Tribe is (28.50%). The literacy percentage of the District covers 59.22% against 75.15 of the state.

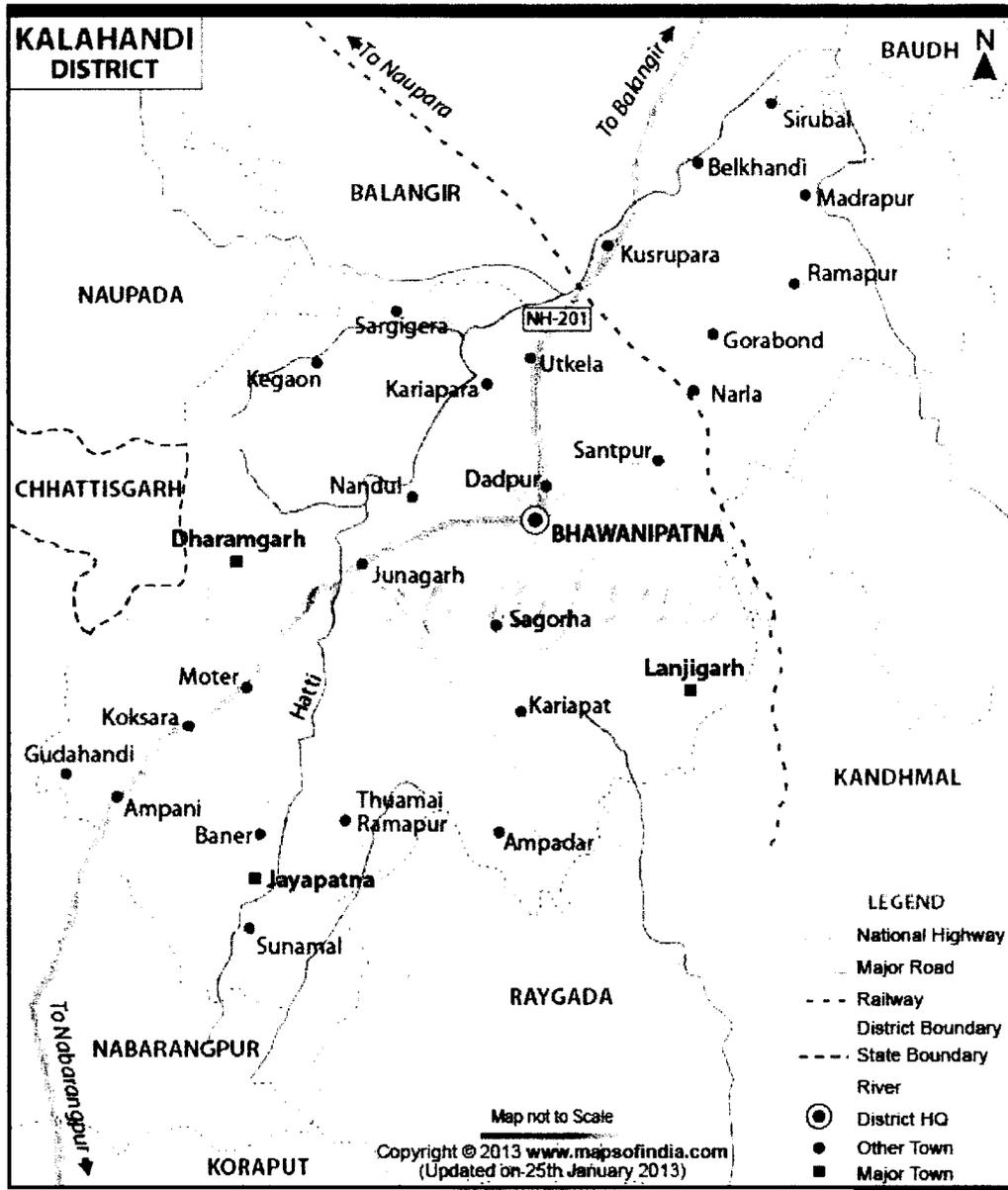


1.3 Connectivity facilities:-

Road Network

The District is well served by a network of good roads. Kalahandi situated at a distance about 400Km from the state capital & international airport Bhubaneswar and at a distance about 500 Km from the shore line of Bay of Bengal. Highways like NH-26, SH-16, SH-06, SH-06A, SH-44 etc. passes within the district. Kalahandi is 230.3Kms from Sambalpur, 260.8Kms from Raipur, 409.9Kms from Cuttack, 396.7Kms from

Bhubaneswar and 850.0 m from Bhawanipatna. It is also connected with other cities such as Sambalpur, Puri, Bolangir, Nayagarh, Boudh, and other district and state via Odisha State Road Transport Corporation and some private transport services.



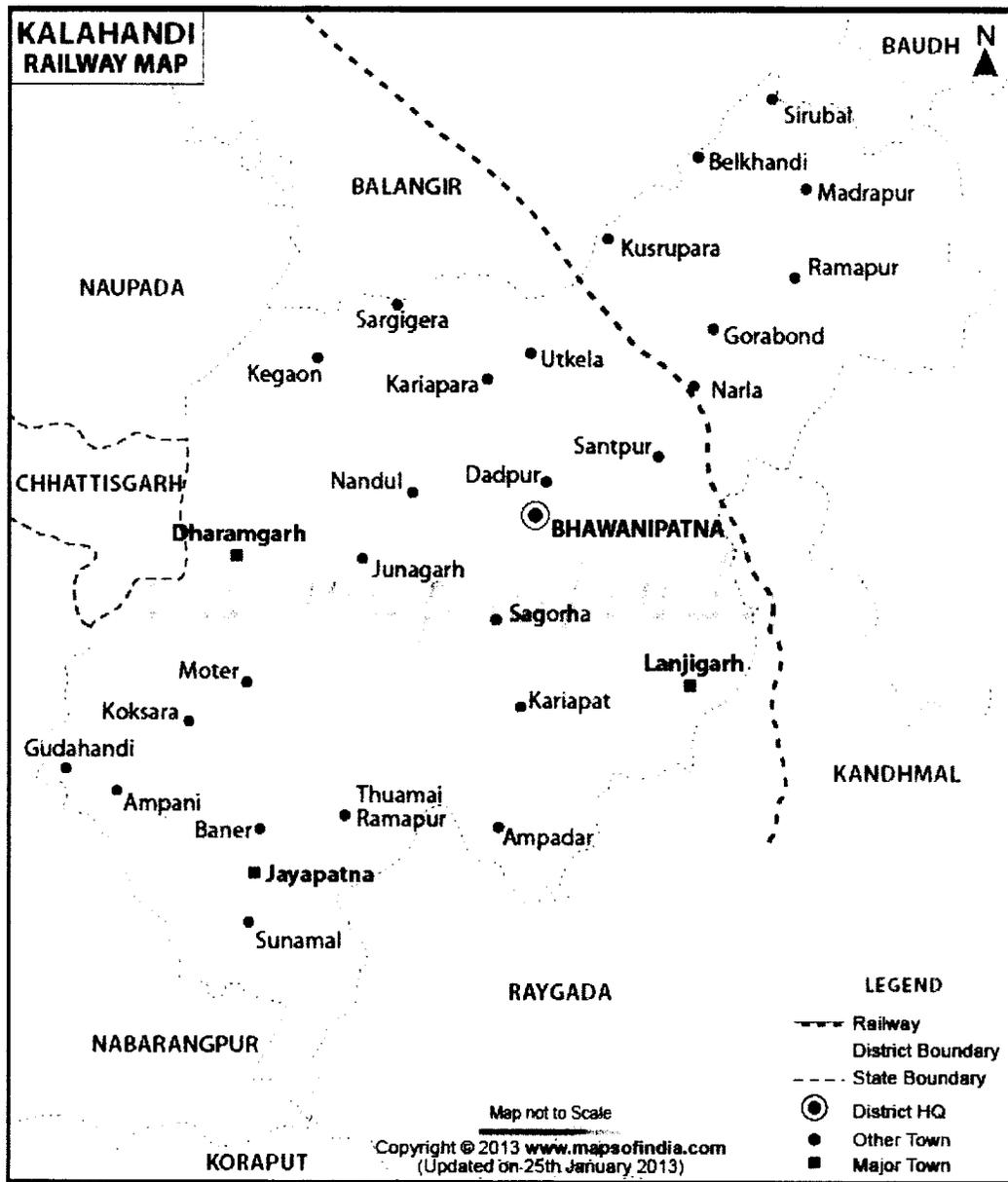
Rail Network

Kalahandi District is well connected by Rail link to different places, Kalahandi has 10 Railway Stations (Kesinga, Lanjigarh Road, Rupra Road, Norla Road, Bhawanipatna, Junagarh Road, Deypur, G Ramchandrapur, Kandel Road, Kutrukhamar Road are

River Sand Mining

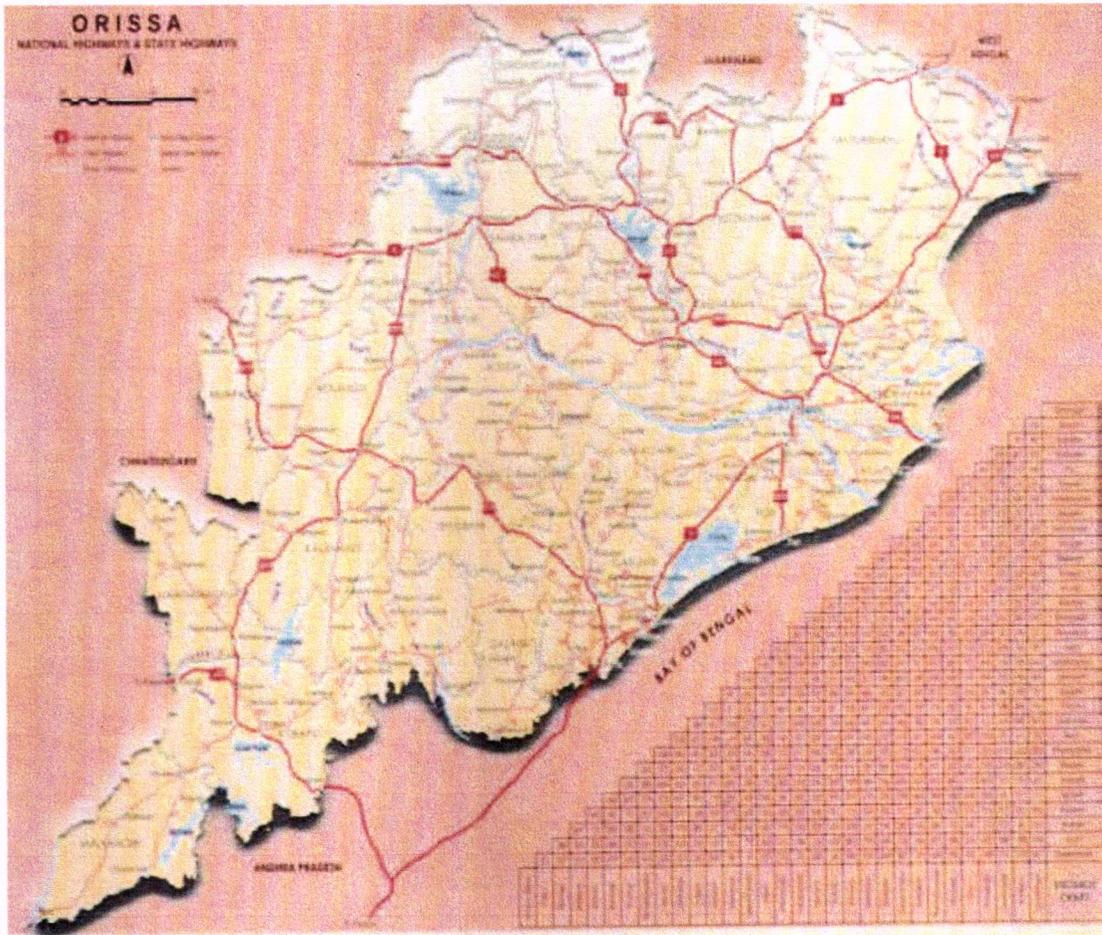
DSR of Kalahandi District

important stations on the East Coast Eastern Railway. The distance to Bhubaneswar is approximately 400.3 km, while the distance to Sambalpur is about 270 km; the city of Kalahandi is well connected to many places in Odisha like Balangir, Titlagarh, Khurda, Bhubaneswar, Angul, Hirakud, Barpali, Brahmapur and Balugaon. It also connects different states of India



Air Network

At present, Kalahandi has new connection by Airway. The site selection for aerodrome development is presently under process. Nearest International airport is Biju Patnaik International Airport, Bhubaneswar, 398Kms from Kalahandi. Utkela Airport is a domestic airport owned by the Government of Odisha located in Kalahandi District, It is situated 15km north of Bhawanipatna.



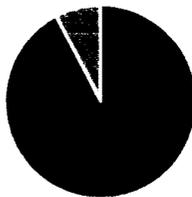
2.0 GENERAL PROFILE OF THE DISTRICT:**2.1 Demography:**

Census - 2011	
Geographical Area	2337 Sq. Km.
Total population	1576869
Male Population	787101
Female Population	789768
Male Literacy	60.37%
Female Literacy	39.63%
SC Male	142133
SC Female	144447
ST Male	221171
ST Female	228285
Other Male	423797
Other Female	417036
Illiterate Male	302924
Illiterate Female	471909

RuralUrbanKalahandi

Urbanization(C 2011)	
Rural	1454882
urban	121987

Rural Urban Kalahandi



■ Urbanization(C 2011) ■ Rural * urban

2.2 Climate

The south-west monsoon contributes about 80 to 85% of the total rainfall of the district. The climate of the district is sub-tropical with hot and dry summer and pleasant winter. The summer season, which is very hot and dry, extends from March to the middle of June. It is followed by the monsoon season from June to September. The air is relatively humid during the middle of June, whereas it is mostly dry during the non-monsoon

period. The winter season extends from November till the end of February, and it is pleasant. Humidity is high during middle of June and it's less in post-monsoon period. The average relative humidity in the district varies from 27% to 80% throughout the year. The mean monthly potential evapo-transpiration 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 3.0 km/hr.

The climate of the Kalahandi District is of extreme type. It is dry except during monsoon. The maximum temperature of the District is 45+ degree Celsius, whereas the minimum temperature recorded as 4°C.

Temperature Graph- Kalahandi

May being the hottest with the mean daily maximum temperature of 45° C while December, January is the coldest month of the year when the temperature drops down to 6°C.

3.0 LAND UTILIZATION PATTERN IN THE DISTRICT

3.1 Forest and non-forest land

The important forest produce of Kalahandi are timber , fuel wood and bamboo while others include Kendu leaves, Charcoal, bramgrass, Mahua flowers and seeds etc.

The forest of Kalahandi 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 overdone, 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 southernmost 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 border. 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.

District-wise Forest Cover Area in Odisha (Area in Km²)

2019 Assessment								
District	Geographical Area Km ²	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
Kalahandi	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

River Sand Mining**DSR of Kalahandi District**

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
Kalahandi	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 2019-Odisha)

3.2 Agriculture Land:

The primary objective of Agriculture Department is to increase the production as well as productivity of major crops like Paddy, Greengram, Arhar, Cotton, Blackgram & vegetables which is widely covered in this District in both Kharif & Rabi season. Another key objective is the 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 Kalahandi District. It is therefore also 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:

Table: Crop Coverage Area of Kalahandi District, Odisha

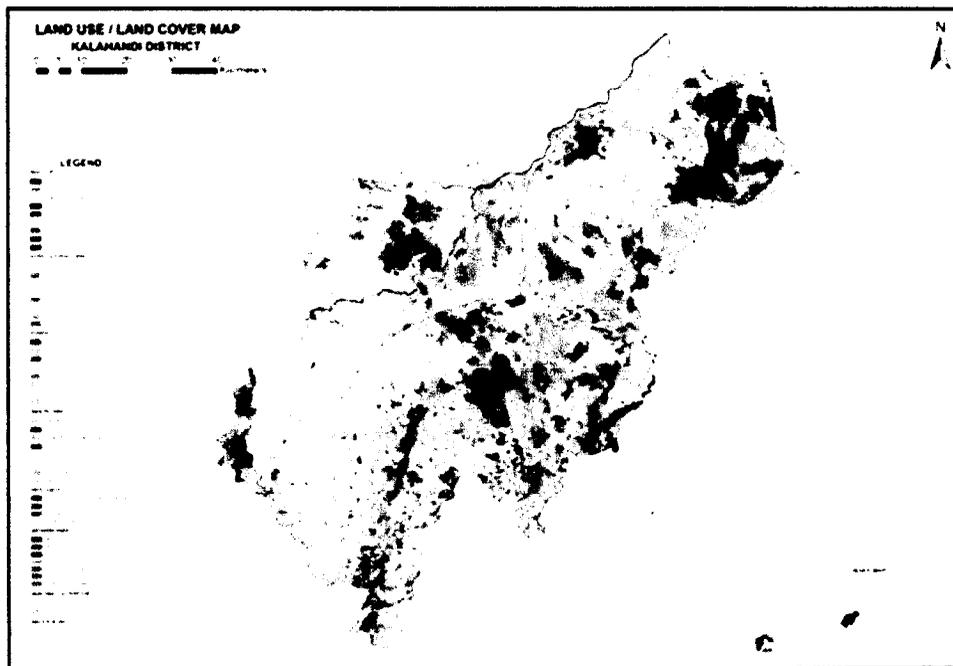
Major field crops cultivated	Area('000ha)							
	Kharif			Rabi			Summer	Grand total
	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total		
Paddy	161097	43361	204.458	61.95	-	61.950	39.42	305.828
Green gram	-	6514	6.514	1.353	71.832	73.185	-	79.699
Black gram	800	19741	20.541	0.238	3.972	4.210	-	24.751
Cotton	-	60988	60.988	-	-	-	-	60.988
Arhar	-	20322	20.322	-	-	-	-	20.322

3.3 Horticulture Land:

The primary objective of Horticulture Department is increase of production as well as productivity of major fruits like Mango, Banana, Guava, Chilli, Onion 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. The horticulture statistics for the District is shown in subsequent tables below:

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, Kalahandi. Orissa Agric.



4.0 PHYSIOGRAPHY OF THE DISTRICT:

Physiography:

The district Kalahandi is situated at the south western part of Odisha constituting part of Western Ghat Mobile Belt normally a rugged hilly terrain. The district covers a number of new series Topo Sheets i.e. F44W16, E44E9, E44E70, E44EI 1, E44E13, E44E14, E44E15, E44E16, F44X3, F44X4, F44X7, F44X8, 1, F44X16, E44FI, E44F2, E44F3, E44F5 & E44F6.

Kalahandi district is physiologically a complex terrain having numerous numbers of hills, moulds, plane lands, river beds, agricultural lands, forest growth areas etc. In the southernmost part of the district there is Indravati Reservoir catchment area which is also shared by Nawarangpur district. Adjacent to reservoir catchment area hilly terrain present which have an elevation range from mean sea level about 700m to 1000m. Hills and mounts are more common in the south to Bhawanipatna where as in the north part is the less hills compared to southern part possesses an elevation range between 250m to 800m from MSL. As the district is a part of Eastern Ghat Mobile Belt so the rocktypes are mostly homogeneous in nature, so the drainage pattern developed in the region is dendritic pattern. The main drainage trend flows from the south-west to north-east direction within the district. There are several seasonal nala / dry nala & a

few perineal natural drainage exists within the district. Main river that touches the district is Tel River, in addition to that a few other small rivers present within the district namely Hati Nadi, Udanti Nadi, Sagada Nadi, Kamal Nadi, Ret Nadi, Uttei Nadi etc.

The main township that is developed in the district is Bhawanipatna also is the district head quarter, which is present in the central part of the district and connect to all parts of the district through road ways.

There are a number of reserve forests present within the district a few major RF are namely Benakhamar RE, Udaygiri RE, Singari RE, Gopalpur RE, Indravati RE, Phatadhara RE, Machul RE, Hatisal RE, Kiding RF, Bazargarh RE, Benagurha RE, Uraldani RE, Taprang RE, Telan RE, Satami RE, Sulia Block Affect. In addition to the reserve forests there is a wild life sanctuary present in the district namely Karlapat Wild life sanctuary.

According to the physiography, the district can be classified into two distinct regions, viz. the plain lands and the hilly tracts. The plain lands region runs southward up to Bhawanipatna and then westward through Junagarh and Dharamgarh district and then further up to the boundary of the district, covering about 59% of the total district area. South-western part of Bhawanipatna subdivision is mostly covered by hilly tracts, and some of the hilly tracts are covered with dense forest.

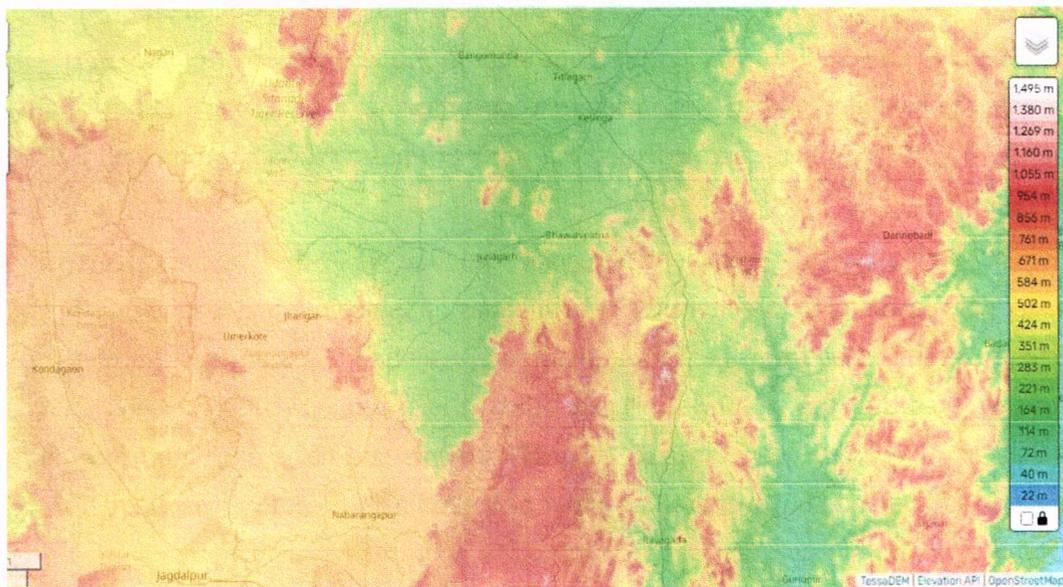
Eastern and south-eastern areas from, Bhawanipatna are hilly tribal areas known locally as 'dongerla'. Chains and clusters of hills rise towards the southern higher plateau which continues into Koraput district forming part of the eastern ghats. Tel and its tributaries Hati, Sunder and Udanti rivers from a wide fertile valley attaining a height of 200 meters (654') on the western side.

The dongerla in Madanpur - Rampur range cluster closer to the north-east form the slow rising plateau attaining 300 - 500 meters height which ultimately merge with the Balliguda plateau in the north-east. Maximum altitude in this region is between 800 - 900 meters. Flat hi 11 tops known as mali are the characteristic of this region which rise above the general level of the valleys. The highest point in Kalahandi is 1298 meters (4259') on the Niyamgiri hills.

Richly cultivable and fertile plains known as Pahilpur region lie to the west of Junagarh which covers nearly 1200 km² (403.32 mile²) of area stretching all the way to the district limits in the South-west. Hill ranges of Ghana, Pariagarh and Parigaon Separate these plains from the northern plains. The hill ranges in Sahajkhol block are extension of the Koraput plateau.

The plains between Tel and Sagarda rivers in the south Nawapara sub-division in the west, Bolangir district in the north and the dongerla in the east spread over Borda, Bhawanipatna, Kesinga and Madanpur-Rampur ranges upto Parkel which is the lowest point in the Kalahandi forest division (152 mtr. 499'). This area has scattered clusters' of hills and is slightly less fertile than the pahilpur region mentioned in the preceding para .

The area of Khariar forest division is characterised by a series of long hill ranges running approximtely from north to south. In the West, the long impeneterable wall is formed by the hill ranges of Gatibeda, Patdarha along with those of Koilakhola. Parallel to this run the hill ranges of Patidongar which meet the Gurudonger block and the Nimna-Adpita hills and finally the outer hill ranges ofKailakhola, intercepted by the Udantiriver. This constitutes the second longest high hill range in the western part of the division. A third series of hill range is formed by Chhata and Bajini hills and is joined by Pippalpani and Kumudi hill ranges ending near Bahebir, intercepted by Ollar Jor in the southern outskirts. The fourth series of hill range is formed by Narayan dongri, Kendumunda and Nageshpahad and is perpendicular to the already described hill ranges. Thereafter, the Choura hills form the fifth series of hill ranges in association with the Khasbahal, Bundiam, Bijli, Budharya, Dharmasagar and Tandel hills. There are many prominent hills on the western boundary with height ranging from 109 meters to 815 meters. Besides, there are scattered hills and hill ranges throught the division.



5.0 DRAINAGE OF IRRIGATION PATTERN OF THE DISTRICT:

5.1 River System

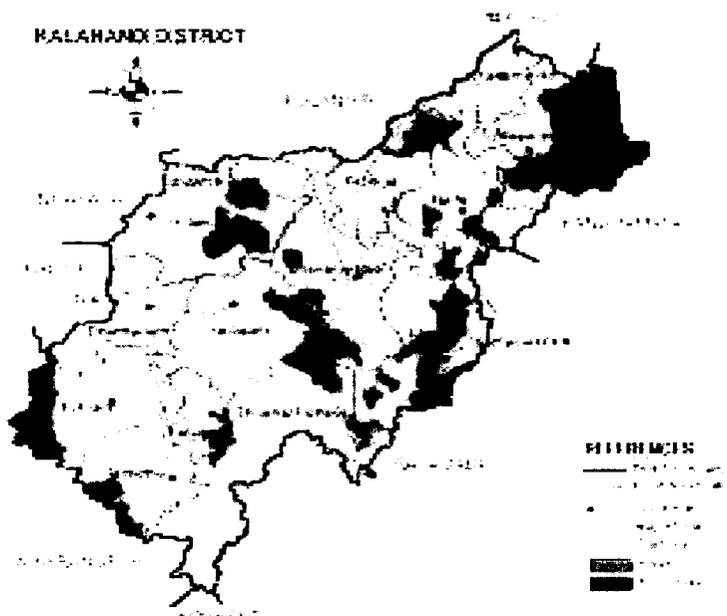
The most, important river system, in this district is of Tel and its tributaries. Large number of small rivers and streams originating from hills in South east portion of Kalahandi and drain in to river Tel. After flowing along the border of Kalahandi with Bolangir district it separate Bolangir and Phulbani districts along the north western boundary of Phulbani districts and meets Mahanadi river near Sonapur.

The Indravati originates in the north of Thuamula Rampur and flows towards the south with practically no tributary during its course in Kalahandi. Finally it flows towards west to descend to the plains in Nowarangpur sub-division of Koraput district It eventually joins the Godawari.

Khariar region has three main perennial rivers namely Jonk, Indra and Sunder and Udanti. Jonk originating from the north-western out-skirts of Patdarha block descends to the plains or the foot hill of Manikgarh block and finally flows into Mahanadi river. Indra originates from Kukar region of Madhya Pradesh and enters Patdarha forest block where it is joined by two prominent streams from the north and south and proceeds eastwards in straight course. Further, it is joined by two perennial hill streams from north and the south called Khalijharia and Durajhor respectively.

River Sunder originates between Patidongar and Tanwatghati blocks and flows to east by the side of Lat - Kanpuda and meets the river Indra at Dargaon after a straight southernly course - The river enters from Madhya Pradesh flowing from west to east, enters the Kalahandi forest division where it joins river Tel near Borda. Substantial areas in the north - west and east and southern parts of Patdarha block are drained by river Indra.

Ong is another prominent perennial river flowing in the Padampur plains in a westernly course upto the inter district boundaries of Sambalpur and Bolangir districts. It meets several nalas from the Tanwatghati and Analjuba hills, then flows to north east and reaches the foot of Arhwal hill, encircling it in a semi- circular way and finally it meets the Mahanadi near Sonapur. Many hill streams and nalas originate from the hill ranges around and flow over the Padampur plains to finally meet the river Ong.



5.2 RAINFALL OF THE DISTRICT AND CLIMATE CONDITION:

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.

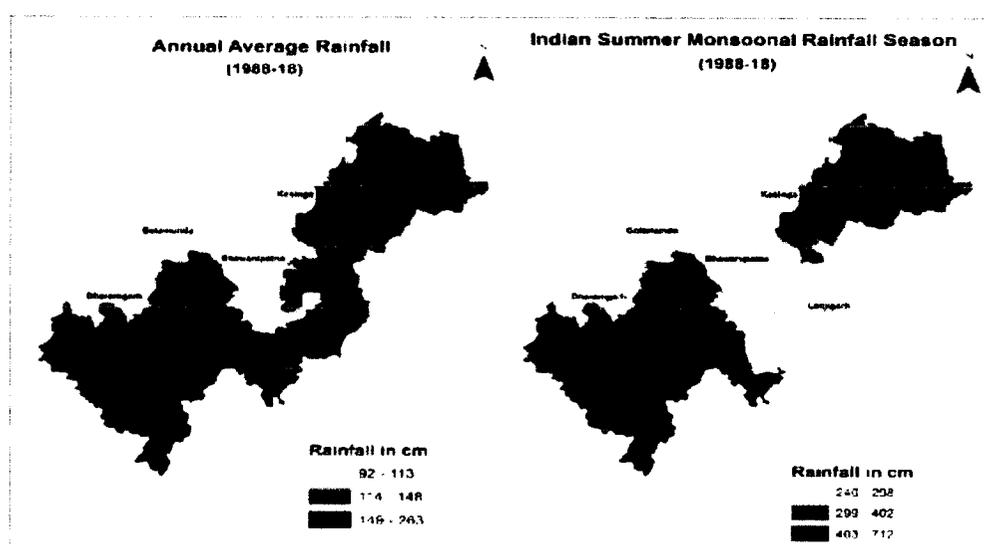
5.2.1 Month wise rainfall:

The driest month is November, with very less amount of rain. There is on average 15.56 mm of precipitation in January. In July, the precipitation reaches its peak, with an average of 255.01 mm.

Year		2021	2022	2023	Average
Sl.No.	Month	(mm)	(mm)	(mm)	(mm)
1	Jan	0.00	60.24	0.00	60.24
2	Feb	4.23	0.00	0.00	4.23
3	Mar	0.00	0.00	40.35	40.35
4	Apr	9.1	3.22	75.21	87.53
5	May	59.02	42.96	33.86	135.84
6	Jun	158.96	145.89	80.45	385.3
7	Jul	296.32	411.22	338.7	1046.24
8	Aug	201.33	643.61	290.34	1135.28

9	Sep	262.38	171.33	444.07	877.78
10	Oct	21.84	76.57	403.28	501.69
11	Nov	32.88	0.00	27.86	60.74
12	Dec	6.76	0.00	6.18	12.94
Total		1052.82	1555.04	1740.3	4348.16

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.



6.0 GEOLOGY AND MINERAL WEALTH OF THE DISTRICT:

6.1 Regional Geology:

The tract is geologically made up of non-fossiliferous rocks, mainly crystalline schists with occasional caps of laterite (or bauxite) on the malis in the southern plateaus. Geological succession found in Kalahandi forest division is as follows in order of increasing antiquity:

Laterite, Cuddapah, Hornblende-schist, Charnokite, Garniteferous Gneissose Granite, Khondallite, Crystalline-complex.

The entire Pahilpur region is underlain by rocks of crystalline complex composed mainly of unseparated gneisses and schists usually garnitiferous. The chief rock is a pink, fairly felspathicbiotite gneiss with hornblende and frequently monoclinic pyroxene.

Khondallite named after a rock in the Khond tract is composed of quartz, graphite, sillimanite and small particles of red garnet in crushed ground mass. It is sedimentary in origin.

The Granitiferous gneisses and granities are found in the northward stretch of the plains lying between the western border and the eastern hills.

The rock type changes to Charnokite inter-spersed with Laterite in the south eastern slopes of the plateau. It tops the hills which again are formed of Khondalites, Charnokite and are generally coarse and crystalline, brownish black in colour and exhibit prophyriticfelspar and garnets. This rock yields heavy clay of calcarious nature unfavorable to vegetative growth. But it produces rich loamy soil in association with Khondallites and/or gneisses and granites.

Charnokite is found passing into Hornblende - schists on the border area of Pahilpur plains. It also weathers to basic day and in combination with Khondallite produces good forest soil.

The Cuddapah rocks are characterised by grey and chocolate colour slates and white and buff quartzites is found in the hills of Sahajkhol block. This rock system on disintegration, produces very poor heavy clay soil.

The rock types in Khariar area are granite gneiss calosilicate rocks, and highly metamorphosed and epidetised basement complex (peninsular gneiss and granite) consisting of rocks belonging to the Khandallite group and Charnokite group. The Khandallite group is composed of the garnet - sillimanite graphite schists and gneisses with inter banded quartzite, sillimanite quartzites, crystalline lime stones calciphyres and calgranulites. The Charnokites are hypertenegrane gneisses which have undergone considerable retrograde metamorphism. These rocks are intricately folded and refolded and at places sheared.

The Padampur area is composed of coarse grained garnetiferous granite gneiss and migmatic gneiss with members of Khondalite series namely Khondalite, calosilicate rocks and quartzites developed on the surrounding hills and mounds.

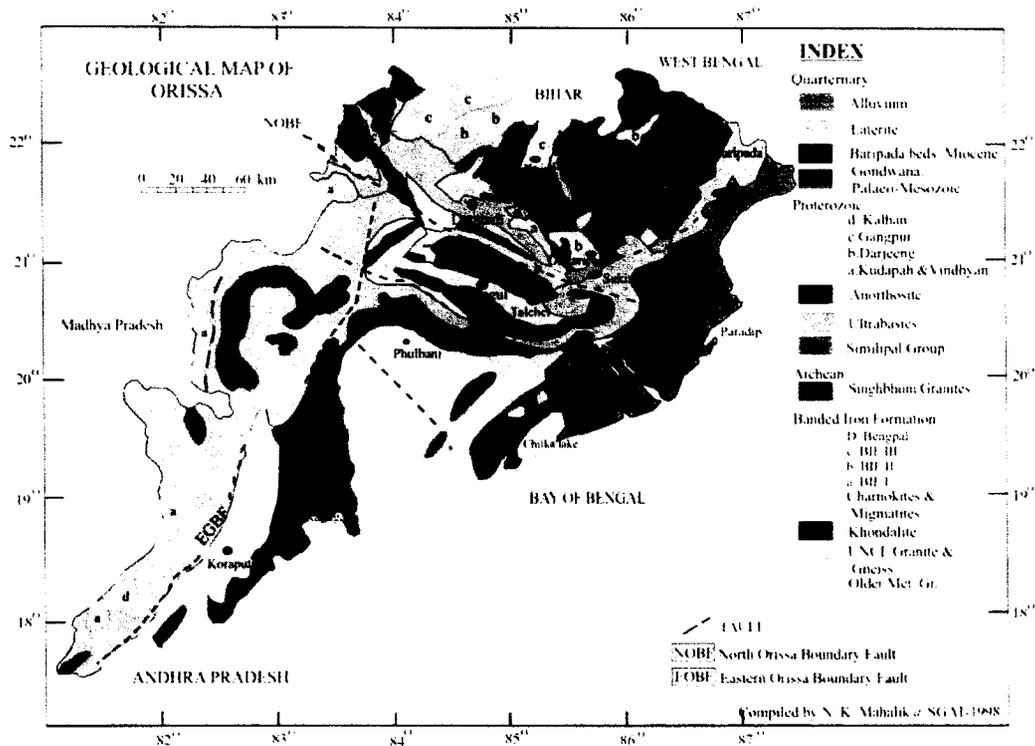
The coarse grained garnite gneiss is generally non-foliated and massive. The fine grained variation encountered in the drill cores is usually well foliated. Porphyritic granites is extensively developed and sheet like out crops are very common around

Padampur, especially along the Koldi and Kumar; nadis. Lenticular zones and banks of hornblende schists and amphibolites occur profusely within the zone of porphyrite granite

Kalahandi District is part of Eastern Ghat Super Group, the Eastern Ghats are a discontinuous range of mountains along India's eastern coast. The Eastern Ghats run from the northern Odisha through Andhra Pradesh to Tamil Nadu in the south passing some parts of Karnataka and in the Wayanad district of Kerala. They are eroded and cut through by four major rivers of peninsular India, viz. Godavari, Mahanadi, Krishna, and Kaveri.

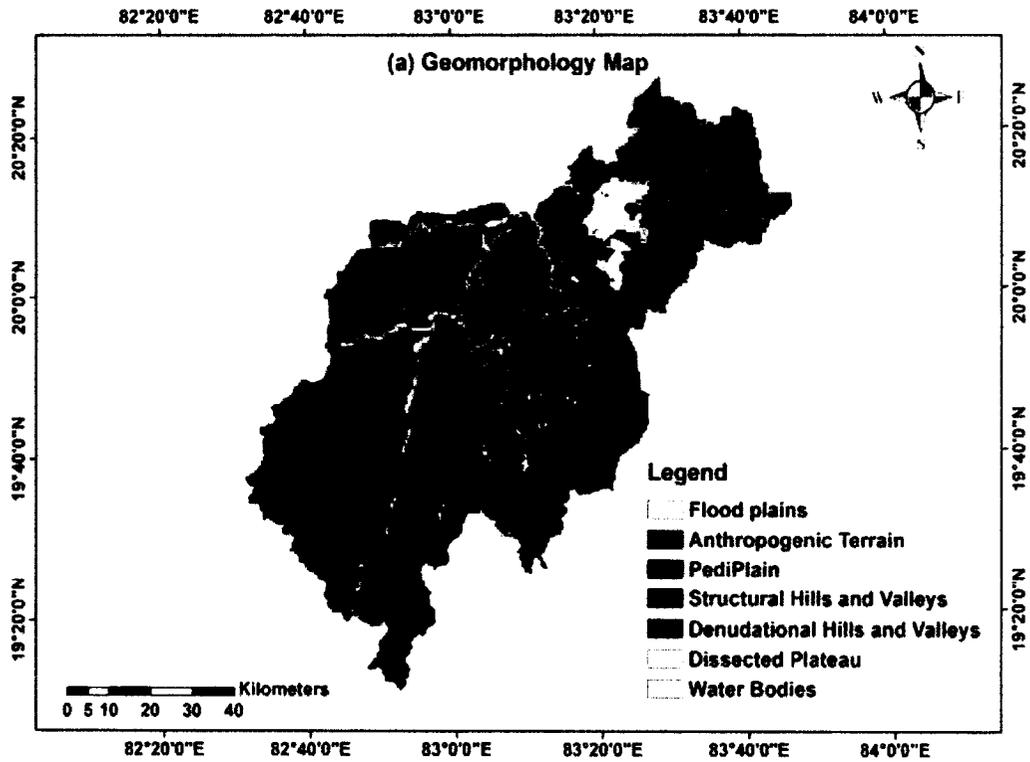
The mountain ranges run parallel to the Bay of Bengal. The Deccan Plateau lies to the west of the range, between the Eastern Ghats and Western Ghats. The coastal plains, including the Coromandel Coast region, lie between the Eastern Ghats and the Bay of Bengal. The Eastern Ghats are not as high as the Western Ghats. The Eastern Ghats are older than the Western Ghats, and have a complex geologic history related to the assembly and breakup of the ancient supercontinent of Rodinia and the assembly of the Gondwana supercontinent.

The Eastern Ghats on the east coast of India is a largely granulite terrain but also exposes granites, migmatites, anorthosites and alkaline rocks. This granulite belt has had a prolonged history of mountain building from late Archaean to late Proterozoic. During this long period the Eastern Ghats mobile belt witnessed repeated folding and possibly polycyclic metamorphism. Some recent findings suggest breaks between orogenic cycles and a proterozoic reworking of Archaean granulites. Extreme-temperature crustal metamorphism under fluid absent conditions and crustal anataxis in huge thickness of pelitic to psammitic protoliths producing leptynites are some of the important results of recent investigations of the Eastern Ghats mobile belt. Different generation of charnockites are present in the Eastern Ghats belt, but charnockitisation of granitic gneisses is yet to be documented. Some apparently nascent growths, the patchy charnockites in the Chilka area are shown to be relict of older charnockitic rocks that suffered granulite-facies metamorphism and attendant migmatitisation.



6.2 Geomorphology :

Physiographically the district comprises diverse landforms consisting of rugged hill ranges, plateaus, undulating plains dotted with residual hills and mounds and fertile erosional plains and valleys. A gently undulating terrain with a vast stretch of cultivable land characterizes the major parts west of Bhawanipatna in the district. The elevation of the hills located in the southeastern and southern parts ranges from 953 to 1229 m above mean sea level. In Arupani – Koksara – Junagarh tract the elevation of land surface varies from 220 m to 325 m above MSL. In Bhawanipatna – Utkela – Kesinga tract the elevation of land surface ranges from 186 m to 350 m above MSL. In the undulating plains the general topographic slope is towards northeast.



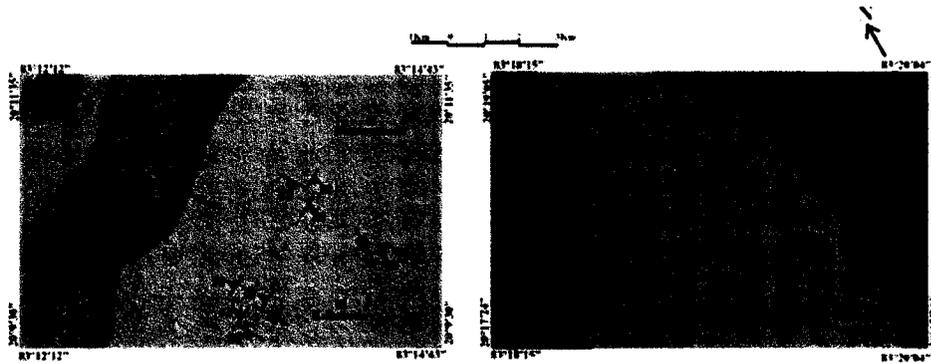
6.3 Stratigraphy:

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

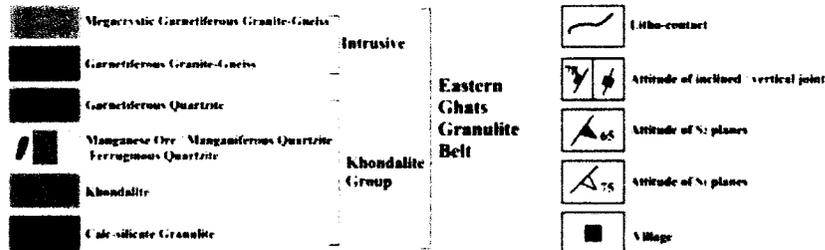
Age(Ma)	Event
550-650	Exhumation & Stabilisation(Pan-African)
800-850	Emplacement of Anorthosite Massifs, Some Alkaline Rocks(?) Younger Granitoids are Charnokites
950-1100	Main Eastern Ghat Orogeny(=Grenville)
	Garnet-Sillimanite-Graphite Gneiss(khondalite)with Khondalite minor cordierite-Saphrine-Spinel Gneiss(Mg-Al) Group Calc-silicates 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)



INDEX



6.4 Mineral Resources:

Some commercially exploitable minerals are found in hilly areas of Kalahandi district. Bauxite is found in Gandhmardan plateau area on the inter district border of Bolangir and Sambalpur districts, the estimate reserve of which is over 2 million tonnes. In addition to this, Graphite and manganese are also being quarried for a long time in the district. Mica is also present, but is not commercially exploitable. Shales and lime-stones occur as bands within the quartzites and are found exposed in some area.

6.5 Soil:

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, soils of the district may be classified into three groups namely Inceptisols, Alfisols, Vertisols, Histosols and Entisols. The detail description is given below:

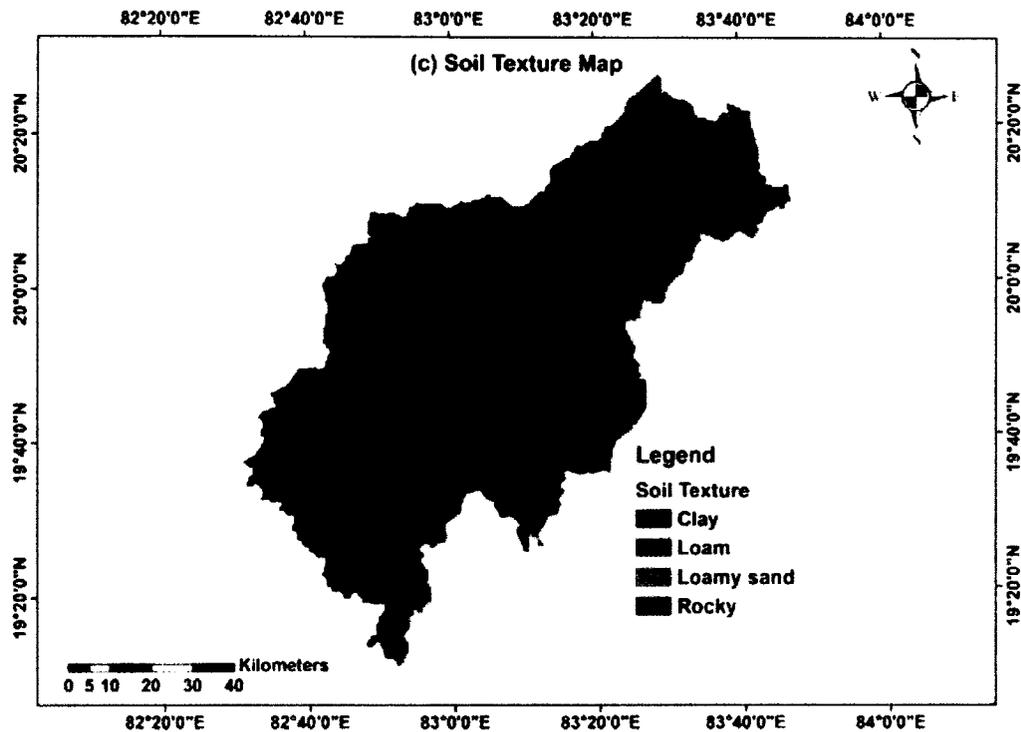
1) Inceptisols: Red soils are the most predominant soil type in Kalahandi district covering about 45 % of the total area. These soils occur in foothills terrain and as capping over the hillocks. These soils are poor in nitrogen, phosphate, potassium and organic matters. These soils are light textured and the pH ranges from 4.5 to 6.0.

2) Alfisols: The Alfisols include red sandy soils, red loamy soils mixed red and black soils. These soils cover about 27 % of the total area of the district and occur at lower elevations with undulating topography. These soils are neutral to slightly alkaline in nature (pH varies from 5.5 to 8.5). The characteristic features of red soils are (i) light texture, porous and friable structure, (ii) absence of lime kankar and free carbonates and (iii) soluble salts in small quantity usually not exceeding 0.05%. These are usually deficient in nitrogen, phosphate, organic matter and lime. These soils are suitable for cultivation of paddy and other crops.

3) Histosols: Black soil is an important soil type in the district occupying parts of Bhawanipatna, Narla, Kesinga, Dharamgarh, Golamunda and Koksara blocks. These soils are rich in potassium and nitrogen but poor in phosphorus. These soils are most favourable for cotton cultivation which is a generally draught resistant, labour intensive but a highly remunerative crop.

4) Vertisols : These are medium black soils found around the course of Tel river and its tributaries. These soils are highly argillaceous and contain high amount of iron, calcium and magnesium. These are usually poor in 6 nitrogen, phosphate and organic matter but rich in potash and lime. The pH varies from neutral to alkaline and texture varies from loam to clay loam. These are quite fertile soils and suitable for paddy cultivation.

5) Entisols: These consist of alluvial soil occupying the flood plains of major rivers and streams in the district. These are deficient in nitrogen, phosphoric acid and lumbars but not in potash and lime. These soils are alkaline in nature and fertile.



7. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT:

A great variety of major mineral potential like Bauxite, Graphite, Galena, Ruby & Iolite and Specified Minor Minerals like Quartz, Feldspar & Decorative Stone (Granite) are available in the district.

Bauxite occurs in Karlapat-Pollingpadar, Kutrumali-Tangridongar, Lanjigarh -Niyamgiri, Keluamali, Krishanmali.

Graphite occurs in Sargipada, Gaidar, Singjharan, Lamer&Badibahal.

Galena occurs in Sisakhal.

Precious Stone (Ruby) occurs in Jhillingdhar, Hinjlibahal, Kerumurda, Sirja, Tandla, Banjipadar, Sargiguda.

Semi-Precious Stone (Iolite) occurs in Dedar, Labanyasar, Bondoguda, Kutingpadar, Ghatpada, Rengali, Dharmagarh, Golamunda and Th.RampurTahasils.

Quartz and Quartzite occurs in Kalahandi, Kesinga, Jaipatna, Junagarh, Dharmagarh, M.Rampur, Narla, Koksara, Golamunda, Kalampur Tahasils.

Feldspar occurs in Bhikajharan of Kalahandi Tahasil.

Decorative Stone (Granite) occurs in Lanjigarh & Kalahandi Tahasil.

(a) Major Mineral:-

In Kalahandi district, presently there are seven nos. of mining leases of semi-precious stone out of which only two nos. of mining leases are working i.e. Ghatpada Garnet Mines over an area of 25.176 hectares of Sri Bijaya Kumar Bansal & Pipalpadar & Sirjapali Cat's eye Mines over an area of 17.122 hectares of Sanjukta Gems Prop:- Sri Shiv Kumar Bansal.

(b) Specified Minor Minerals:-

(i) Four nos Quarry leases for Decorative stone (Granite) have been granted in favour of Jay Minerals Pop:- Sri Ajay Agarwal, in village:- Chandanapur over 9.696 hecets, and over 3.602 hecets in favour of Smt. Ramadevi in village:- Karlasoda over 13.464 hecets and in favour Sri Harendra Kumar Patnaik in village-Nuapada under Kalahandi Tahasil over an area of 8.575 hectares for decorative stone. Now the lease is non-working and the lessee has applied for Renewal of Mining Lease, which is under consideration of the Govt.

Besides this, three nos. of prospecting licenses for decorative stone (Granite) have been granted i.e. Karlasoda Decorative Stone (Granite) Quarry over an area of 1 3.464 hectares in village-Karlasoda under Kalahandi Tahasil in favour of Sr-nt. P.Ramadevi, Chandanpur Decorative Stone (Granite) Quarry over an area of 3.602 hectares & Chandanpur Decorative Stone (Granite) Quarry over an area of 9.696 hectares in village-Chandanpur under Lanjigarh Tahasil in favour of Jay Minerals Prop. Ajay Agrawal.

(ii) There is one nos of non-working Quartz mines in the district had been granted in favour of Shreedhar Minerals, Proprietor Sri Tribhuban Pattjoshi at village Santemri over an area of 3.148 hectares under Jaipatna Tahasil.

(iii) There is one nos of working Quartz Mines in village Sidingpadar over an area of 4.9617 hectares under M-Rampur Tahasit has been granted in favour of Sri Samarendra Pratap Singh Deo and transferred to M/s Max Rampur Fortunea Pvt Ltd.

(iv) LOI have granted for 3 nos of quartz Mines one at - Village Patharla over 3.864 hecets in favour of M/s Shreedhar Minerals one at Dulikiband over 4.945 hecets at Batigurha over 7.680 hecets in favour of M/s Pranati Enterprises.

(v) One Mining lease for Quartz and Feldspar has been granted in favour of M/S Shreedhar Minerals, Proprietor Sri M.N. Pattjoshi over an area of 5.147 hectares on Dt. 14.06.1982. Now the lease is non-working and the lessee has applied for Renewal of Mining Lease which is under consideration of Govt.

(vi) Four no of P.L have been granted in favour of M/S Shreedhar Minerals Proprietor Sri M.N. Patjoshi at village Khinbahali over an area of 2.428 hectares under Junagarh Tahasil, at village Bhalubutra over an area of 2.873 hectares under Jaipatna Tahasil at village Biripura Dongar over 5.323 hect and at village Bhikajharan over 7.207 in favour of M/s Shreedhar Minerals.

(vii) One Prospecting License has been granted for Quartz and Feldspar in favour of M/S Shreedhar Minerals Proprietor Sri M.N. Patjoshi at village Bhikajharan under KalahandiTahasil over an area of 12.638 hectares.

(c) Other than specified minor mineral:-

Other than specified minor minerals such as riverbed sand, ordinary stone (road metal) & Morrum s are also available in the district. But almost Morrum sairat sources are available in Gramya Jungle and Gochar kissam land.

8.0 LIST OF MINING LEASES WITH LOCTION, AREA, AND PERIOD OF VALIDITY IN THE DISTRICT:

8.1 List of Mines in operation in the District:

Attached as Annexure-A

8.2 List of Mines not in operation in the District:

Attached as Annexure-A

9. DETAIL OF ROYALTY OR REVENUE RECEIVED IN LAST THREEYEARS:

S/No.	Name of the Tahasil	2021-22	2022-23	2023-24	Total Amount (Lakh)
1	Kalahandi	4760044	53872744	25211031	126683819
2	Kesinga	19919989	10021671	21384583	51326243
3	Karlamunda	11744749	5313214	12226363	29284326
4	M.Rampur	10277313	7370321	8202645	25850279
5	Narla	6801835	2979332	6077385	15858552
6	Th.Rampur	23858780	10033475	8567901	42460156
7	Lanjigarh	25788442	19206573	4190636	49185651
8	Jaipatna	18379806	21561853	19552295	59493954
9	Junagarh	14400375	9202662	14251631	37854668
10	Koksara	11125252	8352224	15806965	3528441
11	Golamunda	16873457	29721855	24819158	71414470
12	Kalampur	6276117	3278458	7808131	17362706
13	Dhamagarh	18444234	43135979	11916628	73496841
	GrandTotal	231490393	224050361	18001352	635556106

10. DETAIL OF PRODUCTION OF MINOR MINERALS IN LAST

THREEYEARS:

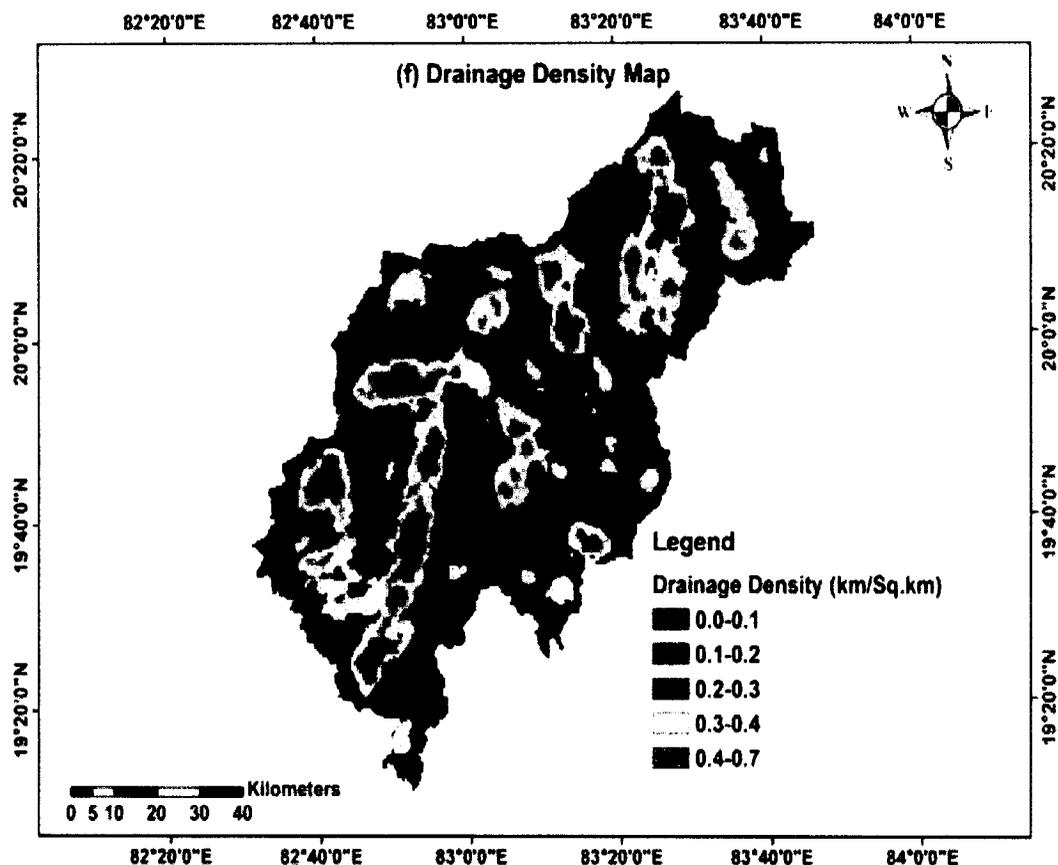
S/No.	Name of the Tahasil	2021-22	2022-23	2023-24	TotalQuantity (Cubicmeter)
1	Kalahandi	27700	30200	32700	906000
2	Kesinga	37222	39722	42222	119166
3	Karlamunda	22120	24620	27120	73860
4	M.Rampur	5534	7534	9534	22602
5	Narla	412	612	912	1936
6	Th.Rampur	Nil	Nil	Nil	0
7	Lanjigarh	Nil	Nil	Nil	0
8	Jaipatna	10000	11500	13000	34500
9	Junagarh	13727	15727	17727	47181
10	Koksara	2407	2707	3007	8121
11	Golamunda	23167	25667	28167	77001
12	Kalampur	24463	26963	29463	80889
13	Dhamagarh	23936	26436	28936	79308
	GrandTotal	97700	109000	120300	544564

11.0 DETAILS OF RIVER OR STREAM AND OTHER SAND SOURCES**11.1 DRAINAGE SYSTEM WITH DESCRIPTION OF MAIN RIVERS**

Kalahandi district is a physically hilly terrain having majorly dendritic drainage pattern, there is only one main river named Tel River flows in the district in the northern part of district, in addition to that several immature rivers namely Hati Nadi, Udanti Nadi, Sagada Nadi, Roul Nadi, Ret Nodi, Sandul Nadi, Uttei Nadi etc. Originate & flows in the district also few of them act as the tributary to Tel River. The distance of the sources from the river origin is geologically very short, hence this can be concluded that the rate of deposition of sand in Tel River is moderate, while in Rest Rivers within the district the rate of deposit is slow.

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	-	-	-
	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	-	8.681	4.39
	Total Irrigated Area	-	190.917	96.56
	Pump sets	253	-	-
	No. of Tractors	56	-	-
	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 Kalahandi District, Kharif, 2020-21



11.2 SALIENT FEATURES OF IMPORTANT RIVERS AND STREAMS:

The river Tel and its tributaries constitute the main drainage system in the district. Some important rivers like Indravati, Nagavalli and Vansadhara owe their origin to the hill ranges in the south-eastern parts of the district. The hilly streams are perennial in nature and many of the tributaries are ephemeral in nature. The drainage pattern of the district is of dendritic, radial and centripetal types. The drainage is effluent in nature. The river Tel, a major tributary of river Mahanadi, originates in the Nawarangpur high lands and enters the district near Dharamgarh. Udanti, Indra, Sagada, Ret, Hatti and Uttei are important tributaries of river Tel. These streams are ephemeral in nature. The Upper Indravati and Uttei are the main irrigation projects providing irrigation facilities in the district. There are 109 operational Minor Irrigation Projects (Flow), 364 government Lift Irrigation Projects and 174 private Lift Irrigation Projects in the district. Ground water contributes about 24 % during kharif and 44% during rabi of the total irrigation

River Sand Mining

DSR of Kalahandi District

potential created so far for the two crop seasons respectively in the district. However there is a vast scope of creating additional irrigation potential through ground water in the district, as most part of the ground water resource remains unutilized. As per available data total irrigation potential created from all sources aggregates to 122021 Ha during Kharif and 66037 Ha during rabi season in the district. Agriculture in the rest part of the cultivable area in the district remains rain fed and unstable.

1	2	3	4	5	6	7	8	9	10
Sl. No	Name of the River or Stream	Total Length in District (in Km.)	Place of Origin	Altitude at Origin	Portion of River or Stream Recommended for Mineral Concession	Length of area Recommended for Mineral Concession (in Km.)	Average width of area Recommended for Mineral Concession (in metre)	Area Recommended for Mineral Concession (in Sq. meter.)	Mineable mineral potential (in metric tonne) (60%of total mineral potential)
1	Tel River	123.60	Krushi in Nawarangpur district	551	Details enclosed in Annexure-A				
2	Hati River	86.80	Merakani in Nawarangpur District	530					
3	Udanti River	32.00	Chhatishgarh	396					
4	Sagada River	45.00	Poiguda in Kalahandi district	492					
5	Kamal River	35.00	Pipalguda in Kalahandi district	334					
6	Ret River	75.00	Patangpadar in Kalahandi district	570					
7	Uttei River	45.00	Belghar in Kandhamal District	726					

12.0 AVAILABILITY OF SAND OR GRAVEL OR AGGREGATE RESOURCES**12.1 Mineral Potential**

Mineral Potential				
Name of the River or Stream	Boulder (MT)	Bajri (MT)	Sand (MT) Geological Reserve	Total Mineable Mineral Potential (MT)
Tel	Nil	Nil	2801612	2173916
Hati	Nil	Nil	874116	411660
Udanti	Nil	Nil	805964	532026
Sagada	Nil	Nil	49979	11272
Roul	Nil	Nil	13491	6886
Ret	Nil	Nil	107812	74850
Uttei	Nil	Nil	28318	20476
Mutura	Nil	Nil	43301	25831
Sandul	Nil	Nil	177961	99135

12.2 Annual Deposition

Annual Deposition				
Name of the River or Stream	Boulder (MT)	Bajri (MT)	Sand (MT) Geological Reserve	Total Mineable Mineral Potential (MT)
Tel	Nil	Nil	2801612	1980560
Hati	Nil	Nil	874116	380670
Udanti	Nil	Nil	805964	495023
Sagada	Nil	Nil	49979	3580
Roul	Nil	Nil	13491	3654
Ret	Nil	Nil	107812	65460

Uttei	Nil	Nil	28318	15741
Mutura	Nil	Nil	43301	3256
Sandul	Nil	Nil	177961	70968

DSR of Kalahandi District

River Sand Mining

13.0 PROCESS OF DEPOSITION OF SAND OR BAURI OR MINOR MINERAL IN LAST THREE YEARS:

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	---
		2023-24	---
Total Volume of Sand in three years			
2	Hati	2021-22	moderate
		2022-23	---
		2023-24	---
Total Volume of Sand in three years			
3	Udanti	2021-22	Slow
		2022-23	---
		2023-24	---
Total Volume of Sand in three years			
4	Sagada	2021-22	Slow
		2022-23	---
		2023-24	---
Total Volume of Sand in three years			
5	Roul	2021-22	Slow
		2022-23	---
		2023-24	---
Total Volume of Sand in three years			
6	Ret	2021-22	Slow
		2022-23	---
		2023-24	---
Total Volume of Sand in three years			
7	Uttei	2021-22	Slow
		2022-23	---
		2023-24	---
Total Volume of Sand in three years			

River Sand Mining

DSR of Kalahandi District

8	Mutura	2021-22	Slow	
		2022-23	---do---	
		2023-24	---do---	
Total Volume of Sand in three years				
9	Sandul	2021-22	Slow	
		2022-23	---do---	
		2023-24	---do---	
Total Volume of Sand in three years				
Grand Total				

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 Kalahandi 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 Sand (Minor Mineral) in respect of Kalahandi 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 DSR Committee of Bhawanipatna &

River Sand Mining

DSR of Kalahandi District

Dharamgarh with the assistance of Irrigation Department, Forest Department, Mining Department & Geology Department. The DSR is being submitted to SEIAA, Odisha, Bhubaneswar for necessary evaluation and approval.

**Executive Engineer, Irrigation
Division Bhawanipatna, Kalahandi**

**Regional Officer,
SPCB, Rayagada**

**Mining Officer, 17.10.24
Kalahandi District, Bhawanipatna**

**Sub-Collector Bhawanipatna-Cum-Chairman,
Sub-Divisional Committee, Bhawanipatna,**

**Sub-Collector Dharamgarh-Cum-Chairman,
Sub-Divisional Committee, Dharamgarh**

**Divisional Forest Officer, (North)
Bhawanipatna, Kalahandi**

**Divisional Forest Officer, (South)
Bhawanipatna, Kalahandi**

**Deputy Director of Mines & Member Convener
DSR Committee, Kalahandi Circle, Bhawanipatna**

**Joint Director Geology
Zonal Survey, Bolangir**

**Collector & District Magistrate
Kalahandi, Bhawanipatna**

List of existing Sand Sources in respect of Kalahandi District

ANNEXURE - A

(List of operational & non-operational Sand Sources in Kalahandi District)

Tahasil	SI No	Name of the river or stream	Name of the Quarry Lease	Village, Khata No, Plot No & Kسام	Latitude	Longitude	Date And Registration No of Lease Deed	No & Date Of Grant Of Env Clearance	Total Area recommended for Mineral concession (in Sq. Meter/Ha.)	Mineable Mineral potential in Metric Tones/Cum (60% of Total Minerals/potential)	Geological mineral potential in Metric tones/ Cums	Name of the Lesse with address despatch	Period of Lease		Status of working or non working/Temp permit working for	Production (Sand) (in Cums)			Royalty Received(In rupees)		
													From	To		2021-22	2022-23	2023-24	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Dharamgarh																					
Dharamgarh	1	Tel	Taramja Sand Bed	Khata No.-294, Plot No. - 212, Kسام-Nadi, Mouza-Taramja	19°54'34.52 044"N to 19°54'46.02 528" N	82°49'15.30 554"E to 82°49'30.63 142"E	12.09.2022 Reg No- 10892201691	282689/341-MINB2/07-2022 Dt-22.08.2022	4.997	MR-37692	GR-48252	Sri Gajindra Pradhan AT/Po/PS-Dharamgarh, Dist-Kalahandi, Mob-8249391323	12.09.2022	11.09.2027	Running	Nil	Nil	Nil	Nil	Nil	Nil
Dharamgarh	2	Tel	Telipalas Sand Bed	Khata No.-297, Plot No. - 195, Kسام-Nadi, Mouza-Telipalas	19°55'03.35 398"N to 19°55'15.24 974" N	82°50'27.19 116"E to 82°50'38.65 988"E	11.02.2022 Reg No- 10892200217	SEIAA-1576/03-2021 Dt-04.09.2021	5	MR-49185	GR-66885	Sri Sanjaya Kumar Mathur S/o-Late Sri Manmohan Mathur, AT-Statuepada, Po/PS-Bhawanipatna Dist-Kalahandi, Mob-9658006087	11.02.2022	10.02.2027	Running	Nil	Nil	Nil	Nil	Nil	Nil
Dharamgarh	3	Tel	Chhilipa Sand Quarry	Khata No.-528, Plot No. - 1043/2679, Kسام-Nadi, Mouza-Chhilipa	19°53'41.40 075"N to 19°53'50.71 679" N	82°44'26.22 720"E to 82°44'39.37 752"E	28.10.2021 Reg No- 10892200183	SEIAA-1090/12-2020 Dt-26.03.2021	5	MR-41807.5	GR-124947.5	Sri Jyotirmaya Singh S/o-Sri Krushna Chandra Singh, AT/Po/PS-Dharamgarh Dist-Kalahandi, Mob-8018550070	28.10.2021	27.10.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil

Jaipatna	28	Hati	Sindhikaguda Sand Quarry	Khata No.-188(AAA), Plot No. - 1050, Kisam-Nadi, Mouza-Sindhikagud	19°30'12.31 616"N to 19°30'29.36 620" N	82°50'27.95 513"E to 82°50'42.41 464"E	NA	EC22B001OR1 62089 Dt-05.11.2022	4.815	MR-35452	GR-48157	M/S Raj Rajeswari Infra Project Pvt. Ltd. AT/Po-Ladugaon, PS-Koksara, Dist-Kalahandi	NA	NA	Quarry Permit	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh																					
Junagarh	29	Tel	Panigaon Sand Quarry	Khata No.-188, Plot No. - 1, Kisam-Nadi, Mouza-Panigaon	19°56'05.05 863"N to 19°56'11.92 197" N	82°57'12.34 554"E to 82°57'18.36 887"E	10.12.2020 11972001659	SEIAA-23/01-2020 Dt-06.08.2020	2.02	MR-16167	GR-20234	Sri Sujit Kumar Panda At/Po/PS-Junagarh Dist-Kalahandi Ph-7606990119	10.12.2020	09.12.2025	Running	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh	30	Hati	Budhipadar Sand Quarry	Khata No.-5, Plot No. - 29, Kisam-Nadi, Mouza-Budhipada	19°49'28.06 430"N to 19°49'48.50 149" N	82°54'38.89 367"E to 82°55'00.89 454"E	25.03.2021 11972100753	SEIAA-795/10-2020 Dt-26.02.2021	5	MR-60112.8	GR-83299.2	Sri Rupesh Singhal At/Po/PS-Junagarh Dist-Kalahandi Ph-9178078748	25.03.2021	24.03.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh	31	Hati	Chingudisar Sand Quarry	Khata No.-138, Plot No. - 1, Kisam-Nadi, Mouza-Chingudisar	19°54'39.00 984"N to 19°55'06.43 035" N	82°57'04.03 063"E to 82°57'14.12 873"E	22.04.2021 11972100928	SEIAA-787/10-2020 Dt-26.02.2021	5	MR-40263	GR-85000	Sri Shatruijit Sahoo At/Po/PS-Junagarh Dist-Kalahandi Ph-9777777211	22.04.2021	21.04.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh	32	Tel	Kandulguda Sand Bed	Khata No.-244, Plot No. - 795, Kisam-Nadi, Mouza-Kandulguda	19°55'45.47 126"N to 19°55'55.54 024" N	82°53'22.94 350"E to 82°53'41.63 550"E	03.02.2022 11972200154	SEIAA-786/10-2020 Dt-06/07/2021	5	MR-28361	GR-90000	Sri Shatruijit Sahoo At/Po/PS-Junagarh Dist-Kalahandi Ph-9777777211	03.02.2022	02.02.2027	Running	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh	33	Hati	Bagdunguri Sand Bed	Khata No.-171), Plot No. - 262, Kisam-Nadi, Mouza-Bagdunguri	19°53'20.47 372"N to 19°53'47.51 338" N	82°54'26.25 490"E to 82°54'39.60 510"E	04.03.2021 11972100581	SEIAA-775/10-2020 Dt-17.12.2020	5	MR-18050	GR-50000	Sri Bibhuti Bhusan Bag At-Kupgaon, Po-Malagunda, Ps-Junagarh, Dist-Kalahandi , Ph-7735405705	04.03.2021	03.03.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh	34	Tel	Atigaon Sand Bed	Khata No.-361, Plot No. - 768/1 & 768/2, Kisam-Nadi, Mouza-Atigaon	19°55'42.03 866"N to 19°55'49.64 139" N	82°54'02.12 493"E to 82°54'29.97 402"E	08.01.2021 11972100119	SEIAA-777/10-20220 Dt-17.12.2020	5	MR-29870	GR-120000	Sri Utam Kumar Dash At-Nuaguda, Po-Chichaiguda, Dist-Kalahandi Ph-8327762099	08.01.2021	07.01.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil

Junagarrh	35	Hati	Banjara Sand Bed	Khata No.-341, Plot No. - 699, Kism-Nadi, Mouza-Banjara	19°46'23.31 404"N to 19°46'34.35 628" N	82°54'04.53 658"E to 82°54'12.72 895"E	NA	286809/404-MINB2/08-2022 Dt-22.09.2022	2.571	MR-20832	GR-41149	Sri Pawan Raj Khemka At/Po/Ps-Junagarh Dist-Kalahandi	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	36	Hati	Barabesal Sand Bed	Khata No.-140, Plot No. - 1, Kism-Nadi, Mouza-Barabesal	19°47'18.77 240"N to 19°47'42.73 391" N	82°54'24.59 385"E to 82°54'33.29 268"E	23.09.2021 11972101891	SEIAA-783/10-2020 Dt-06.07.2021	5	MR-33327	GR-75000	Sri Sunil Kumar Meher At-Barabesal, Po-Banjara, Ps-Junagarh, Dist-Kalahandi, Ph-8637203030	23.09.2021	22.09.2026	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	37	Hati	Dasigaon Sand Bed-2	Khata No.-10, Plot No. - 1, Kism-Nadi, Mouza-Dasigaon	19°41'52.04 619"N to 19°42'12.91 539" N	82°53'21.77 778"E to 82°53'36.91 770"E	NA	SEIAA-784/10-2020 Dt-06.07.2021	5	MR-22129	GR-65000	Raj Rajeswari Infra Pvt. Ltd. Ogalapada, Near Maa Chandigarh Temple,Janla, Khordha752055	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	38	Hati	Habaspur Sand Bed	Khata No.-559, Plot No. - 1566, Kism-Nadi, Mouza-Habaspur	19°43'47.41 437"N to 19°43'52.92 331" N	82°54'07.79 923"E to 82°54'12.23 682"E	NA	NA	1.673	MR-16677	GR-16734	Komal Agrawal, M/S Shree Ganapati Agency At-Madhyampada, Po/Ps-Junagarh, Dist-Kalahandi	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	39	Hati	Dasigaon Sand Bed-1	Khata No.-10, Plot No. - 778, Kism-Nadi, Mouza-Dasigaon	19°41'28.84 362"N to 19°41'49.68 665" N	82°53'13.18 237"E to 82°53'22.80 150"E	NA	SEIAA-780/0-2020 Dt-06.07.2021	5	MR-20176	GR-65000	Sri Uttam Kumar Dash At-Nuaguda, Po-Chichaiiguda, Dist-Kalahandi Ph-8327762099	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	40	Hati	Karchala Sand Bed	Khata No.-439, Plot No. - 1681, Kism-Nadi, Mouza-Karchala	19°43'01.59 961"N to 19°43'19.14 550" N	82°53'53.05 794"E to 82°54'01.16 143"E	NA	SEIAA-772/10-2020 Dt-06.07.2021	5	MR-17555	GR-85000	Sri Tribhuban Patijoshi At-Irrigation Colony Bhawanipatna, S adar Ps-Bhwanipatna, Dist-Kalahandi, Ph-8260182540	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil

Kalahandi	54	Indira or Udanti	Borda-2 Sand Quarry	Khata No.-527, Plot No. - 2429, Kisam-Nadi, Mouza-Borda	20°09'07.42 613"N to 20°09'12.53 150" N	82°58'30.92 591"E to 82°58'40.16 020"E	NA	SEIAA-893/11-2020 Dt-15.12.2021	2.751	MR-14926	GR-21001	NA	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	55	Indira or Udanti	Borda-3 Sand Quarry	Khata No.-527, Plot No. -2438, Kisam-Nadi, Mouza-Borda	20°09'12.05 294"N to 20°09'18.31 815" N	82°59'37.67 104"E to 82°59'41.61 683"E	Regd. No-10882200615 Dt-18.02.2022	SEIAA-1460/02-2021 Dt-31.08.2021	1.416	MR-31515	GR-42492	Sri Jyotirmaya Singh At/Po-Dharmagarh, Dist-Kalahandi	18.02.2022	17.02.2027	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	56	Indira or Udanti	Artal Sand Quarry	Khata No.-349, Plot No. - 42, Kisam-Nadi, Mouza-Artal	20°08'47.62 758"N to 20°08'52.36 033" N	83°01'42.38 416"E to 83°02'02.60 006"E	Regd. No-10882101856 Dt-07.06.2021	SEIAA-910/11-2020 Dt-15.02.2021	4.856	MR-54033	GR-145686	Sanjeeb Kumar Bhoi Vill-Artal, Ps-Kegaon, Dist-Kalahandi, Contact no-9938223615	07.06.2021	06.06.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	57	Tel	Sapsilet Sand Quarry	Khata No.-311, Plot No. - 895, Kisam-Nadi, Mouza-Sapsilet	20°08'31.89 573"N to 20°08'40.50 584" N	83°03'52.65 495"E to 83°04'06.01 510"E	Regd. No-10882103832 Dt-17.11.2021	SEIAA-908/11-2020 Dt-15.02.2021	4.937	MR-64935	GR-148113	Smt. Reena Sahu Vill/Po-Borda (Kholpala), Ps-Kegaon, Dist-Kalahandi	17.11.2021	16.11.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	58	Tel	Bileikuni Sand Quarry	Mouza-Bileikuni	19°59'06.80 915"N to 19°59'17.46 426" N	83°01'00.91 407"E to 83°01'12.27 267"E	NA	NA	4.856	MR-50850	GR-125500	Rabindra Kumar Sahu, Golamunda, Dist - Kalahandi	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	59	Nala	Kusumdara Sand Quarry	Khata No.-96, Plot No. - 958, Kisam-Nadi, Mouza-Kusumdara	19°56'23.44 230"N to 19°56'34.75 235" N	83°07'19.64 934"E to 83°07'27.50 870"E	Regd. No-10882202635 Dt-26.07.2022	245547/133-MINB2/12-2021 Dt-22.02.2022	1.974	MR-4193	GR-13824	Roshan Jaiswal S/o Shyam Babu jaiswal ,Vill-Statue pada, At/Po-Bhawanipatna, Dist-Kalahandi	26.07.2022	25.07.2027	The Source has no at all Sand Deposit.	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	60	Indira or Udanti	Ajarai Sand Quarry	Khata No.-347, Plot No. - 712, Kisam-Nadi, Mouza-Ajarai	20°08'47.39 721"N to 20°08'56.24 729" N	83°02'02.13 933"E to 83°02'25.47 162"E	NA	Not obtained	8.134	MR-41082	GR-81342	Sanjeeb Kumar Bhoi Vill-Artal, Ps-Kegaon, Dist-Kalahandi, Contact no-9938223615	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Kalahandi	61	Tel	Seimpur Sand Quarry	Khata No.-210, Plot No. - 985, Kisam-Nadi, Mouza-Seimpur	20°08'34.459 57"N to 20°08'45.538 47" N	83°05'02.13 688"E to 83°05'13.00 327"E	NA	SEIAA-977/12-2020 Dt-09.03.2021	5	MR-40872	GR-74997	NA	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil

Kalampur

Kalam pur	62	Hatti	Badkutru Sand Bed	Khata No.-326, Plot No. - 1458, Kizam-Nadi, Mouza-Badkutru	19°34'44.47 987"N to 19°34'51.49 457"N	82°51'31.53 748" E to 82°51'39.07 611" E	Regd no-11782100180 Dt-25.06.2023	SEIAA-387/07-2020 Dt-03.11.2020	1.149	MR-858	GR-5137	Smt.Komal Agrawal Vill/Po/Ps-Junagarh,Dist-Kalahandi,7660 14,Contact no-8249092362	25.06.2023	24.06.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalam pur	63	Hatti	Karmel Sand Bed-1	Khata No.-200, Plot No. - 360, Kizam-Nadi, Mouza-Karmel	19°37'17.82 092" N to 19°37'24.99 071" N	82°52'04.31 598" E to 82°52'08.18 715" E	Regd no-11782100307 Dt-27.08.2021	SEIAA-1139/01-2021 Dt-30.06.2021	1.214	MR-12130	GR-30350	Smt. Manjukta Sahoo Wife of Sanjay kumar saho, Vill/Po/P s- Kalampur, Dist- Kalahandi, 7660 13, Contact no-7008995895	27.08.2021	26.08.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalam pur	64	Hatti	Panigaon Sand Bed	Khata No.-315, Plot No. - 1485, Kizam-Nadi, Mouza-Panigaon	19°33'18.58 768" N to 19°33'24.56 926" N	82°51'05.78 120"E to 82°51'12.39 533" E	Regd no-11782100356 Dt-01.11.2021	SEIAA-388/07-2020 Dt-03.11.2020	1.477	MR-4194	GR-5814	Tribhuban Pattajoshi S/o Mulhurta Nanda Pattajoshi, At/Po /Ps- Bhabanipatna, Dist- Kalahandi, 7660 01, Contact no-8260182540	01.11.2021	31.10.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalam pur	65	Hatti	Patrabasa Sand Bed	Khata No.-200, Plot No. - 1, Kizam-Nadi, Mouza-Patrabasa	19°35'01.01 788"N to 19°35'08.26 144" N	82°51'37.97 532"E to 82°52'12.19 652"E	Regd no-11782100306 Dt-27.08.2021	SEIAA-391/07-2020 Dt-03.11.2020	4.856	MR-9067	GR-13699	Debaraj Jain S/o Kapurchan Jain, At- Patrabasa, Po- Pandigaon, Ps- Jaipatna, Dist- Kalahandi, 7660 13, Contact no-9937773134	27.08.2021	26.08.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalam pur	66	Hatti	Paruaguda Sand Bed	Khata No.-314, Plot No. - 1, Kizam-Nadi, Mouza-Paruaguda	19°33'51.41 237"N to 19°34'01.38 323" N	82°51'13.05 190"E to 82°51'20.73 620"E	NA	EC22B001OR1 10835 Dt-22.09.2022	2.023	MR-25622	GR-40468	Quarry permitt for Govt. work	NA	NA	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kalam pur	67	Hatti	Deypur Sand Bed	Khata No.-336, Plot No. - 1, Kizam-Nadi, Mouza-Deypur	19°39'48.41 188"N to 19°40'08.03 908" N	82°53'01.61 387"E to 82°53'18.13 009"E	Regd no-11782100355 Dt-01.11.2021	SEIAA-386/07-2020 Dt-03.11.2020	4.856	MR-13698	GR-17672	Murali Rana S/o Madhu Rana, At- Kapurnala, Po- Mangalpur, Ps- Jaipatna, Dist- Kalahandi, 7660 18, Contact no-6372363798	01.11.2021	31.10.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil

Karlam unda	75	Utei	Deogan Sand Bed	Khata No.-170, Plot No. - 330/1158, Kislam-Nadi, Mouza-Deogan	20°19'22.06 373"N to 20°19'30.93 817" N	83°26'31.12 489"E to 83°26'41.59 216"E	13.10.2023 12182300473	407350/879-MINB2/03-2023 Dt-14.07.2023	2.832	MR-22175	GR-28328	Sri Jubraj Sahu At-Takarumal, Porinja Ps-M.Rampuri Dist-Kalahandi Ph-7978276475	13.10.2023	12.01.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Karlam unda	76	Tel	Tercsingha sand Bed	Khata No.-821, Plot No. - 546, Kislam-Nadi, Mouza-Tercsingha	20°24'29.61 594"N to 20°24'37.91 378" N	83°26'02.76 423"E to 83°26'15.19 995"E	31.08.2023 12182300322	405118/913-MINB2/04-2023 Dt-13.07.2023	4.605	MR-115986	GR-131159	Sri Rajat Patra AT-Bramhanabati PO-Badamulai Dist-Cuttack Ph-8328873493	31.08.2023	30.08.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Karlam unda	77	Utei	Joradobra sand Bed	Khata No.-345, Plot No. - 1318, Kislam-Nadi, Mouza-Joradobra	20°15'10.33 338"N to 20°15'42.30 828" N	83°27'06.79 135"E to 83°27'12.87 326"E	NA	NA	5	MR-24101	GR-70000	Sri Biswajit Rout A/Po-Pahanga, Dist-cuttack	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Karlam unda	78	Utei	Kernapala sand bed	Khata No.-71, Plot No. - 1, Kislam-Nadi, Mouza-Kernapala	20°16'05.53 941"N to 20°16'23.90 718" N	83°27'28.19 705"E to 83°27'38.18 508"E	31.08.2023 12182300321	405203/915-MINB2/04-2023 Dt-14.07.2023	4.856	MR-37450	GR-48562	Smt. Priyambada Srichandan A/Po-Naharkanta, Ps-Mancheswar, Dist-khordha ph-6372624236	31.08.2023	30.08.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Karlam unda	79	Utei	Legeda Sand Bed	Khata No.-399, Plot No. - 2538, Kislam-Nadi, Mouza-Legeda	20°17'24.42 330"N to 20°17'43.90 252" N	83°27'37.25 225"E to 83°27'44.72 186"E	NA	NA	4.046	MR-30048	GR-40468	Sri Amulya kumar Jena At-Dighi, Po-Sithalo, Ps-Niali, Dist-cuttack, Ph-6372409103	NA	NA	Non-Operational	Nil	Nil	Nil	Nil	Nil	Nil
Kesinga																					
Kesinga	80	Tel	Patharia sand Quarry	Khata No.-413, Plot No. - 7, Kislam-Nadi, Mouza-Patharia	20°10'09.70 226"N to 20°10'17.52 687" N	83°09'57.34 162"E to 83°10'06.03 955"E	25.02.2021 1192100243	SEIAA-680/09-2020 Dt-19.01.2021	4.97	MR-64254	GR-74664	Sri Mukesh Agrawal AT/Po-Kesinga Dst- Kalahandi	25.02.2021	24.02.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesinga	81	Tel	Turlakhama sand Quarry	Khata No.-361, Plot No. -231, Kislam-Nadi, Mouza-Turlakhama	20°18'47.93 698"N to 20°18'53.08 732" N	83°20'36.75 629"E to 83°20'43.08 656"E	29.12.2020 11982001364	SEIAA-327/07-2020 Dt-27.10.2020	2.023	MR-12292	GR-14883	Sri Hemanta Sahu A/P O.-Turlakhama PS- Kesinga Dist-Kalahandi	29.12.2020	28.12.2025	Running	Nil	Nil	Nil	Nil	Nil	Nil

Kesing a	82	Tel	Kantesir Sand Bed	Khata No.-398, Plot No. - 97, Kسام-Nadi, Mouza-Kantesir	20°13'29.95 676"N to 20°13'39.54 234" N	83°14'11.09 505"E to 83°14'21.22 869"E	01.08.2023 11982300990	423320/906-MINB2/03-2023 Dt-14.07.2023	4.856	MR-105815	GR-121405	Sri Gautam Kumar Agrawal AT/PO-Ladugaon PS-Koksara Dist-Kalahandi	01.08.2023	31.07.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesing a	83	Tel	Amath sand Bed	Khata No.-135, Plot No. - 27, Kسام-Nadi, Mouza-Amath	20°18'11.07 911"N to 20°18'15.97 017" N	83°18'14.40 488"E to 83°18'26.22 866"E	14.09.2023 11982301265	403653/876-MINB2/03-2023 Dt-13.07.2023	4.653	MR-109299	GR-132333	Sri Rajat Patra AT-Bramhanabati PO-Badamulai Dist-Cuttack Ph-8328873493	14.09.2023	13.09.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesing a	84	Ret	Bisodi Nadi Ghat	Khata No.-281 & 180, Plot No. -466 & 1, Kسام-Nadi, Mouza-Bisodi	Bisodi - 20°05'37.64 928"N to 20°05'40.70 968" N Matia- 20°05'44.99 542"N to 20°06'02.66 035" N	Bisodi- 83°12'28.26 744"E to 83°12'40.82 528"E Matia- 83°12'19.87 610"E to 83°12'24.92 794"E	02.02.2021 11982100110	SEIAA-328/07-2020 Dt-27.10.2020	4.516	MR-4872	GR-8150	Sri Brahma Kumar Goel At/po- Utkela PS-Kesinga Dist- Kalahandi Ph-9437202073	02.02.2021	01.02.2026	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesing a	85	Tel	Goudtola Sand Quarry	Khata No.- 164(AAA), Plot No. - 1, Kسام-Nadi, Mouza-Goudatola	20°09'54.59 052"N to 20°10'04.96 402" N	83°08'28.41 498"E to 83°08'38.74 805"E	31.05.2023 11982300770	404971/861-MINB2/01-2023 Dt-27.04.2023	4.856	MR-104422.5	GR-121405	Sri Tumula Prabhakar Rao At/po-Lanjigarh PS-Narla DIST- Kalahandi	31.05.2023	30.05.2028	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesing a	86	Tel	Chhenaga on Sand Quarry	Khata No. -101, Plot No. - 1, Kسام-Nadi, Mouza-Chhenagaon	20°08'31.02 243"N to 20°08'41.01 174" N	83°07'03.38 437"E to 83°07'08.88 895"E	16.02.2024 11982400201	423558/954-MINB2/07-2023 Dt-04.11.2023	5	MR-87060	GR-99956	Sri Pullak Mohanty At/Po-Alatalanga, Po- Kulasri, Via- Kasarda, Ps-Niali, Dist- Cuttack ph- 9437000101	16.02.2024	15.02.2029	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesing a	87	Ret	Jolko sand Bed	Khata No.-212, Plot No. - 1, Kسام-Nadi, Mouza-Jolko	20°09'41.37 990"N to 20°09'59.89 972" N	83°11'12.41 963"E to 83°11'29.82 586"E	14.10.2020 11982001124	SEIAA-24/01-2020 RD-01.06.2020	5	MR-53835	GR-74850	Sri Tejoram Agrawal At/Po-Kesinga, Ps-Kesinga Dist- Kalahandi	14.10.2020	13.10.2025	Running	Nil	Nil	Nil	Nil	Nil	Nil
Kesing a	88	Ret	Boria Sand Bed	Khata No.-255, Plot No. -412 & 412/1272, Kسام-Nadi, Mouza-Boria	20°08'37.08 066"N to 20°08'50.86 877" N	83°11'49.16 108"E to 83°11'56.48 506"E	06.02.2024 11982400196	SEIAA/OR/MI N/464261/2024 (transfer)	2.833	MR-30445	GR-40375	Sri Biswajit Mohanty At-Sitabardi Po-Bhawanipatna Dist.-Kalahandi ph-700840012	06.02.2024	05.02.2029	Running	Nil	Nil	Nil	Nil	Nil	Nil

Potential Resources of New Sairat Source for Sand in Kalahandi

Tahasil	Sl No	Name of the river or stream	Name of the Quarry Lease	Village, Khata No, Plot No & Kismam	Latitude	Longitude	Date And Registration No Of Lease Deed	No & Date Of Grant Of Env Clearance	Total Area recommended for Mineral concession (in Sq. Meter/Ha.)	Mineable Mineral potential in Metric Tones/Cums (60% of Total Minerals/potential)	Geological mineral potential in Metric tones/ Cums	Name of the Lessee with address despatch	Period of Lease		Status of working or non working/Temp permit working for	Production (Sand) (in Cums)			Royalty Received(In rupees)		
													From	To		20-21-22	20-22-23	20-23-24	20-21-22	20-22-23	20-23-24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Kalahandi																					
Kalahandi	1	Tel	Sapsilet Sand Quarry-2	Khata No.-311, Plot No. - 1867/1866, Kismam-Nadi, Mouza-Sapsilet	20°08'27.00 690"N to 20°08'18.10 505"N	83°04'56.09 024"E to 83°04'43.72 942"E	NA	NA	5.00	66724	95321	NA	NA	NA	New Source for Future Auction	Nil	Nil	Nil	Nil	Nil	Nil
Karlamunda																					
Karlamunda	2	Utei	Legada Sand Bed-2	Khata No.-399, Plot No. - 2537/2538, Kismam-Nadi, Mouza-Legada	20°17'51.53 182"N to 20°17'24.94 277"N	83°27'44.60 612"E to 83°27'32.88 347"E	NA	NA	5.00	49255	70365	NA	NA	NA	New Source for Future Auction	Nil	Nil	Nil	Nil	Nil	Nil
Karlamunda	3	Tel	Putigaon Sand Bed	Khata No.-381, Plot No. - 269, Kismam-Nadi, Mouza-Putigaon	20°21'49.01 896" N to 20°21'39.19 798" N	83°24'19.33 418" E to 83°24'03.65 829" E	NA	NA	4.856	58425	83464	NA	NA	NA	New Source for Future Auction	Nil	Nil	Nil	Nil	Nil	Nil
Karlamunda	4	Tel	Sargulmalpara Sand Bed	Khata No.-571, Plot No. - 1 & 1/2296, Kismam-Nadi, Mouza-Sargulmalpara	20°20'50.03 256"N to 20°20'29.34 552"N	83°24'22.64 942" E to 83°24'08.64 392" E	NA	NA	4.856	49253	70362	NA	NA	NA	New Source for Future Auction	Nil	Nil	Nil	Nil	Nil	Nil
Kalampur																					
Kalampur	5	Hattii	Khanganuguda Sand Bed	Khata No.-182, Plot No. - 207/655, Kismam-Nadi, Mouza-Khanganuguda	19°35'43.08 224"N to 19°35'49.18 262" N	82°52'04.69 830"E to 82°52'31.59 379"E	NA	NA	4.856	64782	92546	NA	NA	NA	New Source for Future Auction	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh																					
Junagarh	6	Tel	Amathola Sand Bed	Khata No.-291, Plot No. - 1, Kismam-Nadi, Mouza-Amathola	19°57'35.91 607"N to 19°57'24.81 874"N	82°58'46.91 611"E to 82°58'30.25 512"E	NA	NA	4.856	143838	205483	NA	NA	NA	New Source for Future Auction	Nil	Nil	Nil	Nil	Nil	Nil

List of Sources proposed for Extinction in Kalahandi

Sl No	Name of the river or stream	Name of the Quarry Lease	Village, Khata No, Plot No & Kismam	Latitude	Longitude	Date And Registration No Of Lease Deed	No. & Date Of Grant Of Env Clearance	Total Area recommended for Mineral concession (in Sq. Meter/Ha.)	Mineable Mineral potential in Metric Tonnes/Cu ms(60% of Total Minerals/p otential)	Geological mineral potential in Metric tonnes /Cums	Name of the Lessee with address despatch	Period of Lease		Remarks	Production (Sand) (in Cums)			Royalty Received (In rupees)			
												From	To		20 21- 22	20 22- 23	20 23- 24	20 21- 22	20 22- 23	20 23- 24	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Golamunda																					
Golamunda	1	Tel	Khamarhaldi Sand Bed	Khata No.-286, Plot No. - 1250, Kismam-Nadi, Mouza-Khamarhaldi	19°54'42.05 394"N to 19°54'52.14 000"N	82°48'14.49 066"E to 82°48'52.08 107"E	05.11.2021 10892101741	SEIAA-1522/03-2021 Dt-04.09.2021	5	MR-17349	GR-75000	Sri Rupesh Agrawal S/O Subash Chandra Agrawal A/P.O/PS-Golamunda. Dist- Kalahandi, Ph- 9938883405 Dist:- Angul	05.11.2021	04.01.2026	A bridge has been constructed & the lease area is very adjacent to bridge & due to bridge the approach road to the lease is mingled with Biju Express Way.	Nil	Nil	Nil	Nil	Nil	Nil
Junagarh																					
Junagarh	2	Hati	Banjara Sand Bed	Khata No.-341, Plot No. - 699, Kismam-Nadi, Mouza-Banjara	19°46'23.31 404"N to 19°46'34.35 628"N	82°54'04.53 658"E to 82°54'12.72 895"E	NA	286809/404-MINB2/08-2022 Dt-22.09.2022	2.571	MR-20832	GR-41149	Sri Pawan Raj Khemka A/Po/PS-Junagarh Dist- Kalahandi	NA	NA	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F (Lease) Dtd 01.12.2020	Nil	Nil	Nil	Nil	Nil	Nil

Junagahrh	3	Hati	Barabesal Sand Bed	Khata No.-140, Plot No. - 1, Kisam-Nadi, Mouza-Barabesal	19°47'18.77 240"N to 19°47'42.73 391" N	82°54'24.59 385"E to 82°54'33.29 268"E	23.09.2021 11972101891	SEIAA-783/10-2020 Dt-06.07.2021	5	MR-33327	GR-75000	Sri Sunil Kumar Meher At-Barabesal, Po-Banjara, Ps-Junagarh, Dist-Kalahandi, Ph-8637203030	23.09.2021	22.09.2026	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F (Lease) Dtd.01.12.2020	Nil	Nil	Nil	Nil	Nil	Nil
Junagahrh	4	Hati	Dasigaon Sand Bed-2	Khata No.-10, Plot No. - 1, Kisam-Nadi, Mouza-Dasigaon	19°41'52.04 619"N to 19°42'12.91 539" N	82°53'21.77 778"E to 82°53'36.91 770"E	NA	SEIAA-784/10-2020 Dt-06.07.2021	5	MR-22129	GR-65000	Raj Rajeswari Infra Pvt. Ltd. Ogalapada, Near Maa Chandigarh Temple,Janla, Khordha752055	NA	NA	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F (Lease) Dtd.01.12.2020	Nil	Nil	Nil	Nil	Nil	Nil
Junagahrh	5	Hati	Habaspur Sand Bed	Khata No.-559, Plot No. - 1566, Kisam-Nadi, Mouza-Habaspur	19°43'47.41 437"N to 19°43'52.92 331" N	82°54'07.79 923"E to 82°54'12.23 682"E	NA	NA	1.673	MR-16677	GR-16734	Komal Agrawal, M/S Shree Ganapati Agency At-Madhyampada, Po/Ps-Junagarh, Dist-Kalahandi	NA	NA	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F (Lease) Dtd.01.12.2020	Nil	Nil	Nil	Nil	Nil	Nil

															20						
Junagarrh	6	Hati	Dasigaon Sand Bed-1	Khata No.-10, Plot No. - 778, Kisam-Nadi, Mouza-Dasigaon	19°41'28.84 362"N to 19°41'49.68 665" N	82°53'13.18 237"E to 82°53'22.80 150"E	NA	SEIAA-780/0-2020 Dt-06.07.2021	5	MR-20176	GR-65000	Sri Uttam Kumar Dash At-Nuaguda, Po-Chichaiguda, Dist-Kalahandi Ph-8327762099	NA	NA	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F (Lease) Dtd.01.12.2020	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	7	Hati	Karchala Sand Bed	Khata No.-439, Plot No. - 1681, Kisam-Nadi, Mouza-Karchala	19°43'01.59 961"N to 19°43'19.14 550" N	82°53'53.05 794"E to 82°54'01.16 143"E	NA	SEIAA-772/10-2020 Dt-06.07.2021	5	MR-17535	GR-85000	Sri Tribhuban Patjoshi At-Irrigation Colony Bhawanipatna, Sadar Ps-Bhwanipatna, Dist-Kalahandi, Ph-8260182540	NA	NA	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F (Lease) Dtd.01.12.2020	Nil	Nil	Nil	Nil	Nil	Nil
Junagarrh	8	Hati	Baragaon Sand Bed	Khata No.-414, Plot No. -1683, Kisam-Nadi, Mouza-Baragaon	19°47'46.73 110"N to 19°47'57.55 942" N	82°54'45.29 216"E to 82°54'49.09 865"E	NA	289730/429-MINB2/08-2022 Dt-27.12.2022	1.922	MR-19845	GR-28835	Sri Shatruijit Sahoo Au/Po/Ps-Junagarh Dist-Kalahandi Ph-9777777211	NA	NA	The source is coming under Eco-Sensitive Zone of Karlapat Sanctuary. The DFO subdivision Kalahandi has objected for Quarry operation & intimated to Member Secretary, SEIAA, Odisha vide Memo No-5542/3F	Nil	Nil	Nil	Nil	Nil	Nil

Koksara																					
Koksara	17	Mutura	Sarasmal & Dangriguda Sand Quarry	Khata No.-6, 335, Plot No. - I, Kizam-Nadi, Mouza-Sarasmal & Dangriguda	19°42'12.72 575"N to 19°42'38.44 792" N	82°44'12.43 608"E to 82°44'29.37 632"E	N/A	N/A	5.26	MR-13372	GR-21044	N/A	N/A	N/A	The Lease Period of the Source has expired on dt. 11.01.2023 & the source has no sand Deposit	Nil	Nil	Nil	Nil	Nil	Nil
Koksara	18	Mutura	Chilguda Sand Quarry	Khata No.-342, Plot No. -354, Kizam-Nadi, Mouza-Chilguda	19°40'23.83 413"N to 19°40'59.53 123" N	82°44'12.48 490"E to 82°44'20.30 571"E	N/A	N/A	1.416	MR-7458	GR-14164	N/A	N/A	N/A	The source has no sand Deposit	Nil	Nil	Nil	Nil	Nil	Nil
Koksara	19	Mutura	Dahagaon Sand Quarry-B	Khata No.-11, Plot No. - 1897, Kizam-Nadi, Mouza-Dahagaon	19°43'53.68 512"N to 19°43'58.95 325" N	82°44'02.79 655"E to 82°44'06.97 413"E	15.01.2021 Reg No-11792100022	SELAA-351/07-2020 Dt-17.12.2020	0.809	MR-5001	GR-8093	Sri Manoj Kumar Behera S/o- Sarju Prasad Behera AT- Gatabandh, Po-Dhansara, PS-Koksara Dist- Kalahandi, Mob- 8457992875	15.01.2021	14.01.2026	The source has no sand Deposit	Nil	Nil	Nil	Nil	Nil	Nil
M. Rampur																					
M. Rampur	20	Sandul	Dutta Sand Quarry	Khata No.-139(AAA), Plot No. -353, Kizam-Nadi, Mouza-Dutta	20°11'51.96 741"N to 20°12'06.76 971" N	83°26'22.41 519"E to 83°26'27.95 743"E	N/A	N/A	2.428	MR-16970	GR-24281	N/A	N/A	N/A	Kesinga Check dam has been completed very recently & the source is found water logged. The source is coming within a distance of 800 mtrs from the Check Dam.	Nil	Nil	Nil	Nil	Nil	Nil
Narla																					
Narla	21	Sandul	Dahal Sand Quarry	Khata No.-76, Plot No. -1, Kizam-Nadi, Mouza-Dahal	20°03'32.81 629"N to 20°03'56.17 671" N	83°21'13.08 040"E to 83°21'27.60 533"E	N/A	N/A	0.404	MR-13625	GR-25000	N/A	N/A	N/A	The Lease period of the Source has expired & Source has no sand Deposit	Nil	Nil	Nil	Nil	Nil	Nil

Jaipatna																
Jaipatna	27	Hati	Dhansuli Sand Quarry	Khata No.- 357, Plot No. - 285, 392, Kisam-Nadi, Mouza-Dhansuli	19°24'06.586 44"N to 19°24'17.517 42" N	82°26'50.101 51"E to 82°47'01.655 25"E	0.02 KM	0.1 KM	0.5 KM	14 KM	0.15 KM	0.15 KM	40 KM	No		
Jaipatna	28	Hati	Sindhikaguda Sand Quarry	Khata No.- 188(AAA), Plot No. - 1050, Kisam-Nadi, Mouza-Sindhikagud	19°30'12.316 16"N to 19°30'29.366 20" N	82°50'27.955 13"E to 82°50'42.414 64"E	0.1 KM	0.1 KM	3.9 KM	13 KM	0.1 KM	0.8 KM	27.4 KM	No		
Junagarh																
JUNAGA RH	29	Tel	Panigaon Sand Quarry	Khata No.- 128, Plot No. - 1, Kisam-Nadi, Mouza-Panigaon	19°56'05.058 63"N to 19°56'11.921 97" N	82°57'12.345 54"E to 82°57'18.368 87"E	0.4 KM	0.1 KM	1.4 KM	13 KM	1 KM	1 KM	30.5 KM	No		
JUNAGA RH	30	Hati	Budhipadar Sand Quarry	Khata No.-5, Plot No. - 29, Kisam-Nadi, Mouza-Budhipada	19°49'28.064 30"N to 19°49'48.501 49" N	82°54'38.893 67"E to 82°55'00.894 54"E	0.1 KM	0.1 KM	3.2 KM	10.5 KM	0.5 KM	0.5 KM	21.5 KM	No		
JUNAGA RH	31	Hati	Chingudisar Sand Quarry	Khata No.- 138, Plot No. - 1, Kisam-Nadi, Mouza-Chingudisar	19°54'39.009 84"N to 19°55'06.430 35" N	82°57'04.030 63"E to 82°57'14.128 73"E	0.1 KM	0.01 KM	0.1 KM	6.5 KM	0.6 KM	0.7 KM	28 KM	No		
JUNAGA RH	32	Tel	Kandulguda Sand Bed	Khata No.- 244, Plot No. - 795, Kisam-Nadi, Mouza-Kandulguda	19°55'45.471 26"N to 19°55'55.540 24" N	82°53'22.943 50"E to 82°53'41.635 50"E	0.6 KM	0.1 KM	1.6 KM	5 KM	0.6 KM	0.6 KM	32.5 KM	No		
JUNAGA RH	33	Hati	Bagdunguri Sand Bed	Khata No.- 171), Plot No. - 262, Kisam-Nadi, Mouza-Bagdunguri	19°53'20.473 72"N to 19°53'47.513 38" N	82°54'26.254 90"E to 82°54'39.605 10"E	0.1 KM	0.2 KM	4.1 KM	5 KM	1.8 KM	1.8 KM	27.5 KM	No		
JUNAGA RH	34	Tel	Atigaon Sand Bed	Khata No.- 361, Plot No. - 768/1 & 768/2, Kisam-Nadi, Mouza-Atigaon	19°55'42.038 66"N to 19°55'49.641 39" N	82°54'02.124 93"E to 82°54'29.974 02"E	0.4 KM	0.02 KM	0.5 KM	18 KM	1.5 KM	1.4 KM	32 KM	No		
JUNAGA RH	35	Hati	Banjara Sand Bed	Khata No.- 341, Plot No. - 699, Kisam-Nadi, Mouza-Banjara	19°46'23.314 04"N to 19°46'34.356 28" N	82°54'04.536 58"E to 82°54'12.728 95"E	0.3 KM	0.05 KM	6 KM	2 KM	0.7 KM	1.2 KM	18 KM	Cluster Approach		
JUNAGA RH	36	Hati	Barabesal Sand Bed	Khata No.- 140, Plot No. - 1, Kisam-Nadi, Mouza-Barabesal	19°47'18.772 40"N to 19°47'42.733 91" N	82°54'24.593 85"E to 82°54'33.292 68"E	0.2 KM	0.01 KM	7.2 KM	10 KM	1 KM	1 KM	18 KM	No		

Annexure-II

List of Potential Mining Lease (existing & Proposed) Rivers

Tahasil	Sl. No	River detail	Lease detail	Area (in Ha.)	Distance (in K.M) from PA/BR/WC	Distance from forest area (in K.M)	Mining lease within 500 metres (if yes cluster area)	Total excavation in Tonnes/ Annum considering digging depth max as 3 metres	Mineral to be mined (sand/Bajri/ R BM etc.)	Existing/ proposed
1	2	3	4	5	6	7	8	9	10	11
Kalahandi Tahasil										
Kalahandi	1	Indira or Udanti	Bargaon Sand Quarry	4.856	PA.WC-52 KM BR-70 Meter	Karlapat Wildlife Sanctuary-52 KM	Yes Area-4.856 ha.	1650 Cum	Sand	Existing
Kalahandi	2	Sagada River	Sagada Sand Quarry	5.00	PA.WC-16 KM BR-1.5 KM	Karlapat Wildlife Sanctuary-16 KM	No	2000 Cum	Sand	Existing
Kalahandi	3	Indira or Udanti	Paikapada Sand Quarry	4.552	PA.WC-52 KM BR-0.15 KM	Karlapat Wildlife Sanctuary-52 KM	No	2000 Cum	Sand	Existing
Kalahandi	4	Indira or Udanti	Gandabasa Sand Quarry	2.023	PA.WC-53 KM BR-0.35 KM	Karlapat Wildlife Sanctuary-53 KM	No	2000 Cum	Sand	Existing
Kalahandi	5	Tel	Turkel-1 Sand Quarry	5.00	PA.WC-52 KM BR-0.21 KM	Karlapat Wildlife Sanctuary-52 KM	Yes Area-5.00 ha.	18000 Cum	Sand	Existing
Kalahandi	6	Tel	Turkel-2 Sand Quarry	5.00	PA.WC-53 KM BR-0.52 KM	Karlapat Wildlife Sanctuary-53 KM	Yes Area-5.00 ha.	16120 Cum	Sand	Existing
Kalahandi	7	Nala	Kusumdara Sand Quarry	1.974	PA.WC-31 KM BR-0.4 KM	Karlapat Wildlife Sanctuary-31 KM	No	1000 Cum	Sand	Existing
Kalahandi	8	Tel	Chahagaon Sand Quarry	1.214	PA.WC-49 KM BR-2.7 KM	Karlapat Wildlife Sanctuary-49 KM	No	8142 Cum	Sand	Existing
Kalahandi	9	Tel	Themra Sand Quarry	4.856	PA.WC-40 KM BR-0.23 KM	Karlapat Wildlife Sanctuary-40 KM	No	5000 Cum	Sand	Existing
Kalahandi	10	Indira or Udanti	Borda-1 Sand Quarry	3.188	PA.WC-53 KM BR-1.6 KM	Karlapat Wildlife Sanctuary-53 KM	Yes Area-1.416	3000 Cum	Sand	Existing
Kalahandi	11	Indira or Udanti	Borda-2 Sand Quarry	2.271	PA.WC-53 KM BR-0.25 KM	Karlapat Wildlife Sanctuary-53 KM	No	5000 Cum	Sand	Existing
Kalahandi	12	Indira or Udanti	Borda-3 Sand Quarry	1.416	PA.WC-53 KM BR-1.4 KM	Karlapat Wildlife Sanctuary-53 KM	Yes Area-3.188	4500 Cum	Sand	Existing
Kalahandi	13	Indira or Udanti	Artal Sand Quarry	4.856	PA.WC-52 KM BR-0.21 KM	Karlapat Wildlife Sanctuary-52 KM	Yes Area-8.314 ha.	5000 Cum	Sand	Existing
Kalahandi	14	Indira or Udanti	Ajarai Sand Quarry	8.134	PA.WC-52 KM BR-0.21 KM	Karlapat Wildlife Sanctuary-52 KM	Yes Area-4.856 ha.	10000 Cum	Sand	Existing
Kalahandi	15	Tel	Seinpur Sand Quarry	5.00	PA.WC-53 KM BR-0.16 KM	Karlapat Wildlife Sanctuary-53 KM	No	6500 Cum	Sand	Existing
Kalahandi	16	Tel	Sapsilet Sand Quarry	4.937	PA.WC-52 KM BR-50 Meter	Karlapat Wildlife Sanctuary-52 KM	No	2000 Cum	Sand	Existing
Kalahandi	17	Tel	Bileikuni Sand Quarry	4.856	PA.WC-35 KM BR-6.1 KM	Karlapat Wildlife Sanctuary-35 KM	No	10000 Cum	Sand	Existing

Dharamgarh Tahasil										
Dharamgarh	18	Tel	Taranja Sand Bed	4.997	PA, WC-34.5 Km BR-2 Km	Karlapat Wildlife Sanctuary-34.5 km	NA	5300 cum	Sand	Existing
Dharamgarh	19	Tel	Telipalas Sand Bed	5.00	PA, WC-34.0 Km BR-1.6 Km	Karlapat Wildlife Sanctuary-34.0 km	NA	2020 cum	Sand	Existing
Dharamgarh	20	Tel	Chhilipa Sand Quarry	5.00	PA, WC-39.5 BR-1.4 km	Karlapat Wildlife Sanctuary-39.5 km	NA	3500 cum	Sand	Existing
Dharamgarh	21	Tel	Chilchila Sand Quarry	5.00	PA, WC-37.5km BR-2.5 km	Karlapat Wildlife Sanctuary-37.5 km	NA	3300 cum	Sand	Existing
Dharamgarh	22	Tel	Sandhikulihari Sand Bed	5.00	PA, WC-39.8 BR-0.6 km	Karlapat Wildlife Sanctuary-39.8 km	NA	3000 cum	Sand	Existing
Dharamgarh	23	Tel	Kanagaon Sand Quarry	5.00	PA, WC-37.9 km BR-3.6 km	Karlapat Wildlife Sanctuary-37.9 km	NA	1900 cum	Sand	Existing
Dharamgarh	24	Tel	Kankeri Sand Quarry	4.876	PA, WC-39.6 km BR-1.8 km	Karlapat Wildlife Sanctuary-39.6 km	NA	5400 cum	Sand	Existing
Dharamgarh	25	Tel	Luhagaon Sand Quarry	5.00	PA, WC-37.5 km BR-2.3 km	Karlapat Wildlife Sanctuary-37.5 km	NA	1820 cum	Sand	Existing
Dharamgarh	26	Tel	Tambachhada Sand Quarry	5.00	PA, WC-33.5 km BR-0.05 km	Karlapat Wildlife Sanctuary-33.5 km	NA	1800 cum	Sand	Existing
Jaipatna Tahasil										
Jaipatna	27	Hati	Dhansuli Sand Quarry	2.225	PA, WC-40.0 Km BR-0.5 Km	Karlapat Wildlife Sanctuary-40.0 km	NA	3000 cum	Sand	Existing
Jaipatna	28	Hati	Sindhikaguda Sand Quarry	4.815	PA, WC-27.4 BR-3.9 km	Karlapat Wildlife Sanctuary-27.4 km	NA	7000 cum	Sand	Existing
Narla Tahasil										
Narla	29	Sandul	Sargiguda Sand Quarry	0.404	PA, WC-34.4 km BR-0.4 km	Kotgarh Wildlife Sanctuary-34.4 km	NA	210 cum	Sand	Existing
Narla	30	Sandul	Jodabandh Sand Quarry	0.404	PA, WC-41.5 BR-2.3 km	Kotgarh Wildlife Sanctuary-41.5 km	NA	202 cum	Sand	Existing
Narla	31	Sandul	Dahal Sand Quarry	0.404	PA, WC-35.4 km BR-0.8 km	Kotgarh Wildlife Sanctuary-35.4 km	NA	2500 cum	Sand	Existing
Narla	32	Sandul	Bhanpur Sand Quarry	0.404	PA, WC -38.2 km BR-1.5 km	Kotgarh Wildlife Sanctuary-38.2 km	NA	3000 cum	Sand	Existing
Narla	33	Sandul	Brahmani Sand Quarry	0.404	PA, WC-41.6 km BR-0.6 km	Kotgarh Wildlife Sanctuary-41.6 km	NA	3000 cum	Sand	Existing
Junagarh Tahasil										
Junagarh	34	Tel	Panigaon Sand Quarry	2.02	PA, WC-30.5km BR-1.4 km	Karlapat Wildlife Sanctuary-30.5km	NA	3000Cum	Sand	Existing

Junagarh	35	Hati	Budhipadar Sand Quarry	5	PA.WC-21.5km BR-3.2 km	Karlapat Wildlife Sanctuary-21.5km	NA	5100Cum	Sand	Existing
Junagarh	36	Hati	Chingudisar Sand Quarry	5	PA.WC-28km BR-0.1km	Karlapat Wildlife Sanctuary-28km	NA	2100Cum	Sand	Existing
Junagarh	37	Tel	Kandulguda Sand Bed	5	PA.WC-32.5km BR-1.6km	Karlapat Wildlife Sanctuary-32.5km	NA	2100Cum	Sand	Existing
Junagarh	38	Hati	Bagdunguri Sand Bed	5	PA.WC-27.5km BR-4.1km	Karlapat Wildlife Sanctuary-27.5km	NA	2000Cum	Sand	Existing
Junagarh	39	Tel	Atigaon Sand Bed	5	PA.WC-32km BR-0.5km	Karlapat Wildlife Sanctuary-32km	NA	2050Cum	Sand	Existing
Junagarh	40	Hati	Banijara Sand Bed	2.571	PA.WC-18km BR-6.0km	Karlapat Wildlife Sanctuary-18km	NA	2000Cum	Sand	Existing
Junagarh	41	Hati	Barabesal Sand Bed	5	PA.WC-18 km BR-7.2km	Karlapat Wildlife Sanctuary-18 km	NA	2100Cum	Sand	Existing
Junagarh	42	Hati	Dasigaon Sand Bed-2	5	PA.WC-15.7km BR-2.57km	Karlapat Wildlife Sanctuary-15.7km	NA	2100Cum	Sand	Existing
Junagarh	43	Hati	Habaspur Sand Bed	1.673	PA.WC-15.5km BR-1.2km	Karlapat Wildlife Sanctuary-15.5km	NA	2050Cum	Sand	Existing
Junagarh	44	Hati	Dasigaon Sand Bed-1	5	PA.WC-15.8km BR-3.4km	Karlapat Wildlife Sanctuary-15.8km	NA	2050Cum	Sand	Existing
Junagarh	45	Hati	Karchala Sand Bed	5	PA.WC-15.3km BR-0.3km	Karlapat Wildlife Sanctuary-15.3km	NA	2100Cum	Sand	Existing
Junagarh	46	Hati	Baragaon Sand Bed	1.922	PA.WC-18.9km BR-8.67km	Karlapat Wildlife Sanctuary-18.9km	NA	2200Cum	Sand	Existing
Junagarh	47	Hati	Budel Sand Bed	2.428	PA.WC-18.5km BR-6.1km	Karlapat Wildlife Sanctuary-18.5km	NA	2000Cum	Sand	Existing
Junagarh	48	Hati	Chilguda Sand Bed	1.663	PA.WC-15.30km BR-1.05km	Karlapat Wildlife Sanctuary-15.30km	NA	2050Cum	Sand	Existing
Junagarh	49	Hati	Chilakpur Sand Bed	1.663	PA.WC-15.0km BR-0.84km	Karlapat Wildlife Sanctuary-15.0km	NA	2000Cum	Sand	Existing
Koksara Tahasil										
Koksara	50	Mutura	Sarasmal & Dangriguda Sand Quarry	5.26	PA.WC-31.6km BR-1.72km	Karlapat Wildlife Sanctuary-31.6km	NA	1500 Cum	Sand	Existing
Koksara	51	Mutura	Chilguda Sand Quarry	1.416	PA.WC-31.40km BR-0.07km	Karlapat Wildlife Sanctuary-31.40km	NA	500 Cum	Sand	Existing
Koksara	52	Mutura	Dahagaon Sand Quarry-B	0.809	PA.WC-32.35 BR-0.12km	Karlapat Wildlife Sanctuary-32.35km	NA	500 Cum	Sand	Existing
M.Rampur Tahasil										
M.Rampur	53	Uttei	Ainlapali Sand Quarry	1	PA.WC-44.04km BR-2.90km	Kotagarh Wildlife Sanctuary-44.04km	NA	600Cum	Sand	Existing

M.Rampur	54	Buda	Lahadi Sand Quarry	4.856	PA.WC-34.20km BR-2.2km	Kotagarh Wildlife Sanctuary-34.20km	NA	800Cum	Sand	Existing
M.Rampur	55	Roul	Duked Sand Quarry	1.861	PA.WC-29.90km BR-1.85km	Kotagarh Wildlife Sanctuary-29.90km	NA	555Cum	Sand	Existing
M.Rampur	56	Buda	Jarka Sand Quarry	4.026	PA.WC-33.53km BR-2.25km	Kotagarh Wildlife Sanctuary-33.53km	NA	670Cum	Sand	Existing
M.Rampur	57	Roul	Kurupadar Sand Quarry	4.046	PA.WC-32.64km BR-0.59km	Kotagarh Wildlife Sanctuary-32.64km	NA	880Cum	Sand	Existing
M.Rampur	58	Sandul	Dutta Sand Quarry	2.428	PA.WC-41.95km BR-2.95km	Kotagarh Wildlife Sanctuary-41.95km	NA	NA	Sand	Existing
M.Rampur	59	Uttei	Salepali-Ambagaon Sand Quarry	3.358	PA.WC-41.38km BR-0.10km	Kotagarh Wildlife Sanctuary-41.38km	NA	1350Cum	Sand	Existing
M.Rampur	60	Roul	Domkarlakhunta Sand Quarry	1.214	PA.WC-46.19km BR-1.15km	Kotagarh Wildlife Sanctuary-46.19km	NA	610Cum	Sand	Existing
Kalampur Tahasil										
Kalampur	61	Hatti	Badktru Sand Bed	1.149	PA, WC-21km BR-240mtr	Karlapat Wildlife Sanctuary-21km	No	700 Cum	Sand	Existing
Kalampur	62	Hatti	Karmel Sand Bed-1	1.214	PA, WC-18.8km BR-126mtr	Karlapat Wildlife Sanctuary-18.8km	No	1112 Cum	Sand	Existing
Kalampur	63	Hatti	Panigaon Sand Bed	1.477	PA, WC-23.3km BR-1.2km	Karlapat Wildlife Sanctuary-23.3km	No	702 Cum	Sand	Existing
Kalampur	64	Hatti	Patrabasa Sand Bed	4.856	PA, WC-21km BR-590mtr	Karlapat Wildlife Sanctuary-21km	No	1000 Cum	Sand	Existing
Kalampur	65	Hatti	Paruaguda Sand Bed	2.023	PA, WC-22.5km BR-1.6km	Karlapat Wildlife Sanctuary-22.5km	No	5000 Cum	Sand	Existing
Kalampur	66	Hatti	Deypur Sand Bed	4.856	PA, WC-16.3km BR-5.1km	Karlapat Wildlife Sanctuary-16.3km	No	1211 Cum	Sand	Existing
Kalampur	67	Hatti	Khandidangriguda Sand Bed	3.237	PA, WC-16km BR-5.5km	Karlapat Wildlife Sanctuary-16km	No	1004 Cum	Sand	Existing
Kalampur	68	Hatti	Mandal Sand Bed	4.046	PA, WC-18.4km BR-2.7km	Karlapat Wildlife Sanctuary-18.4km	No	1600 Cum	Sand	Existing
Kalampur	69	Hatti	Balichada Sand Bed	4.451	PA, WC-17.7km BR-3.5km	Karlapat Wildlife Sanctuary-17.7km	No	1022 Cum	Sand	Existing
Kalampur	70	Hati	Khangeruguda Sand Bed	4.86	PA, WC-19.7km BR-2.4 km	Karlapat Wildlife Sanctuary-19.7km	NA	NA	Sand	Existing

Karlamura Tahasil										
Karlamura	71	Tel	Pourkela Sand Bed	5.26	PA, WC-65.8km BR-4.4km	Kotgarh Wildlife Sanctuary-65.8km	No	8000 Cum	Sand	Existing
Karlamura	72	Utei/Sandul	Ektara sand Bed	5	PA, WC-43.2km BR-3.6km	Kotgarh Wildlife Sanctuary-43.2km	No	3080 Cum	Sand	Existing
Karlamura	73	Tel	Kundeipali Sand Quarry	6	PA, WC-64.3km BR-7.5km	Kotgarh Wildlife Sanctuary-64.3km	No	8000 Cum	Sand	Existing
Karlamura	74	Utei	Deogan Sand Bed	2.832	PA, WC-54.5km BR-2.6km	Kotgarh Wildlife Sanctuary-54.5km	No	2000 Cum	Sand	Existing
Karlamura	75	Tel	Teresingha sand Bed	4.605	PA, WC-63.9km BR-8.8km	Kotgarh Wildlife Sanctuary-63.9km	No	6500 Cum	Sand	Existing
Karlamura	76	Utei	Joradobra sand Bed	5	PA, WC-47km BR-143mtr	Kotgarh Wildlife Sanctuary-47km	No	2800 Cum	Sand	Existing
Karlamura	77	Utei	Kernapala sand bed	4.856	PA, WC-48.3km BR-1.9km	Kotgarh Wildlife Sanctuary-48.3km	No	4000 Cum	Sand	Existing
Karlamura	78	Utei	Legeda Sand Bed	4.046	PA, WC-50.5km BR-1.6km	Kotgarh Wildlife Sanctuary-50.5 km	No	5000 Cum	Sand	Existing
Golamura Tahasil										
Golamura	79	Tel	Beheraguda Sand Bed	5.00	PA/WC:35.3 BR: 1.1	Karlapat Wildlife Sanctuary-35.3	No	2550 Cum	Sand	Existing
Golamura	80	Tel	Khamarhaldi Sand Bed	5.00	PA/WC:35.8 BR: 0.6	Karlapat Wildlife Sanctuary-35.8	No	2400 Cum	Sand	Existing
Golamura	81	Tel	Gunduri Sand Bed	5.00	PA/WC:35.7 BR: 4.8	Karlapat Wildlife Sanctuary-35.7	No	2500 Cum	Sand	Existing
Golamura	82	Tel	Kumbhari Sand Bed	2.428	PA/WC:32.9 BR: 1.5	Karlapat Wildlife Sanctuary-32.9	No	5000 Cum	Sand	Existing
Golamura	83	Udanti	Udesrung Sand Bed	2.428	PA/WC:52.3 BR: 0.8	Karlapat Wildlife Sanctuary-52.3	No	6000 Cum	Sand	Existing
Golamura	84	Tel	Funda & Chilgaon Sand Bed	5.00	PA/WC:31.5 BR: 0.5	Karlapat Wildlife Sanctuary-31.5	No	2400 Cum	Sand	Existing
Golamura	85	Udanti	Mahaling Sand Bed	2.023	PA/WC:50.3 BR: 2.9	Karlapat Wildlife Sanctuary-50.3	No	5000 Cum	Sand	Existing
Golamura	86	Udanti	Manjhari Sand Bed	2.832	PA/WC:50.7 BR: 3.7	Sunabeda Wildlife Sanctuary-50.7	No	4000 Cum	Sand	Existing
Golamura	87	Tel	Panjia Sand Bed	5.00	PA/WC:33.9 BR: 2.3	Karlapat Wildlife Sanctuary-33.9	No	2500 Cum	Sand	Existing
Golamura	88	Tel	Chilgaon Sand Quarry	2.43	PA/WC:30.8 BR: 1.5	Karlapat Wildlife Sanctuary-30.8	No	1600 Cum	Sand	Existing

Golamunda	89	Tel	Sinapali Sand Bed	5.00	PA/WC:51.7 BR: 0.8	Karlapat Wildlife Sanctuary-51.7	No	6000 Cum	Sand	Existing
Golamunda	90	Udanti	Chapria Sand Bed	5.00	PA/WC:51.0 BR: 3.9	Karlapat Wildlife Sanctuary-51.0	No	2000 Cum	Sand	Existing
Golamunda	91	Tel	Uchhala Sand Bed	5.00	PA/WC:42.1 BR: 2.0	Karlapat Wildlife Sanctuary-42.1	No	3200 Cum	Sand	Existing
Golamunda	92	Tel	Karli Sand Bed	5.00	PA/WC:32.1 BR: 4.0	Karlapat Wildlife Sanctuary-32.1	No	2600 Cum	Sand	Existing
Golamunda	93	Tel	Pandkul Sand Bed	2.266	PA/WC:33.4 BR: 0.4	Karlapat Wildlife Sanctuary-33.4	No	5000 Cum	Sand	Existing
Golamunda	94	Tel	Bandhagaon Sand Bed	5.00	PA/WC:30.0 BR: 2.6	Karlapat Wildlife Sanctuary-30.0	No	3100 Cum	Sand	Existing
Golamunda	95	Udanti	Kantamal Sand Bed	4.406	PA/WC:53.8 BR: 3.8	Karlapat Wildlife Sanctuary-53.8	No	5000 Cum	Sand	Existing
Kesinga Tahasil										
Kesinga	96	Tel	Patharla Sand Quarry	4.97	PA/WC: 56.8 BR:5.2	Karlapat Wildlife Sanctuary-56.8	No	12850 Cum	Sand	Existing
Kesinga	97	Tel	Turlakhaman Sand Quarry	2.023	PA/WC:78.2 BR:3.0	Karlapat Wildlife Sanctuary-78.2	No	1000 Cum	Sand	Existing
Kesinga	98	Ret	Boria Sand Bed	2.833	PA/WC:55.0 BR:0.8	Karlapat Wildlife Sanctuary-55.0	No	4800 Cum	Sand	Existing
Kesinga	99	Ret	Gokuleswar & Kanabira sand Quarry	4.840	PA/WC:45.0 BR:2.4	Kotgarh Wildlife Sanctuary-45.0	No	500 Cum	Sand	Existing
Kesinga	100	Tel	Kantesir Sand Bed	4.856	PA/WC:56.5 BR:3.1	Kotgarh Wildlife Sanctuary-56.5	No	7000 Cum	Sand	Existing
Kesinga	101	Tel	Amath sand Bed	4.653	PA/WC:58.8 BR:1.4	Kotgarh Wildlife Sanctuary-58.8	No	5000 Cum	Sand	Existing
Kesinga	102	Ret	Bisodi Nadi Ghat	4.516	PA/WC:50.1 BR:1.8	Karlapat Wildlife Sanctuary-50.1	No	750 Cum	Sand	Existing
Kesinga	103	Tel	Goudtola Sand Quarry	4.856	PA/WC:55.4 BR:6.2	Karlapat Wildlife Sanctuary-55.4	No	6000 Cum	Sand	Existing
Kesinga	104	Tel	Chhenagaon Sand Quarry	5.00	PA/WC:52.8 BR:3.2	Karlapat Wildlife Sanctuary-52.8	No	6000 Cum	Sand	Existing

Kesinga	105	Ret	Jolko sand Bed	5.00	PA/WC:55.9 BR:3.5	Kotgarh Wildlife Sanctuary-55.9	No	2200 Cum	Sand	Existing
---------	-----	-----	----------------	------	----------------------	---------------------------------------	----	----------	------	----------

List of Potential Mining Lease (New) Rivers

Tahasil	Sl. No	River detail	Lease detail	Area (in Ha.)	Distance (in K.M) from PA/BR/WC	Distance from forest area (in K.M)	Mining lease within 500 metres (if yes cluster area	Total excavation in Tonnes/ Annum considering digging depth max as 3 metres	Mineral to be mined (sand/Bajri/ R BM etc.	Existing/ proposed
1	2	3	4	5	6	7	8	9	10	11
Kalahandi Tahasil										
Kalahandi	1	Tel	Sapsilet Sand Quarry-2	4.937	PA, WC- 52.1 KM BR-0.6 KM	Karlapat Wildlife Sanctuary-52.1 KM	No	NA	Sand	New
Karlamunda Tahasil										
Karlamunda	2	Utei	Sargulmalpara Sand bed	4.856	PA, WC- 58.5km BR- 0.6 km	Kotgarh Wildlife Sanctuary-58.5 km	No	NA	Sand	New
Karlamunda	3	Tel	Legada Sand Bed 2	5.00	PA, WC-50.4 km BR- 0.7 km	Kotgarh Wildlife Sanctuary-50.4 km	No	NA	Sand	New
Karlamunda	4	Tel	Putigaon Sand Bed	4.856	PA, WC-60.0 km BR- 1.0 km	Kotgarh Wildlife Sanctuary-60.0 km	No	NA	Sand	New
Kalampur										
Kalampur	5	NA	Khangeruguda Sand Bed	4.856	PA, WC-19.7km BR-2.4 km	Karlapat Wildlife Sanctuary-19.7km	NA	NA	Sand	New
Junagarh										
Junagarh	6	Tel	Amathola Sand Bed	4.856	PA, WC-32.9km BR-2.4 km	Karlapat Wildlife Sanctuary-32.9km	NA	NA	Sand	New

Patta Lands/ Khatedairi Land (Existing Proposed)

Owner	Sl.No.	Area	District	Tahasil	Village	Total Reserve (MT)	Total Mineral to be mined(MT)	Existing/proposed
Not applicable for Kalahandi District								

De-Siltation Location (lakes/ Ponds/dams etc. (Existing & Proposed)

1	2	3	5	6	7	8	9	10	11
Name of reservoir /Dams	Maintain/ Collected by State Government/PSU	location	District	Tahasil	Village	Size (Ha)	Quantity (MT/year)	Existing/proposed	
Not applicable for Kalahandi District									

d) M-sand Plants:

Plant name	Owner	District	Tahasil	Village	Gee-location	Quantity Tonnes/Annun	Existing /Proposed
Not applicable for Kalahandi District							

Cluster & Contiguous Cluster details**Cluster:**

River Name	Cluster No.	Lease No.	Location (River Bed/Patta Land)	Village	Area (in Ha.)	Total excavation (Cum)
Indira or Udanti	1	882203079	River Bed	Bargaon	4.856	8250
Indira or Udanti	1	882301263	River Bed	Artal	4.856	25000
Indira or Udanti	1	NA (To be Auctioned)	River Bed	Ajarai	8.134	20000
Tel	2	NA (To be Operated)	River Bed	Turkel	5.00	90000
Tel	2	10882401454	River Bed	Turkel	5.00	80600
Indira or Udanti	3	882102800	River Bed	Borda	3.188	15000
Indira or Udanti	3	882200637	River Bed	Borda	1.416	18000
Hati	4	N/A	River Bed	Banijara	2.571	N/A
Hati	4	N/A	River Bed	Karchala	5.00	N/A
Hati	4	N/A	River Bed	Budel	2.428	N/A
Hati	5	N/A	River Bed	Chilguda	1.663	N/A
Hati	5	N/A	River Bed	Chilakpur	1.663	N/A

Contiguous Cluster Details

River Name	Contiguous Cluster No.	Cluster No.	Number of leases in the cluster	Location (River Bed/Patta Land)	Distance between clusters	Village	Area of cluster (in Ha.)	Total excavation (Ton)
No contiguous Cluster Situation available in respect of Kalahandi District								

Annexure-IV

Transportation Routes for individual leases and leases in Cluster.

Name of the Tahasil	Name of the sand source	Lease No.	Transportation Route number	Whether runs on Govt. or Private Land	Details of village/Forest area/Agricultural land through which the approach road runs if any	Number of tippers / day of lease	Number of tippers / day of all the lease on route	Length of Route in K.M	Type of Road (Black Topped/ unpaved)	Recommendation for road (Black Topped/ unpaved)	The road will be constructed by Government /Lease Owner	Route map and location
1	2	3	4	5	6	7	8	9	10	11	12	13
Kalahandi Tahasil												
Kalahandi	Bargaon Sand Quarry	10882203056	Village Road	Govt. Land	Bargaon	4	7	3	Unpaved	Unpaved	Lease Owner	
Kalahandi	Sagada Sand Quarry	10882200518	Village Road	Govt. Land	Sagada	2	3	5	Unpaved	Unpaved	Lease Owner	
Kalahandi	Paikapada Sand Quarry	NA	Village Road	Govt. Land	Paikapada	4	5	3	Unpaved	Unpaved	Lease Owner	
Kalahandi	Gandabasa Sand Quarry	10882102547	Village Road	Govt. Land	Gandabasa	2	4	2	Unpaved	Unpaved	Lease Owner	
Kalahandi	Turkel-1 Sand Quarry	NA	Village Road	Govt. Land	Turkel	7	18	3	Unpaved	Unpaved	Lease Owner	
Kalahandi	Turkel-2 Sand Quarry	10882401454	Village Road	Govt. Land	Turkel	11	18	3	Unpaved	Unpaved	Lease Owner	
Kalahandi	Kusumdara Sand Quarry	10882202635	Village Road	Govt. Land	Kusumdara	2	2	4	Unpaved	Unpaved	Lease Owner	
Kalahandi	Chahagaon Sand Quarry	10882101345	Village Road	Govt. Land	Chahagaon	6	8	5	Unpaved	Unpaved	Lease Owner	
Kalahandi	Themra Sand Quarry	10882302744	Village Road	Govt. Land	Themra	5	7	4	Unpaved	Unpaved	Lease Owner	
Kalahandi	Borda-1 Sand Quarry	10882102736	Village Road	Govt. Land	Borda	4	14	4	Unpaved	Unpaved	Lease Owner	
Kalahandi	Borda-2 Sand Quarry	NA	Village Road	Govt. Land	Borda	4	14	4	Unpaved	Unpaved	Lease Owner	
Kalahandi	Borda-3 Sand Quarry	10882200615	Village Road	Govt. Land	Borda	4	14	4	Unpaved	Unpaved	Lease Owner	
Kalahandi	Artal Sand Quarry	10882101856	Village Road	Govt. Land	Artal	6	9	3	Unpaved	Unpaved	Lease Owner	
Kalahandi	Ajarai Sand Quarry	NA	Village Road	Govt. Land	Ajarai	5	9	5	Unpaved	Unpaved	Lease Owner	
Kalahandi	Seinpur Sand Quarry	NA	Village Road	Govt. Land	Seinpur	4	4	3	Unpaved	Unpaved	Lease Owner	
Kalahandi	Sapsilet Sand Quarry	10882103832	Village Road	Govt. Land	Sapsilet	4	5	2	Unpaved	Unpaved	Lease Owner	
Kalahandi	Bileikuni Sand Quarry	NA	Village Road	Govt. Land	Bileikuni	3	4	4	Unpaved	Unpaved	Lease Owner	
Kalahandi	Sapsilet Sand Quarry-2	NA	Village Road	Govt. Land	Sapsilet	5	4	3	Unpaved	Unpaved	Lease Owner	
Golamunda Tahasil												
Golamunda	Beheraguda Sand Quarry	10892101839	Village Road	Govt. Land	Beheraguda	3	5	3	Unpaved	Unpaved	Lease Owner	

Golamunda	Khamarhaldi Sand Quarry	10892101741	Village Road	Govt. Land	Khamarhaldi	2	4	4	Unpaved	Unpaved	Lease Owner	
Golamunda	Gunduri Sand Quarry	10892201759	Village Road	Govt. Land	Gunduri	4	5	2	Unpaved	Unpaved	Lease Owner	
Golamunda	Kumbhari Sand Quarry	NA	Village Road	Govt. Land	Kumbhari	4	6	3	Unpaved	Unpaved	Lease Owner	
Golamunda	Udesrung Sand Quarry	12162400187	Village Road	Govt. Land	Udesrung	3	5	3	Unpaved	Unpaved	Lease Owner	
Golamunda	Funda & Chilgaon Sand Quarry	10892100049	Village Road	Govt. Land	Funda & Chilgaon	5	7	2	Unpaved	Unpaved	Lease Owner	
Golamunda	Mahaling Sand Quarry	NA	Village Road	Govt. Land	Mahaling	3	4	3	Unpaved	Unpaved	Lease Owner	
Golamunda	Manjhari Sand Quarry	NA	Village Road	Govt. Land	Manjhari	4	5	2	Unpaved	Unpaved	Lease Owner	
Golamunda	Panjia Sand Quarry	10892200874	Village Road	Govt. Land	Panjia	4	6	2	Unpaved	Unpaved	Lease Owner	
Golamunda	Chilgaon Sand Quarry	NA	Village Road	Govt. Land	Chilgaon	3	5	3	Unpaved	Unpaved	Lease Owner	
Golamunda	Sinapali Sand Quarry	NA	Village Road	Govt. Land	Sinapali	5	7	2	Unpaved	Unpaved	Lease Owner	
Golamunda	Chapria Sand Quarry	10892201753	Village Road	Govt. Land	Chapria	4	6	3	Unpaved	Unpaved	Lease Owner	
Golamunda	Uchhala Sand Quarry	12162400148	Village Road	Govt. Land	Uchhala	4	7	4	Unpaved	Unpaved	Lease Owner	
Golamunda	Karli Sand Quarry	10892100048	Village Road	Govt. Land	Karli	3	5	3	Unpaved	Unpaved	Lease Owner	
Golamunda	Pandkul Sand Quarry	NA	Village Road	Govt. Land	Pandkul	3	4	2	Unpaved	Unpaved	Lease Owner	
Golamunda	Bandhagaon Sand Quarry	10892201697	Village Road	Govt. Land	Bandhagaon	4	6	4	Unpaved	Unpaved	Lease Owner	
Golamunda	Kantamal Sand Quarry	12162300349	Village Road	Govt. Land	Kantamal	3	5	4	Unpaved	Unpaved	Lease Owner	
Dharamgarh Tahasil												
Dharamgarh	Taranja Sand Bed	10892201691	Village Road	Govt. Land	Taranja	4	12	3	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Telipalas Sand Bed	10892200217	Village Road	Govt. Land	Telipalas	3	8	2	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Chhilipa Sand Quarry	10892200183	Village Road	Govt. Land	Chhilipa	4	10	3	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Chilchila Sand Quarry	10892100753	Village Road	Govt. Land	Chilchila	2	7	2	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Sandhikulihari Sand Bed	10892201733	Village Road	Govt. Land	Sandhikulihari	4	12	4	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Kanagaon Sand Quarry	10892101823	Village Road	Govt. Land	Kanagaon	7	15	3	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Kankeri Sand Quarry	10892201738	Village Road	Govt. Land	Kankeri	3	7	3	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Luhagaon Sand Quarry	10892100978	Village Road	Govt. Land	Luhagaon	6	10	2	Unpaved	Unpaved	Lease Owner	
Dharamgarh	Tambachhada Sand Quarry	10892100752	Village Road	Govt. Land	Tambachhada	4	12	3	Unpaved	Unpaved	Lease Owner	
Jaipatna Tahasil												
Jaipatna	Dhansuli Sand Quarry	NA	Village Road	Govt. Land	Dhansuli	4	10	3	Unpaved	Unpaved	Lease Owner	
Jaipatna	Sindhikaguda Sand Quarry	NA	Village Road	Govt. Land	Sindhikaguda	3	12	4	Unpaved	Unpaved	Lease Owner	
Narla Tahasil												

Narla	Sargiguda Sand Quarry	10912101562	Village Road	Govt. Land	Sargiguda	4	12	3	Unpaved	Unpaved	Lease Owner	
Narla	Jodabandh Sand Quarry	10912102677	Village Road	Govt. Land	Jodabandh	5	11	4	Unpaved	Unpaved	Lease Owner	
Narla	Dahal Sand Quarry	NA	Village Road	Govt. Land	Dahal	4	15	4	Unpaved	Unpaved	Lease Owner	
Narla	Bhanpur Sand Quarry	NA	Village Road	Govt. Land	Bhanpur	5	8	2	Unpaved	Unpaved	Lease Owner	
Narla	Brahmani Sand Quarry	NA	Village Road	Govt. Land	Brahmani	3	7	2	Unpaved	Unpaved	Lease Owner	
Junagarh Tahasil												
Junagarh	Panigaon sand Quarry	11972001659	Village Road	Govt. Land	Panigaon	5	14	4	Unpaved	Unpaved	Lease Owner	
Junagarh	Budhipadar sand Quarry	11972100753	Village Road	Govt. Land	Budhipadar	3	6	5	Unpaved	Unpaved	Lease Owner	
Junagarh	Chingudisar sand Quarry	11972100928	Village Road	Govt. Land	Chingudisar	6	8	6	Unpaved	Unpaved	Lease Owner	
Junagarh	Kandulguda sand Quarry	11972200154	Village Road	Govt. Land	Kandulguda	4	6	4	Unpaved	Unpaved	Lease Owner	
Junagarh	Bagdunguri Sand Quarry	11972100581	Village Road	Govt. Land	Bagdunguri	4	5	2	Unpaved	Unpaved	Lease Owner	
Junagarh	Atigaon Sand Quarry	11972100119	Village Road	Govt. Land	Atigaon	12	4	5	Unpaved	Unpaved	Lease Owner	
Junagarh	Banijara Sand Quarry	NA	Village Road	Govt. Land	Banijara	5	6	4	Unpaved	Unpaved	Lease Owner	
Junagarh	Barabesal Sand Bed	11972101891	Village Road	Govt. Land	Barabesal	3	7	6	Unpaved	Unpaved	Lease Owner	
Junagarh	Dasigaon Sand Bed-2	NA	Village Road	Govt. Land	Dasigaon	3	3	5	Unpaved	Unpaved	Lease Owner	
Junagarh	Habaspur Sand Bed	NA	Village Road	Govt. Land	Habaspur	2	2	9	Unpaved	Unpaved	Lease Owner	
Junagarh	Dasigaon Sand Bed-1	NA	Village Road	Govt. Land	Dasigaon	2	4	2	Unpaved	Unpaved	Lease Owner	
Junagarh	Karchala sand Bed	NA	Village Road	Govt. Land	Karchala	3	2	3	Unpaved	Unpaved	Lease Owner	
Junagarh	Bargaon Sand Bed	NA	Village Road	Govt. Land	Bargaon	2	3	4	Unpaved	Unpaved	Lease Owner	
Junagarh	Budel Sand Bed	NA	Village Road	Govt. Land	Budel	4	2	4	Unpaved	Unpaved	Lease Owner	
Junagarh	Chilguda Sand Bed	NA	Village Road	Govt. Land	Chilguda	3	4	6	Unpaved	Unpaved	Lease Owner	
Junagarh	Chilakpur Sand Bed	NA	Village Road	Govt. Land	Chilakpur	2	2	5	Unpaved	Unpaved	Lease Owner	
Junagarh	Amathola Sand Bed	NA	Village Road	Govt. Land	Amathola	3	4	6	Unpaved	Unpaved	Lease Owner	
Koksara Tahasil												
Koksara	Sarasmal & Dangriguda Sand Quarry	NA	Village Road	Govt. Land	Sarasmal & Dangriguda	2	2	3	Unpaved	Unpaved	Lease Owner	
Koksara	Chilguda Sand Quarry	NA	Village Road	Govt. Land	Chilguda	2	3	4	Unpaved	Unpaved	Lease Owner	
Koksara	Dahagaon Sand Quarry-B	11792100022	Village Road	Govt. Land	Dahagaon	3	3	5	Unpaved	Unpaved	Lease Owner	
M.Rampur Tahasil												
M.Rampur	Ainlapali Sand Quarry	10912201266	Village Road	Govt. Land	Ainlapali	3	3	3	Unpaved	Unpaved	Lease Owner	

M.Rampur	Lahadi Sand Quarry	10912201265	Village Road	Govt. Land	Lahadi	3	6	54	Unpaved	Unpaved	Lease Owner	
M.Rampur	Duked Sand Quarry	10912001912	Village Road	Govt. Land	Duked	4	5	6	Unpaved	Unpaved	Lease Owner	
M.Rampur	Jarka Sand Quarry	10912201264	Village Road	Govt. Land	Jarka	5	4	2	Unpaved	Unpaved	Lease Owner	
M.Rampur	Kurupadar Sand Quarry	10912001894	Village Road	Govt. Land	Kurupadar	3	5	4	Unpaved	Unpaved	Lease Owner	
M.Rampur	Dutta Sand Quarry	NA	Village Road	Govt. Land	Dutta	4	8	3	Unpaved	Unpaved	Lease Owner	
M.Rampur	Salepali-Ambagaon Sand Quarry	10912001543	Village Road	Govt. Land	Salepali-Ambagaon	2	5	5	Unpaved	Unpaved	Lease Owner	
M.Rampur	Domkarlakhunta Sand Quarry	912001509	Village Road	Govt. Land	Domkarlakhunta	4	7	4	Unpaved	Unpaved	Lease Owner	
Kalampur Tahasil												
Kalampur	Badkutru Sand Bed	1782100177	Village Road	Govt. Land	Badkutru	5	10	4	Unpaved	Unpaved	Lease Owner	
Kalampur	Karmel Sand Bed-1	1782100307	Village Road	Govt. Land	Karmel	8	4	3	Unpaved	Unpaved	Lease Owner	
Kalampur	Panigaon Sand Bed	1782100356	Village Road	Govt. Land	Panigaon	4	5	3	Unpaved	Unpaved	Lease Owner	
Kalampur	Patrabasa Sand Bed	1782100306	Village Road	Govt. Land	Patrabasa	3	6	4	Unpaved	Unpaved	Lease Owner	
Kalampur	Paruaguda Sand Bed	NA	Village Road	Govt. Land	Paruaguda	6	4	5	Unpaved	Unpaved	Lease Owner	
Kalampur	Deypur Sand Bed	1782100355	Village Road	Govt. Land	Deypur	3	9	3	Unpaved	Unpaved	Lease Owner	
Kalampur	Khandidangriguda Sand Bed	1782100213	Village Road	Govt. Land	Khandidangriguda	2	4	2	Unpaved	Unpaved	Lease Owner	
Kalampur	Mandal Sand Bed	1782100054	Village Road	Govt. Land	Mandal	5	7	4	Unpaved	Unpaved	Lease Owner	
Kalampur	Balichada Sand Bed	1782100357	Village Road	Govt. Land	Balichada	6	10	3	Unpaved	Unpaved	Lease Owner	
Kalampur	Khangeruguda Sand Bed	NA	Village Road	Govt. Land	Khangeruguda	4	4	6	Unpaved	Unpaved	Lease Owner	
Karlamunda Tahasil												
Karlamunda	Pourkela Sand Bed	10912100645	Village Road	Govt. Land	Pourkela	3	8	6	Unpaved	Unpaved	Lease Owner	
Karlamunda	Ektara sand Bed	10912102820	Village Road	Govt. Land	Ektara	8	4	5	Unpaved	Unpaved	Lease Owner	
Karlamunda	Kundeipali Sand Quarry	10912300232	Village Road	Govt. Land	Kundeipali	5	2	3	Unpaved	Unpaved	Lease Owner	
Karlamunda	Deogan Sand Bed	12182300473	Village Road	Govt. Land	Deogan	4	6	8	Unpaved	Unpaved	Lease Owner	
Karlamunda	Teresingha sand Bed	12182300322	Village Road	Govt. Land	Teresingha	6	10	4	Unpaved	Unpaved	Lease Owner	
Karlamunda	Joradobra sand Bed	NA	Village Road	Govt. Land	Joradobra	3	3	5	Unpaved	Unpaved	Lease Owner	
Karlamunda	Kernapala sand bed	12182300321	Village Road	Govt. Land	Kernapala	4	2	2	Unpaved	Unpaved	Lease Owner	
Karlamunda	Legeda Sand Bed	NA	Village Road	Govt. Land	Legeda	2	9	7	Unpaved	Unpaved	Lease Owner	
Karlamunda	Legada Sand Bed-2	NA	Village Road	Govt. Land	Legada	5	6	4	Unpaved	Unpaved	Lease Owner	
Karlamunda	Putigaon Sand Bed	NA	Village Road	Govt. Land	Putigaon	6	8	7	Unpaved	Unpaved	Lease Owner	
Karlamunda	Sargulmalpara Sand Bed	NA	Village Road	Govt. Land	Sargulmalpara	3	7	5	Unpaved	Unpaved	Lease Owner	

Kesinga Tahasil												
Kesinga	Patharla Sand Quarry	1192100243	Village Road	Govt. Land	Patharla	8	15	5	Unpaved	Unpaved	Lease Owner	
Kesinga	Turlakhaman Sand Quarry	11982001364	Village Road	Govt. Land	Turlakhaman	3	6	6	Unpaved	Unpaved	Lease Owner	
Kesinga	Boria Sand Bed	11982400196	Village Road	Govt. Land	Boria	4	6	6	Unpaved	Unpaved	Lease Owner	
Kesinga	Gokuleswar & Kanabira sand Quarry	1198210098	Village Road	Govt. Land	Gokuleswar & Kanabira	6	10	5	Unpaved	Unpaved	Lease Owner	
Kesinga	Kantesir Sand Bed	11982300990	Village Road	Govt. Land	Kantesir	7	12	4	Unpaved	Unpaved	Lease Owner	
Kesinga	Amath sand Bed	11982301265	Village Road	Govt. Land	Amath	7	11	4	Unpaved	Unpaved	Lease Owner	
Kesinga	Bisodi Nadi Ghat	11982100110	Village Road	Govt. Land	Bisodi	6	9	7	Unpaved	Unpaved	Lease Owner	
Kesinga	Goudtola Sand Quarry	11982300770	Village Road	Govt. Land	Goudtola	8	16	5	Unpaved	Unpaved	Lease Owner	
Kesinga	Chhenagaon Sand Quarry	11982400201	Village Road	Govt. Land	Chhenagaon	9	17	7	Unpaved	Unpaved	Lease Owner	
Kesinga	Jolko sand Bed	11982001124	Village Road	Govt. Land	Jolko	9	18	8	Unpaved	Unpaved	Lease Owner	

Cluster No.	Transportation Route number	Number of tippers / day of Cluster	Number of tippers / day of all the Cluster on route	Length of Route in K.M	Type of Road (Black Topped/ unpaved)	Recommendation for road (Black Topped/ unpaved)	The road will be constructed by Government /Lease Owner	Route map and location
Cluster-1	Quarry Road	15	25	11	Unpaved	Unpaved	Lease Owner	
Cluster-2	Quarry Road	18	36	6	Unpaved	Unpaved	Lease Owner	
Cluster-3	Quarry Road	8	28	8	Unpaved	Unpaved	Lease Owner	
Cluster-4	Quarry Road	12	10	11	Unpaved	Unpaved	Lease Owner	
Cluster-5	Quarry Road	5	6	11	Unpaved	Unpaved	Lease Owner	