



DISTRICT SURVEY REPORT (DSR) OF CUTTACK DISTRICT, ODISHA FOR ROAD METAL/BUILDING STONE / BLACK STONE MINING

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



**COLLECTORATE CUTTACK
NOVEMBER-2024**

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PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized Sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRRRI), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrum and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- Laterite: Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretionary often forms a hard crust, and can reach thicknesses of up to 10 meters or more.
- Road Metal/Stone: Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- Morrum: Association of morrum with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

03. GENERAL PROFILE OF THE DISTRICT.

a. Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

b. Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87- Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack,91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

c. Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

d. Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position in the map of Indian Industries. Popularly known as Silver City, Cuttack is also growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has

provided job opportunities to skilled man power. There are also some private companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home-based and agro-based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

e. Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road is one of the premier national research institute under the Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The

presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc.

The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

f. Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14
No. of Tahasils	15
No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01
No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

g. Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhabaleswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhabaleswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to Cuttack Sadar Sub Division one can find the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansa Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a

tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

Silver Filigree work, uniqueness of Cuttack City: -

Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

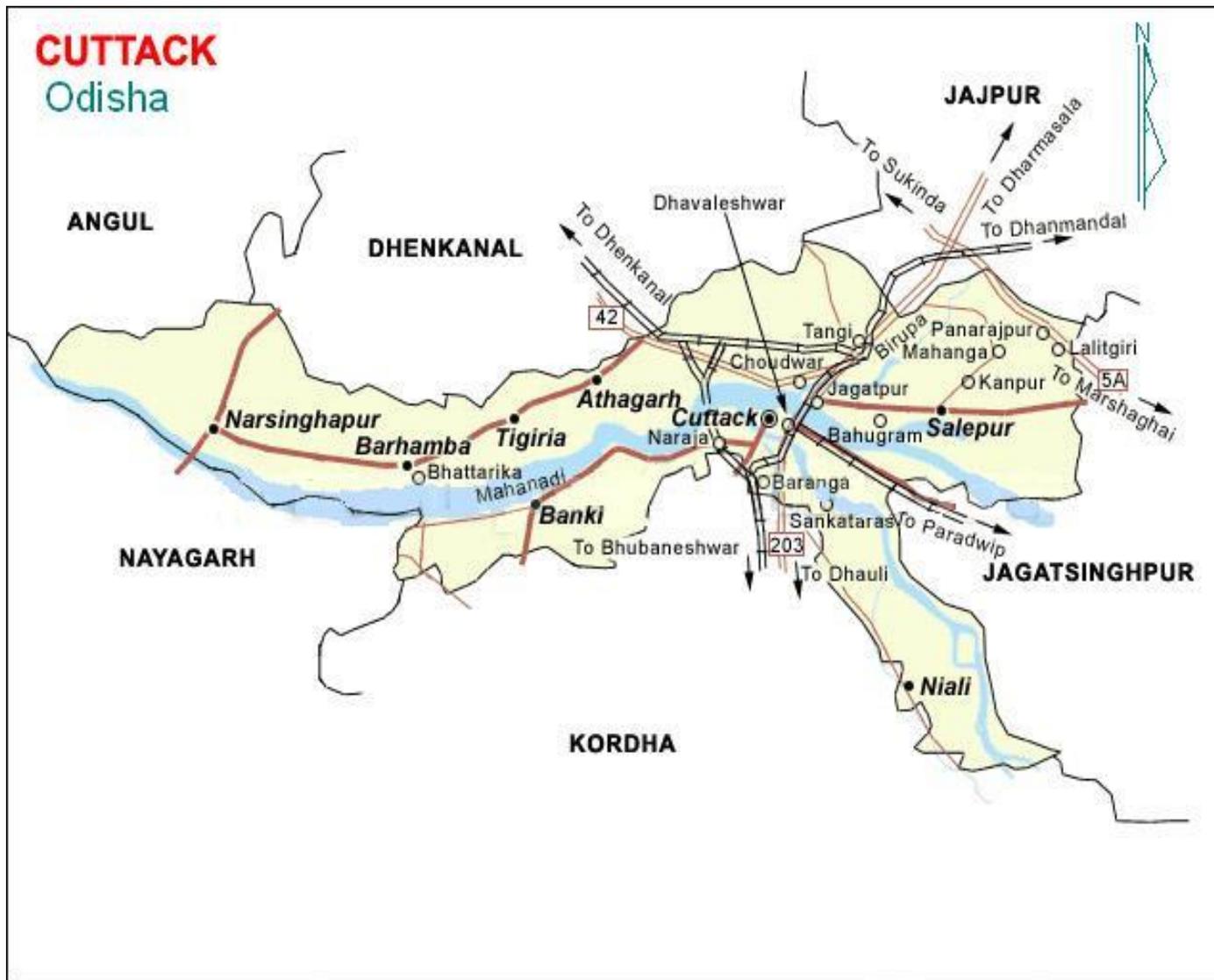
Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU), Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju Patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble deed for their contribution to Odisha as well as for our Country.

INDEX MAP







04. GEOLOGY OF THE DISTRICT.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone.

conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

Stratigraphy:

Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies) Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene gneulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

05. DRAINAGE AND IRRIGATION PATTERN.

The drainage of the district is mainly controlled by rivers like Mahanadi, Kathajodi, Kuakhai, Birupa, Chitrapatala, Sidua, Luna & Devi.

During the year 2013-14, it is reported by District Agriculture Office that the irrigation potential created during kharif and rabi are 101740 hectares and 48370 hectares respectively from all sources.

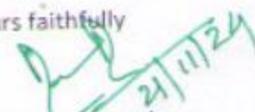
06. LAND UTILISATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURAL, HORTICULTURAL, MINING ETC.

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully


Dy. Director of Horticulture
Cuttack

07. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT.

The drainage systems i.e. rivers of the district gets filled with water during the monsoon and the gradually it decreases from the month of January to June of each year. In the summer season all rivers become almost dry excepting narrow flow of water within the basin.

The variation of ground water table in the district is as follows:

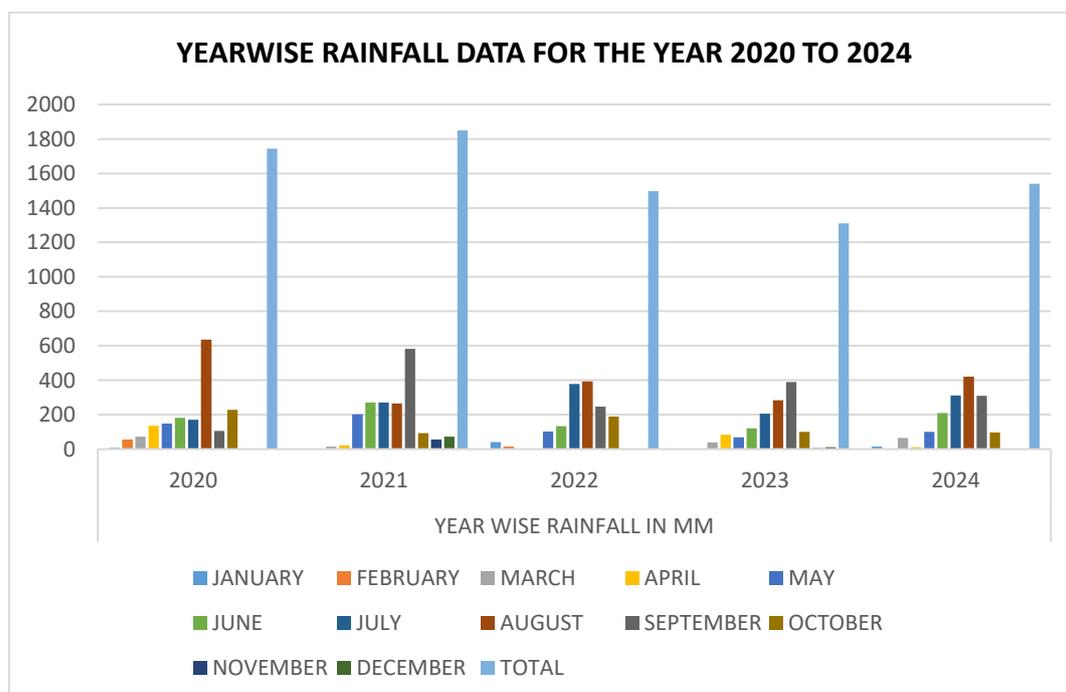
Depth of water level (mbgl)/ Period	April	August	November	January
Minimum	0.66	0.26	0.37	0.5
maximum	10.5	7.20	6.6	8.2

08. RAINFALL OF THE DISTRICT AND CLIMATIC CONDITION.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7^o-8^o C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



09. DETAILS OF THE MINING LEASES IN THE DISTRICT AS PER THE FOLLOWING FORMAT.

SL. NO.	NAME OF THE MINERAL	NAME OF THE LESSEE	ADDRESS & CONTACT NO. OF LESSEE	MINING LEASE GRANT ORDER NO. & DATE	AREA OF MINING LEASE (IN AC)	PERIOD OF MINING LEASE (INITIAL)		DATE OF COMMENCEMENT OF MINING OPERATION	STATUS (WORKING OR NON WORKING /TEMP. WORKING FOR DESPATCH ETC.)	OBTAINED ENVIRONMENTAL CLEARANCE (Y/N) IF Y LETTER NO. WITH DATE OF GRANT OF E.C	LOCATION OF THE MINING LEASE LAND SCHEDULE AND (LATITUDE & LONGITUDE)
						FROM	TO				
1	2	3	4	5	6	7	8	11	12	14	15
A.NAME OF THE TAHASIL:- ATHAGARH											
A1	BAIDEHIPUR STONE QUARRY	ITISHREEROUT	AT:- KHUNTAKATA, PO:- ATHAGARH DIST:- CUTTACK	LETTER NO-2470/DT:19.06.2017	4.5AC/1.821HA	06.12.2021	05.12.2026	06.12.2021	NON-WORKING	LETTER NO-1326/SEIAA DT:19.05.2021	MOUZA-BAIDEHIPUR, KHATA-79, PLOT-296-4.500AC,KISSAM-PAHAD, LAT-20°28'31.80"N TO 20°28'37.20"N LONG-85°34'55.60"E TO 85°35'3.50"E
B.NAME OF THE TAHASIL:- BADAMBA											
B1	BUDHAPANKA STONE QUARRY	PRATAP KISHORE MOHANTY	S/O-LATE RAJKISHORE MOHANTY AT/PO- H/TOWN NO. 210, CUTTACK ROAD, P.S.- LAXMISAGAR, DIST.- KHORDHA	LETTER NO-2721/DT:02.11.2020	6.3AC/2.549HA	09.06.2021	08.06.2026	09.06.2021	WORKING	LETTER NO-692/SEIAA DT:26.02.2021	MOUZA-BUDHAPANKA, KHATA-713, PLOT-164-1.000AC,334-2.420AC,1625-2.880AC,KISSAM-PARBAT, LAT-20°28'7.62"N TO 20°28'11.85"N LONG-85°25'57.66"E TO 85°26'7.93"E

B2	NIZIGARHBA RAMBA STONE QUARRY	BIJAY KUMAR ROUT	BIJOY KUMAR ROUT S/O-BIRA KISHORE ROUT,PLOT NO-GA- 133,NILADRI VIHAR,CHANDRASEKHARPUR,BH UBANESWAR,KHORDA	LETTER NO- 403/ DT:21.01 .2023	11.750AC/ 4.755HA					NON- WORKING		MOUZA- NIZIGARHBARAM BA, KHATA-961, PLOT- 2158- 11.750AC,334- 2.420AC,1625- 2.880AC,KISSAM- PAHAD, LAT- 20°25'25.4"N TO 20°25'37.7"N LONG- 85°21'20.3"E TO 85°21'30.1"E
NEW SOURCES												
B3	BELIAPALA STONE QUARRY				8.00AC/3.2 37HA							MOUZA- BELIAPALA, KHATA-377, PLOT- 1/4462, KISSAM- CHATAN, LAT- 20.412 LONG- 85.254
C.NAME OF THE TAHASIL:- BANKI												
C1	PANIKORAD STONE QUARRY	CHINM AYEE MUDUL I	W/O-SUKANTA MUDULI ,AT- TRISULIA, P.O.- BRAHMANIGAON, P.S-BARANGA,DIST-CUTTACK	LETTER NO- 2630/ DT:10.10 .2020	2.950AC/1. 194HA	21.10. 2022	20.10. 2027	21.10.2022		NON- WORKING	EC22B001OR12 4825/DATE: 22/09/2022	MOUZA- PANIKORADA, KHATA-201, PLOT- 30- 2.950AC,KISSAM- MUNDIA, LAT- 20°17'59.06"N LONG- 85°27'18.86"E
NEW SOURCES												
C2	BRAHMAPUR A BLACK STONE QUARRY				2.385AC/0. 965HA							MOUZA- BRAHMAPURA,KH ATA NO-886,PLOT NO-2518,KISSAM- P.PATITA,LAT- 20.328000°,LONG -85.493000°
D.NAME OF THE TAHASIL:- TIGIRIA												
D1	BAIJHALI MUNDIA STONE QUARRY	SARAF AJ KHAN	AT-PANKAL PO-NUAPATNA PS- TIGIRIA DIST.-CUTTACK	LETTER NO- 2620/ DT:18.9. 2020	2.950AC/1. 194HA	13.05. 2021	12.05. 2026	13.05.2021		NON- WORKING	LETTER NO- 584/SEIAA DT:15.02.2021	MOUZA- VEJIA, KHATA-902, PLOT- 1174/3887- 1.270AC,KISSAM- MUNDIA, LAT- 20°28'7.28"N TO 20°28'10.21"N

											LONG- 85°27'45.51"E TO 85°27'50.97"E
D2	DIGI MUNDIA STONE QUARRY	KRUSH NA CHAN DRA SWAIN	AT/PO-BRAHMANIGAON PS- BARANGA DIST.-CUTTACK	LETTER NO- 2560/ DT:10.9. 2020	3.000AC/ 1.214HA	16.06. 2021	15.06. 2026	16.06.2021	WORKING	LETTER NO- 596/SEIAA DT:15.02.2021	MOUZA- VEJIA, KHATA-903, PLOT- 3378- 3.000AC,KISSAM- PARBAT - II, LAT20°27'48.97"N TO 20°27'52.70"N LONG- 85°29'0.54"E TO 85°29'4.78"E
D3	JHINKA BLACK STONE QUARRY	KRUSH NA CHAN DRA SWAIN	AT/PO-BRAHMANIGAON PS- BARANGA DIST.-CUTTACK	LETTER NO- 2561/ DT:10.9. 2020	2.790AC/1. 129HA	16.06. 2021	15.06. 2026	16.06.2021	NON- WORKING	LETTER NO- 554/SEIAA DT:15.02.2021	MOUZA- VEJIA, KHATA-903, PLOT- 2847- 2.790AC,KISSAM- PARBAT - II, LAT- 20°27'56.19"N TO 20°28'0.93"N LONG- 85°28'23.92"E TO 85°28'27.50"E
D4	BAURANI BALABANDH A BLACK STONE QUARRY	SARAT BEHER A	AT-KUNDITARA PATNA PO-PAHAL PS-BALIANTA DIST.-KHORDA	LETTER NO- 2562/ DT:10.9. 2020	5.360AC/2. 169HA	18.06. 2021	17.06. 2026	18.06.2021	NON- WORKING	LETTER NO- 454/SEIAA DT:08.02.2021	MOUZA- VEJIA, KHATA-905, PLOT- 3138- 5.360AC,KISSAM- BAGAYATA-II, LAT-20°28'23.56"N TO 20°28'27.51"N LONG- 85°28'32.33"E TO 85°28'42.43"E
NEW SOURCES											
D5	BHEJIA BLACK STONE QUARRY-1				8.401AC/3. 4HA						MOUZA- BHEJIA,KHATA NO-879/883,PLOT NO- 695/5136,696,KISS AM-PATITA,LAT- 20.470000°,LONG - 85.462000°
D6	BHEJIA BLACK STONE QUARRY-2				1.383AC/0. 56HA						MOUZA- BHEJIA,KHATA NO-879/837,PLOT NO- 1192,1193,KISSA

											M-SARADA-I,SARADA-II,LAT-20.469000°,LONG-85.458000°
D7	BHEJIA BLACK STONE QUARRY-3				0.840AC/0. 34HA						MOUZA- BHEJIA,KHATA NO-879/876,PLOT NO- 1201/4923,KISSA M-BIALI,LAT- 20.468000°,LONG -85.458000°
E.NAME OF THE TAHASIL-NARSINGHPUR											
NEW SOURCES											
E1	KANDHAKAN ALPADA STONE QUARRY				12.347AC/ 4.997HA						MOUZA- KANDHAKANALP ADA,KHATA NO- 51,PLOT NO- 1,KISSAM- PARBATA-II,LAT- 20°26'42.1"N TO 20°26'48.00"N LONG- 85°04'48.40"E TO 85°05'00.00"E
E2	KHAROR-02 STONE QUARRY				9.884AC/4. 00HA						MOUZA- KHAROR,KHATA NO-910,PLOT NO- 2890/3548,KISSA M-PAHADA, LAT- 20.447826 LONG- 85.232769
F.NAME OF THE TAHASIL-DAMPADA											
NEW SOURCES											
F1	DULANPUR BLACK STONE QUARRY				5.469AC/2. 2136HA						MOUZA- DULANPUR,KHAT A NO-957,PLOT NO-2173,KISSAM- P.PATITA,LAT- 20.366483°,LONG -85.599472°

10. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

Revenue collected for **Stone/Road metal**.

Revenue Collected for last three years (in Rs)		
2021-22	2022-23	2023-24
1,00,25,644.57	1,67,45,740.12	1,31,49,421.12

11. DETAILS OF PRODUCTION OF MINOR MINERAL IN LAST THREE YEARS.

Production of **Stone/Road metal**.

Production for last three years (in Cum)		
2021-22	2022-23	2023-24

13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY AS PER THE FOLLOWING FORMAT.

Sl.No	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of LOI	Use(Captive/Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9
1	NIZIGARHBA RAMBA STONE QUARRY	BIJAY KUMAR ROUT	BIJOY KUMAR ROUT S/O-BIRA KISHORE ROUT,PLOT NO-GA-133,NILADRI VIHAR,CHANDRASEKHARPUR,BHUBANESWAR,KHORDA	Letter no-403/ Dt:21.01.2023	11.750Ac/4.755H a	3 MONTH TO 2 YRS	NON- CAPTIVE	Mouza-NIZIGARHBARAMB A, Khata-961, Plot-2158-11.750Ac,334-2.420Ac,1625-2.880Ac,Kissam-PAHAD, Lat-20°25'25.4"N to 20°25'37.7"N Long-85°21'20.3"E to 85°21'30.1"E

** The selected bidder shall be required to execute quarry lease in Form-N within three weeks from the date of intimation of his selection, if the approval of the mining plan and environment clearance has been obtained before auction, and in other cases, three months from the date of intimation, failing which, the intimation shall stand cancelled and the security deposit shall stand forfeited:*

*Provided that the Controlling Authority may, for genuine and sufficient reasons, extend the said period, if it is satisfied that the delay in execution of lease deed is not due to reasons attributable to the selected bidder (See **Rule-27(13) of OMMCR-2016**).*

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT.

SL. NO.	NAME OF SOURCE	LEASE AREA FOR NON OPERATIONAL & NEW SOURCES IN M2	AVERAGE THICKNESS OF STRATA NON OPERATIONAL & NEW SOURCES IN M	GEOLOGICAL RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINERAL POTENTIAL OF NON OPERATIONAL & NEW SOURCES AS PER FIELD OBSERVATION (IN M3)
A.Name of the Tahasil:- ATHAGARH				
A1	BAIDEHIPUR STONE QUARRY,Mouza-BAIDEHIPUR, Khata-79, Plot- 296-4.500Ac,Kissam-PAHAD, Lat-20°28'31.80"N to 20°28'37.20"N Long-85°34'55.60"E to 85°35'3.50"E	NA	NA	139478
B.Name of the Tahasil:- BADAMBA				
B1	BUDHAPANKA STONE QUARRY,Mouza-BUDHAPANKA, Khata-713, Plot- 164-1.000Ac,334-2.420Ac,1625-2.880Ac,Kissam-PARBAT, Lat-20°28'7.62"N to 20°28'11.85"N Long-85°25'57.66"E to 85°26'7.93"E	NA	NA	186024
B2	NIZIGARHBARAMBA STONE QUARRYMouza-NIZIGARHBARAMBA, Khata-961, Plot- 2158-11.750Ac,334-2.420Ac,1625-2.880Ac,Kissam-PAHAD, Lat-20°25'25.4"N to 20°25'37.7"N Long-85°21'20.3"E to 85°21'30.1"E	NA	NA	654291
B3	BELIAPALA STONE QUARRY Mouza-BELIAPALA, Khata-377, Plot- 1/4462, Kissam-CHATAN, Lat- 20°28'4.80"N Long- 85°27'28.80"E	32370	15	485550
C.Name of the Tahasil:- BANKI				
C1	PANIKORAD STONE QUARRY,Mouza-PANIKORADA, Khata-201, Plot- 30-2.950Ac,Kissam-Mundia, Lat-20°17'55.07"N to 20°17'58.00"N Long-85°27'22.50"E to 85°27'35.50"E	NA	NA	23688
C2	Brahmapura BLACK STONE QUARRY,Mouza- BRAHMAPURA,khata no-886,Plot no-2518,Kissam-P.PATITA,Lat- 20.328000°,Long-85.493000°	9650	6	57900
D.Name of the Tahasil:- TIGIRIA				
D1	BAIJHALI MUNDIA STONE QUARRY,Mouza- VEJIA, Khata-902, Plot- 1174/3887-1.270Ac,Kissam-Mundia, Lat-20°28'7.28"N to 20°28'10.21"N Long-85°27'45.51"E to 85°27'50.97"E	NA	NA	47313

D2	DIGI MUNDIA STONE QUARRY,Mouza-VEJIA, Khata-903, Plot- 3378-3.000Ac,Kissam-PARBAT - II, Lat20°27'48.97"N to 20°27'52.70"N Long-85°29'0.54"E to 85°29'4.78"E	NA	NA	144516
D3	JHINKA BLACK STONE QUARRY,Mouza-VEJIA, Khata-903, Plot- 2847-2.790Ac,Kissam-PARBAT - II, Lat-20°27'56.19"N to 20°28'0.93"N Long-85°28'23.92"E to 85°28'27.50"E	NA	NA	124808
D4	BAURANI BALABANDHA BLACK STONE QUARRY,Mouza- VEJIA, Khata-905, Plot- 3138-5.360Ac,Kissam-BAGAYATA-II, Lat-20°28'23.56"N to 20°28'27.51"N Long-85°28'32.33"E to 85°28'42.43"E	NA	NA	234765
D5	Bhejia BLACK STONE QUARRY-1,MOUZA-BHEJIA,Khata no-879/883,Plot no-695/5136,696,Kissam-Patita,Lat-20.470000°,Long- 85.462000°	34000	6	204000
D6	Bhejia BLACK STONE QUARRY-2,MOUZA-BHEJIA,Khata no-879/837,Plot no-1192,1193,Kissam-Sarada-I,Sarada-II,Lat-20.469000°,Long-85.458000°	5600	6	33600
D7	Bhejia BLACK STONE QUARRY-3,MOUZA-BHEJIA,Khata no-879/876,Plot no-1201/4923,Kissam-Biali,Lat-20.468000°,Long-85.458000°	3400	6	20400
E.Name of the Tahasil-Narsinghpur				
E1	Kandhakanalpada STONE QUARRY,MOUZA-Kandhakanalpada,Khata no-51,Plot no-1,Kissam-PARBATA-II,Lat20°26'42.1"N to 20°26'48.00"N Long- 85°04'48.40"E to 85°05'00.00"E	49970	22	1099340
E2	Kharor-02 STONE QUARRY,MOUZA-KHAROR,Khata no-910,Plot no-2890/3548,Kissam-Pahada, LAT-20.447826 LONG-85.232769	40000	20	800000
F.Name of the Tahasil-DAMPADA				
F1	Dulanpur BLACK STONE QUARRY,MOUZA-DULANPUR,Khata no-957,Plot no-2173,Kissam-P.PATITA,Lat-20.366483°,Long-85.599472°	22136	15	332040
F2	HADISAH			

15. QUALITY /GRADE OF MINERAL AVAILABLE IN THE DISTRICT.

Road metal/building metal of the district are very much suitable for various construction purposes after its crushing and screening. The in-situ rocks are fractured making these unsuitable for decorative purpose.

16. USE OF MINERAL.

Road metal/building metal of the district are used mainly for various construction purposes like road making, concrete making, dams etc.

17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS.

Demand for Stone (Crushed Stone and Aggregates)

- Infrastructure and Roads: Crushed stone or aggregates are widely used in the construction of roads, railways, bridges, and other infrastructure projects. Cuttack, being an important city in Odisha, sees substantial demand for stone from both government projects and private infrastructure companies.
- Building Construction: Stone is also required for the construction of buildings (as foundation material or for other structural purposes) and in the production of concrete. With increasing residential and commercial real estate activities in Cuttack, the demand for stone is expected to grow.
- Urban Development: The growth of urban areas around Cuttack and Bhubaneswar and the construction of new roads and flyovers also increases the demand for stone, especially for aggregate purposes in concrete.
- Demand from Neighboring Areas: As Cuttack is an industrial and commercial hub, demand for both sand and stone also comes from neighboring districts like Khurda, Jagatsinghpur, and Jajpur, where infrastructure development is underway.

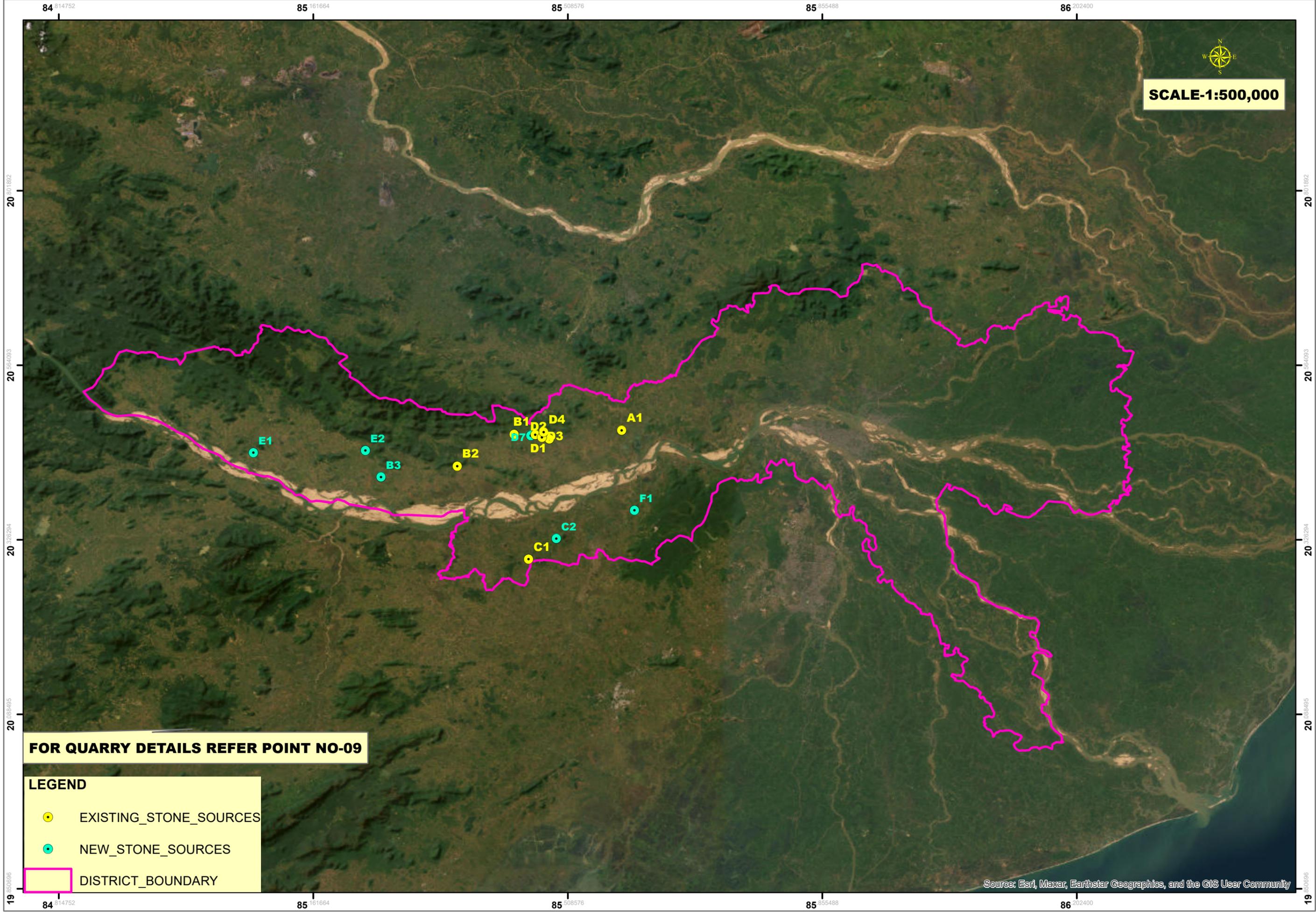
Supply of Stone (Crushed Stone and Aggregates)

- Quarries and Mining: The supply of crushed stone in Cuttack largely comes from stone quarries located in and around the district. Neighboring districts like Khurda, Jajpur, and Angul are rich in stone quarries. The availability of stone largely depends on the number of active quarries and the mining licenses granted by the government.
- Stone Crushing Units: Once the stones are extracted from quarries, they are processed into different sizes of aggregates and crushed stone. Cuttack, along

with nearby districts, has many stone crushing units that supply the processed material to the construction sector.

- **Demand-Supply Gap:** While Cuttack has a reasonable supply of crushed stone from nearby quarries, the demand often outpaces the local supply, especially during peak construction phases. This can lead to increased transportation costs or supply delays.
- **Transportation and Logistics:** Stone has a relatively higher transportation cost compared to sand due to its weight and the need for specialized equipment. Transporting stone from quarries located in other districts (such as Jajpur or Angul) may increase costs and impact supply, particularly for smaller construction companies.

MINING LEASES (STONE) MARKED ON THE DISTRICT SATELLITE-MAP OF CUTTACK



SCALE-1:500,000



FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

- EXISTING_STONE_SOURCES
- NEW_STONE_SOURCES
- ▭ DISTRICT_BOUNDARY

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MINING LEASES (STONE) MARKED ON THE DISTRIC TOPO-MAP OF CUTTACK

84 814752 85 161664 85 508576 85 855488 86 202400

18. Mining lease marked on the map of the district



SCALE-1:500,000

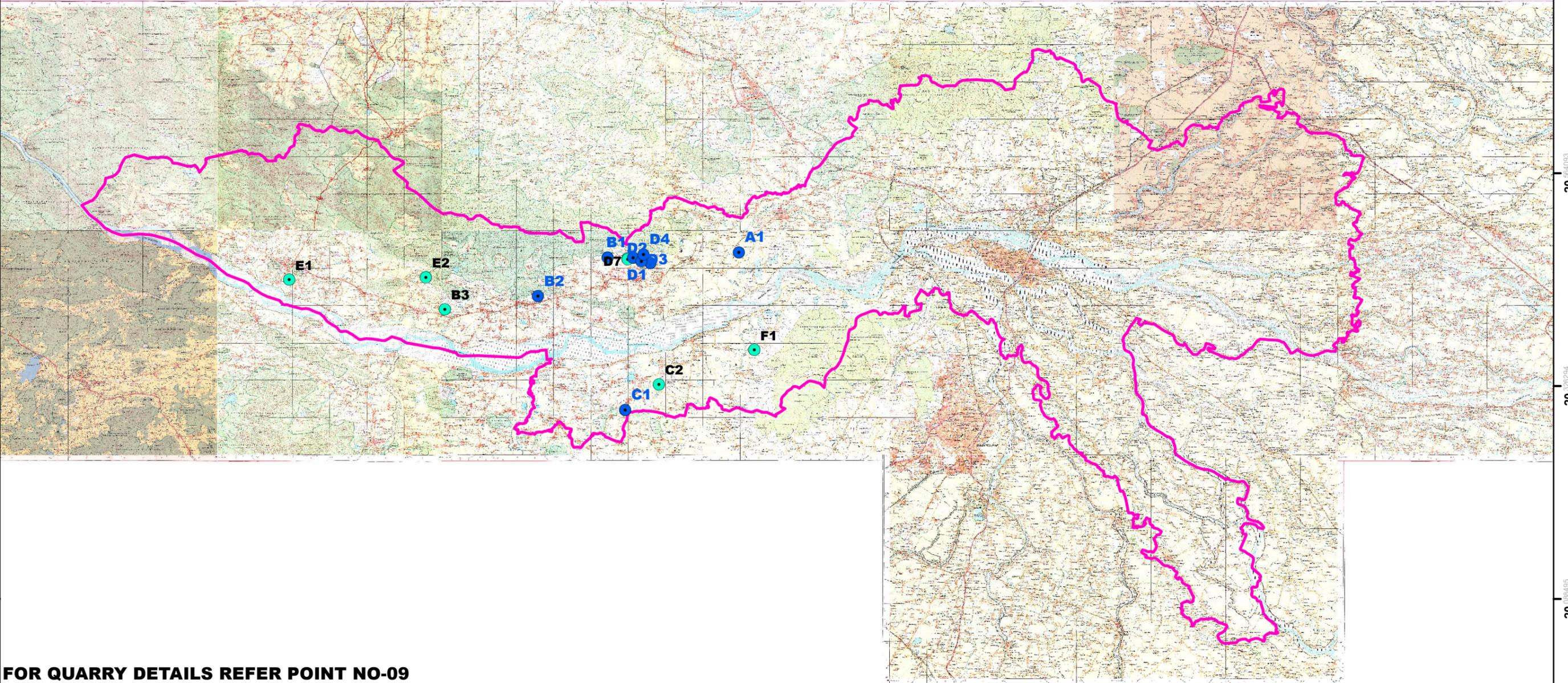
20

20

20

20

19



FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

-  EXISTING_STONE_SOURCES
-  NEW_STONE_SOURCES
-  DISTRICT_BOUNDARY

84 814752 85 161664 85 508576 85 855488 86 202400

20

20

20

20

19

PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized Sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes

gives a boost to this handicraft industry. There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRRl), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrum and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- **Laterite:** Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretions often form a hard crust, and can reach thicknesses of up to 10 meters or more.
- **Road Metal/Stone:** Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- **Morrum:** Association of morrum with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

03. GENERAL PROFILE OF THE DISTRICT.

Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87-

Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack, 91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position

in the map of Indian Industries. Popularly known as Silver City, Cuttack is also growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has provided job opportunities to skilled man power. There are also some private companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home- based and agro- based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road.is one of the premier national research institute under the

Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc. The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14
No. of Tahasils	15

No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01
No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhabaleswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhabaleswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to Cuttack Sadar Sub Division one can find

the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansa Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

Silver Filigree work, uniqueness of Cuttack City: -

Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

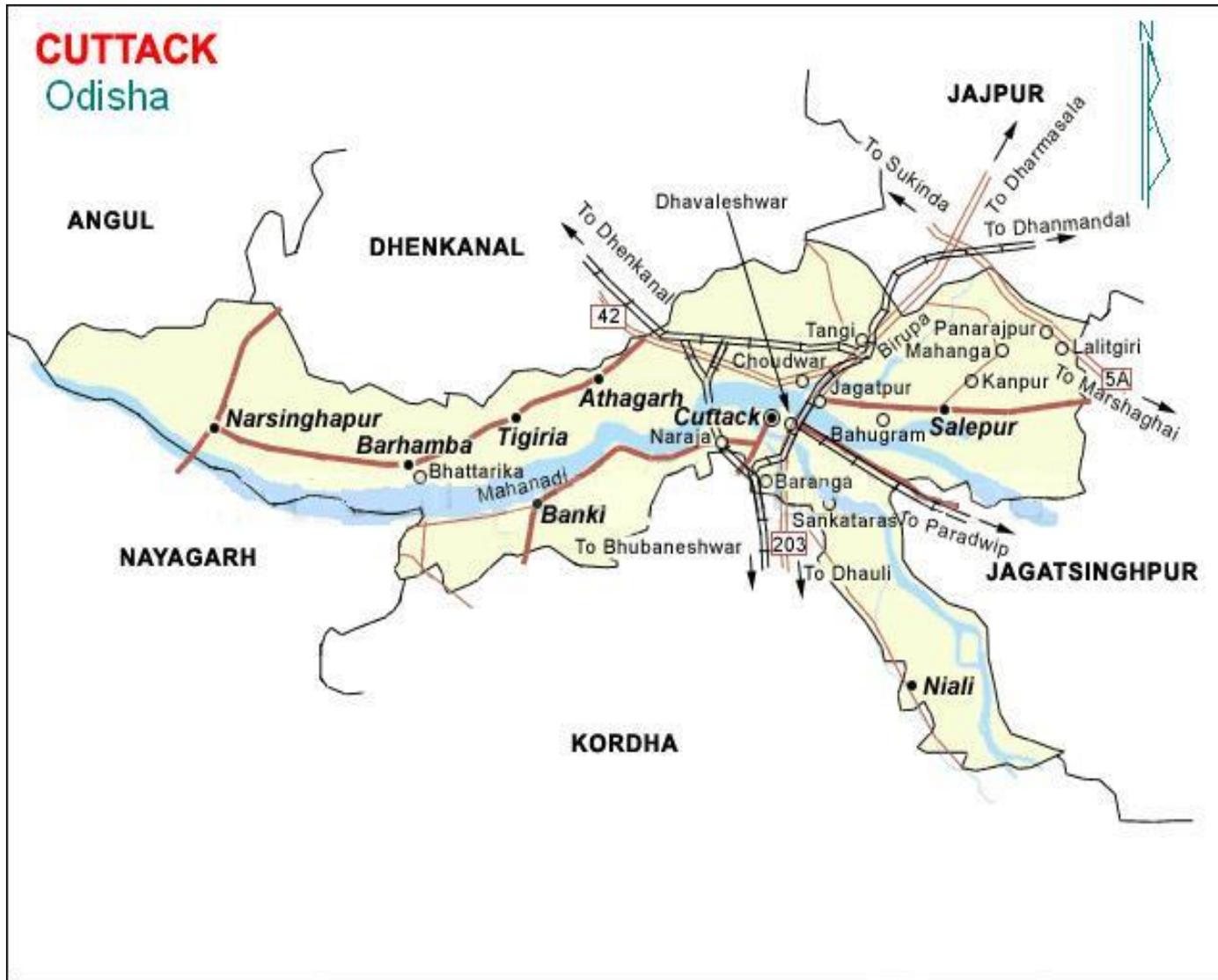
Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU) , Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT,) etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble did for their contribution to Odisha as well as for our Country.

INDEX MAP







04. GEOLOGY OF THE DISTRICT.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone.

conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

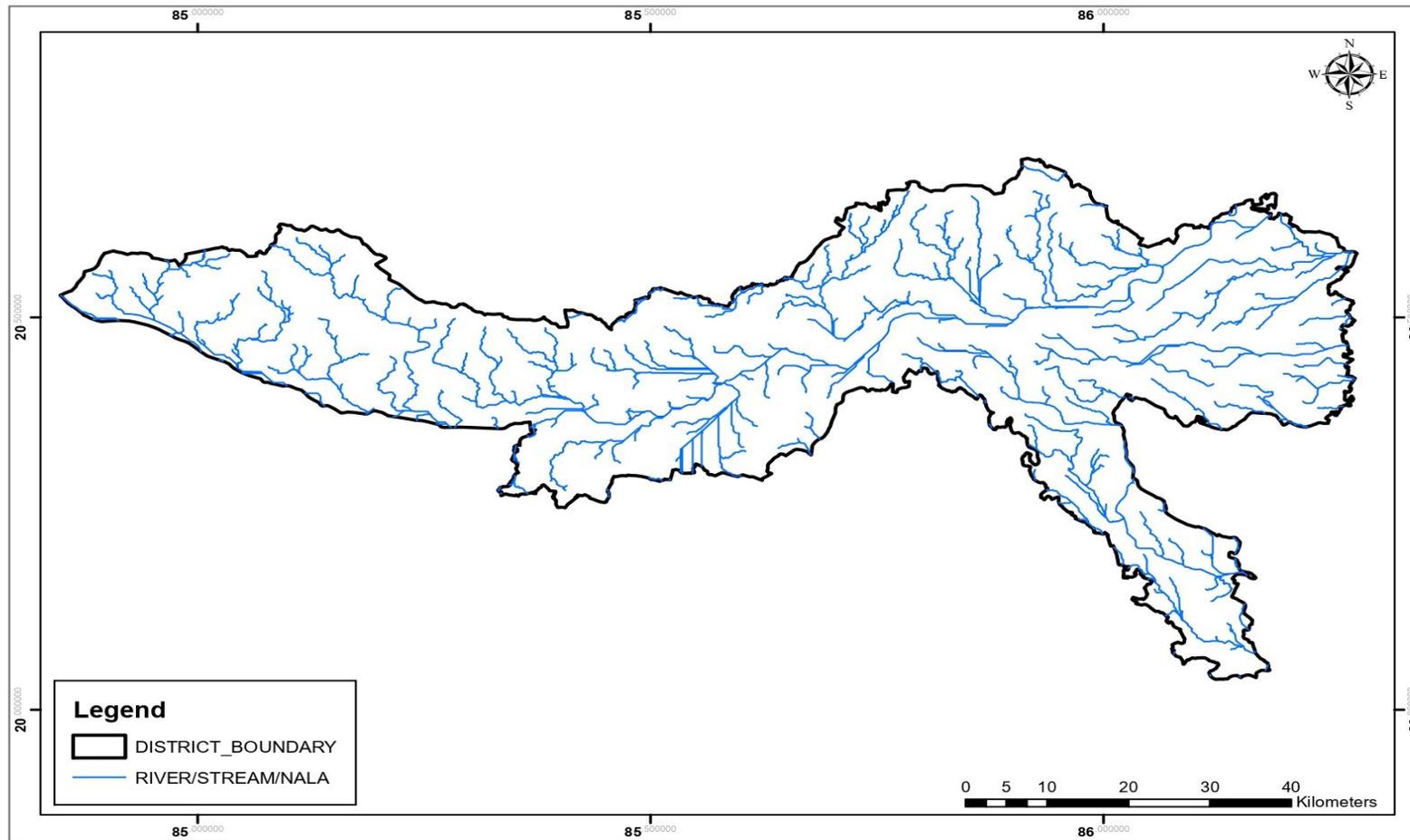
Stratigraphy:

Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies)
		Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene geanulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

05. DRAINAGE AND IRRIGATION PATTERN.

The river Brahmani and its tributaries control the drainage of the district. Brahmani is the second longest river in Odisha and flows through the district in a general east-west direction. It divides the district into two halves. Initially, the river flows in a north-south direction, then follows a northwest-southeast course and subsequently changes to northeast-southwest direction. Finally, it changes to a northwest-southeast course near the eastern border of the district. Most part of the district falls within its basin. The Brahmani is perennial in nature with a nominal flow during the summer season. Its important tributaries are Ramiala Nadi, Nigre Nadi, Purajhor Nadi etc. The smaller streams show dendritic pattern while the major river and its tributaries show sub-parallel drainage, indicating structural control. Major part of the district is irrigated through canal irrigation from the dam at Rengali.

DRAINAGE MAP OF CUTTACK DISTRICT



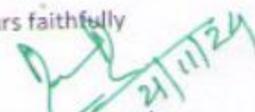
06. LAND UTILISATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURAL, HORTICULTURAL, MINING ETC.

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully


Dy. Director of Horticulture
Cuttack

07. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT.

The drainage systems i.e. rivers of the district gets filled with water during the monsoon and the gradually it decreases from the month of January to June of each year. In the summer season all rivers become almost dry excepting narrow flow of water within the basin.

The variation of ground water table in the district is as follows:

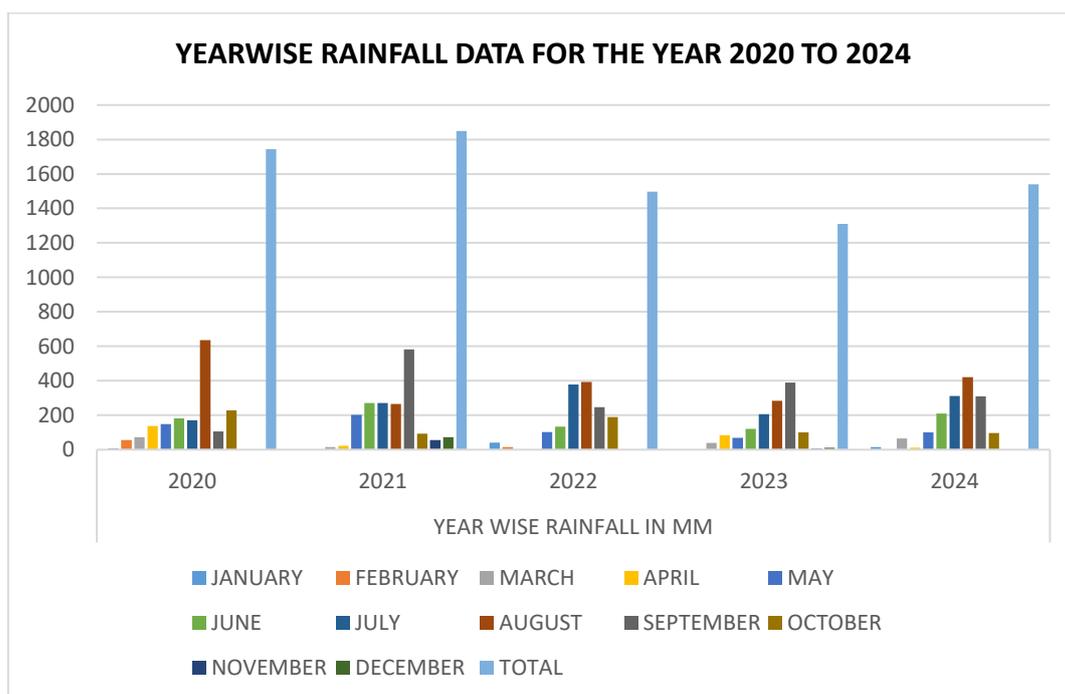
Depth of water level (mbgl)/ Period	April	August	November	January
Minimum	0.66	0.26	0.37	0.5
maximum	10.5	7.20	6.6	8.2

08. RAINFALL OF THE DISTRICT AND CLIMATIC CONDITION.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7^o-8^o C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



09. DETAILS OF THE MINING LEASES IN THE DISTRICT AS PER THE FOLLOWING FORMAT.

Sl.No	Name of the Mineral	Name of the Lessee	Adress & Contact No. of lesee	Mining lease Grant Order No. & date	Area of Mining lease (in AC)	Period of Mining lease (Initial)		Date of commencement of mining operation	Status (Working Non Working/Temp . working for despatch etc.)	Obtained Environment clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitude)
						From	To				
1	2	3	4	5	6	7	8	11	12	14	15
A.Name of the Tahasil:- TANGI CHOWDAR											
A1	LATERITE STONE QUARRY KANPUR	SUKANTA MUDULI	AT. TRISULIA, PO. BRAHMANIGAON PS. BARANGA DIST. CUTTACK , 754005	Letter no- 2657/ Dt:25.03.2021	2.420Ac/0.979Ha	07.02.2022	06.02.2027	07.02.2022	Non-Working	Letter no- 3916/SEIAA Dt:28.01.2022	Mouza- KANHAPUR, Khata-228, Plot- 186- 2.420Ac,Kissam -PATITA, Lat- 20°38'52.90"N to 20°38'57.00"N Long- 86°0'12.50"E to 86°0'17.30"E
A2	LATERITE STONE QUARRY MANIA	KRUSHNA CHANDRA DAS	AT.GANDARPUR , PO. / PS. CHAULIAGANJ DIST. CUTTACK ,	Letter no- 2663/ Dt:25.03.2021	2.590Ac/1.048Ha	02.04.2022	01.04.2027	02.04.2022	Non-Working	Letter no- 2855/SEIAA Dt:22.09.2021	Mouza- MANIA, Khata-529, Plot- 186- 2.590Ac,Kissam -PATITA, Lat- 20°37'9.70"N to 20°37'19.80"N Long- 86°0'22.00"E to 86°0'28.90"E

A3	LATERITE STONE QUARRY JEMADEIPUR	CHINMAYE E MUDULI	W/O-SUKANTA MUDULI ,AT-TRISULIA, P.O.-BRAHMANIGAON , P.S-BARANGA, DIST-CUTTACK	Letter no-2660/ Dt:25.03.2021	3.000Ac/1.214Ha	13.06.2022	12.06.2027	13.06.2022	Non-Working	Letter no-3910/SEIAA Dt:28.01.2022	Mouza-JEMADEIPUR, Khata-353, Plot- 1/904-3.000Ac, Kissam -PATITA, Lat-20°36'22.60"N to 20°36'25.60"N Long-85°54'36.40"E to 85°54'41.90"E
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B.Name of the Tahasil:- Athagarh A

NEW SOURCE

B1	Machhyapur Laterite stone Quarry 1				12.35Ac/4.998 Ha						Mouza-Machhyapur , Khata-43, plot-6/268, lat-20.575424°, Long-85.766528°
B2	Machhyapur Laterite stone Quarry 2				12.35Ac/4.998 Ha						Mouza-Machhyapur , Khata-43, plot-6/268, lat-20.573441°, Long-85.764624°

NB: in the above table omitted Columns are,
 Column- 09 & 10 Period of Mining lease (Renew) -NA
 Column-13 Use (Captive/ Non-Captive) - All Non-Captive
 Column- 16 Method of Mining (Opencast/Underground) - All Open cast

10. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

Revenue collected for *Laterite Stone*.

Sl. No.	Name of the Tahasil	Name of Source	Revenue Collected for last three years (in Rs)Lakh		
			2021-22	2022-23	2023-24
A1	TANGI CHOUWAR	LATERITE STONE QUARRY KANPUR	3821817	4800000	-
A2		LATERITE STONE QUARRY MANIA	-	5796414	-
A3		LATERITE STONE QUARRY JEMADEIPUR	2837625	-	-

11. DETAILS OF PRODUCTION OF MINOR MINERAL IN LAST THREE YEARS.

Production of *Laterite Stone*

Sl. No.	Name of the Tahasil	Name of Source	Production for last three years (in Cum)		
			2021-22	2022-23	2023-24
A1	TANGI CHOUWAR	LATERITE STONE QUARRY KANPUR			
A2		LATERITE STONE QUARRY MANIA			
A3		LATERITE STONE QUARRY JEMADEIPUR			

13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY AS PER THE FOLLOWING FORMAT.

Sl.No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of LOI	Use(Captive/Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9
NA	NA	NA	NA	NA	NA	NA	NA	NA

** The selected bidder shall be required to execute quarry lease in Form-N within three weeks from the date of intimation of his selection, if the approval of the mining plan and environment clearance has been obtained before auction, and in other cases, three months from the date of intimation, failing which, the intimation shall stand cancelled and the security deposit shall stand forfeited:*

*Provided that the Controlling Authority may, for genuine and sufficient reasons, extend the said period, if it is satisfied that the delay in execution of lease deed is not due to reasons attributable to the selected bidder (See **Rule-27(13) of OMMCR-2016**).*

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT.

SL. NO.	NAME OF SOURCE WITH LOCATION	GEOLOGICAL RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINERAL POTENTIAL OF NON OPERATIONAL & PROPOSED SOURCES AS PER FIELD OBSERVATION (IN M3)	MINEABLE RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINEABLE RESOURCE OF NON OPERATIONAL & PROPOSED QUARRIES AS PER FIELD OBSERVATION (IN M3)
A1	LATERITE STONE QUARRY KANPURMouza- KANPUR, Khata-228, Plot- 186-2.420Ac,Kissam-PATITA, Lat-20°38'52.90"N to 20°38'57.00"N Long-86°0'12.50"E to 86°0'17.30"E	53845	30250
A2	LATERITE STONE QUARRY MANIAMouza- MANIA, Khata-529, Plot- 186-2.590Ac,Kissam-PATITA, Lat-20°37'9.70"N to 20°37'19.80"N Long-86°0'22.00"E to 86°0'28.90"E	39920	16548
A3	LATERITE STONE QUARRY JEMADEIPURMouza- JEMADEIPUR, Khata-353, Plot-1/904-3.000Ac,Kissam-PATITA, Lat-20°36'22.60"N to 20°36'25.60"N Long-85°54'36.40"E to 85°54'41.90"E	60700	44900
NEW SOURCE			

B1	Machhyapur Laterite stone Quarry 1, Mouza- Machhyapur , Khata-43, plot-6/268, lat- 20.574590°, Long- 85.765464°	419940	
B2	Machhyapur Laterite stone Quarry 2, Mouza- Machhyapur , Khata-43, plot-6/268, lat- 20.574594°, Long- 85.765458°	419940	

15. QUALITY /GRADE OF MINERAL AVAILABLE IN THE DISTRICT.

Due to less content of Alumina, the laterite of the district is suitable for construction of walls related boundary or houses after manual sizing of the slabs.

16. USE OF MINERAL.

Laterite of the district is used mainly for construction of walls related boundary or houses after manual sizing of the slabs.

17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS.

The demand for laterite is primarily driven by its use in the construction industry, particularly for affordable housing, road construction, and other infrastructure projects. It also benefits from its status as a sustainable building material, though its use can be constrained by environmental regulations and regional availability. The demand is strong in tropical regions, particularly in developing countries where cost-effective, locally sourced building materials are essential.

The supply of laterite is heavily dependent on its natural abundance in tropical and subtropical regions, the efficiency of extraction methods, and the presence of transportation infrastructure. While laterite is widely available in certain parts of the world, its extraction can be constrained by environmental regulations, logistical challenges, and market forces. Areas with significant deposits of laterite are generally able to supply the material locally, but its supply for larger-scale or more distant projects may be limited by factors like cost, transportation, and regulatory hurdles.

18. MINING LEASES MARKED ON THE MAP OF THE DISTRICT.

19. DETAILS OF THE AREA OF WHERE THERE IS A CLUSTER OF MINING LEASES VIZ. NUMBER OF MINING LEASES, LOCATION (LATITUDE AND LONGITUDE).

Quarries existing within 500m radius are considered as cluster of Mining Leases as per the MoEF guide lines.

SI No.	Name of Tahasil	Cluster Name	Details of the area & Location	Number of Mining leases in Cluster
NA	NA	NA	NA	NA

20. DETAILS OF ECO-SENSITIVE AREA, IF ANY, IN THE DISTRICT.

Kapilash Sanctuary and its eco-sensitive zone are located within the District of Dhenkanal has been notified by MoEF & CC, Govt. of India on date 17th June, 2025. Some portion of the Cuttack District under Cuttack Forest Division included in the Eco-Sensitive Zone of the Kapilash Wildlife Sanctuary. There is only one village i.e. Banjhama is coming within the Eco-sensitive Zone. The Latitude & Longitude of the village Banjhama is N20.37' .2.54" E85.52'.41.92".

21. IMPACT ON THE ENVIRONMENT (AIR, WATER, NOISE, SOIL, FLORA & FAUNA, LAND USE, AGRICULTURE, FOREST ETC.) DUE TO MINING ACTIVITY.

Generally, the environment impact can be categorized as either primary or secondary. Primary Impacts are those, which are attributed directly by the project. Secondary impacts are those which are indirectly induced and typically include the associated investment and changed pattern of social and economic activities by the proposed action.

The impact has been ascertained for the project assuming that the pollution due to mining activity has been completely spelled out under the base line environmental status for the entire ROM which is proposed to be exploited from the mines.

Impacts on Ambient Air

Mining operation are carried out by opencast manual, semi mechanized/ mechanized methods generating dust particles due to various activities likes, excavation, loading, handling of mineral and transportation. The air quality in the mining areas depends upon the nature and concentration of emissions

and meteorological conditions. The major air pollutants due to mining activities include:-

- Particulate matter (dust) of various sizes.
- Gases, such as sulphur dioxide, oxides of nitrogen, carbon monoxide etc from machine & vehicular exhaust.

Dust is the single air pollutant observed in the open cast mines. Diesel operating drilling machines, blasting and movement of machineries/ vehicles produce NO_x , SO₂ and CO emissions, usually at low levels. Dust can be of significant nuance surrounding land user and potential health risk in some circumstances.

Impacts on Water

Sometimes the mining operation leads to intersect the water table causing ground water depletion. Due to the interference with surface water sources like river, nallah etc drainage pattern of the area is altered.

Noise impacts

Noise pollution mainly due to operation of machineries and occasional plying of machineries. These actives will create noise pollution in the surrounding area.

Impact on Land environment

The topography of the area will change certain changes due to mining activity which may cause some alteration to the entire eco system.

Impact on Flora & Fauna

The impact on biodiversity is difficult to quantify because of it's diverse and dynamic characteristics.

Mining activities generally result in the deforestation, land degradation, water, air and noise pollution which directly or indirectly affect the faunal and flora status of the project area.

However, occurrence and magnitude of these impacts are entirely dependent upon the project location, mode of operation and technology involved.

22. REMEDIAL MEASURES TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT.

Air

Mitigation measures suggested for air pollution controls are to be based on the baseline ambient air quality of the project/cluster area and would include measures such as:

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust particles.
- Controlled blasting techniques shall be adopted.
- Water sprinkling on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be undertaken.
- Transport of materials in trucks are to be covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mine area.
- Information on wind direction and meteorology are to be considered during planning, so that pollutants, which cannot be fully suppressed by engineering techniques, will be prevented from reaching the nearby agricultural land, if any.
- Comprehensive greenbelt around overburden dumps and periphery of the mining projects/clusters has to be carried out to reduce to fugitive dust transmission from the project area in order to create clean & healthy environment.

Water

- Construction of garland drains and settling tanks to divert surface run – off of the mining area to the natural drainage.
- Construction of check dams/ gully plugs at strategic places to arrest silt wash off from broken up area.
- Retaining walls with weep hole are to be constructed around the mine boundaries to arrest silt wash off.

- The mined out pits shall be converted in to the water reservoir at the end of mine life. This will help in recharging ground water table by acting as a water harvesting structure.
- Periodic analysis of mine pit water and ground water quality in nearby villages are to be undertaken.
- Domestic sewage from site office & urinals/latrines provided within ML/QL areas is to be discharged in septic tank followed by soak pits.

Noise

- Periodic maintenance of machineries, equipments shall be ensured to keep the noise generated within acceptable limit.
- Development of thick green belt around mining/cluster area, haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities like blasting, excavation site etc. Worker and operators at work sites will be provided with earmuffs.
- Conducting periodical medical check-up of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise related effects.
- Periodic noise monitoring at locations within the mining area and nearby habitations to assess efficacy of adopted control measures.
- During blasting optimum spacing, burden and charging of holes will be made under the supervision of competent qualified mines foreman, mate etc.

Biological Environment

- Development of green belt/gap filling saplings in the safety barrier left around the quarry area/ cluster area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy laves on the inactive mined out upper benches.

- Development of dense poly culture plantation using local floral species in the mining areas at conceptual stage if the mine is not continued much below the general ground level.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.

23. RECLAMATION OF MINED OUT AREA (BEST PRACTICE ALREADY IMPLEMENTED IN THE DISTRICT, REQUIREMENT AS PER RULES AND REGULATION, PROPOSED RECLAMATION PLAN).

As per statute all mines/quarries are to be properly reclaimed before final closure of the mine. Reclamation of exhausted mines are planned to be undertaken in below three possible means:

1. If, substantial amount of waste is there, the exhausted quarry can be fully or partly backfilled using the stored waste. The backfilled areas are to be brought under plantation of local species.

2. If the generation of waste is much less as in the case of minor mineral mining, the exhausted quarries can be reclaimed by

a. Plantation on the broken-up surface if the depth of quarry is not much below the surrounding surface level.

b. Converted to water reservoir after stabilization of the slopes if the exhausted quarry continues much below the surrounding surface level. It is preferred to cordon the water reservoir either through wire fencing or retaining wall with plantation from the safety point of view.

Most of the quarry/mining lease areas are yet to be exhausted from ore point of view. Hence, reclamation would be taken up only after exhaustion of the ore/mineral content from these areas. The exhausted minor mineral quarries of the district have been converted to water reservoirs.

24. RISK ASSESSMENT & DISASTER MANAGEMENT PLAN.

The only risk involved related to mining of minor mineral excepting natural calamities is slope failure and probable accidents due to high and ill maintained bench walls. This can only be addressed through making of regular benches and undertaking mining in benching pattern.

The disaster management plan (DMP) is supposed be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is to be aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated through rehearsal/induction conducted by the respective department from time to time.

General responsibilities of employees' during an emergency:

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the worker in charge, should adopt safe and emergency shut down and attend to any prescribed duty. If no such responsibility is assigned, the workers should adopt a safe course to assembly point and wait instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

Co-ordination with local authorities:

The Mine Manger who is responsible for emergency will always keep a jeep ready at site. In case of any eventuality, the victim will be taken to the nearby hospitals after carrying out the first aid at the site. The Manger should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shops, district revenue authorities etc. and use them efficiently during the case of emergency.

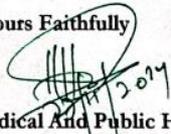
25. DETAILS OF THE OCCUPATIONAL HEALTH ISSUES IN THE DISTRICT. (LAST FIVE-YEAR DATA OF NUMBER OF PATIENTS OF SILICOSIS & TUBERCULOSIS IS ALSO NEEDS TO BE SUBMITTED).

As per the guidelines of the Mine Rules 1995, occupational health safety has been stipulated by the ILO/WHO. The proponent's will take necessary precautions to fulfill the stipulations. Normal sanitary facilities have to be provided within the lease area. The management will carry out periodic health checkup of workers.

Occupational hazards involved in mines are related to dust pollution, noise pollution, blasting and injuries from moving machineries & equipment and fall from high places. DGMS has given necessary guidelines for safety against these occupational hazards. The management has to strictly follow these guidelines. All necessary first aid and medical facilities are to be provided to the workers. The mine shall be well equipped with personal protective equipment (PPE). Further, all the necessary ported equipments such as helmet, safety goggles, earplugs, earmuffs ets are to be provided to mine workers as per Mines Rules. All operators and mechanics are to be trained to handle fire fighting equipments.

TB ACTIVITIES	2019-20	2020-21	2021-22	2022-23	2023-24
TOTAL NUMBER OF PATIENTS DIAGNISED	2155	1794	2371	2765	2672
TOTAL NUMBER OF PATIENTS NOTIFIED	2155	1794	2371	2765	2672
MDR	72	46	52	57	40
TBTREATMENT CURED	829	730	698	820	937
TBTREATMENT COMPLETED	1009	813	1350	1685	1401
DIED	140	152	172	163	128
FAILURE	13	9	7	11	5
TREATMENT CHANGED	42	25	42	41	26
NOT EVALUTED	11	4	1	2	23
ON TREATMENT	0	0	0	5	120
NOT STARTED TREATMENT	34	25	27	18	16
SILICOSIS ACTIVITIES	0	0	0	3	0
OPD PATIENTS	0	0	0	0	0
IPD PATIENTS	0	0	0	3	0

Yours Faithfully


Chief District Medical And Public Health Officer

Cuttack

26. PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASES ALREADY GRANTED IN THE DISTRICT.

As most of the minor mineral mines/quarries of the district are yet to be exhausted of their mineral content no sort of reclamation measures including plantation has been undertaken excluding gap plantation of local species in the peripheral safety zones of the quarries/ clusters and in some of the haul roads.

27. ANY OTHER INFORMATION.

NIL



DISTRICT SURVEY REPORT (DSR) OF CUTTACK DISTRICT, ODISHA FOR MORRUM MINING

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



**COLLECTORATE CUTTACK
NOVEMBER-2024**

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PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft

cooperatives and handicraft training institutes gives a boost to this handicraft industry. There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRRRI), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrums and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- Laterite: Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretionary often forms a hard crust, and can reach thicknesses of up to 10 meters or more.
- Road Metal/Stone: Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- Morrums: Association of morrums with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

03. GENERAL PROFILE OF THE DISTRICT.

Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87-

Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack,91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position

in the map of Indian Industries. Popularly known as Silver City, Cuttack is also growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has provided job opportunities to skilled man power. There are also some private companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home- based and agro- based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road.is one of the premier national research institute under the

Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc. The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14
No. of Tahasils	15

No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01
No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhableswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhableswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to

Cuttack Sadar Sub Division one can find the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansha Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

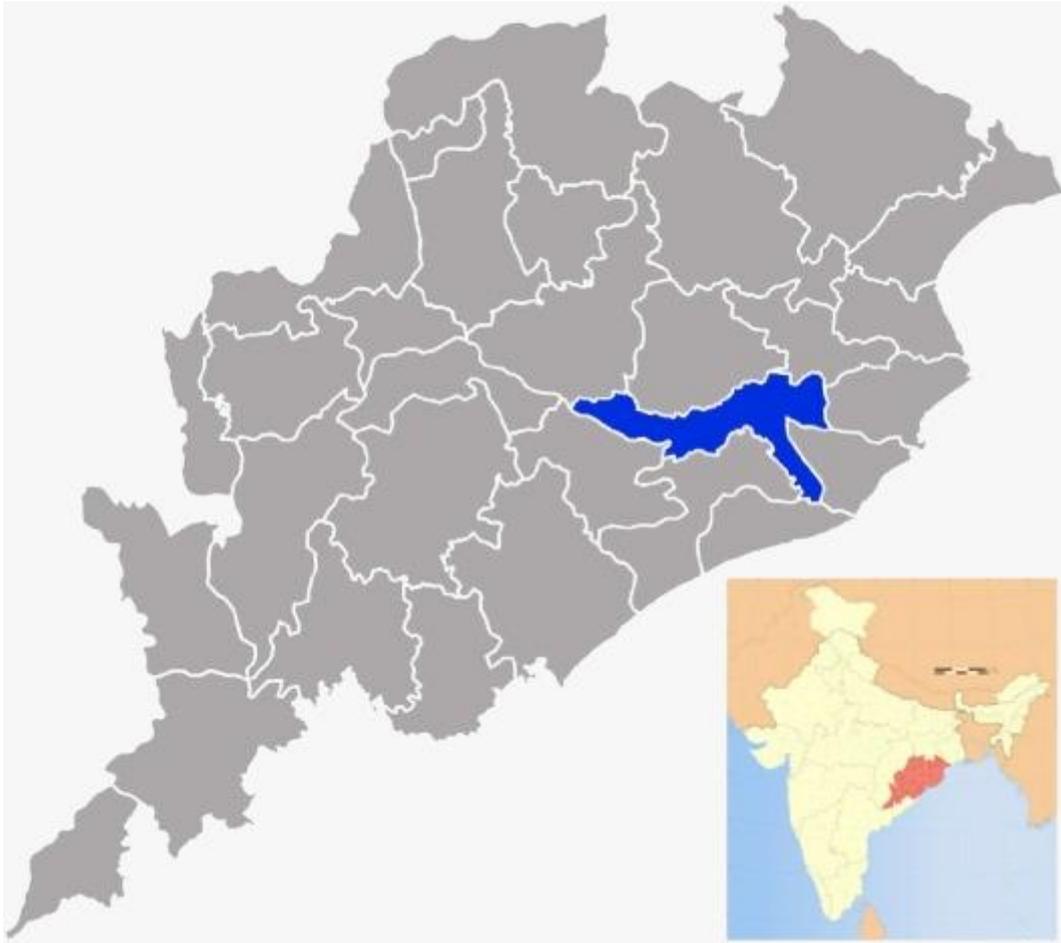
Silver Filigree work, uniqueness of Cuttack City: -

Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

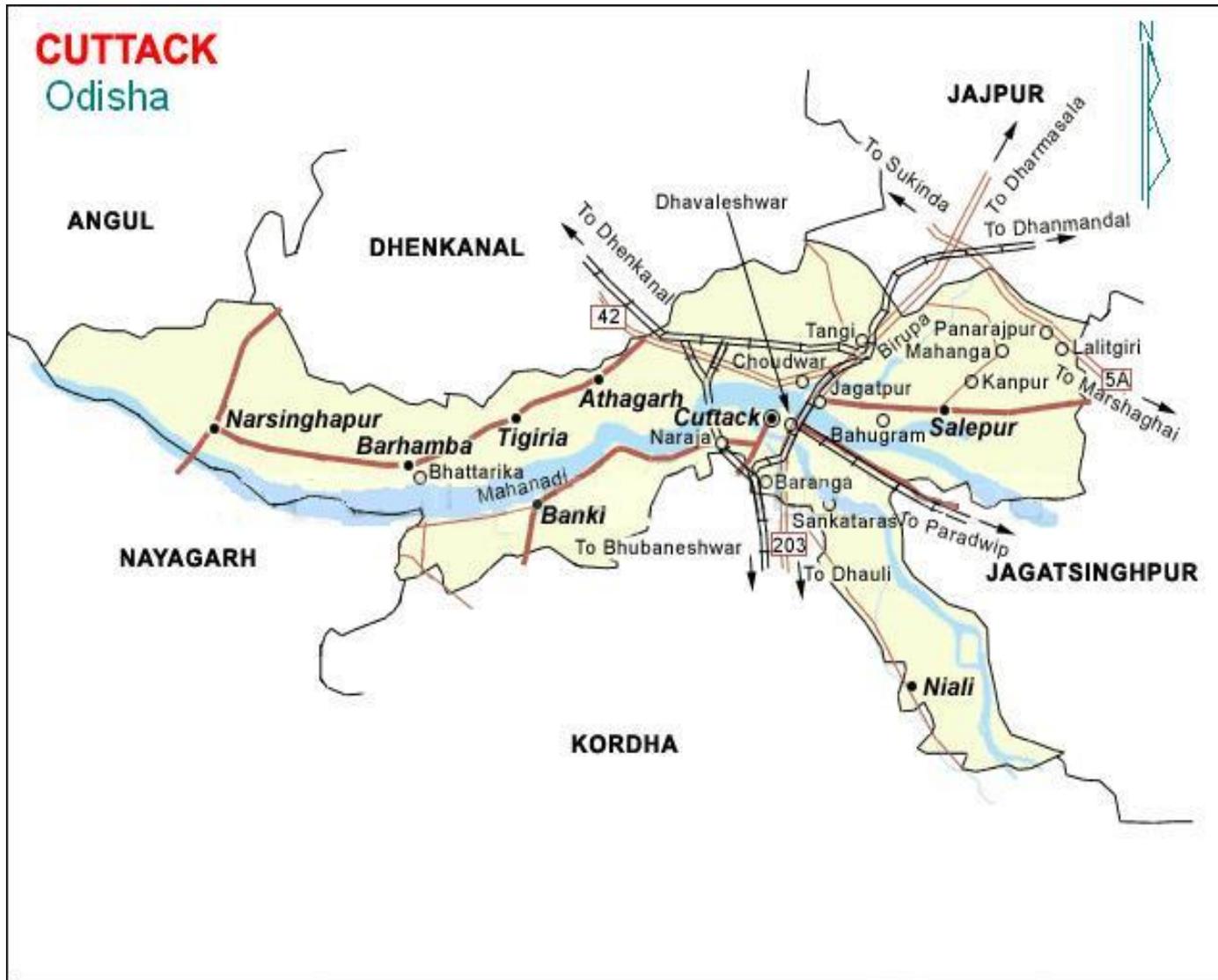
Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU) , Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble did for their contribution to Odisha as well as for our Country.

INDEX MAP







04. GEOLOGY OF THE DISTRICT.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone. conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

Stratigraphy:

Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies)
		Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene gneulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

05. DRAINAGE AND IRRIGATION PATTERN.

The drainage of the district is mainly controlled by rivers like Mahanadi, Kathajodi, Kuakhai, Birupa, Chitrapatala, Sidua, Luna & Devi.

During the year 2013-14, it is reported by District Agriculture Office that the irrigation potential created during kharif and rabi are 101740 hectares and 48370 hectares respectively from all sources.

06. LAND UTILISATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURAL, HORTICULTURAL, MINING ETC.

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully

Dy. Director of Horticulture
Cuttack

07. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT.

The drainage systems i.e. rivers of the district gets filled with water during the monsoon and the gradually it decreases from the month of January to June of each year. In the summer season all rivers become almost dry excepting narrow flow of water within the basin.

The variation of ground water table in the district is as follows:

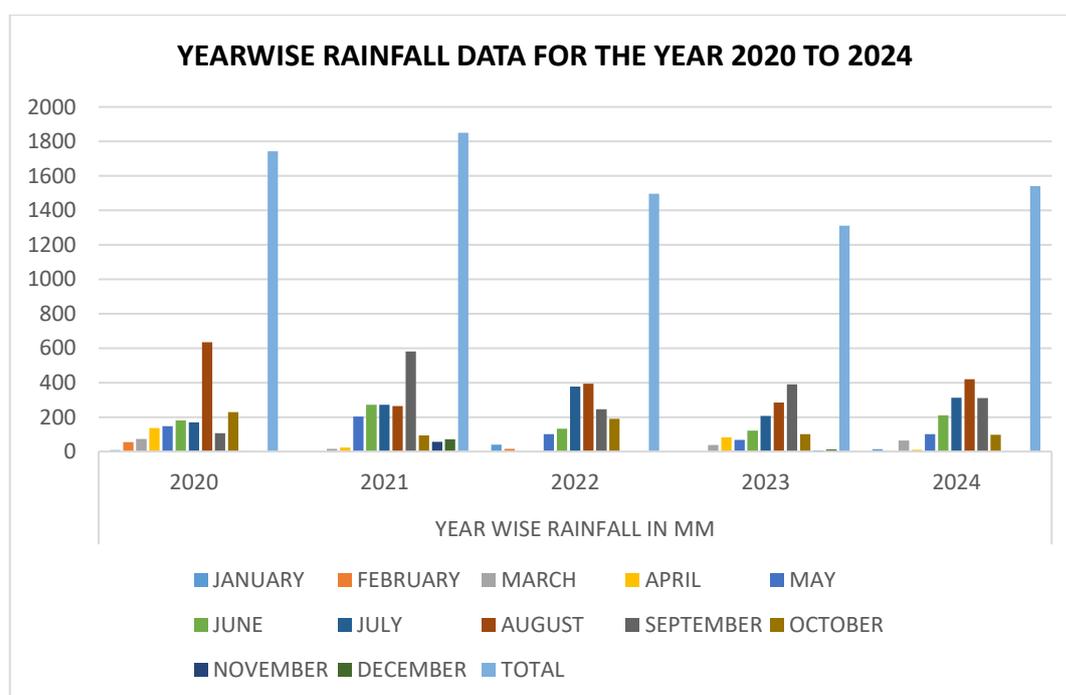
Depth of water level (mbgl)/ Period	April	August	November	January
Minimum	0.66	0.26	0.37	0.5
maximum	10.5	7.20	6.6	8.2

08. RAINFALL OF THE DISTRICT AND CLIMATIC CONDITION.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7 -8°C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



09. DETAILS OF THE MINING LEASES IN THE DISTRICT AS PER THE FOLLOWING FORMAT.

Sl.No.	Name of the Mineral	Name of the Lessee	Adress & Contact No. of lesee	Mining lease Grant Order No. & date	Area of Mining lease (in AC)	Period of Mining lease (Initial)		Date of commencement of mining operaion	Status (Working Non Working/Temp. working for despatch etc.)	Obtained Environental clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitute)
						From	To				
1	2	3	4	5	6	7	8	11	12	14	15
NEW SOURCES											
A.Name Of Tahasil-Athagarh											
A1	GURUDIJHATIA				12.35				NON-WORKING		MOUZA-GURUDIJHATIA,KHATA NO-343,PLOT NO-212,KISSAM-GOCHAR,LAT-20.568000°,LONG-85.803000°
A2	BENTAPADA				12.35				NON-WORKING		MOUZA-BENTAPADA,KHATA NO-879,PLOT NO-2814/3040,KISSAM-GOCHAR,LAT-20.481°,LONG-85.632°
B.Name Of Tahasil-Banki											
B1	DURGAPUR				12				NON-WORKING		MOUZA-DURGAPUR,KHATA NO-843,PLOT NO-1091,KISSAM-MUNDIA,LAT-20.357806°,LONG-85.505028°
C.Name Of Tahasil-Dampada											
C1	GADJIT				12.35				NON-WORKING		MOUZA- GADJIT,KHATA NO-886,PLOT NO-743,KISSAM-PURATANA PATITA,LAT-20.378936°,LONG-85.615882°
D.Name Of Tahasil-Tangi Choudwar											
D1	CHHOTAPADAGAON				2.5				NON-WORKING		MOUZA-CHHOTAPADAGAON,KHATA NO-185,PLOT NO-244,KISSAM-PATITA,LAT- 20.587000°,LONG-85.871000°

10. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

*Revenue collected for **Morrum**.*

NIL

11. DETAILS OF PRODUCTION OF MINOR MINERAL IN LAST THREE YEARS.

*Production of **Morrum***

NIL

13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY AS PER THE FOLLOWING FORMAT.

NIL

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT.

SL. NO.	NAME OF SOURCE WITH LOCATION	LEASE AREA FOR NON OPERATIONAL & PROPOSED QUARRIES IN M2	AVERAGE THICKNESS OF STRATA NON OPERATIONAL & PROPOSED QUARRIES IN M	GEOLOGICAL RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINERAL POTENTIAL OF NON OPERATIONAL & PROPOSED SOURCES AS PER FIELD OBSERVATION (IN M3)
A1	GURUDIJHATIA,MOUZA- GURUDIJHATIA,KHATA NO-343,PLOT NO-212,KISSAM-,LAT-20.568000°,LONG-85.803000°	49980	1.5	74970
A2	BENTAPADA,MOUZA- BENTAPADA,KHATA NO-879,PLOT NO-2814/3040,KISSAM-,LAT-20.481°,LONG-85.632°	49980	1.5	74970
B1	DURGAPUR,MOUZA- DURGAPUR,KHATA NO-843,PLOT NO-1091,KISSAM-MUNDIA,LAT-20.357806°,LONG-85.505028°	48,564	1.5	72846
C1	GADJIT,MOUZA- GADJIT,KHATA NO-886,PLOT NO-743,KISSAM-PURATANA PATITA,LAT- 20.378936°,LONG-85.615882°	49980	1.5	74970
D1	CHHOTAPADAGAON,MOUZA- CHHOTAPADAGAON,KHATA NO-185,PLOT NO-244,KISSAM-PATITA,LAT-20.587000°,LONG- 85.871000°	10,117.50	1.5	15176.25

15. QUALITY /GRADE OF MINERAL AVAILABLE IN THE DISTRICT.

Morrum of the district is very much suitable for filling purposes particularly of road.

16. USE OF MINERAL.

Morrum of the district is used mainly in the road construction purpose apart from some domestic constructions.

17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS.

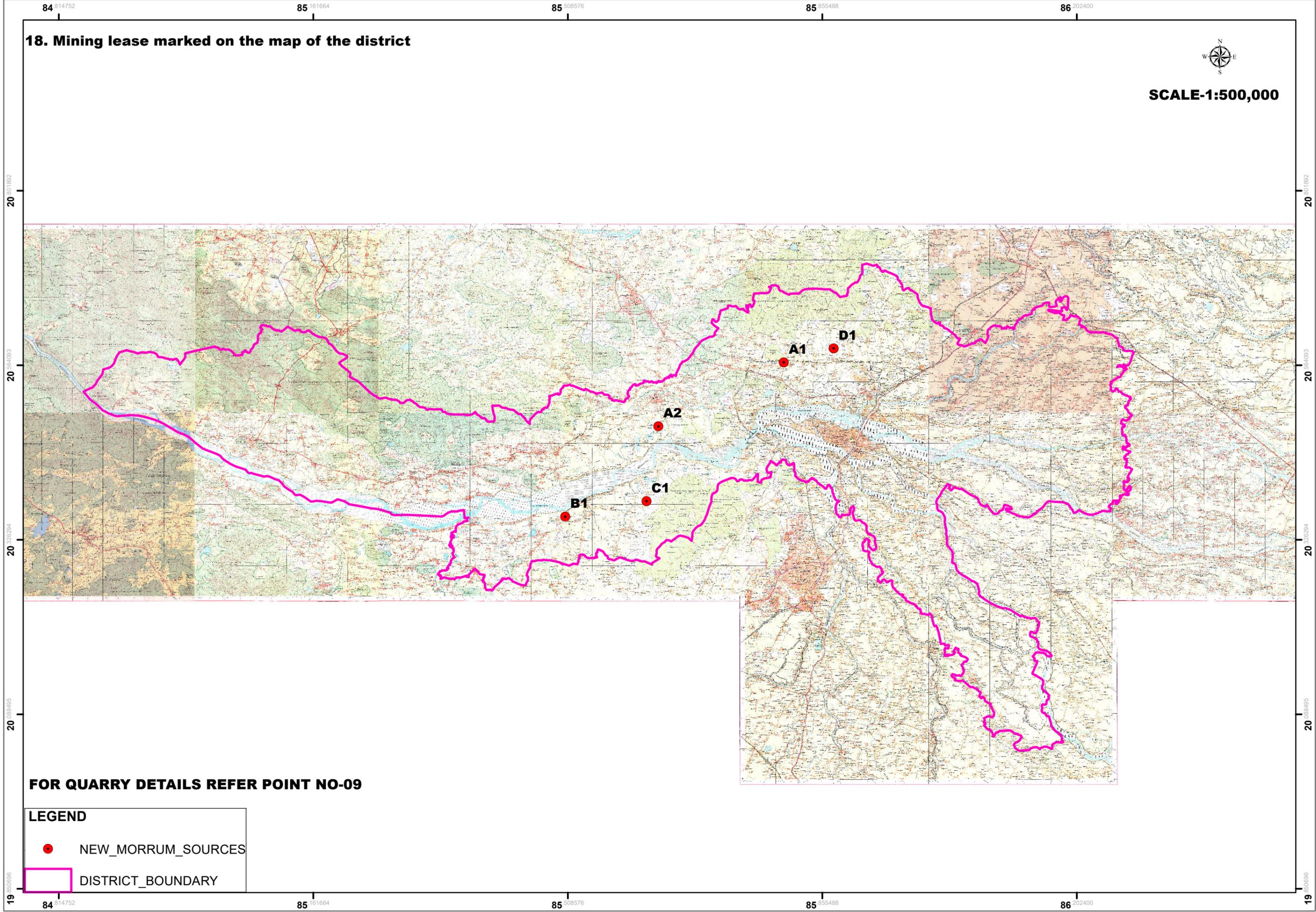
The demand for morrum is influenced by infrastructure development, construction activities, and local agricultural practices. It is mainly in demand in rural or developing areas where road construction, earthwork, and civil engineering projects require affordable and locally available soil material. However, factors like regulatory changes and competition from other construction materials can affect its demand over time.

MINING LEASES (MORRUM) MARKED ON THE DISTRIC TOPO-MAP OF CUTTACK

18. Mining lease marked on the map of the district



SCALE-1:500,000



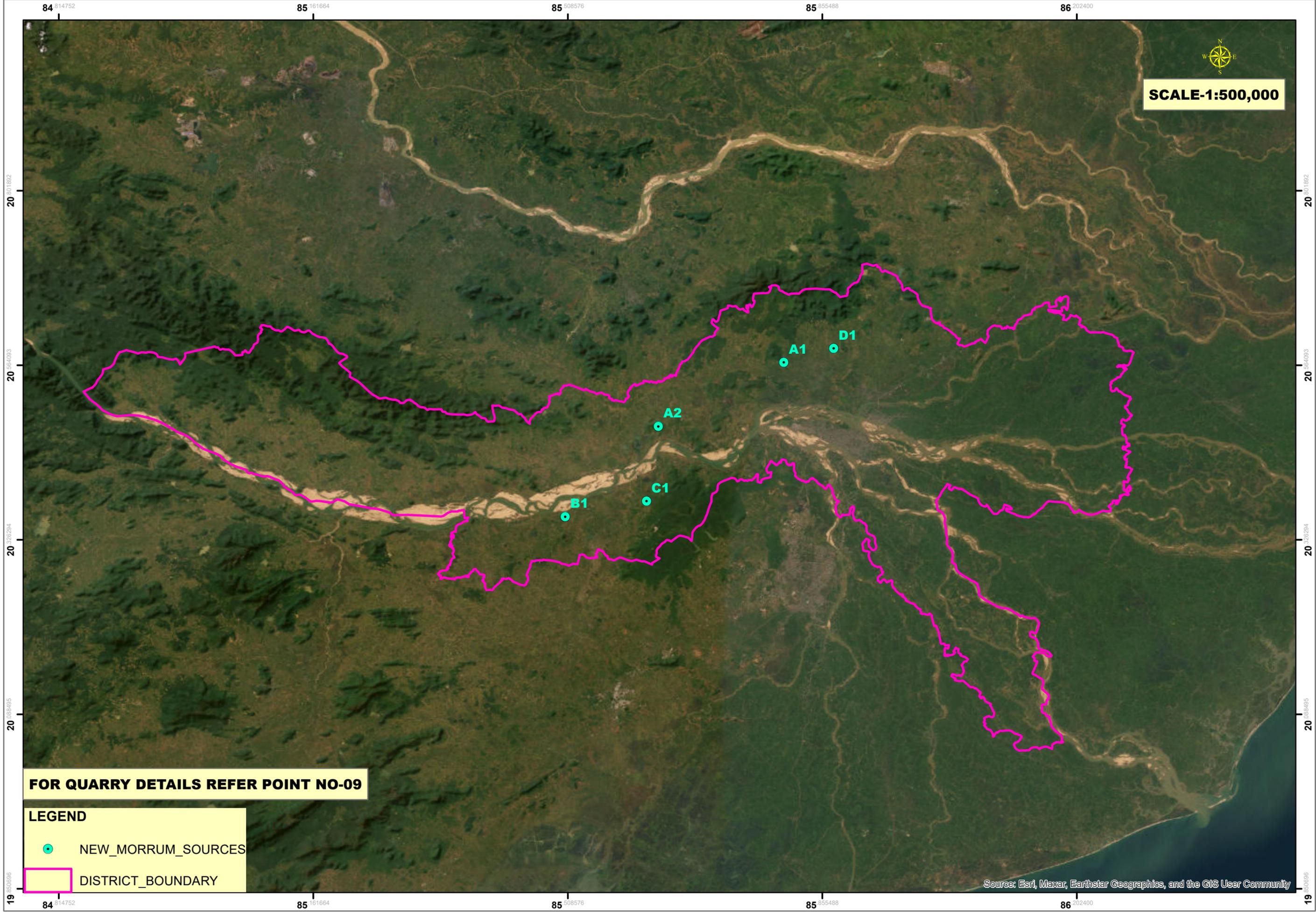
FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

● NEW_MORRUM_SOURCES

▭ DISTRICT_BOUNDARY

MINING LEASES (MORRUM) MARKED ON THE DISTRICT SATELLITE-MAP OF CUTTACK



SCALE-1:500,000

FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

- NEW_MORRUM_SOURCES
- DISTRICT_BOUNDARY

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

19. DETAILS OF THE AREA OF WHERE THERE IS A CLUSTER OF MINING LEASES VIZ. NUMBER OF MINING LEASES, LOCATION (LATITUDE AND LONGITUDE).

NIL

20. DETAILS OF ECO-SENSITIVE AREA, IF ANY, IN THE DISTRICT.

Kapilash Sanctuary and its eco-sensitive zone are located within the District of Dhenkanal has been notified by MoEF & CC, Govt. of India on date 17th June, 2025. Some portion of the Cuttack District under Cuttack Forest Division included in the Eco-Sensitive Zone of the Kapilash Wildlife Sanctuary. There is only one village i.e. Banjhama is coming within the Eco-sensitive Zone. The Latitude & Longitude of the village Banjhama is N20.37' .2.54" E85.52'.41.92".

21. IMPACT ON THE ENVIRONMENT (AIR, WATER, NOISE, SOIL, FLORA & FAUNA, LAND USE, AGRICULTURE, FOREST ETC.) DUE TO MINING ACTIVITY.

Activities attributed to Mining:-

Generally, the environment impact can be categorized as either primary or secondary. Primary Impacts are those, which are attributed directly by the project. Secondary impacts are those which are indirectly induced and typically include the associated investment and changed pattern of social and economic activities by the proposed action.

The impact has been ascertained for the project assuming that the pollution due to mining activity has been completely spelled out under the base line environmental status for the entire ROM which is proposed to be exploited from the mines.

Impacts on Ambient Air

Mining operation are carried out by opencast manual, semi mechanized/ mechanized methods generating dust particles due to various activities likes, excavation, loading, handling of mineral and transportation. The air quality in the mining areas depends upon the nature and concentration of emissions

and meteorological conditions. The major air pollutants due to mining activities include:-

- Particulate matter (dust) of various sizes.
- Gases, such as sulphur dioxide, oxides of nitrogen, carbon monoxide etc from machine & vehicular exhaust.

Dust is the single air pollutant observed in the open cast mines. Diesel operating drilling machines, blasting and movement of machineries/ vehicles produce NO_x , SO₂ and CO emissions, usually at low levels. Dust can be of significant nuance surrounding land user and potential health risk in some circumstances.

Impacts on Water

Sometimes the mining operation leads to intersect the water table causing ground water depletion. Due to the interference with surface water sources like river, nallah etc drainage pattern of the area is altered.

Noise impacts

Noise pollution mainly due to operation of machineries and occasional plying of machineries. These actives will create noise pollution in the surrounding area.

Impact on Land environment

The topography of the area will change certain changes due to mining activity which may cause some alteration to the entire eco system.

Impact on Flora & Fauna

The impact on biodiversity is difficult to quantify because of it's diverse and dynamic characteristics.

Mining activities generally result in the deforestation, land degradation, water, air and noise pollution which directly or indirectly affect the faunal and flora status of the project area.

However, occurrence and magnitude of these impacts are entirely dependent upon the project location, mode of operation and technology involved.

22. REMEDIAL MEASURES TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT.

Air

Mitigation measures suggested for air pollution controls are to be based on the baseline ambient air quality of the project/cluster area and would include measures such as:

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust particles.
- Controlled blasting techniques shall be adopted.
- Water sprinkling on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be undertaken.
- Transport of materials in trucks are to be covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mine area.
- Information on wind direction and meteorology are to be considered during planning, so that pollutants, which cannot be fully suppressed by engineering techniques, will be prevented from reaching the nearby agricultural land, if any.
- Comprehensive greenbelt around overburden dumps and periphery of the mining projects/clusters has to be carried out to reduce to fugitive dust transmission from the project area in order to create clean & healthy environment.

Water

- Construction of garland drains and settling tanks to divert surface run – off of the mining area to the natural drainage.
- Construction of checks dams/ gully plugs at strategic places to arrest silt wash off from broken up area.

- Retaining walls with weep hole are to be constructed around the mine boundaries to arrest silt wash off.
- The mined out pits shall be converted in to the water reservoir at the end of mine life. This will help in recharging ground water table by acting as a water harvesting structure.
- Periodic analysis of mine pit water and ground water quality in nearby villages are to be undertaken.
- Domestic sewage from site office & urinals/latrines provided within ML/QL areas is to be discharged in septic tank followed by soak pits.

Noise

- Periodic maintenance of machineries, equipments shall be ensured to keep the noise generated within acceptable limit.
- Development of thick green belt around mining/cluster area, haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities like blasting, excavation site etc. Worker and operators at work sites will be provided with earmuffs.
- Conducting periodical medical check-up of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise related effects.
- Periodic noise monitoring at locations within the mining area and nearby habitations to assess efficacy of adopted control measures.
- During blasting optimum spacing, burden and charging of holes will be made under the supervision of competent qualified mines foreman, mate etc.

Biological Environment

- Development of green belt/gap filling saplings in the safety barrier left around the quarry area/ cluster area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy laves on the inactive mined out upper benches.
- Development of dense poly culture plantation using local floral species in the mining areas at conceptual stage if the mine is not continued much below the general ground level.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.

23. RECLAMATION OF MINED OUT AREA (BEST PRACTICE ALREADY IMPLEMENTED IN THE DISTRICT, REQUIREMENT AS PER RULES AND REGULATION, PROPOSED RECLAMATION PLAN).

As per statute all mines/quarries are to be properly reclaimed before final closure of the mine. Reclamation of exhausted mines are planned to be undertaken in below three possible means:

1. If, substantial amount of waste is there, the exhausted quarry can be fully or partly backfilled using the stored waste. The backfilled areas are to be brought under plantation of local species.

2. If the generation of waste is much less as in the case of minor mineral mining, the exhausted quarries can be reclaimed by

a. Plantation on the broken-up surface if the depth of quarry is not much below the surrounding surface level.

b. Converted to water reservoir after stabilization of the slopes if the exhausted quarry continues much below the surrounding surface level. It is preferred to cordon the water reservoir either through wire fencing or retaining wall with plantation from the safety point of view.

Most of the quarry/mining lease areas are yet to be exhausted from ore point of view. Hence, reclamation would be taken up only after exhaustion of the

ore/mineral content from these areas. The exhausted minor mineral quarries of the district have been converted to water reservoirs.

24. RISK ASSESSMENT & DISASTER MANAGEMENT PLAN.

The only risk involved related to mining of minor mineral excepting natural calamities is slope failure and probable accidents due to high and ill maintained bench walls. This can only be addressed through making of regular benches and undertaking mining in benching pattern.

The disaster management plan (DMP) is supposed be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is to be aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated through rehearsal/induction conducted by the respective department from time to time.

General responsibilities of employees' during an emergency:

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the worker in charge, should adopt safe and emergency shut down and attend to any prescribed duty. If no such responsibility is assigned, the workers should adopt a safe course to assembly point and wait instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

Co-ordination with local authorities:

The Mine Manger who is responsible for emergency will always keep a jeep ready at site. In case of any eventuality, the victim will be taken to the nearby hospitals after carrying out the first aid at the site. The Manger should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shops, district revenue authorities etc. and use them efficiently during the case of emergency.

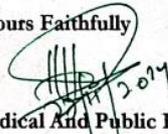
25. DETAILS OF THE OCCUPATIONAL HEALTH ISSUES IN THE DISTRICT. (LAST FIVE-YEAR DATA OF NUMBER OF PATIENTS OF SILICOSIS & TUBERCULOSIS IS ALSO NEEDS TO BE SUBMITTED).

As per the guidelines of the Mine Rules 1995, occupational health safety has been stipulated by the ILO/WHO. The proponent's will take necessary precautions to fulfill the stipulations. Normal sanitary facilities have to be provided within the lease area. The management will carry out periodic health checkup of workers.

Occupational hazards involved in mines are related to dust pollution, noise pollution, blasting and injuries from moving machineries & equipment and fall from high places. DGMS has given necessary guidelines for safety against these occupational hazards. The management has to strictly follow these guidelines. All necessary first aid and medical facilities are to be provided to the workers. The mine shall be well equipped with personal protective equipment (PPE). Further, all the necessary ported equipments such as helmet, safety goggles, earplugs, earmuffs ets are to be provided to mine workers as per Mines Rules. All operators and mechanics are to be trained to handle fire fighting equipments.

TB ACTIVITIES	2019-20	2020-21	2021-22	2022-23	2023-24
TOTAL NUMBER OF PATIENTS DIAGNISED	2155	1794	2371	2765	2672
TOTAL NUMBER OF PATIENTS NOTIFIED	2155	1794	2371	2765	2672
MDR	72	46	52	57	40
TBTREATMENT CURED	829	730	698	820	937
TBTREATMENT COMPLETED	1009	813	1350	1685	1401
DIED	140	152	172	163	128
FAILURE	13	9	7	11	5
TREATMENT CHANGED	42	25	42	41	26
NOT EVALUTED	11	4	1	2	23
ON TREATMENT	0	0	0	5	120
NOT STARTED TREATMENT	34	25	27	18	16
SILICOSIS ACTIVITIES	0	0	0	3	0
OPD PATIENTS	0	0	0	0	0
IPD PATIENTS	0	0	0	3	0

Yours Faithfully



Chief District Medical And Public Health Officer

Cuttack

26. PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASES ALREADY GRANTED IN THE DISTRICT.

As most of the minor mineral mines/quarries of the district are yet to be exhausted of their mineral content no sort of reclamation measures including plantation has been undertaken excluding gap plantation of local species in the peripheral safety zones of the quarries/ clusters and in some of the haul roads.

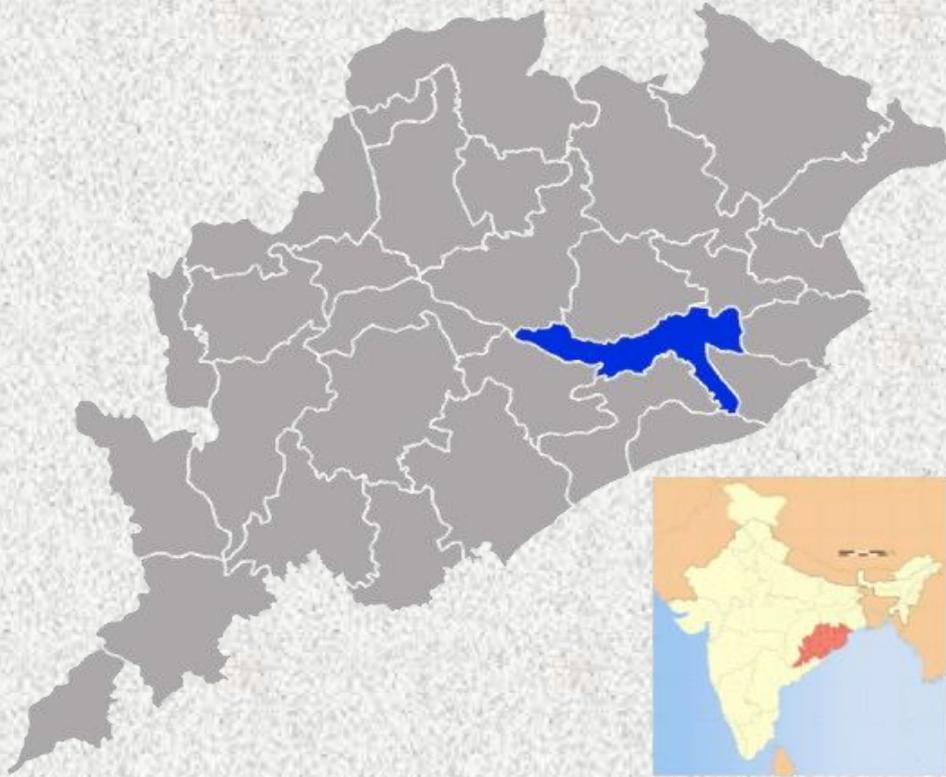
27. ANY OTHER INFORMATION.

NIL



DISTRICT SURVEY REPORT (DSR) OF CUTTACK DISTRICT, ODISHA FOR DECORATIVE STONE MINING

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



**COLLECTORATE CUTTACK
NOVEMBER-2024**

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0. PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized Sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRRRI), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrum and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- Laterite: Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretionary often forms a hard crust, and can reach thicknesses of up to 10 meters or more.
- Road Metal/Stone: Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- Morrum: Association of morrum with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

03. GENERAL PROFILE OF THE DISTRICT.

Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87-

Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack, 91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position in the map of Indian Industries. Popularly known as Silver City, Cuttack is also

growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has provided job opportunities to skilled man power. There are also some private companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home- based and agro- based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road.is one of the premier national research institute under the Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its

silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc. The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14
No. of Tahasils	15
No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01

No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhabaleswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhabaleswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to Cuttack Sadar Sub Division one can find the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri

Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansa Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

Silver Filigree work, uniqueness of Cuttack City: -

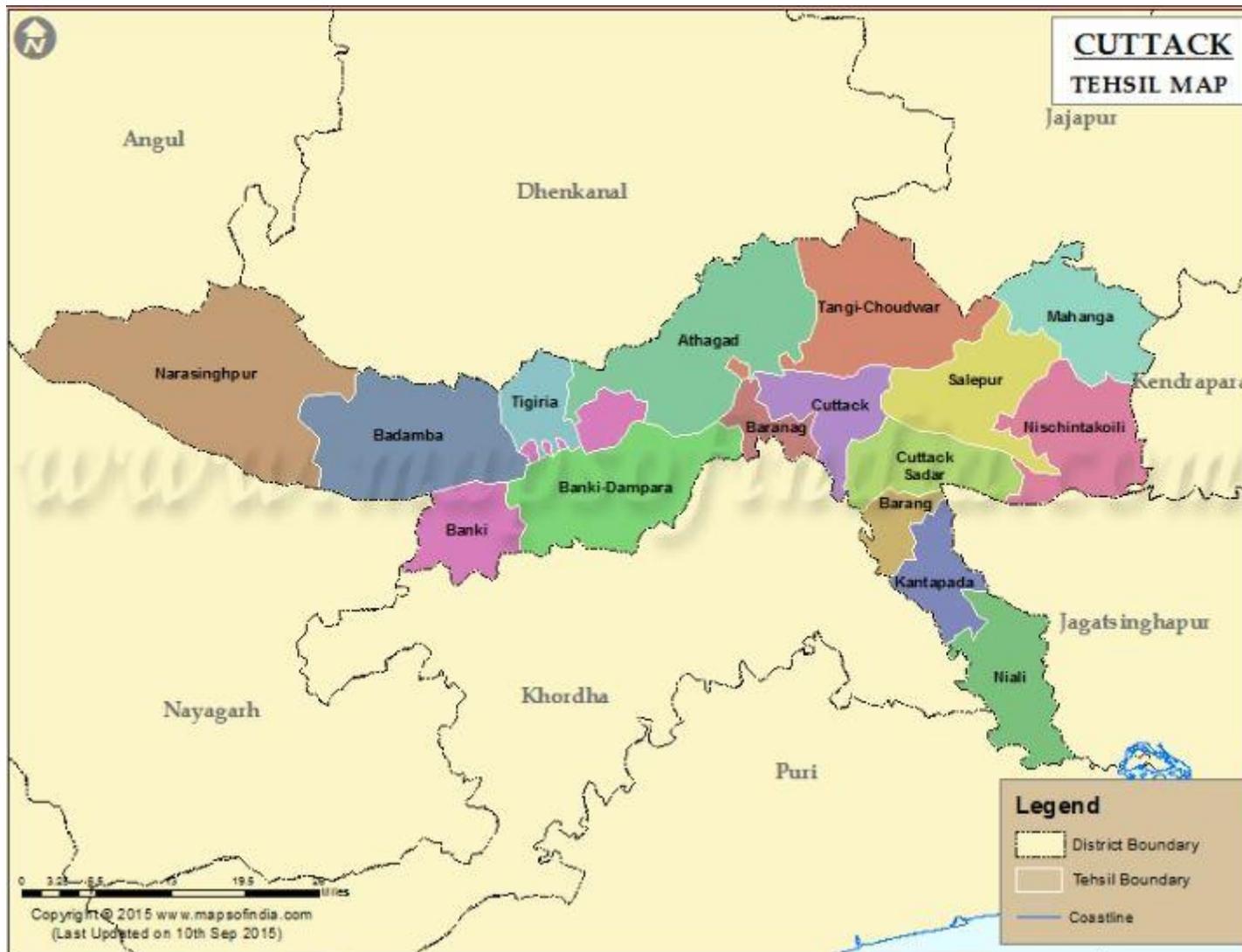
Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

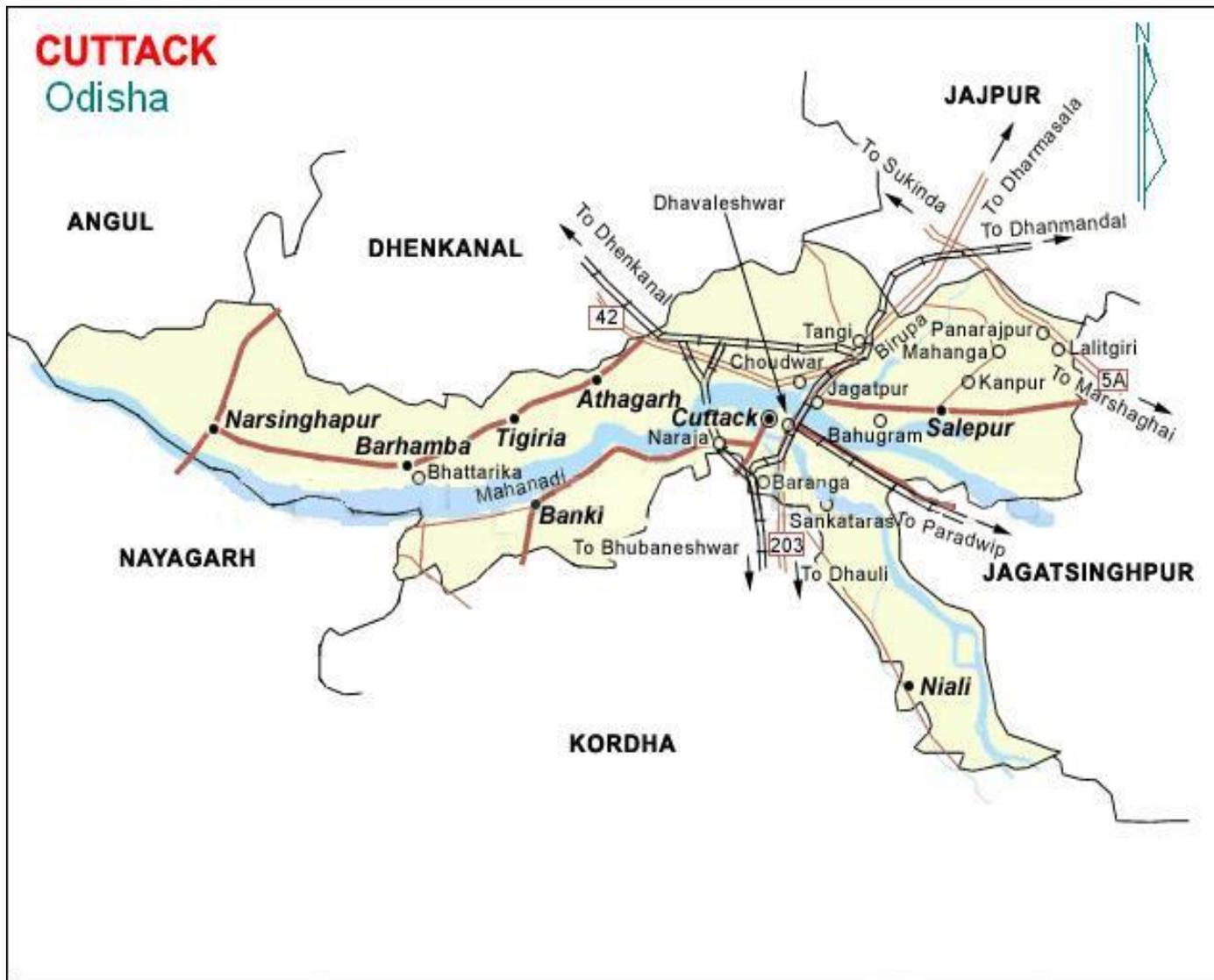
Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU) , Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT,) etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble did for their contribution to Odisha as well as for our Country.

INDEX MAP







04. GEOLOGY OF THE DISTRICT.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone. conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

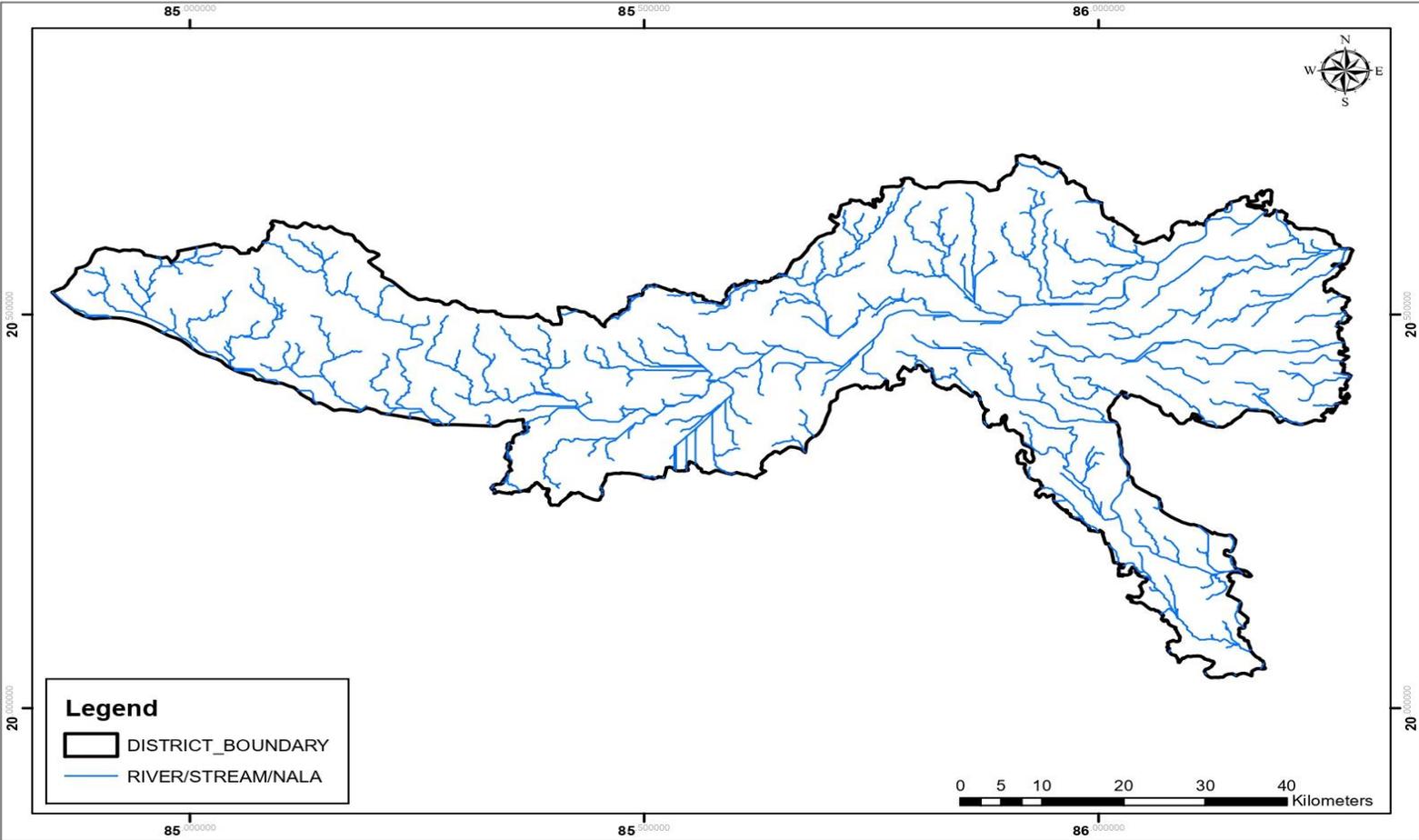
Stratigraphy:

Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies)
		Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene geanulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

05. DRAINAGE AND IRRIGATION PATTERN.

The river Brahmani and its tributaries control the drainage of the district. Brahmani is the second longest river in Odisha and flows through the district in a general east-west direction. It divides the district into two halves. Initially, the river flows in a north-south direction, then follows a northwest-southeast course and subsequently changes to northeast-southwest direction. Finally, it changes to a northwest-southeast course near the eastern border of the district. Most part of the district falls within its basin. The Brahmani is perennial in nature with a nominal flow during the summer season. Its important tributaries are Ramiala Nadi, Nigre Nadi, Purajhor Nadi etc. The smaller streams show dendritic pattern while the major river and its tributaries show sub-parallel drainage, indicating structural control. Major part of the district is irrigated through canal irrigation from the dam at Rengali.

DRAINAGE MAP OF CUTTACK DISTRICT



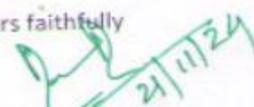
06. LAND UTILISATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURAL, HORTICULTURAL, MINING ETC.

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully


21/11/24
Dy. Director of Horticulture
Cuttack

07. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT.

The drainage systems i.e. rivers of the district gets filled with water during the monsoon and the gradually it decreases from the month of January to June of each year. In the summer season all rivers become almost dry excepting narrow flow of water within the basin.

The variation of ground water table in the district is as follows:

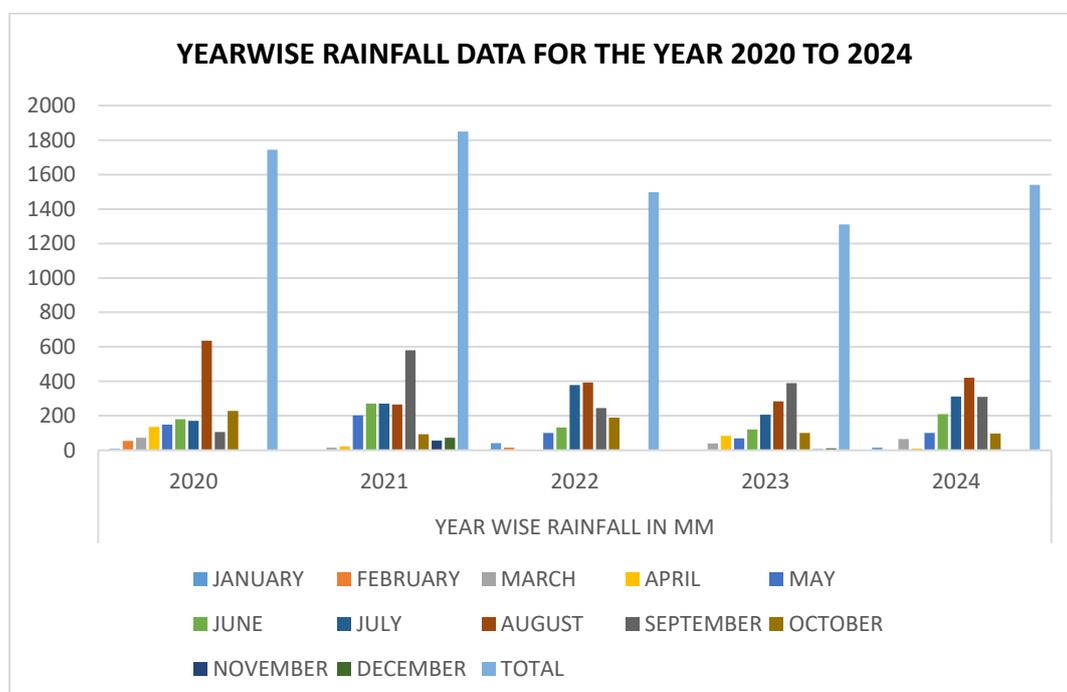
Depth of water level (mbgl)/ Period	April	August	November	January
Minimum	0.66	0.26	0.37	0.5
maximum	10.5	7.20	6.6	8.2

08. RAINFALL OF THE DISTRICT AND CLIMATIC CONDITION.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7 -8°C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



09. DETAILS OF THE MINING LEASES IN THE DISTRICT AS PER THE FOLLOWING FORMAT.

Sl.No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of lessee	Mining lease Grant Order No. & date	Area of Mining lease (in AC)	Period of Mining lease (Initial)		Date of commencement of mining operation	Status (Working Non Working/Temp. working for despatch etc.)	Obtained Environmental clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitude)
						From	To				
1	2	3	4	5	6	7	8	11	12	14	15
A.Name of the Tahasil:- TANGI CHOWDAR											
A1	Gobindpur decorative stone Mine	OMC LIMITED	7RFJ+96R, Gopabandhu Marg, Unit 4, Keshari Nagar, Bhubaneswar, Odisha 751001	5682/S&M, 28.7.2021	45.17Ac/18.28Ha	21.01.2022	20.01.2052	21.01.2022	working	EC22B001OR134336,06.01.2022	MOUZA- Gokulpur, Khata-368, Plot- 1213, Kissam-Parbat2 , Lat- 20°34'18.09300"N to 20°34'44.81292"N Long- 86°03'21.39912"E to 86°03'44.52084"E
B.Name of the Tahasil:- Narsinghpur											
B1	Sagar Decorative stone Mine				49.40Ac/19.991Ha				Non- working		MOUZA- Sagar, Khata-932, Plot- 2827, Kissam-Pahad , Lat- 20°28'13.6"N to 20°28'28.3"N Long- 85°07'42.9"E to 85°08'07.1"E

NB: in the above table omitted Columns are,

Column- 09 & 10 Period of Mining lease (Renew) -NA

Column-13 Use (Captive/ Non-Captive) - All Non-Captive

Column- 16 Method of Mining (Opencast/Underground) - All Open cast

10. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

Revenue collected for Decorative Stone.

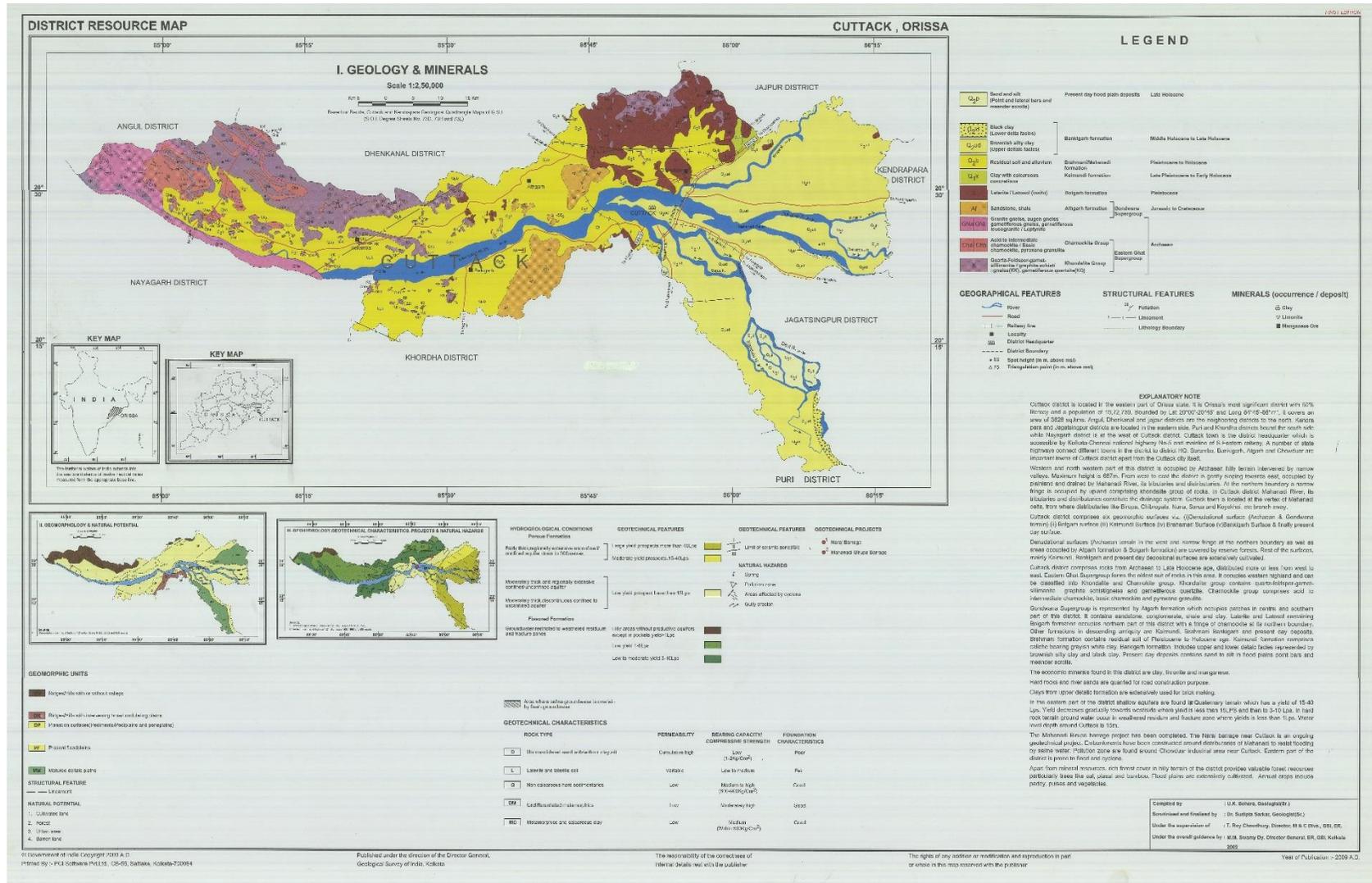
Sl. No.	Name of the Tahasil	Name of Source	Revenue Collected for last three years (in Rs)Lakh		
			2021-22	2022-23	2023-24
A1	Tangi Chowdar	Gobindpur decorative stone quarry	503573	577561	1777252
B1	Narsinghpur	Sagar Decorative stone quarry	-	-	-

11. DETAILS OF PRODUCTION OF MINOR MINERAL IN LAST THREE YEARS.

Production of Decorative Stone

Sl. No.	Name of the Tahasil	Name of Source	Production for last three years (in Cum)		
			2021-22	2022-23	2023-24
A1	Tangi Chowdar	Gobindpur decorative stone quarry	-	6346.165	9472.75
B1	Narsinghpur	Sagar Decorative stone quarry	-	-	-

12. MINERAL MAP OF THE DISTRICT.



13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY AS PER THE FOLLOWING FORMAT.

Sl.No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of LOI	Use(Captive/Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9
NA	NA	NA	NA	NA	NA	NA	NA	NA

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT.

SL. NO.	NAME OF SOURCE WITH LOCATION	GEOLOGICAL RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN (IN M3)	MINEABLE RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN (IN M3)
A1	Gobindpur decorative stone quarry, MOUZA- Gokulpur, Khata-368, Plot-1213, Kissam- , Lat- 20°34'18.09300"N to 20°34'44.81292"N Long- 86°03'21.39912"E to 86°03'44.52084"E	447487	27676.25
B1	Sagar Decorative stone quarry, MOUZA- Sagar, Khata-932, Plot-2827, Kissam- , Lat- 20°28'13.6"N to 20°28'28.3"N Long- 85°07'42.9"E to 85°08'07.1"E	2102052.9	1805929.50

15. QUALITY /GRADE OF MINERAL AVAILABLE IN THE DISTRICT.

Khondalite of the district is very much suitable for Sculpture carving purposes due its softness due to the effect of weathering in Khondalite. After recovery Balance material may be used for filling purposes particularly of road.

16. USE OF MINERAL.

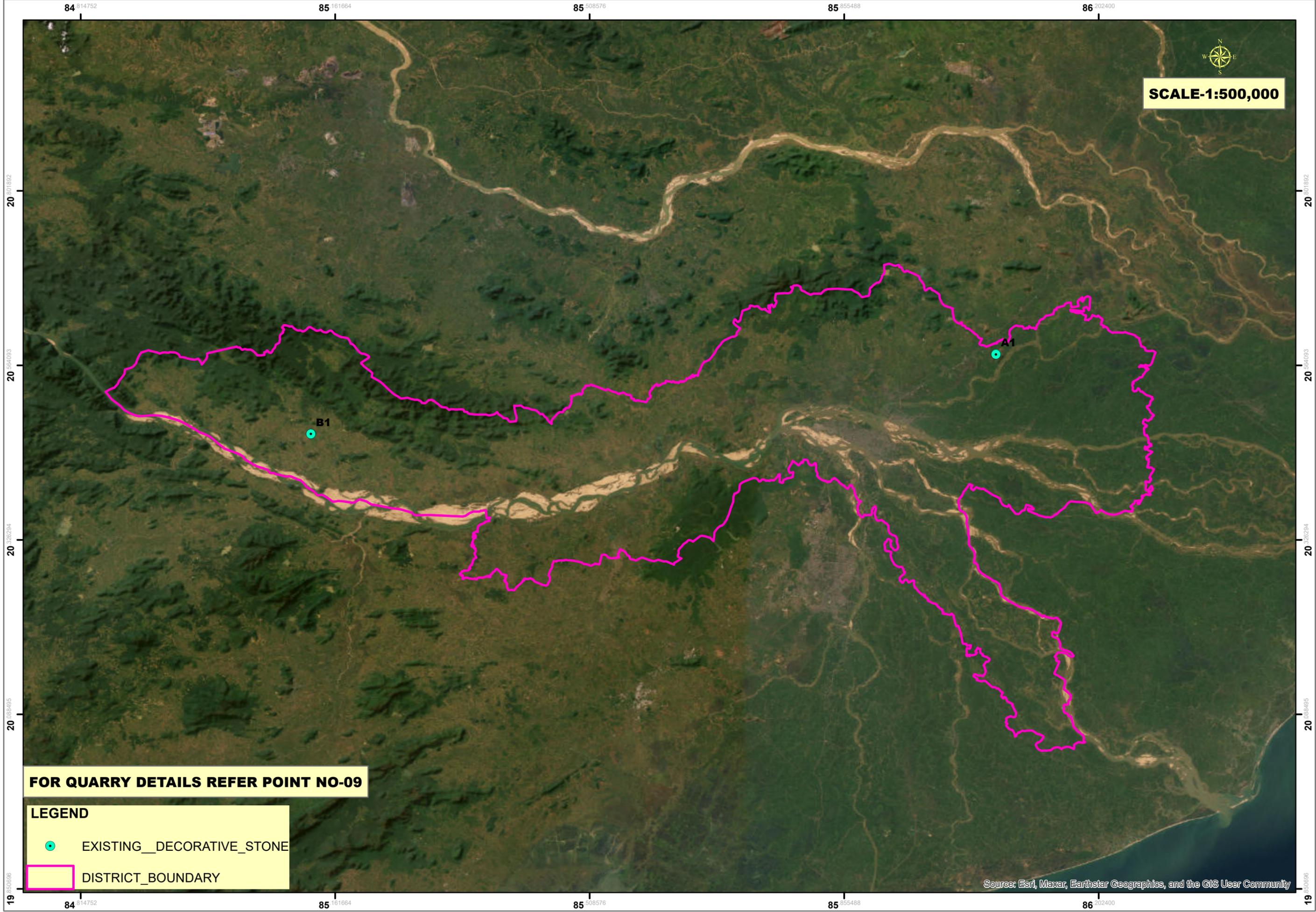
Khondalite blocks for use in the projects to be undertaken under the scheme for "Augmentation of Basic Amenities and Development of Heritage and Architecture"(ABADHA) and/or projects for development of Puri as World Heritage City.

17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS.

Khondalite is a type of metamorphic rock predominantly found in Odisha, India, and is primarily composed of quartz, feldspar, and mica. It has various uses, particularly in the construction and building industry, due to its durability and aesthetic appeal. In Khordha, the demand for khondalite can be attributed to:

- **Construction Projects:** With ongoing infrastructure development, including roads, buildings, and bridges, khondalite is sought after for its strength and longevity.
- **Monuments and Sculptures:** Its suitability for carving makes it popular in the creation of sculptures and historical monuments.
- **Export Potential:** Khondalite can also be exported, increasing its demand in international markets.
- **Local Industry:** The demand from local stone processing industries that utilize khondalite for various applications contributes to its market need.

MINING LEASES (DECORATIVE STONE) MARKED ON THE DISTRICT SATELLITE-MAP OF CUTTACK



SCALE-1:500,000

FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

● EXISTING__DECORATIVE_STONE

□ DISTRICT_BOUNDARY

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

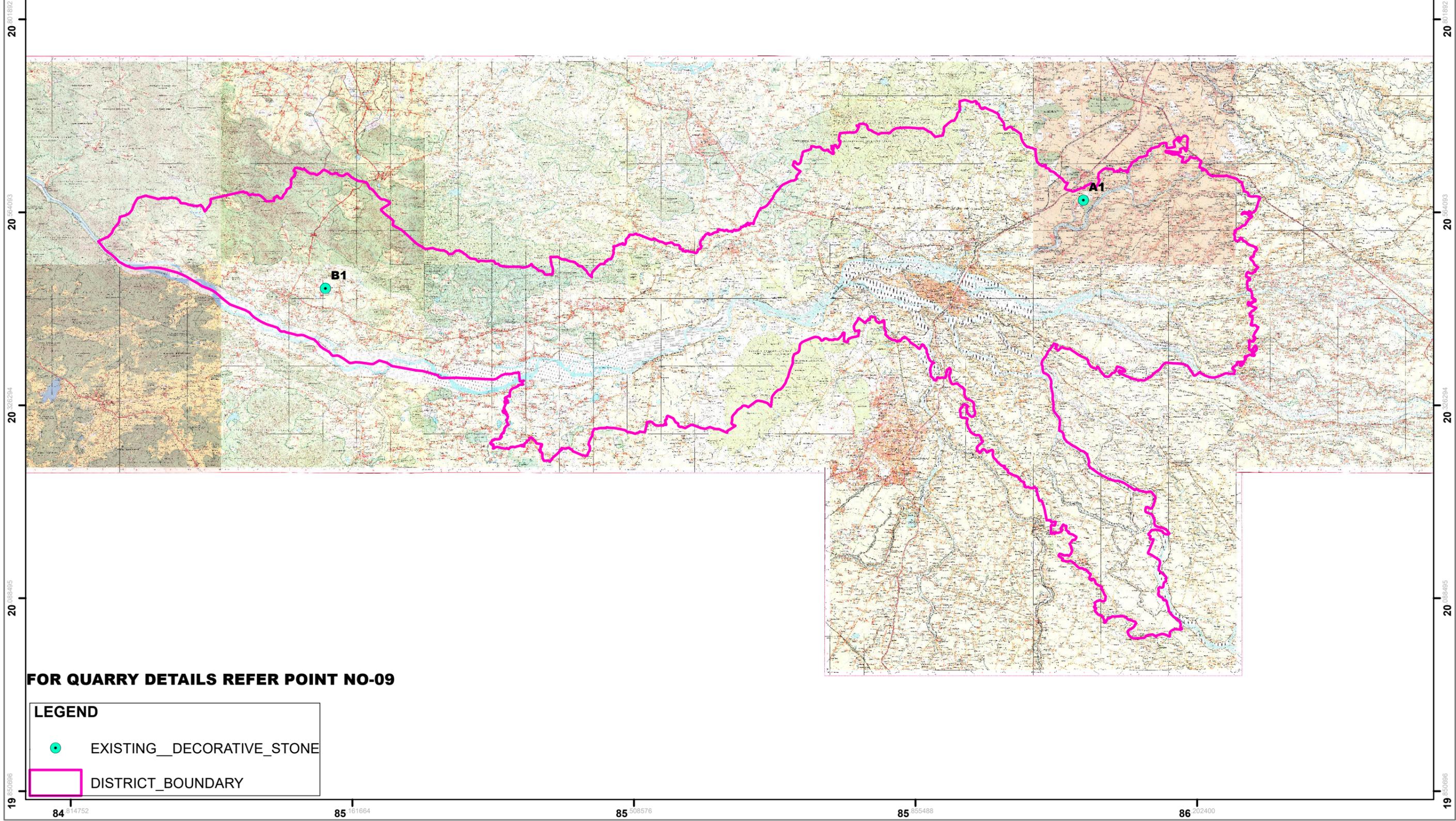
MINING LEASES (DECORATIVE STONE) MARKED ON THE DISTRIC TOPO-MAP OF CUTTACK

84 814752 85 161664 85 508576 85 855488 86 202400

18. Mining lease marked on the map of the district



SCALE-1:500,000



FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

● EXISTING_DECORATIVE_STONE

▭ DISTRICT_BOUNDARY

84 814752 85 161664 85 508576 85 855488 86 202400

19 850886

19 850886

**19. DETAILS OF THE AREA OF WHERE THERE IS A CLUSTER OF MINING LEASES
VIZ. NUMBER OF MINING LEASES, LOCATION (LATITUDE AND LONGITUDE).**

NA

Quarries existing within 500m radius are considered as cluster of Mining Leases as per the MoEF guide lines. But for decorative stone there is no cluster present.

20. DETAILS OF ECO-SENSITIVE AREA, IF ANY, IN THE DISTRICT.

Kapilash Sanctuary and its eco-sensitive zone are located within the District of Dhenkanal has been notified by MoEF & CC, Govt. of India on date 17th June, 2025. Some portion of the Cuttack District under Cuttack Forest Division included in the Eco-Sensitive Zone of the Kapilash Wildlife Sanctuary. There is only one village i.e. Banjhama is coming within the Eco-sensitive Zone. The Latitude & Longitude of the village Banjhama is N20.37' .2.54" E85.52' .41.92".

21. IMPACT ON THE ENVIRONMENT (AIR, WATER, NOISE, SOIL, FLORA & FAUNA, LAND USE, AGRICULTURE, FOREST ETC.) DUE TO MINING ACTIVITY.

Activities attributed to Mining:-

Generally, the environment impact can be categorized as either primary or secondary. Primary Impacts are those, which are attributed directly by the project. Secondary impacts are those which are indirectly induced and typically include the associated investment and changed pattern of social and economic activities by the proposed action.

The impact has been ascertained for the project assuming that the pollution due to mining activity has been completely spelled out under the base line environmental status for the entire ROM which is proposed to be exploited from the mines.

Impact on Ambient Air

Mining operation are carried out by opencast manual, semi mechanized/ mechanized methods generating dust particles due to various activities likes, excavation, loading, handling of mineral and transportation. The air quality in the mining areas depends upon the nature and concentration of emissions and meteorological conditions.

The major air pollutants due to mining activities include:-

- Particulate matter (dust) of various sizes.
- Gases, such as sulphur dioxide, oxides of nitrogen, carbon monoxide etc from machine & vehicular exhaust.

Dust is the single air pollutant observed in the open cast mines. Diesel operating drilling machines, blasting and movement of machineries/ vehicles produce NO_x, SO₂ and CO emissions, usually at low levels. Dust can be of significant nuance surrounding land user and potential health risk in some circumstances.

Water Impact

Sometimes the mining operation leads to intersect the water table causing ground water depletion. Due to the interference with surface water sources like river, nallah etc drainage pattern of the area is altered.

Noise Impact

Noise pollution mainly due to operation of machineries and occasional plying of machineries. These actives will create noise pollution in the surrounding area.

Impact on Land environment

The topography of the area will change certain changes due to mining activity which may cause some alteration to the entire eco system.

Impact on Flora & Fauna

The impact on biodiversity is difficult to quantify because of it's diverse and dynamic characteristics.

Mining activities generally result in the deforestation, land degradation, water, air and noise pollution which directly or indirectly affect the faunal and flora status of the project area.

However, occurrence and magnitude of these impacts are entirely dependent upon the project location, mode of operation and technology involved.

22. REMEDIAL MEASURES TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT.

Air

Mitigation measures suggested for air pollution controls are to be based on the baseline ambient air quality of the project/cluster area and would include measures such as:

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust particles.
- Controlled blasting techniques shall be adopted.
- Water sprinkling on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be undertaken.
- Transport of materials in trucks are to be covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mines area.
- Information on wind diction and meteorology are to be considered during planning, so that pollutants, which cannot be fully suppressed by engineering techniques, will be prevented from reaching the nearby agricultural land, if any.
- Comprehensive greenbelt around overburden dumps and periphery of the mining projects/clusters has to be carried out to reduce to fugitive dust transmission from the project area in order to create clean & healthy environment.

Water

- Construction of garland drains and settling tanks to divert surface run –off of the mining area to the natural drainage.
- Construction of checks dams/ gully plugs at strategic places to arrest silt wash off from broken up area.
- Retaining walls with weep hole are to be constructed around the mine boundaries to arrest silt wash off.

- The mined out pits shall be converted in to the water reservoir at the end of mine life. This will help in recharging ground water table by acting as a water harvesting structure.
- Periodic analysis of mine pit water and ground water quality in nearby villages are to be undertaken.
- Domestic sewage from site office & urinals/latrines provided within ML/QL areas is to be discharged in septic tank followed by soak pits.

Noise

- Periodic maintenance of machineries, equipments shall be ensured to keep the noise generated within acceptable limit.
- Development of thick green belt around mining/cluster area, haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities like blasting, excavation site etc. Worker and operators at work sites will be provided with earmuffs.
- Conducting periodical medical check-up of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise related effects.
- Periodic noise monitoring at locations within the mining area and nearby habitations to assess efficacy of adopted control measures.
- During blasting optimum spacing, burden and charging of holes will be made under the supervision of competent qualified mines foreman, mate etc.

Biological Environment

- Development of green belt/gap filling saplings in the safety barrier left around the quarry area/ cluster area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy laves on the inactive mined out upper benches.

- Development of dense poly culture plantation using local floral species in the mining areas at conceptual stage if the mine is not continued much below the general ground level.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.

23. RECLAMATION OF MINED OUT AREA (BEST PRACTICE ALREADY IMPLEMENTED IN THE DISTRICT, REQUIREMENT AS PER RULES AND REGULATION, PROPOSED RECLAMATION PLAN).

As per statute all mines/quarries are to be properly reclaimed before final closure of the mine. Reclamation of exhausted mines are planned to be undertaken in below three possible means:

1. If, substantial amount of waste is there, the exhausted quarry can be fully or partly backfilled using the stored waste. The backfilled areas are to be brought under plantation of local species.

2. If the generation of waste is much less as in the case of minor mineral mining, the exhausted quarries can be reclaimed by

a. Plantation on the broken-up surface if the depth of quarry is not much below the surrounding surface level.

b. Converted to water reservoir after stabilization of the slopes if the exhausted quarry continues much below the surrounding surface level. It is preferred to cordon the water reservoir either through wire fencing or retaining wall with plantation from the safety point of view.

Most of the quarry/mining lease areas are yet to be exhausted from ore point of view. Hence, reclamation would be taken up only after exhaustion of the ore/mineral content from these areas. The exhausted minor mineral quarries of the district have been converted to water reservoirs.

24. RISK ASSESSMENT & DISASTER MANAGEMENT PLAN.

The only risk involved related to mining of minor mineral excepting natural calamities is slope failure and probable accidents due to high

and ill maintained bench walls. This can only be addressed through making of regular benches and undertaking mining in benching pattern. The disaster management plan (DMP) is supposed be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is to be aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated through rehearsal/induction conducted by the respective department from time to time .

General responsibilities of employees' during an emergency:

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the worker in charge, should adopt safe and emergency shut down and attend to any prescribed duty. If no such responsibility is assigned, the workers should adopt a safe course to assembly point and wait instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

Co-ordination with local authorities:

The Mine Manger who is responsible for emergency will always keep a jeep ready at site. In case of any eventuality, the victim will be taken to the nearby hospitals after carrying out the first aid at the site. The Manger should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shops, district revenue authorities etc. and use them efficiently during the case of emergency.

25. DETAILS OF THE OCCUPATIONAL HEALTH ISSUES IN THE DISTRICT. (LAST FIVE-YEAR DATA OF NUMBER OF PATIENTS OF SILICOSIS & TUBERCULOSIS IS ALSO NEEDS TO BE SUBMITTED).

As per the guidelines of the Mine Rules 1995, occupational health safety has been stipulated by the ILO/WHO. The proponent's will take necessary precautions to fulfill the stipulations. Normal sanitary facilities have to be provided within the lease area. The management will carry out periodic health checkup of workers.

Occupational hazards involved in mines are related to dust pollution, noise pollution, blasting and injuries from moving machineries & equipment and fall from high places. DGMS has given necessary guidelines for safety against these occupational hazards. The management has to strictly follow these guidelines.

All necessary first aid and medical facilities are to be provided to the workers. The mine shall be well equipped with personal protective equipment (PPE). Further, all the necessary ported equipment such as helmet, safety goggles, earplugs, earmuffs etc are to be provided to mine workers as per Mines Rules. All operators and mechanics are to be trained to handle firefighting equipment.

TB ACTIVITIES	2019-20	2020-21	2021-22	2022-23	2023-24
TOTAL NUMBER OF PATIENTS DIAGNISED	2155	1794	2371	2765	2672
TOTAL NUMBER OF PATIENTS NOTIFIED	2155	1794	2371	2765	2672
MDR	72	46	52	57	40
TBTREATMENT CURED	829	730	698	820	937
TBTREATMENT COMPLETED	1009	813	1350	1685	1401
DIED	140	152	172	163	128
FAILURE	13	9	7	11	5
TREATMENT CHANGED	42	25	42	41	26
NOT EVALUTED	11	4	1	2	23
ON TREATMENT	0	0	0	5	120
NOT STARTED TREATMENT	34	25	27	18	16
SILICOSIS ACTIVITIES	0	0	0	3	0
OPD PATIENTS	0	0	0	0	0
IPD PATIENTS	0	0	0	3	0

Yours Faithfully

Chief District Medical And Public Health Officer

Cuttack

26. PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASES ALREADY GRANTED IN THE DISTRICT.

As most of the minor mineral mines/quarries of the district are yet to be exhausted of their mineral content no sort of reclamation measures including plantation has been undertaken excluding gap plantation of local species in the peripheral safety zones of the quarries/ clusters and in some of the haul roads.

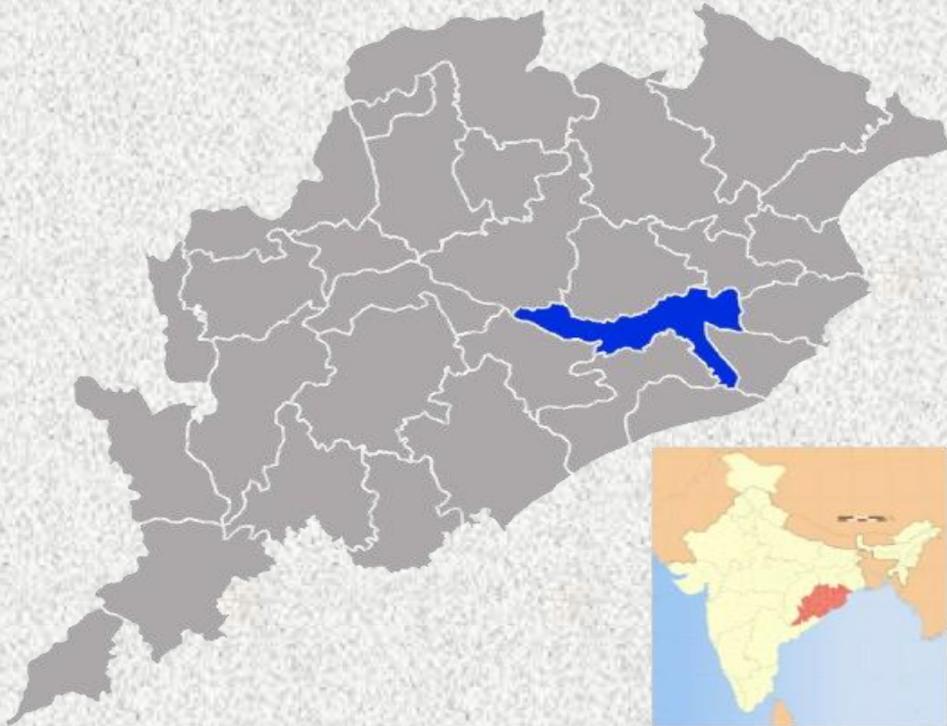
27. ANY OTHER INFORMATION.

NIL



DISTRICT SURVEY REPORT (DSR) OF CUTTACK DISTRICT, ODISHA FOR ORDINARY EARTH/BRICK EARTH MINING

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



**COLLECTORATE CUTTACK
NOVEMBER-2024**

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PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft

cooperatives and handicraft training institutes gives a boost to this handicraft industry. There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRRRI), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrum and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- Laterite: Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretionary often forms a hard crust, and can reach thicknesses of up to 10 meters or more.
- Road Metal/Stone: Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- Morrum: Association of morrum with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

03. GENERAL PROFILE OF THE DISTRICT.

Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87- Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack,91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position in the map of Indian Industries. Popularly known as Silver City, Cuttack is also growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has provided job opportunities to skilled man power. There are also some private

companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home-based and agro-based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road is one of the premier national research institute under the Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes

gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc.

The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14
No. of Tahasils	15
No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01
No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhabaleswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhabaleswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to Cuttack Sadar Sub Division one can find the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansa Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a

tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

Silver Filigree work, uniqueness of Cuttack City: -

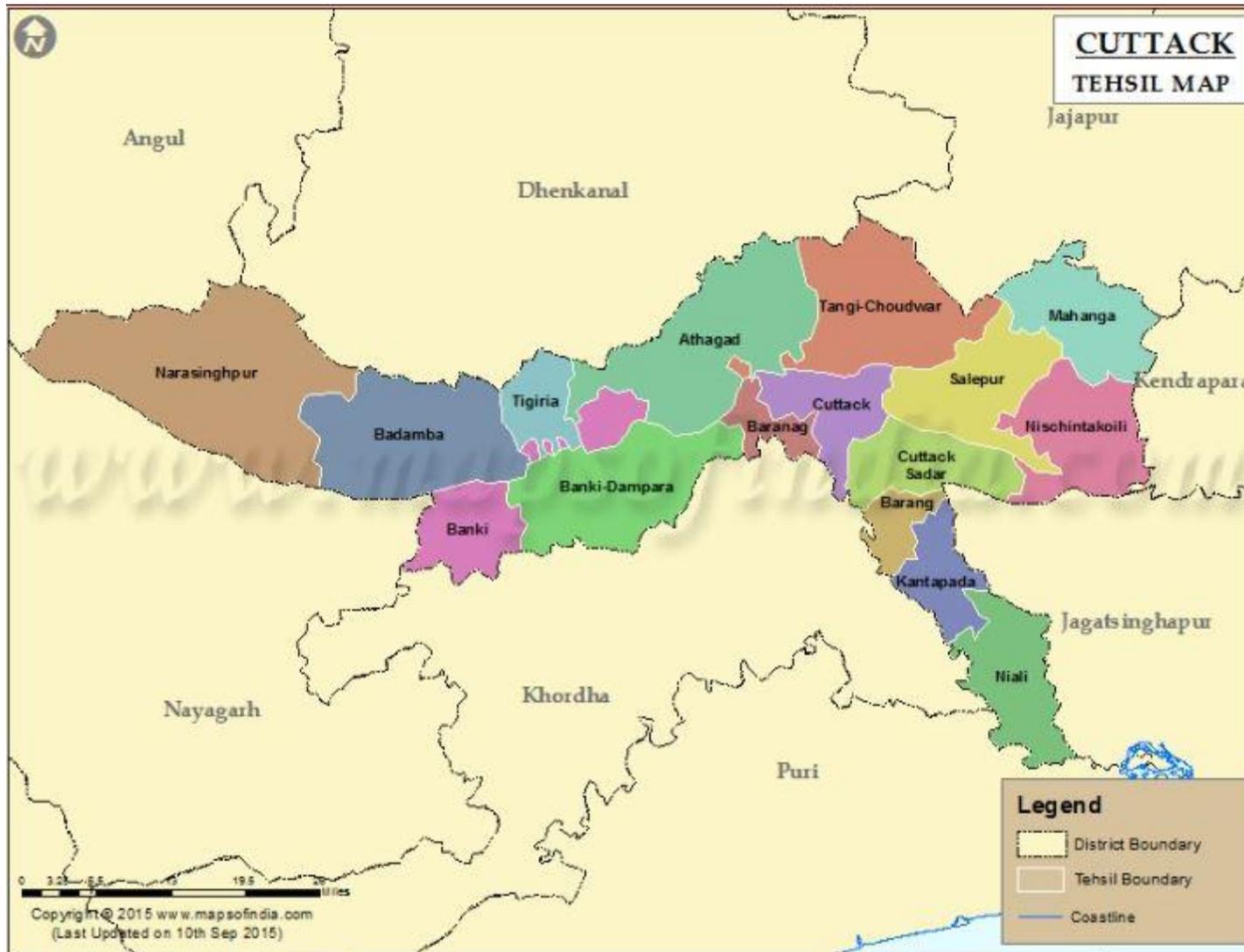
Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

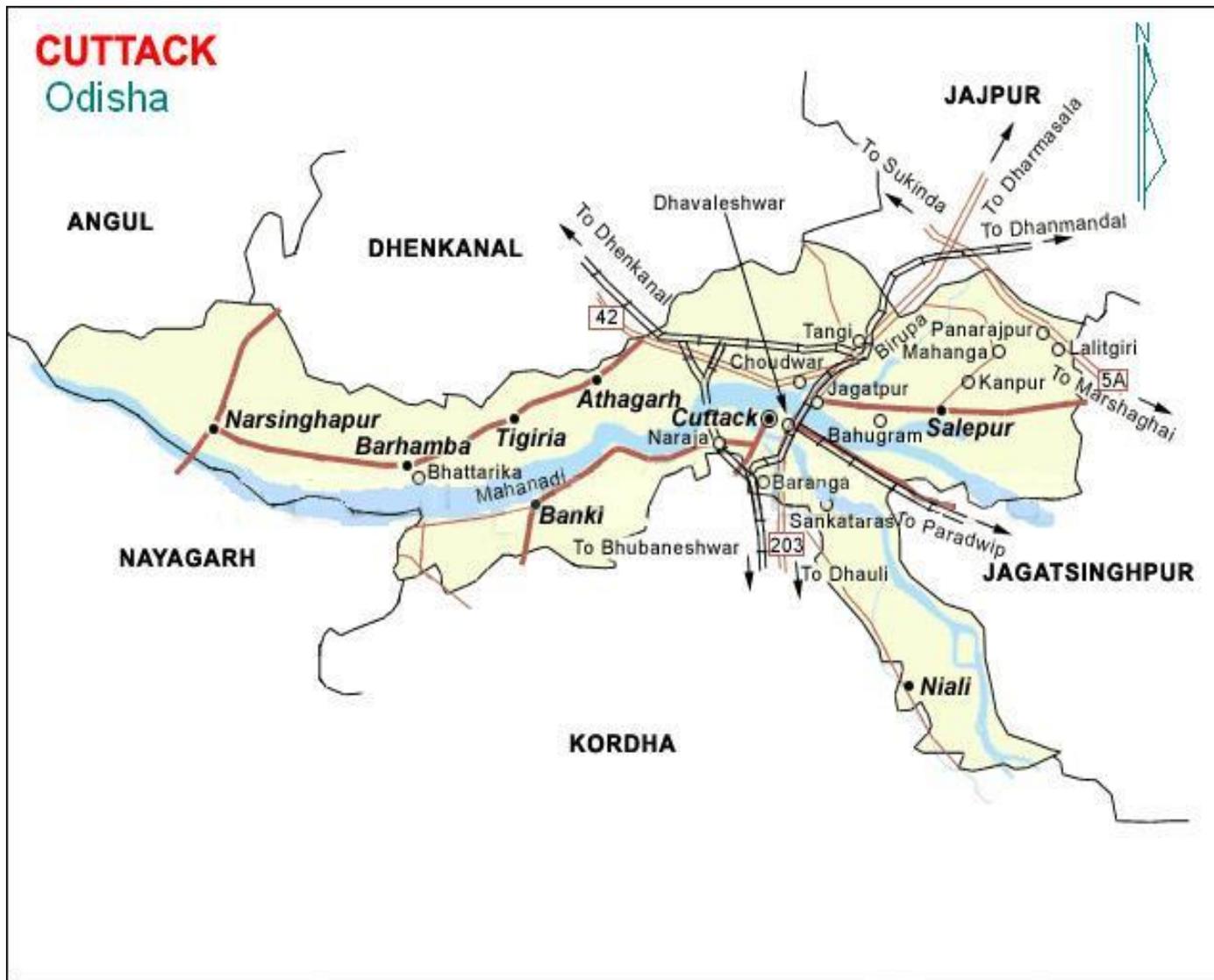
Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU), Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju Patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble deed for their contribution to Odisha as well as for our Country.

INDEX MAP







04. GEOLOGY OF THE DISTRICT.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone. conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

Stratigraphy:

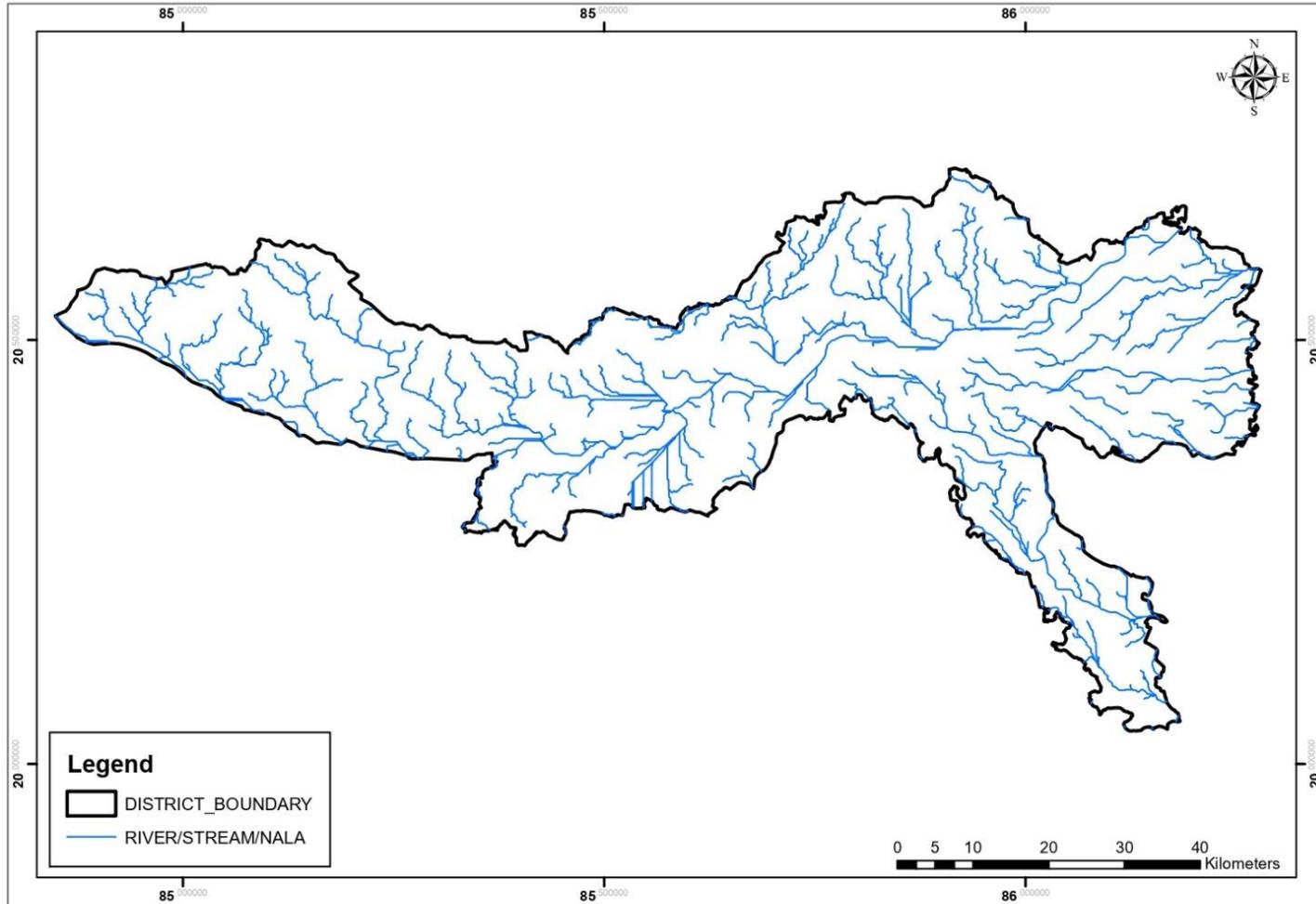
Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies)
		Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene gneulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

05. DRAINAGE AND IRRIGATION PATTERN.

The drainage of the district is mainly controlled by rivers like Mahanadi, Kathajodi, Kuakhai, Birupa, Chitrapala, Sidua, Luna & Devi.

During the year 2013-14, it is reported by District Agriculture Office that the irrigation potential created during kharif and rabi are 101740 hectares and 48370 hectares respectively from all sources.

DRAINAGE MAP OF CUTTACK DISTRICT



06. LAND UTILISATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURAL, HORTICULTURAL, MINING ETC.

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully

 Dy. Director of Horticulture
 Cuttack

07. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT.

The drainage systems i.e. rivers of the district gets filled with water during the monsoon and the gradually it decreases from the month of January to June of each year. In the summer season all rivers become almost dry excepting narrow flow of water within the basin.

The variation of ground water table in the district is as follows:

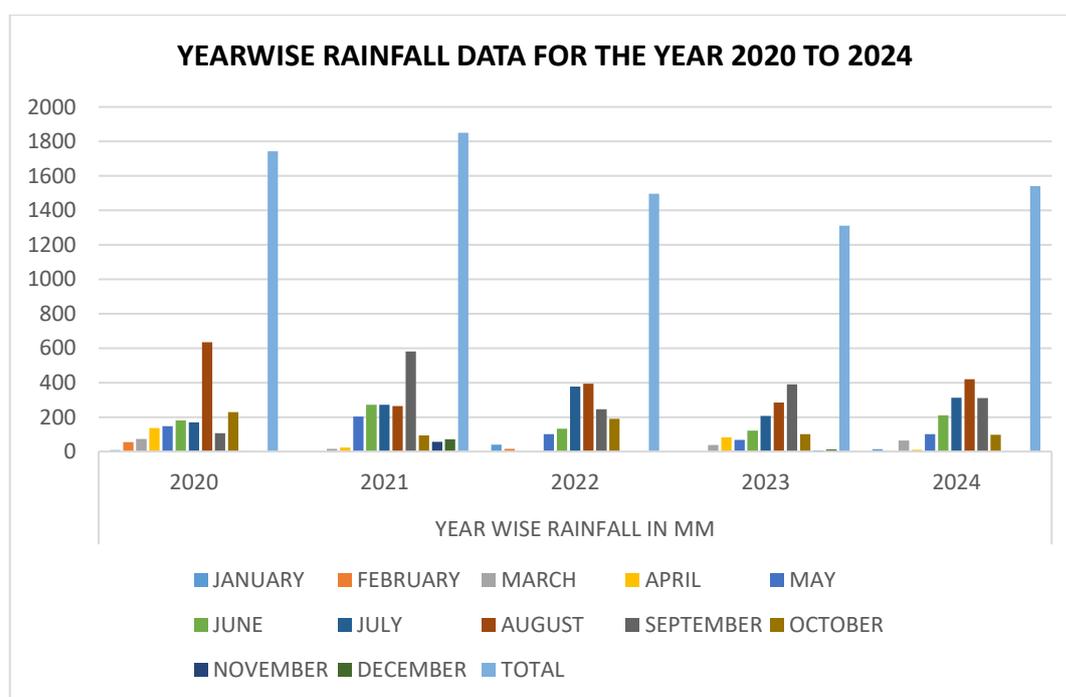
Depth of water level (mbgl)/ Period	April	August	November	January
Minimum	0.66	0.26	0.37	0.5
maximum	10.5	7.20	6.6	8.2

08. RAINFALL OF THE DISTRICT AND CLIMATIC CONDITION.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7 -8°C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



09. DETAILS OF THE MINING LEASES IN THE DISTRICT AS PER THE FOLLOWING FORMAT.

Sl.No	Name of the Mineral	Name of the Lessee	Address & Contact No. of lesee	Mining lease Grant Order No. & date	Area of Mining lease (in HA)	Period of Mining lease (Initial)		Date of commencement of mining operation	Status (Working Non Working/Temp. working for despatch etc.)	Obtained Environmental clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitude)
						From	To				
1	2	3	4	5	6	7	8	11	12	14	15
A.Name Of Tahasil-Baranga											
A1					0.085 HA						MOUZA-GANGESWAR,KHATA NO-218,PLOT NO-132,KISSAM-GHARABARI,LAT-20.289,LONG-85.943
A2					0.263 HA						MOUZA-GANGESWAR,KHATA NO-170,PLOT NO-133,KISSAM-GHARABARI LAT-20.289,LONG-85.943
A3					1.0077 HA						MOUZA-GANGESWAR,KHATA NO-397,PLOT NO-142,KISSAM-GHARABARI,LAT-20.289,LONG-85.944
NEW SOURCES											
A4	MEERA BRICK KILN				0.248 HA						MOUZA-GANGESWAR,KHATA NO-401/83,PLOT NO-627/1991,KISSAM-Biali Dophasal,LAT-20.288,LONG-85.945
A5					0.3966 HA						MOUZA-GANGESWAR,KHATA NO-393/49,PLOT NO-149,KISSAM-BINAJORI,LAT-20.288,LONG-85.944
A6					0.4006 HA						MOUZA-KURANGASASAN,KHATA NO-761,PLOT NO-326,KISSAM-,LAT-20.308,LONG-85.953
A7					0.3966 HA						MOUZA-KURANGASASAN,KHATA NO-761,PLOT NO-349,KISSAM-,LAT-20.309,LONG-85.954
B.Name Of Tahasil-Sadar											

B1					0.4047 HA						MOUZA-SAINDA,KHATA NO-581,PLOT NO-2007,KISSAM-GHARABARI,LAT-20.376,LONG-85.899
B2					0.6799 HA						MOUZA-NUAHAT,KHATA NO-340,PLOT NO-844,KISSAM-PATITA,LAT-20.377,LONG-85.881
B3					0.8215 HA						MOUZA-NUAHAT,KHATA NO-498/343,PLOT NO-844/1997,KISSAM-PATITA,LAT-20.377,LONG-85.881
NEW SOURCES											
B4	POOJA BRICKS				0.433 HA						MOUZA-JHARKATA,KHATA NO-587,PLOT NO-906,KISSAM-POKHARI ADI,LAT-20.414,LONG-85.936
B5					0.7284 HA						MOUZA-JHARKATA,KHATA NO-587,PLOT NO-907,KISSAM-JALASAYA EK,LAT-20.414,LONG-85.936
B6					0.2468 HA						MOUZA-JHARKATA,KHATA NO-602,PLOT NO-908,KISSAM-ADI,LAT-20.414,LONG-85.937
C.Name Of Tahasil-Tangi Chaudwar											
NEW SOURCES											
C1	LUCKY BRICKS				0.1376 HA						MOUZA-MAGURA DHANAMANDAL,KHATA NO-322,PLOT NO-344,KISSAM-GHARABARI,LAT-20.585,LONG-86.053
C2					0.6596 HA						MOUZA-MAGURA DHANAMANDAL,KHATA NO-1151/72,PLOT NO-348,KISSAM-GHARABARI,LAT-20.585,LONG-86.052

10. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

Revenue collected for Ordinary earth/Brick Earth.

NA

11. DETAILS OF PRODUCTION OF MINOR MINERAL IN LAST THREE YEARS.

NA

13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY AS PER THE FOLLOWING FORMAT.

NIL

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT.

SL. NO.	NAME OF SOURCE WITH LOCATION	LEASE AREA FOR NON OPERATIONAL & PROPOSED QUARRIES IN M2	AVERAGE THICKNESS OF STRATA NON OPERATIONAL & PROPOSED QUARRIES IN M	GEOLOGICAL RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINERAL POTENTIAL OF NON OPERATIONAL & PROPOSED SOURCES AS PER FIELD OBSERVATION (IN M3)
A1	MOUZA-GANGESWAR,KHATA NO-218,PLOT NO-132,KISSAM-GHARABARI,LAT-20.289,LONG-85.943	850	1	850
A2	MOUZA-GANGESWAR,KHATA NO-170,PLOT NO-133,KISSAM-GHARABARI LAT-20.289,LONG-85.943	2630	1	2630
A3	MOUZA-GANGESWAR,KHATA NO-397,PLOT NO-142,KISSAM-GHARABARI,LAT-20.289,LONG-85.944	10077	1	10077
A4	MOUZA-GANGESWAR,KHATA NO-401/83,PLOT NO-627/1991,KISSAM-Biali Dophasal,LAT-20.288,LONG-85.945	2480	1	2480
A5	MOUZA-GANGESWAR,KHATA NO-393/49,PLOT NO-149,KISSAM-BINAJORI,LAT-20.288,LONG-85.944	3966	1	3966
A6	MOUZA-KURANGASASAN,KHATA NO-761,PLOT NO-326,KISSAM-,LAT-20.308,LONG-85.953	4006	1	4006
A7	MOUZA-KURANGASASAN,KHATA NO-761,PLOT NO-349,KISSAM-,LAT-20.309,LONG-85.954	3966	1	3966
B1	MOUZA-SAINDA,KHATA NO-581,PLOT NO-2007,KISSAM-GHARABARI,LAT-20.376,LONG-85.899	4047	1	4047
B2	MOUZA-NUAHAT,KHATA NO-340,PLOT NO-844,KISSAM-PATITA,LAT-20.377,LONG-85.881	6799	1	6799
B3	MOUZA-NUAHAT,KHATA NO-498/343,PLOT NO-844/1997,KISSAM-PATITA,LAT-20.377,LONG-85.881	8215	1	8215
B4	MOUZA-JHARKATA,KHATA NO-587,PLOT NO-906,KISSAM-POKHARI ADI,LAT-20.414,LONG-85.936	4330	1	4330
B5	MOUZA-JHARKATA,KHATA NO-587,PLOT NO-907,KISSAM-JALASAYA EK,LAT-20.414,LONG-85.936	7284	1	7284
B6	MOUZA-JHARKATA,KHATA NO-602,PLOT NO-908,KISSAM-ADI,LAT-20.414,LONG-85.937	2468	1	2468
C1	MOUZA-MAGURA DHANAMANDAL,KHATA NO-322,PLOT NO-344,KISSAM-GHARABARI,LAT-20.585,LONG-86.053	1376	1	1376
C2	MOUZA-MAGURA DHANAMANDAL,KHATA NO-1151/72,PLOT NO-348,KISSAM-GHARABARI,LAT-20.585,LONG-86.052	6596	1	6596

15. QUALITY /GRADE OF MINERAL AVAILABLE IN THE DISTRICT.

The earth is suitable for making of chimney bricks.

16. USE OF MINERAL.

The bricks made up of the earth are used for housing construction purposes.

17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS.

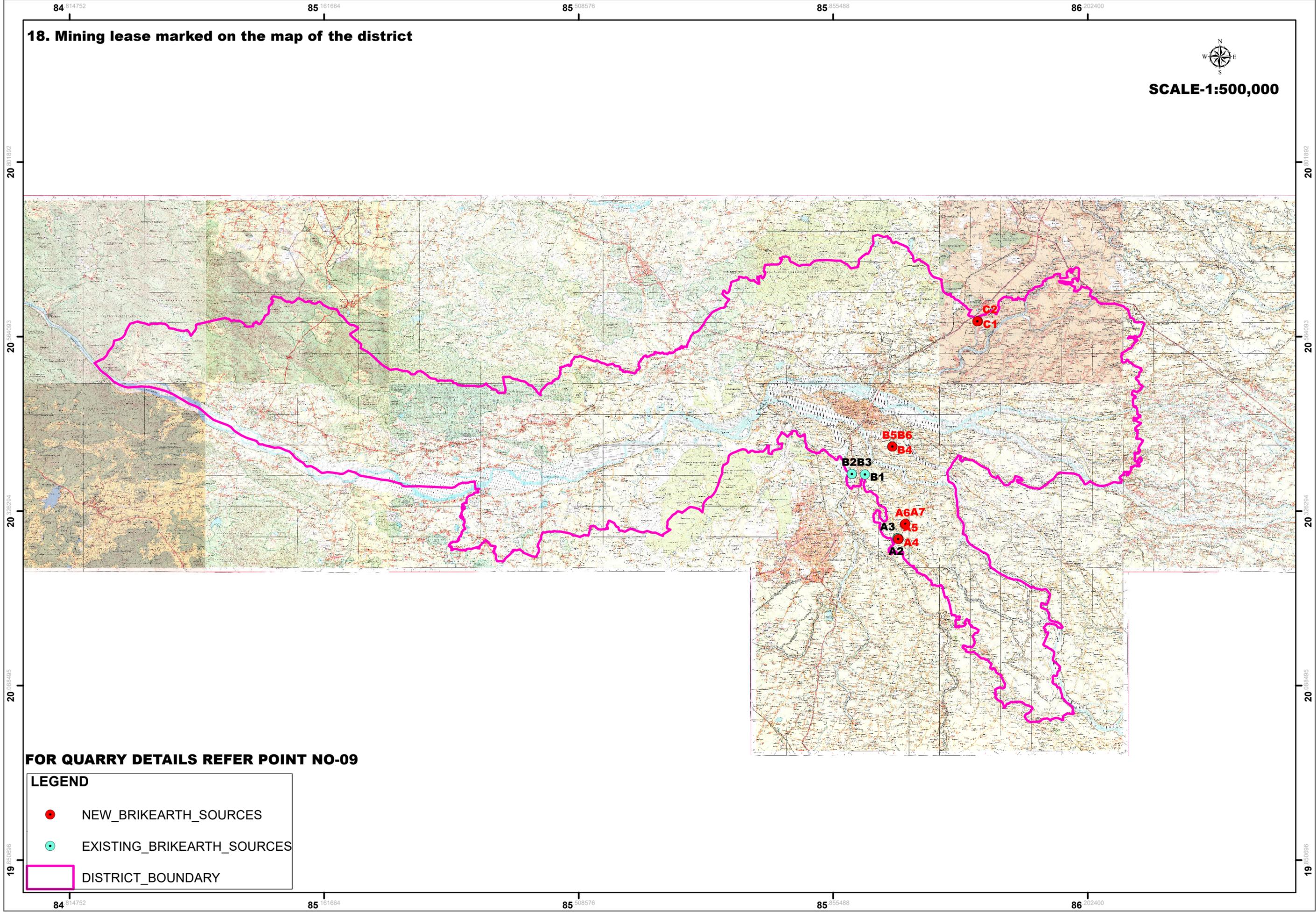
The demand for ordinary earth is primarily driven by construction, agriculture, and land development projects. Its low cost and wide availability make it a key material in infrastructure development, affordable housing, and landscaping. The demand fluctuates depending on economic conditions, urbanization trends, government policies, and local resource availability. In developing regions, the demand is particularly high for low-cost building projects and agricultural development. However, environmental regulations and the availability of alternative materials may impact its demand and supply in certain areas.

The supply of ordinary earth is generally abundant but can be constrained by geographical location, environmental regulations, and transportation costs. It is primarily sourced from excavation activities, including construction, land reclamation, and mining. The supply may fluctuate depending on local construction projects, agricultural needs, and environmental policies. Areas with large-scale construction or land development projects typically have a higher supply of earth, while remote areas or regions with strict environmental regulations may face limitations. The supply of ordinary earth is also influenced by economic factors, including demand for construction and infrastructure development.

MINING LEASES (BRICEARTH) MARKED ON THE DISTRIC TOPO-MAP OF CUTTACK

18. Mining lease marked on the map of the district


SCALE-1:500,000

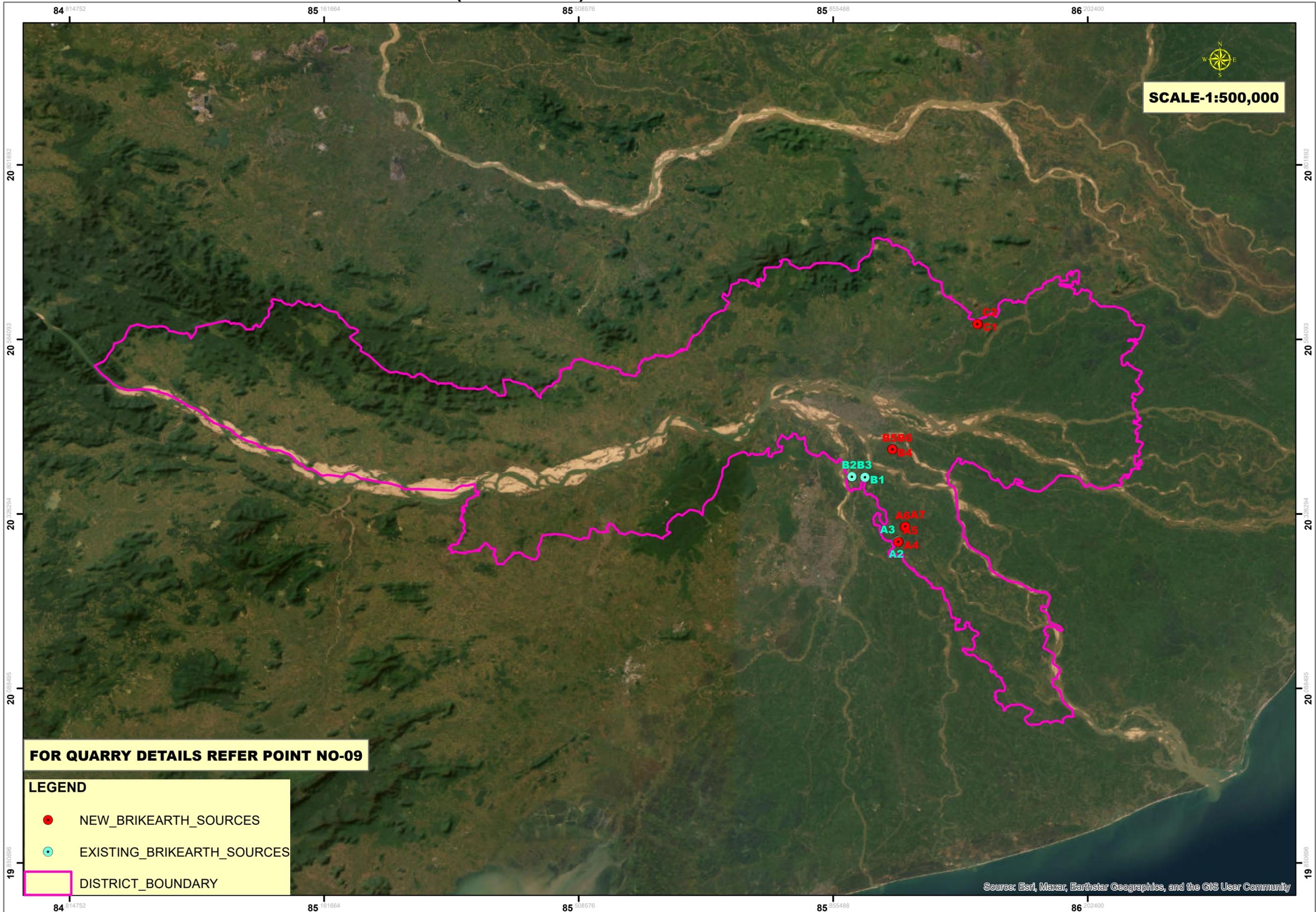


FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

-  NEW_BRIKEARTH_SOURCES
-  EXISTING_BRIKEARTH_SOURCES
-  DISTRICT_BOUNDARY

MINING LEASES (BRICEARTH) MARKED ON THE DISTRIC SATELLITE-MAP OF CUTTACK



FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

- NEW_BRIKEARTH_SOURCES
- EXISTING_BRIKEARTH_SOURCES
- ▭ DISTRICT_BOUNDARY

**19. DETAILS OF THE AREA OF WHERE THERE IS A CLUSTER OF MINING LEASES VIZ.
NUMBER OF MINING LEASES, LOCATION (LATITUDE AND LONGITUDE).**

SL NO.	NAME OF TAHASIL	NAME OF CLUSTER	DETAILS OF QUARRY LEASE AREA	NUMBER OF MINING LEASE
1	Baranga	GANGESWAR CLUSTER	MOUZA-GANGESWAR,KHATA NO-218,PLOT NO-132,KISSAM-GHARABARI,LAT-20.289, LONG-85.943	5
			MOUZA-GANGESWAR,KHATA NO-170,PLOT NO-133,KISSAM-GHARABARI LAT-20.289, LONG-85.943	
			MOUZA-GANGESWAR,KHATA NO-397,PLOT NO-142,KISSAM-GHARABARI,LAT-20.289, LONG-85.944	
			MOUZA-GANGESWAR,KHATA NO-401/83,PLOT NO-627/1991,KISSAM-Biali Dophasal,LAT-20.288, LONG-85.945	
			MOUZA-GANGESWAR,KHATA NO-393/49,PLOT NO-149,KISSAM-BINAJORI,LAT-20.288, LONG-85.944	
2	Baranga	KURANGASASAN CLUSTER	MOUZA-KURANGASASAN,KHATA NO-761,PLOT NO-326,KISSAM-,LAT-20.308, LONG-85.953	2
			MOUZA-KURANGASASAN,KHATA NO-761,PLOT NO-349,KISSAM-,LAT-20.309, LONG-85.954	
3	Sadar	NUAHAT CLUSTER	MOUZA-NUAHAT,KHATA NO-340,PLOT NO-844,KISSAM-PATITA,LAT-20.377, LONG-85.881	2
			MOUZA-NUAHAT,KHATA NO-498/343,PLOT NO-844/1997,KISSAM-PATITA,LAT-20.377, LONG-85.881	
4	Sadar	JHARKATA CLUSTER	MOUZA-JHARKATA,KHATA NO-587,PLOT NO-906,KISSAM-POKHARI ADI,LAT-20.414, LONG-85.936	3
			MOUZA-JHARKATA,KHATA NO-587,PLOT NO-907,KISSAM-JALASAYA EK,LAT-20.414, LONG-85.936	
			MOUZA-JHARKATA,KHATA NO-602,PLOT NO-908,KISSAM-ADI,LAT-20.414, LONG-85.937	

5	Tangi Chaudwar	MAGURA DHANAMANDAL CLUSTER	MOUZA-MAGURA DHANAMANDAL,KHATA NO- 322,PLOT NO-344,KISSAM- GHARABARI,LAT-20.585,LONG- 86.053	2
			MOUZA-MAGURA DHANAMANDAL,KHATA NO- 1151/72,PLOT NO-348,KISSAM- GHARABARI,LAT-20.585,LONG- 86.052	

20. DETAILS OF ECO-SENSITIVE AREA, IF ANY, IN THE DISTRICT.

Kapilash Sanctuary and its eco-sensitive zone are located within the District of Dhenkanal has been notified by MoEF & CC, Govt. of India on date 17th June, 2025. Some portion of the Cuttack District under Cuttack Forest Division included in the Eco-Sensitive Zone of the Kapilash Wildlife Sanctuary. There is only one village i.e. Banjhama is coming within the Eco-sensitive Zone. The Latitude & Longitude of the village Banjhama is N20.37' .2.54" E85.52'.41.92".

21. IMPACT ON THE ENVIRONMENT (AIR, WATER, NOISE, SOIL, FLORA & FAUNA, LAND USE, AGRICULTURE, FOREST ETC.) DUE TO MINING ACTIVITY.

Activities attributed to Mining:-

Generally, the environment impact can be categorized as either primary or secondary. Primary Impacts are those, which are attributed directly by the project. Secondary impacts are those which are indirectly induced and typically include the associated investment and changed pattern of social and economic activities by the proposed action.

The impact has been ascertained for the project assuming that the pollution due to mining activity has been completely spelled out under the base line environmental status for the entire ROM which is proposed to be exploited from the mines.

Impact on Ambient Air

Mining operations are carried out by opencast manual, semi mechanized/ mechanized methods generating dust particles due to various activities like, excavation, loading, handling of mineral and transportation. The air quality in the mining areas depends upon the nature and concentration of emissions and meteorological conditions.

The major air pollutants due to mining activities include:-

- Particulate matter (dust) of various sizes.
- Gases, such as sulphur dioxide, oxides of nitrogen, carbon monoxide etc from machine & vehicular exhaust.

Dust is the single air pollutant observed in the open cast mines. Diesel operating drilling machines, blasting and movement of machineries/ vehicles produce NO_x, SO₂ and CO emissions, usually at low levels. Dust can be of significant nuisance surrounding land user and potential health risk in some circumstances.

Water Impact

Sometimes the mining operation leads to intersect the water table causing ground water depletion. Due to the interference with surface water sources like river, nallah etc drainage pattern of the area is altered.

Noise Impact

Noise pollution mainly due to operation of machineries and occasional plying of machineries. These activities will create noise pollution in the surrounding area.

Impact on Land environment

The topography of the area will change certain changes due to mining activity which may cause some alteration to the entire eco system.

Impact on Flora & Fauna

The impact on biodiversity is difficult to quantify because of its diverse and dynamic characteristics.

Mining activities generally result in the deforestation, land degradation, water, air and noise pollution which directly or indirectly affect the faunal and flora status of the project area.

However, occurrence and magnitude of these impacts are entirely dependent upon the project location, mode of operation and technology involved.

22. REMEDIAL MEASURES TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT.

Air

Mitigation measures suggested for air pollution controls are to be based on the baseline ambient air quality of the project/cluster area and would include measures such as:

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust particles.
- Controlled blasting techniques shall be adopted.
- Water sprinkling on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be undertaken.
- Transport of materials in trucks are to be covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mines area.
- Information on wind direction and meteorology are to be considered during planning, so that pollutants, which cannot be fully suppressed by

engineering techniques, will be prevented from reaching the nearby agricultural land, if any.

- Comprehensive greenbelt around overburden dumps and periphery of the mining projects/clusters has to be carried out to reduce fugitive dust transmission from the project area in order to create clean & healthy environment.

Water

- Construction of garland drains and settling tanks to divert surface run – off of the mining area to the natural drainage.
- Construction of checks dams/ gully plugs at strategic places to arrest silt wash off from broken up area.
- Retaining walls with weep hole are to be constructed around the mine boundaries to arrest silt wash off.
- The mined out pits shall be converted in to the water reservoir at the end of mine life. This will help in recharging ground water table by acting as a water harvesting structure.
- Periodic analysis of mine pit water and ground water quality in nearby villages are to be undertaken.
- Domestic sewage from site office & urinals/latrines provided within ML/QL areas is to be discharged in septic tank followed by soak pits.

Noise

- Periodic maintenance of machineries, equipments shall be ensured to keep the noise generated within acceptable limit.
- Development of thick green belt around mining/cluster area, haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities like blasting, excavation site etc. Worker and operators at work sites will be provided with earmuffs.

- Conducting periodical medical check-up of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise related effects.
- Periodic noise monitoring at locations within the mining area and nearby habitations to assess efficacy of adopted control measures.
- During blasting optimum spacing, burden and charging of holes will be made under the supervision of competent qualified mines foreman, mate etc.

Biological Environment

- Development of green belt/gap filling saplings in the safety barrier left around the quarry area/ cluster area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy laves on the inactive mined out upper benches.
- Development of dense poly culture plantation using local floral species in the mining areas at conceptual stage if the mine is not continued much below the general ground level.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.

23. RECLAMATION OF MINED OUT AREA (BEST PRACTICE ALREADY IMPLEMENTED IN THE DISTRICT, REQUIREMENT AS PER RULES AND REGULATION, PROPOSED RECLAMATION PLAN).

As per statute all mines/quarries are to be properly reclaimed before final closure of the mine. Reclamation of exhausted mines are planned to be undertaken in below three possible means:

1. If, substantial amount of waste is there, the exhausted quarry can be fully or partly backfilled using the stored waste. The backfilled areas are to be brought under plantation of local species.

2. If the generation of waste is much less as in the case of minor mineral mining, the exhausted quarries can be reclaimed by

a. Plantation on the broken-up surface if the depth of quarry is not much below the surrounding surface level.

b. Converted to water reservoir after stabilization of the slopes if the exhausted quarry continues much below the surrounding surface level. It is preferred to cordon the water reservoir either through wire fencing or retaining wall with plantation from the safety point of view.

Most of the quarry/mining lease areas are yet to be exhausted from ore point of view. Hence, reclamation would be taken up only after exhaustion of the ore/mineral content from these areas. The exhausted minor mineral quarries of the district have been converted to water reservoirs.

24. RISK ASSESSMENT & DISASTER MANAGEMENT PLAN.

The only risk involved related to mining of minor mineral excepting natural calamities is slope failure and probable accidents due to high and ill maintained bench walls. This can only be addressed through making of regular benches and undertaking mining in benching pattern.

The disaster management plan (DMP) is supposed to be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is to be aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated through rehearsal/induction conducted by the respective department from time to time .

General responsibilities of employees' during an emergency:

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the worker in charge, should adopt safe and

emergency shut down and attend to any prescribed duty. If no such responsibility is assigned, the workers should adopt a safe course to assembly point and wait instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

Co-ordination with local authorities:

The Mine Manger who is responsible for emergency will always keep a jeep ready at site. In case of any eventuality, the victim will be taken to the nearby hospitals after carrying out the first aid at the site. The Manger should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shops, district revenue authorities etc. and use them efficiently during the case of emergency.

25. DETAILS OF THE OCCUPATIONAL HEALTH ISSUES IN THE DISTRICT. (LAST FIVE-YEAR DATA OF NUMBER OF PATIENTS OF SILICOSIS & TUBERCULOSIS IS ALSO NEEDS TO BE SUBMITTED).

As per the guidelines of the Mine Rules 1995, occupational health safety has been stipulated by the ILO/WHO. The proponent's will take necessary precautions to fulfill the stipulations. Normal sanitary facilities have to be provided within the lease area. The management will carry out periodic health checkup of workers.

Occupational hazards involved in mines are related to dust pollution, noise pollution, blasting and injuries from moving machineries & equipment and fall from high places. DGMS has given necessary guidelines for safety against these occupational hazards. The management has to strictly follow these guidelines. All necessary first aid and medical facilities are to be provided to the workers. The mine shall be well equipped with personal protective equipment (PPE). Further, all the necessary ported equipment such as helmet, safety goggles, earplugs, earmuffs etc are to be provided to mine workers as per Mines Rules. All operators and mechanics are to be trained to handle firefighting equipment.

TB ACTIVITIES	2019-20	2020-21	2021-22	2022-23	2023-24
TOTAL NUMBER OF PATIENTS DIAGNISED	2155	1794	2371	2765	2672
TOTAL NUMBER OF PATIENTS NOTIFIED	2155	1794	2371	2765	2672
MDR	72	46	52	57	40
TBTREATMENT CURED	829	730	698	820	937
TBTREATMENT COMPLETED	1009	813	1350	1685	1401
DIED	140	152	172	163	128
FAILURE	13	9	7	11	5
TREATMENT CHANGED	42	25	42	41	26
NOT EVALUTED	11	4	1	2	23
ON TREATMENT	0	0	0	5	120
NOT STARTED TREATMENT	34	25	27	18	16
SILICOSIS ACTIVITIES	0	0	0	3	0
OPD PATIENTS	0	0	0	0	0
IPD PATIENTS	0	0	0	3	0

Yours Faithfully

Chief District Medical And Public Health Officer

Cuttack

26. PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASES ALREADY GRANTED IN THE DISTRICT.

As most of the minor mineral mines/quarries of the district are yet to be exhausted of their mineral content no sort of reclamation measures including plantation has been undertaken excluding gap plantation of local species in the peripheral safety zones of the quarries/ clusters and in some of the haul roads.

27. ANY OTHER INFORMATION.

NIL

DRAFT COPY



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

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



**COLLECTORATE CUTTACK
NOVEMBER-2024**

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0. PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized Sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRRRI), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrum and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- Laterite: Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretionary often forms a hard crust, and can reach thicknesses of up to 10 meters or more.
- Road Metal/Stone: Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- Morrum: Association of morrum with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

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

*All required Lease details are given in the prescribed format,
Please refer (Annexure-I).*

Sl.No.	Name of River /Stream	Name of the Mineral	Name of the Lessee	Address & Contact No. of lessee	Mining lease Grant Order No. & date	Area of Mining lease (in Ac/Ha)	Period of Mining lease (Initial)		Date of commencement of mining operation	Status (Working Non Working/Temp. working for despatch etc.)	Obtained Environmental clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitude)	Method of Mining (open cast/Underground)	Remarks
							From	To						
1	2	3	4	5	6	7	8	9	10	11	13	14	15	16
A.Name of the Tahasil:- ATHAGARH														
A1	MAHANADI RIVER	BALARAMPUR SAND QUARRY	ASHISH JAI SWAL	S/o-Omprakash Jaiswal, At-wordNo-02,Civil Lane, Baloda Bazar,PS-Baloda Bazar Chatisgarh-493332, Mob-9926532691	Letter no-4862/,Dt:26.10.2022	12.00 Acre/4.856Ha	02.12.2022	01.12.2027	02.12.2022	Working	Letter no-1551/SEIAA, Dt:30.06.2021	Mouza- Balarampur, Khata-197, Plot- 399(P)-12.00Ac, ,Kissam-Nadi, Lat-20°27'35.68"N to 20°27'44.51"N Long-85°44'21.17"E to 85°44'32.01"E	Open cast	Operational
PROPOSED														
A2	MAHANADI RIVER	Daspur Sand Quarry				12.35 Ac/4.997Ha						Mouza-Daspur, Khata no-165, Plot no-228/550, Kissam-Nadilat-20.443, Long-85.702		

A3	MAH ANAD I RIVER	Daspur Sand Quarry				12.35 Ac/4.9 97Ha						Mouza-Daspur,Khata no- 165,Plot no-371,Kissam- Nadi,lat-20.444,Long- 85.714		
A4	MAH ANAD I RIVER	Daspur Sand Quarry				12.35 Ac/4.9 97Ha						Mouza-Daspur,Khata no- 165,Plot no-538,Kissam- Nadilat-20.447,Long- 85.722		
A5	MAH ANAD I RIVER	Brajabih aripur Sand Quarry				12.35 Ac/4.9 97Ha						Mouza- Brajabiharipur,Khata no- 21,Plot no-142,Kissam- Nadi,lat-20.506,Long- 85.814		

B.Name of the Tahasil:- BADAMBA

B1	MAH ANAD I RIVER	NARANA PUR MAHAN ADI SAND	M A M A S A M A N T A	At-Po- Nizigarh Baramba PS- Nizigarhb aramba Dist- Cuttack Pin- 754031,M ob- 99381796 26	Letter no- 1184/ ,Dt: 06.04. 2021	13.35 Acre/5 .403H a	21. 01. 202 3	20. 01. 202 8	21.01.2 023	Non- Work ing	EC22B0 01OR16 7701/Dt :03.12.2 022	Mouza- Naranpur, Khata- 156, Plot- 1053-13.35Ac ,Kissam-Nadi, Lat- 20°23'21.6"N to 20°23'26.9"N Long- 85°25'47.0"E to 85°26'02.8"E	Open cast	Oper ation al
B2	MAH ANAD I RIVER	KANTAP ADA MAHAN ADI SAND	CH INT A M AN I	S/O- Basant Kumar Samal, At/Po- Ichhapur,	Letter no- 1185/ ,Dt: 06.04. 2021	16.00 Acre/6 .475H a	11. 01. 202 3	10. 01. 202 8	11.01.2 023	Work ing	EC22B0 01OR15 0054/Dt :03.12.2 022	Mouza- Kantapada, Khata- 439, Plot- 3278-16.00Ac ,Kissam-Nadi, Lat- 20°22'25.0"N to 20°22'35.1"N Long-	Open cast	Oper ation al

			SAMAL	P.S.- Badamba, Cuttack, Odisha- 754031. Tel- 70089528 62.							85°20'18.9"E to 85°20'33.6"E			
B3	MAHANADI RIVER	MANGARAJPUR MAHANADI SAND	HARAPRASAD SENAPATI	S/o- Jadumani Senapati, At-Plot- 157,Bapuji Nagar PS- Capital,Bhubaneswar, Dist- Khordha, Odisha- 751025, Mob- 70089281 78	Letter no- 05/ Dt:01. 01.20 21	14.00 Acre/0 5.66Ha				Non- Work ing	EC24B0 01OR19 6390/Dt :03.02.2 024	Mouza- Mangarajpur, Khata-641, Plot- 3720/3749-14.00Ac ,Kissam-Nadi, Lat- 20°22'26.9"N to 20°22'35.5"N Long- 85°18'39.6"E to 85°18'47.7"E	Open cast	Non- Oper ation al
B4	MAHANADI RIVER	BANGARISINGHA MAHANADI SAND	HARAPRASAD SENAPATI	S/o- Jadumani Senapati, At-Plot- 157,Bapuji Nagar PS- Capital,Bh	Letter no- 01/ Dt:01. 01.20 21	17.00 Acre/0 6.88Ha				Non- Work ing	EC24B0 01OR15 9577,Dt - 03.02.2 024	Mouza- Bangarsingha, Khata-903, Plot- 7388/7570-17.00Ac ,Kissam-Nadi, Lat- 20°23'20.7"N to 20°23'27.0" N Long- 85°27'59.9"E to 85°28'17.5"E	Open cast	Non- Oper ation al

			PA TI	ubaneswar, Dist- Khordha, Odisha- 751025, Mob- 70089281 78											
B5	MAH ANAD I RIVER	TUNAPU R MAHAN ADI SAND	DE BA JA NI PR AH AR AJ	W/o- Sudhir Kumar Praharaj, At- M/146,Ba ramunda Housing Board Colony(Ne ar Trinath Mandir Baramund a) Dist- Khurdha,P in-751003	Letter no- 03/ Dt:01. 01.20 21	13.00 Acre/5 .261Ha				Non- Work ing	NO	Mouza- Tunapur, Khata- 504, Plot- 4007- 7.70Ac,Plot- 4007/4051- 5.30Ac,Kissam-Nadi, Lat- 20°22'58.1"N to 20°23'04.9" N Long- 85°23'02.6"E to 85°23'15.7"E	Open cast	Non- Oper ational	
PROPOSED															
B6	MAH ANAD I RIVER	Kanjiapal a Sand Bed				12.35 Ac/4.9 97Ha						Mouza-Kanjiapala,Khata no-279,Plot no- 1639,Kissam-Nadi,Lat- 20.366,Long-85.305			

B7	MAH ANAD I RIVER	Ogalpur Sand Bed				12.35 Ac/4.9 97Ha						Mouza-Ogalpur, Khata no- 200, Plot no- 1137/1898, Lat- 20°21'57.90"N to 20°22'04.80"N Long- 85°16'36.30"E to 85°16'47.60"E		
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C.Name of the Tahasil:- BANKI

C1	MAH ANAD I RIVER	KOTADW AR SAND GHAT	AB HIS HE K M OH AN TY	At-Plot No.1545,L ane No.4/A,Ja gannath Nagar,GG P Colony,PS - Sahidnaga r, Bhubanes war, Khord ha Odisha- 751025,M ob- 88951754 02.	Letter no- 1951/ Dt: 18.07. 2019	50.00 Acre/2 0.235 Ha	16. 02. 202 4	15. 02. 202 4	16.02.20 24	Work ing	EC23B0 01OR12 2892 Dt- 04.11.2 023	Mouza- Patugadadharpur, Khata-1, Plot- 25-50.00Ac, Kissam-Nadi, Lat- 20°22'23.00"N to 20°22'43.50" N Long- 85°30'11.80"E to 85°30'35.50"E	Open cast	Oper ation al
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C2	MAH ANAD I RIVER	BAIDES WAR SAND SOURCE	MI NA KS HI PR AD HA N	W/o-Late Jagannath Pradhan At- Samanata rapur, Po/Ps- Khordha , Dist- Khordha Odisha- 752055. Tel- 94379116 36.	Letter no- 56/ Dt:06. 01.20 20	33.00 Acre/1 3.355 Ha	05. 11. 202 1	04. 11. 202 6	05.11.20 21	Work ing	Letter no- 1944/ SEIAA, Dt: 29.07.2 021	Mouza- Patugadadharpur, Khata-1, Plot- 3/1- 33.00Ac, Kissam-Nadi, Lat- 20°21'33.916"N to 20°21'42.779" N Long- 85°24'0.971"E to 85°24'22.040"E	Open cast	Oper ation al
C3	MAH ANAD I RIVER	OSTIA SAND SOURCE	CH IN M AY EE M UD ULI	W/O- Sukant Muduli , Mangala Mandir, Kunheipa da, Brahmani gan, Cuttack, Odisha - 754005 Mob- 82494848 49	Letter no- 32/ Dt:05. 01.20 21	12.35 Acre/4 .998H a	10. 11. 202 1	09. 11. 202 6	10.11.20 21	Work ing	Letter no- 2067/ SEIAA, Dt: 05.08.2 021	Mouza- Patugadadharpur, Khata-1, Plot- 38(P)- 12.35Ac, Kissam-Nadi, Lat- 20°27'11.334"N to 20°27'20.267" N Long- 85°37'29.958"E to 85°37'40.414"E	Open cast	Oper ation al

C4	MAHANADI RIVER	ANUARY SAND SOURCE	PATIPABANSWAIN	House no.- 418, Bastia Bagicha, At-Jhanjirima ngala, Telenga Bazar, Cuttack Sadar, Cuttack, Odisha-753009. Tel-9238447777.	Letter no-54/Dt:06.01.2020	12.50 Acre/50.059H a	12.04.2022	11.04.2027	12.04.2022	Non-Working	EC22B001OR110343/Dt:17.03.2022	Mouza- Patugadadharpur, Khata-1, Plot-6- 12.50Ac, Kissam-Nadi, Lat-20°21'27.251"N to 20°21'32.790"N Long-85°25'23.915"E to 85°25'41.134"E	Open cast	Operational
C5	MAHANADI RIVER	TENTULIA SAND SOURCE	BANSHIHARASWAIN	S/O-Jayadev swain, At- Plot No-426, Sameigadi a, Near Manchan athdeva high school Rasulgarh, Bhubaneswar Khordha, Odisha-	Letter no-3503/Dt:16.12.2022	12.50 Acre/50.059H a				Non-Working	NO	Mouza- Patugadadharpur, Khata-1, Plot- 29/1-12.50Ac, Kissam-Nadi, Lat-20°24'38.90"N to 20°24'46.00"N Long-85°32'05.40"E to 85°32'14.60"E	Open cast	Non-Operational

				751010. Tel- 88953844 22										
PROPOSED														
C6	MAH ANAD I RIVER	Patugada dharpur Sand Bed				12.35 Ac/4.9 97Ha						Mouza- Patugadadharpur,Khata no-1,Plot no- 28(P),29,Kissam-Nadi,Lat- 20.407,Long-85.546		
D.Name of the Tahasil:- BARANGA														
D1	KATH AJODI RIVER	KATHAJO DI RIVER SAND MUNDA MUHAN	SU KA NTI SA HO O	W/O- Nirmal Sahoo, At- Bidyadhar pur, Po- Nayabaza ar, Cuttack, Odisha- 753004. Tel- 94370450 95.	Letter no- 1051/ Dt:24. 06.20 19	15.00 Acre/6 .070H a	18. 02. 202 1	17. 02. 202 6	18.02.20 21	Work ing	Letter no- 8375/ SEIAA, Dt: 03.06.2 020	Mouza- Mundamuhan, Khata-27, Plot- 76/p- 15.00Ac, Kissam-Nadi, Lat- 20°26'58.4"N to 20°27'10.0"N Long- 85°50'13.3"E to 85°50'26.6"E	Open cast	Oper ation al

D2	SIDUA RIVER	SIDUA RIVER SAND DEOKALI	CHINMAYEEMUDULI	W/O-Sukant Muduli, Mangala Mandir, Kunheipada, Brahmanigan, Cuttack, Odisha - 754005 Mob-8249484849	Letter no-1470/Dt:14.08.2019	5.00 Acre/2.023H a	17.08.2020	16.08.2025	17.08.2020	Working	Letter no-8479/SEIAA, Dt:29.06.2020	Mouza- Deokali, Khata-100, Plot-293(P)-5.00Ac, Kissam-Nadi, Lat-20°22'4.80"N to 20°22'8.70"N Long-85°57'11.10"E to 85°57'16.80"E	Open cast	Operational
D3	SIDUA RIVER	SIDUA RIVER SAND KORKORA	SUBASHJENA	S/o Late Satyabadi Jena At-Gadakantunia, Po-Balakati PS-Balianta, Dist-Khordha Odisha-752100 Tel-8895625050	Letter no-1192/Dt:12.07.2019	12.200 Acre/4.937H a	20.07.2020	19.07.2025	20.07.2020	Working	Letter no-8477/SEIAA, Dt:29.06.2020	Mouza- Korkora, Khata-314, Plot-385(P)-12.20Ac, Kissam-Nadi, Lat-20°21'38.7"N to 20°21'46.0"N Long-85°59'19.2"E to 85°59'28.3"E	Open cast	Operational

D4	KATHAJODI RIVER	KATHAJODI R/S BIDYADHARPUR	AVI AN INF RA ST RU CT UR EN ER GY PV T LT D	C/o-Ranjan Kumar Pattanaik Plot No-132, Forest Park, Near Bharati Tower, Bhubaneswar Khordha , Odisha-751009. Tel-9338703161.	Letter no-2114/ Dt:28.10.2022	12.200 Acre/4 .937Ha	02.11.2022	01.11.2027	02.11.2022	Working	Yes,EC2 2B0010 R11829 1,Dt-22.08.2022	Mouza- Bidyadharpur, Khata-331, Plot-102(P)-12.20Ac, Kissam-Nadi, Lat-20°28'28.7"N to 20°28'34.3"N Long-85°48'42.0"E to 85°48'54.5"E	Open cast	Operational
D5	KUAKHAI RIVER	KUAKHAI RIVER SAND NARANPUR	PI NAK ROUT	S/o-Shisira Kumar Rout At-Mundamuhan ,PS-Baranga Dist-Cuttack,754005,Mo b-9348210734	Letter no-2272/ Dt:22.11.2022	12.250 Acre/4 .958Ha	05.11.2022	04.11.2027	05.11.2022	Working	Yes,EC2 2B0010 R12746 6,Dt-05.11.2022	Mouza- Naranpur, Khata-196, Plot-1(P)-12.250Ac, Kissam-Nadi, Lat-20°26'30.70"N to 20°26'39.90"N Long-85°50'58.5"E to 85°51'06.2"E	Open cast	Operational

D6	KATHAJODI RIVER	KATHAJODI R/S BENTKAR PADA	SUBASH ROUT	S/o-Late Kailash Rout, At- Trisulia, PS- Barang, Dist- Cuttack, Odisha- 754005 Mob- 79786549 24.	Letter no- 119/ Dt:12. 07.20 19	25.00 Acre/1 0.117 Ha				Non-Work ing	YES,EC2 3B0010 R15360 2, DATED- 07.09.2 023	Mouza- Bentkarpada, Khata-57, Plot-70(P)-25.00 Ac, Kissam-Nadi, Lat- 20°27'57.5"N to 20°28'4.9"N Long- 85°49'31.2"E to 85°49'48.6"E	Open cast	Non-Oper ational
D7	KATHAJODI RIVER	KATHAJODI RIVER SAND ARILO	OMC	OMC	NO	12.200 Acre/4 .937Ha	10 years			Non-Work ing	NO	Mouza- Arilo, Khata-249, Plot-5(P)-12.20 Ac, Kissam-Nadi, Lat- 20°28'43.45896"N to 20°28'50.70540"N Long- 85°47'08.41272"E to 85°47'16.30536"E	Open cast	Non-Oper ational
PROPOSED														
D8	KATHAJODI RIVER	Belagach hia Sand Bed				12.35 Ac/4.9 97Ha						Mouza-Belagachhia,Khata no-757,Plot no- 933,Kissam-Nadi,Lat- 20.423,Long-85.861		
D9	KATHAJODI RIVER	Bidyadharpur Sand Bed				12.35 Ac/4.9 97Ha						Mouza- Bidyadharpur,Khata no- 331,Plot no-949,Kissam-		

												Nadi,Lat-20.46,Long-85.816			
D10	KATHAJODI RIVER	Korkora Sand Bed				12.35 Ac/4.997Ha							Mouza-Korkora,Khata no-314,Plot no-385,Kissam-Nadi,Lat-20.365,Long-85.999		

E.Name of the Tahasil:- CUTTACK SADAR

E1	KATHAJODI RIVER	KATHAJODI RIVER SAND SUBERNAPUR	RAJENDRAPRASAD SINGH	At-Rauspatana, Po-Buxibazar, Cuttack Sadar, Cuttack, Odisha-753001. Tel-7008992830.	Letter no-1740/Dt:06.03.2020	20.500 Acre/8.296Ha	27.06.2022	26.06.2027	27.06.2022	Working	EC24B0107OR5609213A/12/02/2024	Mouza-SUBERNAPUR, Khata-1, Plot- 1-20.500Ac, ,Kissam-Nadi, Lat-20°27'48.34"N to20°27'56.75"N Long -85°50'37.29"E to 85°50'52.69"E		Operational
E2	KATHAJODI RIVER	KATHAJODI RIVER SAND TANGARHUDA	RAJASHEERABHERA	W/O-Ranjit Kumar Das At-Panisalia, Po-Jagatsinghpur, Jagatsinghpur, Odisha-754103.	Letter no-1278/Dt:19.02.2018	35.00 Acre/14.164Ha	22.05.2019	21.05.2024	22.05.2019	Non-Working	Letter no-6183/SEIAA Dt:01.11.2018	Mouza-TANGARHUDA, Khata-3, Plot-24-35.000Ac ,Kissam-Nadi, Lat-20°27'56.80"N to 20°28'8.80"N Long-85°49'57.40"E to85°50'17.50"E	Open cast	Non-Operational

				Tel-7008278927.										
E3	KATHAJODI RIVER	KATHAJODI RIVER SAND UNIT 37 BADAMBADI	PRAFULAKUMARSAHO	S/O-Paramananda Sahoo, At-Khannagar, Paroundoy Market, Cuttack, Odisha-753012. Tel-9438035909.	Letter no-1748/Dt:06.03.2020	12.50 Acre/5.059Ha	28.07.2022	27.07.2027	28.07.2022	Working	EC22B001OR137696/DT :- 07.06.2022	Mouza- UNIT 37 BADAMBADI, Khata-540, Plot-661-7.000Ac,663-5.500Ac,Kissam-Nadi, Lat-20°26'58.70"N to 20°27'8.51"N Long-85°52'53.47"E to 85°53'2.56"E	Open cast	Operational
E4	KATHAJODI RIVER	KATHAJODI RIVER SAND UNIT 39 SILPAPURI	CHINMAYEEMUDULI	W/O-Sukant Muduli, Mangala Mandir, Kunheipada, Brahmanigan, Cuttack, Odisha - 754005 Mob-	Letter no-1744/Dt:06.03.2020	12.500 Acre/5.06Ha	04.07.2022	03.07.2027	04.07.2022	Working	EC22B001OR123556/DT :- 07.06.2022	Mouza- UNIT 39 SILPAPURI, Khata-327, Plot-685-6.500Ac,876-6.000Ac,Kissam-Nadi, Lat-20°26'3.10"N to 20°26'13.00"N Long-85°53'55.50"E to 85°54'4.50"E	Open cast	Operational

				82494848 49										
E5	KUAK HAI RIVER	KUAKHAI RIVER SAND UTTAMA PUR	CH IN M AY EE M UD ULI	W/O- Sukant Muduli , Mangala Mandir, Kunheipa da, Brahmani gan, Cuttack, Odisha - 754005 Mob- 82494848 49	Letter no- 1743/ Dt:06. 03.20 20	14.00 Acre/0 5.67H a	24. 08. 202 2	23. 08. 202 7	24.08.20 22	Work ing	EC24B0 107OR5 156964 A/DT- 21/01/2 024	Mouza- UTTAMAPUR, Khata-255, Plot-861- 14.000Ac, ,Kissam-Nadi, Lat- 20°25'34.04"N to20°25'42.35"N Long- 85°51'53.68"E to 85°52'3.42"E	Open cast	Oper ation al
E6	KUAK HAI RIVER	KUAKHAI RIVER SAND PRATAP NAGARI	PR AK AS H CH AN DR A RA UT	S/o-Late Pramod Kumar Rautaray At- Gurujanga ,PS- Khordha Dist- Khordha,7 52060	Letter no- 1747 Dt:06. 03.20 20	13.00 Acre/5 .261H a	24. 08. 202 2	23. 08. 202 7	24.08.20 22	Non- Work ing	EC22B0 01OR16 2187/ SEIAA, Dt: 03.06.2 022	Mouza- PRATAPNAGARI, Khata-1030, Plot-1248- 13.000Ac, ,Kissam-Nadi, Lat-20°23'40.87"N to20°23'53.84"N Long- 85°52'9.60"E to 85°52'19.81"E	Open cast	Oper ation al

			AR AY	Mob- 93379948 06										
E7	KATH AJODI RIVER	KATHAJO DI RIVER SAND BRAHMA PUR	RA JE ND RA PR AS AD SIN GH	At- Rauspata na, Po- Buxibazar, Cuttack Sadar, Cuttack, Odisha- 753001. Tel- 70089928 30.	Letter no- 1745/ Dt:06. 03.20 20	13.00 Acre/5 .261H a	27. 06. 202 2	26. 06. 202 7	27.06.20 22	Work ing	EC22B0 01OR17 3835/ SEIAA, Dt: 03.06.2 022	Mouza- BRAHMAPUR, Khata-677, Plot-1- 13.000Ac, ,Kissam-Nadi, Lat-20°25'37.06"N to 20°25'46.04"N Long- 85°54'34.81"E to 85°54'45.46"E	Open cast	Oper ation al
E8	SIDUA RIVER	SIDHUA RIVER SAND KADAMP ADA	BI DY AD HA R PA TR A	At- Aitalanga, Po- Jhinkiria,C uttack Sadar, Cuttack, Odisha- 754112. Tel- 96683266 69.	Letter no- 1277/ Dt:09. 02.20 18	12.500 Acre/5 .06Ha	11. 11. 202 0	10. 11. 202 5	11.11.20 20	Work ing	Letter no- 6181/SE IAA Dt:01.11 .2018	Mouza- KADAMPADA, Khata-610, Plot-2638- 12.500Ac, ,Kissam-Nadi, Lat-20°23'41.80"N to20°23'49.00"N Long- 85°54'43.10"E to 85°54'54.90"E	Open cast	Oper ation al

E9	SIDUA RIVER	SIDHUA RIVER SAND JARIPADA	PRANAKRUSHNA YAK	Plot no-392,393, Unit-30, Laxmisagar-1, Old Station Bazar, Koradakanta Bhubaneswar, Odisha-751006. Tel-9437031107.	Letter no-5709/Dt:14.08.2018	25.00 Acre/10.117 Ha	19.08.2022	18.08.2027	19.08.2022	Working	EC22B001OR189302/DT :- 03.06.2022	Mouza- JARIPADA, Khata-428, Plot-395-25.000Ac, ,Kissam-Nadi, Lat-20°24'16.90"N to 20°24'33.60"N Long-85°54'8.30"E to85°54'15.60"E	Open cast	Operational
E10	KATHAJODI RIVER	Bagulapada	RAJENDRAPRASAD SINGH	At-Rauspatana, Po-Buxibazar, Cuttack Sadar, Cuttack, Odisha-753001. Tel-7008992830.	Letter no-1746/Dt:06.03.2020	13.00 Acre/5.261Ha	24.07.2024	23.07.2029	24.07.2024	Non-Working	EC24B000OR139030/Date: 24/05/2024	Mouza- BAGULAPADA, Khata-25, Plot-116-13.000Ac,Kissam-Nadi, Lat- 20°26'14.38"N to 20°26'22.15"N Long-85°56'21.52"E to 85°56'33.52"E	Open cast	Operational

E11	KUAKHAI RIVER	Arakhakuda	BAISHANABCHARANAYAK	S/o-Gangadhar Nayak At-HG-38,Gourav Nagar, Housing Board Colony, Madhuban, Ps-Paradeep, Dist-jagatsinghpur	Letter no-2660/ Dt:09.05.2022	12.50 Acre/5.059H a				Non-Working	NO	Mouza- ARAKHAKUDA, Khata-172, Plot-1-12.500Ac, ,Kissam-Nadi, Lat- 20°22'43.92"N to20°22'53.66"N Long-85°52'31.92"E to 85°52'42.87"E	Open cast	Non-Operational
E12	KATHAJODI RIVER	Rajahansa	AJITSAHURICTORM/SARUNISTONECRUS	S/O-Gokulanda Sahoo,At/Po/ps-Nihalprasad,Dhenkanal, Odisha-759016. Tel-9938206689	Letter no-2661/ Dt:09.05.2022	13.500 Acre/5.463H a				Non-Working	NO	Mouza- RAJAHANSA, Khata-960, Plot-857-13.500Ac, ,Kissam-Nadi, Lat-20°25'20.98"N to 20°25'35.89"N Long-85°57'14.63"E to 85°57'23.15"E	Open cast	Non-Operational

			HE R										
E13	KATH AJODI RIVER	KATHAJO DI RIVER SAND SARTOL	O MC	OMC	NO	10.30 Acre/4 .168H a	10 years		Non- Work ing	YES,EC2 4C0107 OR5522 543N,Dt :18.07.2 024	Mouza-Sartol, Khata-204, Plot-1052(P)-10.30 Ac, Kissam-Nadi, Lat- 20°25'59.23920"N to 20°26'06.48348"N Long- 85°55'17.39316"E to 85°55'25.46688"E	Open cast	Non- Oper ation al
E14	KATH AJODI RIVER	KATHAJO DI RIVER SAND KALAPAD A	O MC	OMC	NO	10.50 Acre/4 .249H a	10 years		Non- Work ing	YES,EC2 4C0107 OR5498 271N,Dt :19.07.2 024	Mouza-Kalapada, Khata- 1009, Plot-02(P)-10.50 Ac, Kissam-Nadi, Lat- 20°23'51.58644"N to 20°24'00.83808"N Long- 85°58'09.58980"E to 85°58'19.78716"E	Open cast	Non- Oper ation al
E15	SIDUA RIVER	SIDUA RIVER SAND KULASAR ICHUAN	O MC	OMC	NO	10.50 Acre/4 .249H a	10 years		Non- Work ing	NO	Mouza-Kulasarichuan, Khata-682, Plot-02(P)- 10.50 Ac, Kissam-Nadi, Lat- 20°23'51.58644"N to 20°24'00.83808"N Long- 85°58'09.58980"E to 85°58'19.78716"E	Open cast	Non- Oper ation al
PROPOSED													
E16	SIDUA RIVER	Khadichu andeuli				12.35 Ac/4.9 97Ha					Mouza- Khadichuandeuli,Khata no-391,Plot no- 1162,Kissam-Nadi,Lat- 20.379,Long-85.95		

E17	MAH ANAD I RIVER	Gatirout patna				12.35 Ac/4.9 97Ha						Mouza- Gatiroutpatna, Khata no- 695, Plot no-188, Kissam- Nadi, Lat-20.448, Long- 85.956		
E18	SIDUA RIVER	Baradhul eswar				12.35 Ac/4.9 97Ha						Mouza- Baradhuleswar, Khata no- 275, Plot no-1444, Kissam- Nadi, Lat-20.387, Long- 85.934		
E19	KATH AJODI RIVER	Subhadra apur				12.35 Ac/4.9 97Ha						Mouza- Subhadrapur, Khata no- 454, Plot no-1,2, Kissam- Nadi, Lat-20.451, Long- 85.87		
E20	MAH ANAD I RIVER	Kanheip ur				12.35 Ac/4.9 97Ha						Mouza-Kanheipur, Khata no-252, Plot no-1, Kissam- Nadi, Lat-20.464, Long- 85.922		

F.Name of the Tahasil:- DAMPADA

F1	MAH ANAD I RIVER	JATAMU NDIA SAND GHAT	BR AJ A KIS HO RE SW AI N	s/O- Gajendra Swain ,At/P.o- Madhupu r,P.S- Baranga,D ist- Cuttack Mob- 70085528 73	Letter no- 1030/ Dt:02. 04.20 22	12.35 Acre/4 .998H a	06. 12. 202 2	05. 12. 202 7	06.12.20 22	Work ing	EC22B0 01OR11 4988/ SEIAA, Dt:29.09 .2022	Mouza- MAHANADI, Khata-12, Plot-27- 12.350Ac, Kissam- BALICHAR, Lat- 20°25'3.20"N to 20°25'9.63"N Long- 85°36'30.71"E to 85°36'40.38"E	Open cast	Oper ation al
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F2	MAHANADI RIVER	KALIKA PRASAD SAND GHAT	KRUSHNACHANDRASWAIN	S/O-Bansidhar Swain At/Po-Brahmani gaon, P.S-Baranaga, Dist-Cuttack, Odisha-754005, Mob. - 7008552873	Letter no-1341/Dt:17.05.2022	12.35 Acre/4.998Ha	30.08.2022	29.08.2027	30.08.2022	Working	SEIAA FILE NO:245534/304 - MINB2/06-2022	Mouza- MAHANADI, Khata-12, Plot-36-12.350Ac, Kissam-BALICHAR, Lat-20°26'59.60"N to 20°27'5.70"N Long-85°38'16.50"E to 85°38'26.10"E	Open cast	Operational
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PROPOSED

F3	MAHANADI RIVER	Mahana di Sand Bed				12.35 Ac/4.997Ha						Mouza-Mahanadi,Khata no-12,Plot no-39,41,Kissam-Nadi,Lat-20.451,Long-85.649,		
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G.Name of the Tahasil:-KANTAPADA

G1	KANDAL RIVER	ARISOL ADASPU R KANDAL RIVER SAND	BIJANKUMARBARIK	S/o-Rasananda Barik At-Flat No 203 Block-1, Supratik Infraventure,Jagama ra Khandagiri,Bhubane	LETTER NO-2463/, DATE D-10.12.2020	12.30 Acre/4.98Ha	04.06.2021	03.06.2026	04.06.2021	Working	LETTER NO-1173/SEIAA, DATED-30.03.2021	Mouza-Adaspur,Khata-1277, Plot-3857(P)-3.41Ac, Kissam-NADI,Mouza-Arisole,Khata-429, Plot-531-8.89Ac, Kissam-NADI Lat-20°13'04.10"N to 20°13'17.30"N Long-86°01'56.30"E to 86°02'08.50"E	Open cast	Operational
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				swar Odisha- 751030 Mob- 93377118 46										
G2	DEVI RIVER	TITHAPA DA-I DEVI RIVER SAND	SA CH IN KU M AR SA HO O	Lenka Sahi, At- Bidyadhar pur, Po- Nayabaza r, Cuttack, Odisha- 753004. Tel- 94396561 94	LETTE R NO- 1521/, DATE D- 10.12. 2020	12.20 Acre/4 .93Ha	30. 09. 202 1	29. 09. 202 6	30.09.20 21	Work ing	LETTER NO- 2376/SE IAA, DATED- 31.08.2 021	Mouza-TITHAPADA, Khata-75, Plot-287- 12.200Ac, Kissam-NADI, Lat-20°21'17.30"N to 20°21'25.60"N Long- 86°1'0.90"E to 86°1'11.20"E	Open cast	Oper ation al
G3	DEVI RIVER	BALADA- NAINLO DEVI RIVER SAND	SU RY AV AN SHI EA RT H M OO VE RS	At- Sibanaray anpur, Po- Keonjhar Garh, Keonjhar, Odisha- 758030. Tel- 94370037 32	Letter no- 1649/ Dt:24. 06.20 22	12.00 Acre/4 .856H a	05. 08. 202 2	04. 08. 202 7	05.08.20 22	Non- Work ing	Letter no- 4868/SE IAA Dt:13.07 .2022	Mouza-Balada, Khata-331, Plot-128-12.000Ac, Kissam-NADI, Lat- 20°16'22.70"N to 20°16'32.70"N Long- 86°2'53.10"E to 86°3'3.20"E	Open cast	Oper ation al

G4	DEVI RIVER	SRISUNDARPUR DEVI RIVER	PUBLIC ROUT	W/o-Sri Pinak Rout At-Mundamuhan ,PS-Baranga Dist-Cuttack,754005 Mob-9348210734	LETTER NO-19/, DATE D-03.10.2023	12.20 Acre/4.93Ha	12.07.2023	11.07.2028	12.07.2023	Working	LETTER NO-2044/SEIAA, DATED-05.08.2021	Mouza-SIRSUNDARPUR,Khata-441, Plot-521-12.200Ac, Kissam-NADI, Lat-20°20'51.60"N to 20°22'52.80"N Long-86°1'9.40"E to 86°1'21.00"E	Open cast	Operational
G5	DEVI RIVER	BADAKH ARMAN GA -EAST DEVI RIVER SAND	AVI INFRASTRUCTURE ENERGY PVT LTD	A/R Ranjan Kumar Pattanaik Plot No-132, Forest Park, Near Bharati Tower, Bhubaneswar Khordha , Odisha-751009. Tel-9338703161.	LETTER NO-2244/, DATE D-15.09.2023	12.36 Acre/4.997Ha	01.11.2023	30.10.2028	01.11.2023	Working	EC22B001OR178571/SEIAA, Dt:30.06.2022	Mouza-BADAKHARAMANGA,Khata-235, Plot-654-12.350Ac, Kissam-NADI, Lat-20°17'13.90"N to 20°17'22.00"N Long-86°2'4.70"E to 86°2'12.10"E	Open cast	Operational

G6	DEVI RIVER	BADAKH ARMAN GA - WEST DEVI RIVER SAND	PURNA CHANDRA PATRA	S/o-Bhikari Patra At-Gadasrira mpur,Po-Balianta PS-Balianta,Dist-Khurda,752100,Mob-9658953952	LETTER NO-1498/, DATE D-13.06.2022	12.30 Acre/4.98Ha	08.02.2023	07.02.2028	08.02.2023	Non-Working	LETTER NO-1320/SE IAA, DATED-19.05.2021	Mouza-BADA KHARAMANGA,Khata-235, Plot-633-12.300Ac, Kissam-NADI, Lat-20°17'28.20"N to 20°17'37.10"N Long-86°1'55.80"E to 86°2'4.60"E	Open cast	Operational
PROPOSED														
G7	DEVI RIVER	Rahamba Sand Bed				12.35 Ac/4.997Ha						Mouza-Rahamba,Khata no-875,Plot no-500,Kissam-Nadi,Lat-20.263,Long-86.063		
G8	KANDALA RIVER	Manikunda Sand Bed				12.35 Ac/4.997Ha						Mouza-Manikunda,Khata no-204,Plot no-294,Kissam-Nadi,Lat-20.25,Long-86.018		
H.Name of the Tahasil:-KISHANNAGAR														
H1	MAHANADI RIVER	HULIPUR	SARAJ KUMAR MOHANTH	S/O-Khetrabasi Mohanty, At-Nachuni, Po-Banapur,	Letter no-245/ Dt:06.02.2019	12.355 Acre/5.00Ha	22.09.2020	21.09.2025	22.09.2020	Working	Letter no-8723/SE IAA Dt:17.08.2020	Mouza-HULIPUR,Khata-882, Plot-1-12.355Ac, Kissam-NADI, Lat-20°25'49.60"N to 20°25'58.80"N Long-86°4'1.10"E to 86°4'11.00"E	Open cast	Operational

			AN TY	Khordha Odisha- 751006, Phone- 88478255 88										
H2	MAH ANAD I RIVER	UDAYPU R	SA RO J KU M AR M OH AN TY	S/O- Khetrabas i Mohanty, At- Nachuni, Po- Banapur, Khordha Odisha- 751006, Phone- 88478255 88	Letter no- 246/ Dt:06. 02.20 19	12.355 Acre/5 .00Ha	22. 09. 202 0	21. 09. 202 5	22.09.20 20	Work ing	Letter no- 8721/SE IAA Dt:17.08 .2020	Mouza-UDEYPUR,Khata- 179, Plot-1282-12.355Ac, Kissam-NADI, Lat- 20°24'13.70"N to 20°24'23.10"N Long- 86°8'24.90"E to 86°8'36.10"E	Open cast	Oper ation al
H3	CHITT ROTP ALA RIVER	DULUPU R	SA RO J KU M AR M OH AN TY	S/O- Khetrabas i Mohanty, At- Nachuni, Po- Banapur, Khordha Odisha- 751006,	Letter no- 247/ Dt:06. 02.20 19	12.355 Acre/5 .00Ha	23. 09. 202 0	22. 09. 202 5	23.09.20 20	Work ing	Letter no- 8727/SE IAA Dt:17.08 .2020	Mouza-DULUPUR,Khata- 579, Plot-1-4.355Ac,5- 8.000Ac, Kissam-NADI, Lat-20°23'19.50"N to 20°23'30.90"N Long- 86°13'6.10"E to 86°13'24.70"E	Open cast	Oper ation al

				Phone-8847825588										
H4	MAHANADI RIVER	KHENTALA MAHANADI SAND QUARRY	DEBI PRASAD TRIPATHY	S/o-Basudev Tripathy At-Adhanga majurai,PO-Adhangagada,Anakha,PS-Birida Dist-Jagatsinghpur, State-Odisha-754102 Mob-9439448258	Letter no-2453/Dt:23.11.2020	12.355 Acre/5.00Ha	21.01.2021	20.01.2026	21.01.2021	Non-Working	Letter no-10078/S EIAA Dt:16.12.2020	Mouza-KHENTAL,Khata-188, Plot-1-12.355Ac, Kissam-NADI, Lat-20°23'46.58"N to 20°23'56.29"N Long-86°8'13.44"E to 86°8'23.16"E	Open cast	Operational
H5	MAHANADI RIVER	BARADA MAHANADI SAND QUARRY	DEBI PRASAD TRI	S/o-Basudev Tripathy At-Adhanga majurai,P	Letter no-1660/Dt:30.06.2022	12.355 Acre/5.00Ha	04.03.2021	03.03.2026	04.03.2021	Non-Working	Letter no-10082/S EIAA Dt:16.12.2020	Mouza- BARADA,Khata-1213, Plot-2-12.355Ac, Kissam-NADI, Lat-20°26'15.10"N to 20°26'24.40"N Long-	Open cast	Operational

			PA TH Y	O- Adhangag ada,Anak hia,PS- Birida Dist- Jagatsingh pur, State- Odisha- 754102 Mob- 94394482 58								86°1'37.90"E to86°1'46.00"E		
H6	CHITT ROTP ALA RIVER	MURKU NDI CHITTRO TPALA SAND QUARRY	PA TIT AP AB AN SW AI N	House no.- 418, Bastia Bagicha, At- Jhanjirima ngala,Tele nga Bazar, Cuttack Sadar, Cuttack, Odisha- 753009. Tel- 92384477 77.	Letter no- 2181/ Dt:08. 10.20 20	12.355 Acre/5 .00Ha	27. 01. 202 1	26. 01. 202 6	27.01.20 21	Non- Work ing	Letter no- 10094/ SEIAA, Dt: 16.12.2 020	Mouza- MURKUNDI,Khata-505, Plot-1-12.355Ac, Kissam- NADI, Lat-20°27'18.40"N to 20°27'32.00"N Long- 86°3'58.10"E to 86°4'7.50"E	Open cast	Oper ation al

H7	CHITTOPTALA RIVER	MOHAMMADPUR CHITTOPTALA SAND QUARRY	SAROKUMARPANDA	S/O-Amulyani dhi Panda, At:EB-81,Stage-05,BDA Colony,Jharpada PS-Laxmisagar.Bhubaneswar, Khordha, Odisha-751006. Tel-9338549485.	Letter no-2180/Dt:08.10.2020	12.355 Acre/5.00Ha	25.02.2021	24.02.2026	25.02.2021	Working	Letter no-10084/S EIAA Dt:16.12.2020	Mouza-MAHAMMADPUR,Khata-773, Plot-1-12.355Ac, Kissam-NADI, Lat-20°24'8.02"N to 20°24'15.04"N Long-86°15'36.40"E to 86°15'46.20"E	Open cast	Operational
H8	MAHANADI RIVER	BABUJANGA MAHANADI SAND QUARRY	SAGARKUMARAY	At-MIG-19,Laxmisagar,PS-Laxmisagar Tahasil=Bhubaneswar,Dist-Khordha Odisha-751006, Mob-7978772448	Letter no-2178/Dt:08.10.2020	12.355 Acre/5.00Ha	04.06.2021	03.06.2026	04.06.2021	Non-Working	Letter no-4636/SE IAA Dt:01.06.2022	Mouza-BABUJANGA,Khata- 817, Plot-1676-12.355Ac, Kissam-NADI, Lat-20°22'57.74"N to 20°23'8.01"N Long-86°11'35.36"E to 86°11'45.79"E	Open cast	Operational

H9	MAHANADI RIVER	DONDO MAHANADI SAND QUARRY	BANSHIDHARA SWAIN	S/O- Jayadev swain, At- Plot No-426, Sameigadi a, Near Manchan athdeva high school Rasulgarh, Bhubaneswar Khordha, Odisha-751010. Tel-8895384422	Letter no-2182/Dt:08.10.2020	12.355 Acre/5.00Ha	21.10.2021	20.10.2026	21.10.2021	Working	Letter no-1335/SE IAA Dt:19.05.2021	Mouza- DONDO, Khata-882, Plot-1235-12.355Ac, Kissam-NADI, Lat-20°25'15.22"N to 20°25'25.62"N Long-86°6'57.15"E to 86°7'8.17"E	Open cast	Operational
H10	MAHANADI RIVER	KURULI MAHANADI SAND QUARRY	ROUT INFRASTRUCTURE	Md of M/S-Rout Infrastructure pvt ltd At- Gatiroutpatna, P.O.- Biribati, PS- Chauliaganj Cuttack,	Letter no-971/Dt:21.03.2023	12.10 Acre/4.896Ha	26.07.2023	25.07.2028	26.07.2023	Working	Letter no-10094/S EIAA Dt:16.12.2020	Mouza- KURULI, Khata-451, Plot-1004-12.100Ac, Kissam-NADI, Lat-20°26'10.16"N to 20°26'17.34"N Long-86°4'31.53"E to 86°4'41.43"E	Open cast	Operational

				Odisha-754131. Tel-9861450055.										
H1 1	MAH ANAD I RIVER	PURUNA HAT MAHAN ADI SAND QUARRY	PU RN A CH AN DR A PA TR A	S/o- Bhikari Patra At- Gadasrira mpur,Po- Baliana PS- Baliana,D ist- Khurda,75 2100,Mob -96589 53952	Letter no- 73/ Dt:09. 01.20 23	12.355 Acre/5 .00Ha	02. 08. 202 3	01. 08. 202 8	02.08.20 23	Work ing	Letter no- 978/SEI AA Dt:24.03 .2021	Mouza- PURUNAHAT,Khata-423, Plot-1395 1395/1401- 12.355Ac, Kissam-NADI, Lat-20°25'32.36"N to 20°25'39.10"N Long- 86°6'36.77"E to86°6'45.74"E	Open cast	Oper ation al
PROPOSED														
H1 2	MAH ANAD I RIVER	Bankala				12.35 Ac/4.9 97Ha						Mouza-Bankala,Khata no- 103,Plot no-280,Kissam- Nadi,Lat-20.368,Long- 86.198		
H1 3	MAH ANAD I RIVER	Guali				12.35 Ac/4.9 97Ha						Mouza-Guali,Khata no- 1051,Plot no- 1614,Kissam-Nadi,Lat- 20.453,Long-86.073		

H14	MAH ANADI RIVER	Aitipur				12.35 Ac/4.997Ha						Mouza-Aitipur, Khata no-486, Plot no-9, Kissam-Nadi, Lat-20.437, Long-85.991		
H15	CHITROPA RIVER	Uttarkul				12.35 Ac/4.997Ha						Mouza-Uttarkul, Khata no-516, Plot no-52, Kissam-Nadi, Lat-20.398, Long-86.237		

I.Name of the Tahasil:-NARSINGHPUR

I1	MAH ANADI RIVER	TAMARA MAHANSAND BED	SARAT BEHERA	S/o-Kinu Behera At-Johala Po-Balianta Khordha, Odisha-752101 Mob-9778250326	LETTER NO-2420, DATE D-12.08.2020	12.200 Acre/4.937Ha	22.03.2021	21.03.2026	22.03.2021	Working	Letter no-10316/S EIAA Dt:17.12.2020	Mouza-TAMARA, Khata-414, Plot-1750-12.200Ac, Kissam-NADI, Lat-20°23'42.29"N to 20°23'51.72"N Long-85°9'39.17"E to 85°9'50.83"E	Open cast	Operational
I2	MAH ANADI RIVER	MANPUR (SAND)	SARAT BEHERA	S/o-Kinu Behera At-Johala Po-Balianta Khordha, Odisha-752101 Mob-9778250326	LETTER NO-2431/, DATE D-12.08.2020	12.200 Acre/4.937Ha	20.01.2021	19.01.2026	20.01.2021	Non-Working	LETTER NO-10324/S EIAA, DATED-17.12.2020	Mouza-MANPUR, Khata-280, Plot-2251 & 2252-12.200Ac, Kissam-NADI, Lat-20°23'35.99"N to 20°23'40.24"N Long-85°10'26.76"E to 85°10'41.05"E	Open cast	Operational

13	MAHANADI RIVER	BRAHMAPURAMAHANADI SAND	RANJANKUMAR PATTANAIK	S/o-Late Dhruba Charan Pattanaik At-Plot No-1103/4104,RATAN VILLA Sobhagya Nagar,Bhubaneswar MC Khordha, Odisha-751003 Mob-9338703161	LETTER NO-724, DATE D-08.02.2021	12.350 Acre/4.998Ha	13.04.2021	12.04.2021	13.04.2021	Working	Letter no-974/SEIAA Dt:24.03.2021	Mouza-BRAHMAPURA,Khata-158, Plot-1141-12.350Ac, Kissam-NADI, Lat-20°25'2.04"N to 20°25'7.37"N Long-85°6'9.84"E to85°6'21.45"E	Open cast	Operational
14	MAHANADI RIVER	DHANIPUR (SAND)	NARAYAN BISWAL	S/o-Late Alekha Biswal At/Po-Brahmani gaon,PS-Baranga Dist-Cuttack,Pin-754005 Tel-7008552873	LETTER NO-4320/, DATE D-16.12.2020	12.350 Acre/4.998Ha	07.04.2021	06.04.2021	07.04.2021	Working	LETTER NO-982/SEIAA, DATED-24.03.2021	Mouza-DHANIPUR,Khata-640, Plot- 06-12.350Ac, Kissam-NADI, Lat-20°24'52.32"N to 20°24'57.07"N Long-85°5'32.15"E to 85°5'44.53"E	Open cast	Operational

PROPOSED														
15	MAH ANADI RIVER	Muraripur Sand Bed				12.35 Ac/4.997Ha						Mouza-Muraripur, Khata no-324, Plot no-1219, Kissam-Nadi Lat-20°24'36.9"N to 20°24'48.1"N, long-, 85°6'39.35"E		
16	MAH ANADI RIVER	Padmalapatna Sand Bed				12.35 Ac/4.997Ha						Mouza-Padmalapatna, Khata no-269, Plot no-1072, Kissam-Nadi, Lat-20°23'40.36", Long-85°9'38.99"		
J.Name of the Tahasil:-NIALI														
J1	DEVI RIVER	NATI DEVI RIVER SAND SAIRAT SOURCE	BE NUDHAR PATRA	S/o-Biswanath Patra, Plot No-837 Daraji Sahi, Old town Bhubaneswar, Khordha, Odisha-751002. Tel-9337882182.	Letter no-3344/Dt:05.11.2020	12.00 Acre/4.856Ha	04.05.2021	03.05.2026	04.05.2021	Work ing	Letter no-870/SEIAA, Dt:09.03.2021	Mouza-NATI, Khata-604, Plot-2510(P)-12.000Ac, Kissam-NADI, Lat-20°10'45.90"N to 20°11'4.99"N Long-86°8'47.95"E to 86°8'59.33"E	Open cast	Oper ational

J2	KANDAL RIVER	POLSARA KANDAL RIVER SAND SAIRAT SOURCE	BIJAYLAXMI SAHO	W/o-Pratap Kumar Sahoo At-Plot No-361,Paikana nagar, Bhubaneswar,Odisha ,751003 Tel-7008294162	Letter no-317/ Dt:04.01.2021	12.00 Acre/4 .856Ha	20.09.2021	19.09.2026	20.09.2021	Non-Working	Letter no-3619/SEIAA Dt:18.12.2021	Mouza-POLSARA,Khata-711, Plot-1317(P)-12.000Ac, Kissam-NADI, Lat- 20°10'28.15"N to 20°10'38.26"N Long-86°6'28.99"E to 86°6'45.22"E	Open cast	Operational
J3	DEVI RIVER	KULASHREE DEVI RIVER SAND SAIRAT SOURCE	BIDULATA SENAPATI	W/o Santosh Kumar Senapati, At-Pubakhandada, PS-Niali Cuttack,Odisha-754004. Tel-9937633137.	Letter no-1770/ Dt:10.08.2021	11.400 Acre/4 .614Ha	27.12.2021	26.12.2026	27.12.2021	Non-Working	Letter no-3357/ SEIAA, Dt:18.10.2021	Mouza-KULASHREE,Khata-1194, Plot- 3(P)-11.400Ac, Kissam-NADI, Lat-20°14'0.05"N to 20°14'6.50"N Long-86°5'33.81"E to 86°5'51.83"E	Open cast	Operational
J4	KANDAL RIVER	PAHANGA KANDAL RIVER SAND	BAKRUSHN	S/o Sulabha Chandra Nath, At-	Letter no-315/ Dt:03.	12.00 Acre/4 .856Ha	03.09.2021	02.09.2026	03.09.2021	Working	Letter no-1496/ SEIAA, Dt:	Mouza-PAHANGA,Khata-1339, Plot-2584-12.000Ac, Kissam-NADI, Lat-20°10'5.06"N to 20°10'11.77"N Long-	Open cast	Operational

		SAIRAT SOURCE	ANATHA	Mahanadi bihar, Chauliaganj, Cuttack sadar, Cuttack, Odisha-753004. Tel-9437271611	02.2021						30.06.2021	86°7'13.69"E to 86°7'30.38"E		
J5	DEVI RIVER	SITHALO DEVI RIVER SAND SAIRAT	BANSHIDHARASWAIN	S/O-Jayadev swain, At- Plot No-426, Sameigadia, Near Manchanathdeva high school Rasulgarh, Bhubaneswar Khordha, Odisha-751010. Tel-8895384422	Letter no-2953/ Dt:13.12.2021	11.200 Acre/4 .533Ha	06.05.2022	06.05.2027	06.05.2022	Non-Working	Letter no-4357/ SEIAA, Dt: 27.04.2022	Mouza-SITHALO, Khata-1641, Plot-1489 (P)-11.200Ac, Kissam-NADI, Lat- 20°11'25.97"N to 20°11'37.68"N Long-86°7'13.71"E to 86°7'23.86"E	Open cast	Operational

J6	DEVI RIVER	BACHHA SAILO DEVI RIVER SAND SAIRAT	BE NU DH AR PA TR A	S/o- Biswanath Patra, Plot No-837 Daraji Sahi ,Old town Bhubaneswar, Khordha, Odisha-751002. Tel-9337882182.	Letter no-1746/ Dt:28.08.2020	12.100 Acre/4.897Ha	01.11.2021	31.10.2026	01.11.2021	Non-Working	Letter no-2919/ SEIAA, Dt: 28.09.2021	Mouza- BACHHASAILO, Khata-436, Plot-1659/2366-12.100Ac, Kissam-NADI, Lat-20°11'25.97"N to 20°12'52.38"N Long-86°8'49.42"E to 86°8'55.25"E	Open cast	Operational
PROPOSED														
J7	DEVI RIVER	Sasanpada Sand Bed				12.35 Ac/4.997Ha						Mouza-Sasanpada, Khata no-511, Plot no-1444/2222, Kissam-Nadi, Lat-20.219, Long-86.136		
K.Name of the Tahasil:-NISCHINTAKOILI														
K1	LUNA RIVER	LUNA RIVER SAND BALIAPADA	SO VANANDA	S/o-Bijaya Kumar Nanda At-Sabitri Sadan, Rameswarpatana, PO-Oldtown, PS-	Letter no-2859/ Dt:01.12.2020	12.355 Acre/5.00Ha	11.02.2021	10.02.2026	11.02.2021	Non-Working	Letter no-9931/ SEIAA, Dt: 17.12.2020	Mouza- BALIAPADA, Khata-1006, Plot-1210-12.355Ac, Kissam-NADI, Lat-20°27'10.52"N to 20°27'15.63"N Long-86°12'30.27"E to 86°12'42.44"E	Open cast	Operational

				Lingaraj, Dist- Khordha,7 51002 Mob- 94370428 80										
K2	CHIT ROTP ALA RIVER	CHITROT PLA RIVER SAND BARHAM PUR	SA TY A GO PA L BIS HO I	S/O- Bhaskar Bisoi, At- Naiguan, Po- Kusuman dal (Gopinath pur), Cuttack, Odisha- 753001. Tel- 93481880 29	Letter no- 2497/ Dt:03. .11.20 20	12.355 Acre/5 .00Ha	04. 03. 202 1	03. 03. 202 6	04.03.2 021	Non- Work ing	Letter no- 9943/ SEIAA, Dt: 17.12.2 020	Mouza- BARAHAMPUR,Khata- 231,Plot- 634-12.355Ac, Kissam-NADI, Lat- 20°23'37.07"N to 20°23'45.77"N Long- 86°11'56.81"E to 86°12'9.06"E	Open cast	Oper ation al
K3	LUNA RIVER	LUNA RIVER SAND DEMAND O	KIS HO RE M UD ULI	S/O- Nagendra Muduli, At- Dharadha rpur, Po- Raghunat hpur, Jagatsingh pur,	Letter no- 2499/ Dt:03. .11.20 20	12.355 Acre/5 .00Ha	22. 01. 202 1	21. 01. 202 6	22.01.2 021	Work ing	Letter no- 9929/ SEIAA, Dt: 17.12.2 020	Mouza-DEMANDO,Khata- 325,Plot- 192-12.355Ac, Kissam-NADI, Lat- 20°27'7.98"N to 20°27'16.81"N Long- 86°11'13.38"E to 86°11'23.90"E	Open cast	Oper ation al

				Odisha-754132. Tel-7008445266										
K4	CHITTROTPALARIVER	CHITROTPLARIVERSANDKALAMISHREEJAYANTAPUR	KISHOREMUDULI	S/O-Nagendra Muduli, At-Dharadharpur, Po-Ragunathpur, Jagatsinghpur, Odisha-754132. Tel-7008445266	Letter no-2810/Dt:25.11.2020	12.355 Acre/5.00Ha	22.01.2021	21.01.2026	22.01.2021	Non-Working	LETTER NO-9918/SE IAA, DATED-07.12.2020	Mouza-KALAMISIRI JAYNTAPUR, Khata-296, Plot- 1-12.355Ac, Kissam-NADI, Lat-20°27'7.41"N to 20°27'10.65"N Long-86°8'45.97"E to 86°8'54.39"E	Open cast	Operational
K5	LUNARIVER	LUNARIVERSANDKULAGANISALO	SHAIKH RAHEMTULLAH	S/o-Shaikh Kefayatulla Vill-Rasulpur, Po.Kood PS-Salipur AT-Andeisahi PS-Jagatpur Dist-	LETTER NO-2858/, DATE D-01.12.2020	12.355 Acre/5.00Ha	12.01.2021	11.01.2026	12.01.2021	Working	LETTER NO-9927/SE IAA, DATED-07.12.2020	Mouza-KULAGANISALO, Khata-817, Plot-1920,1921-12.355Ac, Kissam-NADI, Lat-20°27'46.42"N to 20°27'54.25"N Long-86°15'16.64"E to 86°15'29.77"E	Open cast	Operational

				Cuttack, Odisha- 754221 Mob- 98530107 13										
K6	LUNA RIVER	LUNA RIVER SAND KULASUK ARPADA LOKANA THPUR	SO VA N NA ND A	S/o-Bijaya Kumar Nanda At-Sabitri Sadan, Rameswar patana, PO- Oldtown, PS- Lingaraj, Dist- Khordha,7 51002 Mob- 94370428 80	LETTE R NO- 2507//, DATE D- 03.11. 2020	12.355 Acre/5 .00Ha	11. 02. 202 1	10. 02. 202 6	11.02.2 021	Non- Work ing	Letter no- 4632/ SEIAA, Dt: 01.06.2 022	Mouza- KULASUKARAPADA,Khata- 371,Plot-1022-12.355Ac, Kissam-NADI, Lat- 20°27'19.52"N to20°27'30.08"N Long- 86°13'54.28"E to 86°14'8.12"E	Open cast	Oper ation al
K7	CHITT ROTP ALA RIVER	CHITROT PLA RIVER SAND PALADA	SA NT OS H KU M AR M AH AP	S/o-Sri Damodar Mohapatr a At- Muguria PS- Kishannag ar Dist-	Letter no- 2503/ Dt:03. .11.20 20	12.355 Acre/5 .00Ha	18. 01. 202 1	17. 01. 202 6	18.01.2 021	Work ing	Letter no- 9933/ SEIAA, Dt: 07.12.2 020	Mouza- PALADA,Khata- 548,Plot-169-12.355Ac, Kissam-NADI, Lat- 20°25'17.30"N to 20°25'31.78"N Long- 86°10'39.53"E to 86°10'55.31"E	Open cast	Oper ation al

			AT RA	Cuttack, Odisha- 754134 Mob- 63702806 44										
K8	CHITT ROTP ALA RIVER	CHITROT PLA RIVER SAND NAGASP UR	SA SM ITA SW AI N	W/o-Sri Pradosh Swain At- Potapokh ari ,Nuabazar ,Cuttack Sadar Cuttack, Odisha- 753004 Mob- 96586541 43	Letter no- 2860/ Dt:01. 12.20 20	12.355 Acre/5 .00Ha	01. 06. 202 1	31. 05. 202 6	01.06.2 021	Non- Work ing	Letter no- 9939/ SEIAA, Dt: 07.12.2 020	Mouza- NAGASPUR,Khata- 1013,Plot-535-12.355Ac, Kissam-NADI, Lat- 20°24'35.23"N to 20°24'46.79"N Long- 86°11'5.90"E to 86°11'23.95"E	Open cast	Oper ation al
K9	LUNA RIVER	LUNA RIVER SAND SAHADE BPUR	BR AH M AN AN DA BE HE RA	S/o- Kanduri Behera At- Kulangais alo, Po- Asureswa r PS- Nischintk oili,Dist- Cuttack	Letter no- 2504/ Dt:03. 11.20 20	12.355 Acre/5 .00Ha	25. 01. 202 1	24. 01. 202 6	25.01.2 021	Non- Work ing	Letter no- 9910/ SEIAA, Dt: 07.12.2 020	Mouza- SAHADEBPUR,Khata- 563,Plot-49-12.355Ac, Kissam-NADI, Lat- 20°27'8.15"N to 20°27'13.09"N Long- 86°13'18.47"E to 86°13'32.40"E	Open cast	Oper ation al

				Odisha-754209 Mob-9337136943										
K10	CHITTROTPALARIVER	CHITROTPALARIVERSANTAPUR	BIKRAMROUT	S/O-Bibhuti Bhusan Rout, Rout Infrastructure Pvt. Ltd. At/Po-Gatiroutpatna, P.S.-Biribati, Cuttack, Odisha-754100. Tel-9861450055.	Letter no-3038/Dt:18.10.2022	12.355 Acre/5.00Ha	13.01.2023	12.01.2028	13.01.2023	Non-Working	EC22B001OR174167/Dt:17.08.2022	Mouza- SANTAPUR, Khata-313, Plot-71-12.355Ac, Kissam-NADI, Lat-20°25'28.59"N to 20°25'35.85"N Long-86°10'18.23"E to 86°10'33.17"E	Open cast	Operational
PROPOSED														
K11	CHITTROTPALARIVER	Janardanpur				12.35 Ac/4.997Ha						Mouza-Janardanpur, Khata no-288, Plot no-5, Kissam-Nadi, Lat-20.457, Long-86.13		

K12	CHITT ROTP ALA RIVER	Jaladia				12.35 Ac/4.9 97Ha						Mouza-Jaladia ,Khata no- 139,Plot no-444,Kissam- Nadi,Lat- 20.433,Long86.168		
K13	CHITT ROTP ALA RIVER	Sanarout pati				12.35 Ac/4.9 97Ha						Mouza-Sanaroutpati ,Khata no-49,Plot no- 185,Kissam-Nadi,Lat- 20.462,Long-86.134		
K14	LUNA RIVER	Sadhakn agar				12.35 Ac/4.9 97Ha						Mouza-Sadhaknagar ,Khata no-140,Plot no- 428,Kissam-Nadi,Lat- 20.455,Long-86.178		

L.Name of the Tahasil:-SALEPUR

L1	BIRUP A RIVER	BIRUPA RIVER SAND, NARADA	NA RA YA N PA TI	At/Po- Mahanpur ,PS- Salipur Cuttack,O disha- 754201 Tel- 94391008 00	Letter no- 106, Dt:07. 01.20 22	10.710 Acre/4 .334H a	10. 01. 202 2	09. 01. 202 7	10.01.20 22	Work ing	Letter no- 3914/ SEIAA, Dt: 28.01.2 022	Mouza-NARADA, Khata- 535, Plot-1-10.710Ac, Kissam-Nadi, Lat- 20°33'53.15"N to 20°34'2.78"N Long- 86°4'1.97"E to 86°4'11.01"E	Open cast	Oper ation al
L2	BIRUP A RIVER	BIRUPA RIVER SAND, BADABHI MRAJPU R	DIL LIP SA HO O	S/o- Prafulla Kumar Sahoo Plot No- 746,1St Floor,Sahi d nagar Bhubanes	Letter no- 1699, Dt:12. 04.20 22	10.225 Acre/4 .138H a	05. 12. 202 2	04. 12. 202 7	05.12.20 22	Non- Work ing	EC22B0 01OR12 3978/ Dt :01.02.2 022	Mouza- BADABHIMARAJPUR, Khata-818, Plot-1- 10.225Ac, Kissam-Nadi, Lat-20°32'35.64"N to 20°32'43.70"N Long- 86°1'41.63"E to86°2'47.50"E	Open cast	Oper ation al

				war,Odisha-751007 Tel-9937040548										
L3	MAHANADI RIVER SAND, GOPINATHPUR	MAHANADI RIVER SAND, GOPINATHPUR	RASHMI ASSOCIATES PVT LTD	Md. Rashmi Ranjan Routaray Buxibazar friends Colony,Cuttack Sadar GPO, Cuttack ,Pin-753001, Mob-9437022060	Letter no-5380, Dt:02.09.2022	11.00 Acre/4.452Ha	25.10.2023	24.10.2028	25.10.2023	Working	EC22B001OR192412/Dt:05.11.2022	Mouza-GOPINATHPUR, Khata-589, Plot-1001-11.000Ac, Kissam-Nadi, Lat-20°28'28.14"N to 20°28'32.47"N Long-85°57'21.43"E to 85°57'35.14"E	Open cast	Operational
L4	BIRUPA RIVER SAND BHAIRPUR	BIRUPA RIVER SAND BHAIRPUR	SAHUMETALIKS	At/Po-Barbil,Dist-Keonjhar Odisha-758035, Tel-9430369472 Email:sahumetaliks	Letter no-383, Dt:03.02.2018	12.500 Acre/5.059Ha				Non-Working	Letter no-1265/SEIAA, Dt:09.04.2021	Mouza- BHAIRPUR, Khata-655, Plot-1-12.500Ac, Kissam-Nadi, Lat-20°30'44.70"N to 20°30'51.02"N Long-85°58'43.02"E to 85°58'55.56"E	Open cast	Non-Operational

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PROPOSED

L5	BIRUP A RIVER	Chahapada				12.35 Ac/4.9 97Ha						Mouza-Chahapada, Khata no-1020, Plot no-1, Kissam-Nadi, LAT-20.544, Long-86.05		
L6	MAH ANAD I RIVER	Barabodia-I				12.35 Ac/4.9 97Ha						Mouza-Barabodia-I, Khata no-553, Plot no-1514, Kissam-Nadi, Lat-20.456, Long-85.992		
L7	MAH ANAD I RIVER	Barabodia-II				12.35 Ac/4.9 97Ha						Mouza-Barabodia-II, Khata no-553, Plot no-1494, Kissam-Nadi, Lat-20.46, Long-85.987		
L8	BIRUP A RIVER	Ganipur				12.35 Ac/4.9 97Ha						Mouza-Ganipur, Khata no-172, Plot no-1, Kissam-Nadi, Lat-20.517, Long-86.004		
L9	MAH ANAD I RIVER	Atoda-I				12.35 Ac/4.9 97Ha						Mouza-Atoda, Khata no-1204, Plot no-3950, Kissam-Nadi, Lat-20.448, Long-86.019		
L10	MAH ANAD I RIVER	Atoda-II				12.35 Ac/4.9 97Ha						Mouza-Atoda, Khata no-1204, Plot no-4021, Kissam-Nadi, Lat-20.447, Long-86.007		
L11	BIRUP A RIVER	Sanabhimrajpur				12.35 Ac/4.9 97Ha						Mouza-Sanabhimrajpur, Khata no-331, Plot no-1, Kissam-		

N1	MAHANADI RIVER	HATAMAL SAND QUARRY	CHINTAMANISAMAL	S/O-Basant Kumar Samal, At/Po-Ichhapur, P.S.-Badamba, Cuttack, Odisha-754031. Tel-7008952862.	Letter no-317/Dt:03.02.2021	15.00 Acre/6.07Ha				Non-Working	NO	Mouza-Hatamal, Khata-275, Plot-1282-11.750Ac,1260/1288-3.250Ac, Kissam-Nadi, Lat-20°24'16.50"N to 20°24'23.60"N Long-85°30'41.70"E to 86°30'41.50"E	Open cast	Non-Operational
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04. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS.

ROYALTY FOR SAND					
Sl. No.	Name of the Tahasil	Name of Source	Revenue Collected for last three years (in Rs)Lakh		
			2021-22	2022-23	2023-24
A1	ATHAGARH	BALARAMPUR SAND QUARRY			
B1	BADAMBA	NARANAPUR MAHANADI SAND			
B2		KANTAPADA MAHANADI SAND			
B3		MANGARAJAPUR MAHANADI SAND			
B4		BANGARISINGHA MAHANDI SAND			
B5		TUNAPUR MAHANADI SAND			
C1	BANKI	KOTADWAR SAND GHAT			
C2		BAIDESWAR SAND SOURCE			
C3		OSTIA SAND SOURCE			
C4		ANUARY SAND SOURCE			
C5		TENTULIA SAND SOURCE			
D1	BARANGA	KATHAJODI RIVER SAND MUNDAMUHAN			
D2		SIDUA RIVER SAND DEOKALI			
D3		SIDUA RIVER SAND KORKORA			
D4		KATHAJODI R/S BIDYADHARPUR			
D5		KUAKHAI RIVER SAND NARANPUR			
D6		KATHAJODI R/S BENTKARPADA			
D7		KATHAJODI RIVER SAND ARILO			
E1	CUTTACK SADAR	KATHAJODI RIVER SAND SUBERNAPUR			
E2		KATHAJODI RIVER SAND TANGARHUDA			
E3		KATHAJODI RIVER SAND UNIT 37 BADAMBADI			
E4		KATHAJODI RIVER SAND UNIT 39 SILPAPURI			
E5		KUAKHAI RIVER SAND UTTAMAPUR			
E6		KUAKHAI RIVER SAND PRATAPNAGARI			
E7		KATHAJODI RIVER SAND BRAHMAPUR			

E8		SIDHUA RIVER SAND KADAMPADA			
E9		SIDHUA RIVER SAND JARIPADA			
E10		Bagulapada			
E11		Arakhakuda			
E12		Rajahansa			
E13		KATHAJODI RIVER SAND SARTOL			
E14		KATHAJODI RIVER SAND KALAPADA			
E15		SIDUA RIVER SAND KULASARICHUAN			
F1	DAMPADA	JATAMUNDIA SAND GHAT			
F2		KALIKA PRASAD SAND GHAT			
G1	KANTAPADA	ARISOL ADASPUR KANDAL RIVER SAND			
G2		TITHAPADA-I DEVI RIVER SAND			
G3		BALADA-NAINLO DEVI RIVER SAND			
G4		SRISUNDARPUR DEVI RIVER			
G5		BADAKHARMANGA -EAST DEVI RIVER SAND			
G6		BADAKHARMANGA -WEST DEVI RIVER SAND			
H1	KISHANNAGAR	HULIPUR			
H2		UDAYPUR			
H3		DULUPUR			
H4		KHENTALA MAHANADI SAND QUARRY			
H5		BARADA MAHANADI SAND QUARRY			
H6		MURKUNDI CHITTROTPALA SAND QUARRY			
H7		MOHAMMADPUR CHITTROTPALA SAND QUARRY			
H8		BABUJANGA MAHANADI SAND QUARRY			
H9		DONDO MAHANADI SAND QUARRY			
H10		KURULI MAHANADI SAND QUARRY			
H11		PURUNAHAT MAHANADI SAND QUARRY			
I1	NARSINGHPUR	TAMARA MAHANADI SAND BED			
I2		MANPUR (SAND)			

I3		BRAHMAPURA MAHANADI SAND			
I4		DHANIPUR (SAND)			
J1	NIALI	NATI DEVI RIVER SAND SAIRAT SOURCE			
J2		POLSARA KANDAL RIVER SAND SAIRAT SOURCE			
J3		KULASHREE DEVI RIVER SAND SAIRAT SOURCE			
J4		PAHANGA KANDAL RIVER SAND SAIRAT SOURCE			
J5		SITHALO DEVI RIVER SAND SAIRAT			
J6		BACHHASAILO DEVI RIVER SAND SAIRAT			
K1		NISHINTKOILI	LUNA RIVER SAND BALIAPADA		
K2	CHITROTPLA RIVER SAND BARHAMPUR				
K3	LUNA RIVER SAND DEMANDO				
K4	CHITROTPLA RIVER SAND KALAMISHREE JAYANTAPUR				
K5	LUNA RIVER SAND KULAGANISALO				
K6	LUNA RIVER SAND KULASUKARPADA LOKANATHPUR				
K7	CHITROTPLA RIVER SAND PALADA				
K8	CHITROTPLA RIVER SAND NAGASPUR				
K9	LUNA RIVER SAND SAHADEBPUR				
K10	CHITROTPLA RIVER SAND SANTAPUR				
L1	SALEPUR	BIRUPA RIVER SAND, NARADA			
L2		BIRUPA RIVER SAND, BADABHIMRAJPUR			
L3		MAHANADI RIVER SAND, GOPINATHAPUR			
L4		BIRUPA RIVER SAND BHAIRPUR			
M1	TANGI CHOUDWAR	MAHANADI RIVER SAND NUAPATNA			
M2		BIRUPA RIVER SAND BHATIMUNDA			
N1	TIGIRIA	HATAMAL SAND QUARRY			

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

PRODUCTION OF SAND					
Sl. No.	Name of the Tahasil	Name of Source	Production for last three years (in Cum)		
			2021-22	2022-23	2023-24
A1	ATHAGARH	BALARAMPUR SAND QUARRY			
B1	BADAMBA	NARANAPUR MAHANADI SAND			
B2		KANTAPADA MAHANADI SAND			
B3		MANGARAJAPUR MAHANADI SAND			
B4		BANGARISINGHA MAHANDI SAND			
B5		TUNAPUR MAHANADI SAND			
C1	BANKI	KOTADWAR SAND GHAT			
C2		BAIDESWAR SAND SOURCE			
C3		OSTIA SAND SOURCE			
C4		ANUARY SAND SOURCE			
C5		TENTULIA SAND SOURCE			
D1	BARANGA	KATHAJODI RIVER SAND MUNDAMUHAN			
D2		SIDUA RIVER SAND DEOKALI			
D3		SIDUA RIVER SAND KORKORA			
D4		KATHAJODI R/S BIDYADHARPUR			
D5		KUAKHAI RIVER SAND NARANPUR			
D6		KATHAJODI R/S BENTKARPADA			
D7		KATHAJODI RIVER SAND ARILO			
E1	CUTTACK SADAR	KATHAJODI RIVER SAND SUBERNAPUR			
E2		KATHAJODI RIVER SAND TANGARHUDA			
E3		KATHAJODI RIVER SAND UNIT 37 BADAMBADI			
E4		KATHAJODI RIVER SAND UNIT 39 SILPAPURI			
E5		KUAKHAI RIVER SAND UTTAMAPUR			
E6		KUAKHAI RIVER SAND PRATAPNAGARI			

E7		KATHAJODI RIVER SAND BRAHMAPUR			
E8		SIDHUA RIVER SAND KADAMPADA			
E9		SIDHUA RIVER SAND JARIPADA			
E10		Bagulapada			
E11		Arakhakuda			
E12		Rajahansa			
E13		KATHAJODI RIVER SAND SARTOL			
E14		KATHAJODI RIVER SAND KALAPADA			
E15		SIDUA RIVER SAND KULASARICHUAN			
F1	DAMPADA	JATAMUNDIA SAND GHAT			
F2		KALIKA PRASAD SAND GHAT			
G1	KANTAPADA	ARISOL ADASPUR KANDAL RIVER SAND			
G2		TITHAPADA-I DEVI RIVER SAND			
G3		BALADA-NAINLO DEVI RIVER SAND			
G4		SRISUNDARPUR DEVI RIVER			
G5		BADAKHARMANGA -EAST DEVI RIVER SAND			
G6		BADAKHARMANGA -WEST DEVI RIVER SAND			
H1	KISHANNAGAR	HULIPUR			
H2		UDAYPUR			
H3		DULUPUR			
H4		KHENTALA MAHANADI SAND QUARRY			
H5		BARADA MAHANADI SAND QUARRY			
H6		MURKUNDI CHITTROPALA SAND QUARRY			
H7		MOHAMMADPUR CHITTROPALA SAND QUARRY			
H8		BABUJANGA MAHANADI SAND QUARRY			
H9		DONDO MAHANADI SAND QUARRY			
H10		KURULI MAHANADI SAND QUARRY			
H11		PURUNAHAT MAHANADI SAND QUARRY			
I1	NARSINGHPUR	TAMARA MAHANADI SAND BED			
I2		MANPUR (SAND)			

I3		BRAHMAPURA MAHANADI SAND			
I4		DHANIPUR (SAND)			
J1	NIALI	NATI DEVI RIVER SAND SAIRAT SOURCE			
J2		POLSARA KANDAL RIVER SAND SAIRAT SOURCE			
J3		KULASHREE DEVI RIVER SAND SAIRAT SOURCE			
J4		PAHANGA KANDAL RIVER SAND SAIRAT SOURCE			
J5		SITHALO DEVI RIVER SAND SAIRAT			
J6		BACHHASAILO DEVI RIVER SAND SAIRAT			
K1		NISHINTKOILI	LUNA RIVER SAND BALIAPADA		
K2	CHITROTPA RIVER SAND BARHAMPUR				
K3	LUNA RIVER SAND DEMANDO				
K4	CHITROTPA RIVER SAND KALAMISHREE JAYANTAPUR				
K5	LUNA RIVER SAND KULAGANISALO				
K6	LUNA RIVER SAND KULASUKARPADA LOKANATHPUR				
K7	CHITROTPA RIVER SAND PALADA				
K8	CHITROTPA RIVER SAND NAGASPUR				
K9	LUNA RIVER SAND SAHADEBPUR				
K10	CHITROTPA RIVER SAND SANTAPUR				
L1	SALEPUR	BIRUPA RIVER SAND, NARADA			
L2		BIRUPA RIVER SAND, BADABHIMRAJPUR			
L3		MAHANADI RIVER SAND, GOPINATHAPUR			
L4		BIRUPA RIVER SAND BHAIRPUR			
M1	TANGI CHOUWAR	MAHANADI RIVER SAND NUAPATNA			
M2		BIRUPA RIVER SAND BHATIMUNDA			
N1	TIGIRIA	HATAMAL SAND QUARRY			
TOTAL			18186340	279336293	255486454

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

The drainage of the district is mainly controlled by the rivers like Mahanadi, Kathajodi, Kuakhai, Birupa, Chitraptala, Sidua, Luna and Devi. Being a coastal district the river basins are much wider and the sand sources are very much suitable for construction purposes. Being highest order of streams the energy of the stream is less and the suspensions including the river sand are deposited through sedimentation. Generally, it is observed that river sand gets deposited after high flood within the rivers.

07. GENERAL PROFILE OF THE DISTRICT.

a. Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

b. Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87-

Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack, 91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

c. Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

d. Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence, the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position

in the map of Indian Industries. Popularly known as Silver City, Cuttack is also growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has provided job opportunities to skilled man power. There are also some private companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home- based and agro- based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

e. Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road is one of the premier national research institute under the

Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc. The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

f. Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14

No. of Tahasils	15
No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01
No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

g. Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhabaleswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhabaleswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to Cuttack Sadar Sub Division one can find

the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansa Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

Silver Filigree work, uniqueness of Cuttack City: -

Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

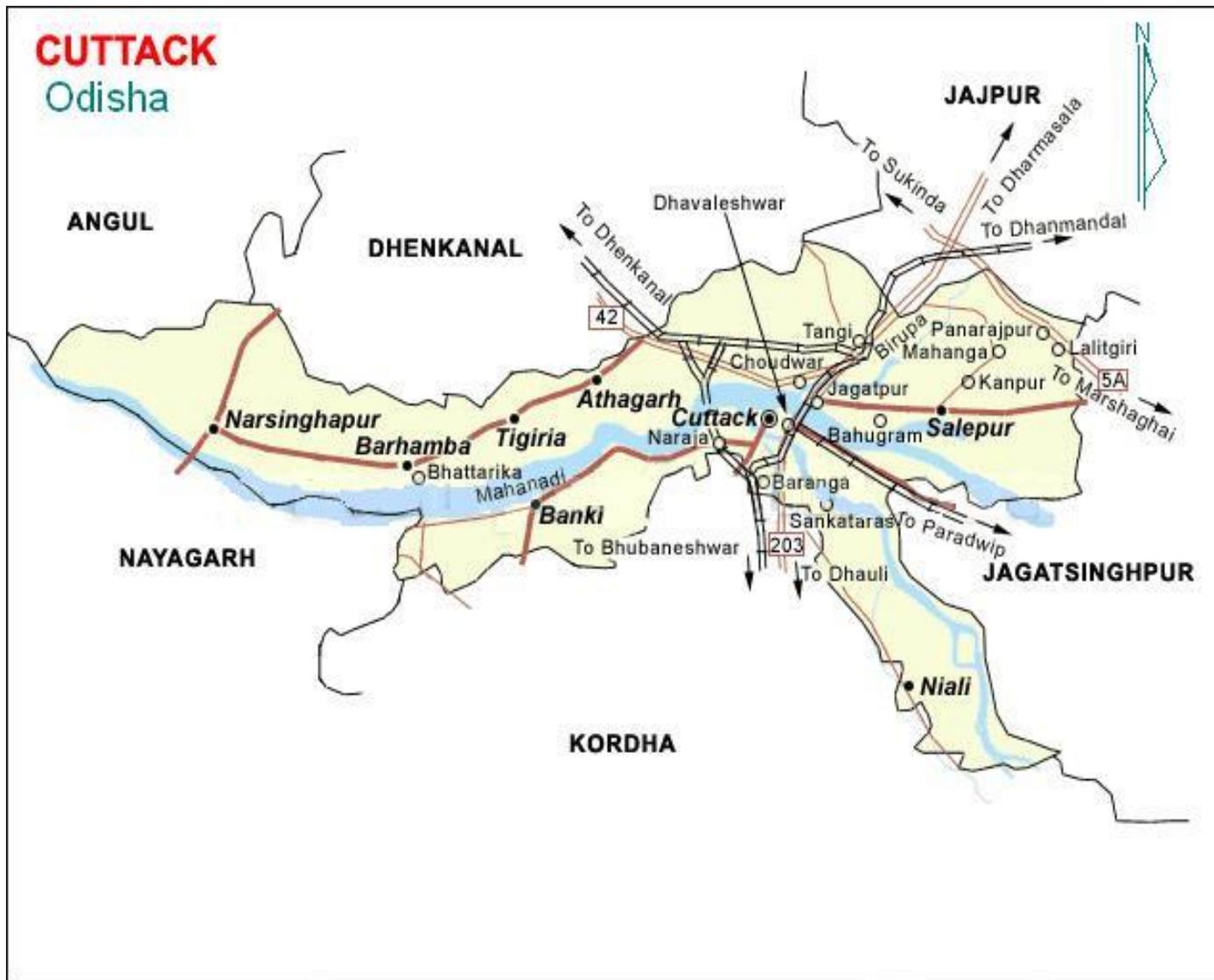
Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU) , Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT,) etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble did for their contribution to Odisha as well as for our Country.

INDEX MAP







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

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully


21/11/24
Dy. Director of Horticulture
Cuttack

20 PHYSIOGRAPHY OF THE DISTRICT.

Western and north western part of this district is occupied by Archaean hilly terrain intervened by narrow valleys, Maximum height is 698m. From west to east the district is gently sloping towards east, occupied by plainland and drained by Mahanadi River, its tributaries and distributaries. At the northern boundary a narrow fringe is occupied by upland comprising khondalite group of rocks. In cuttack district Mahanadi River, its tributaries and distributaries constitute the drainage system. Cuttack town is located at the vertex of Mahanadi delta, from where distributaries like birupa, Chitrotpala , Nuna , Sarua and kuakhai , etc branch away.

Cuttack district comprises geomorphic Surface viz. i) denudational surface (Archaean & Gondwana terrain, ii) bolgarh surface iii) Kaimundi surface iv) Brahmani surface v) Bankigarh surface & finally vi) present day surface.

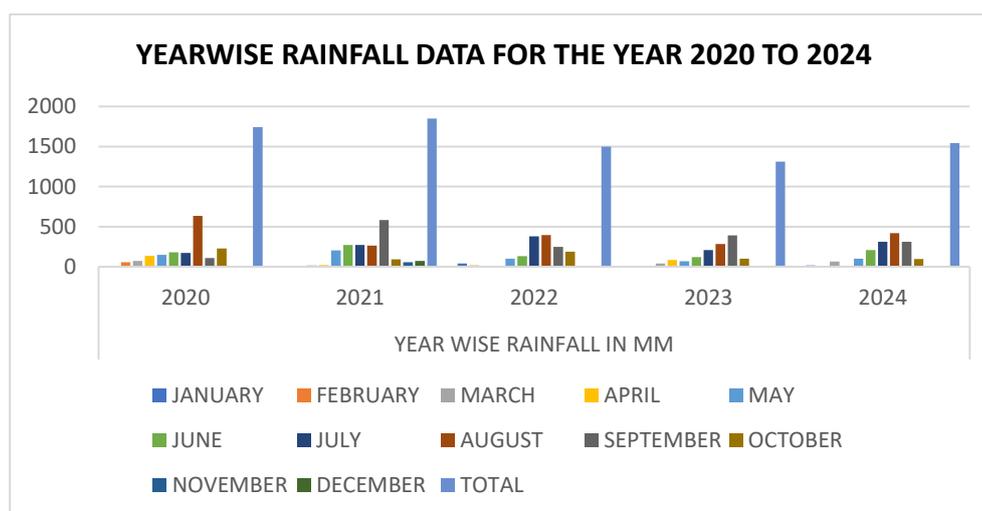
Denudational surface (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athagarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present day depositional surface are extensively cultivated.

21 RAINFALL: MONTH-WISE.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7° -8° C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



22 GEOLOGY AND MINERAL WEALTH.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone.

conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

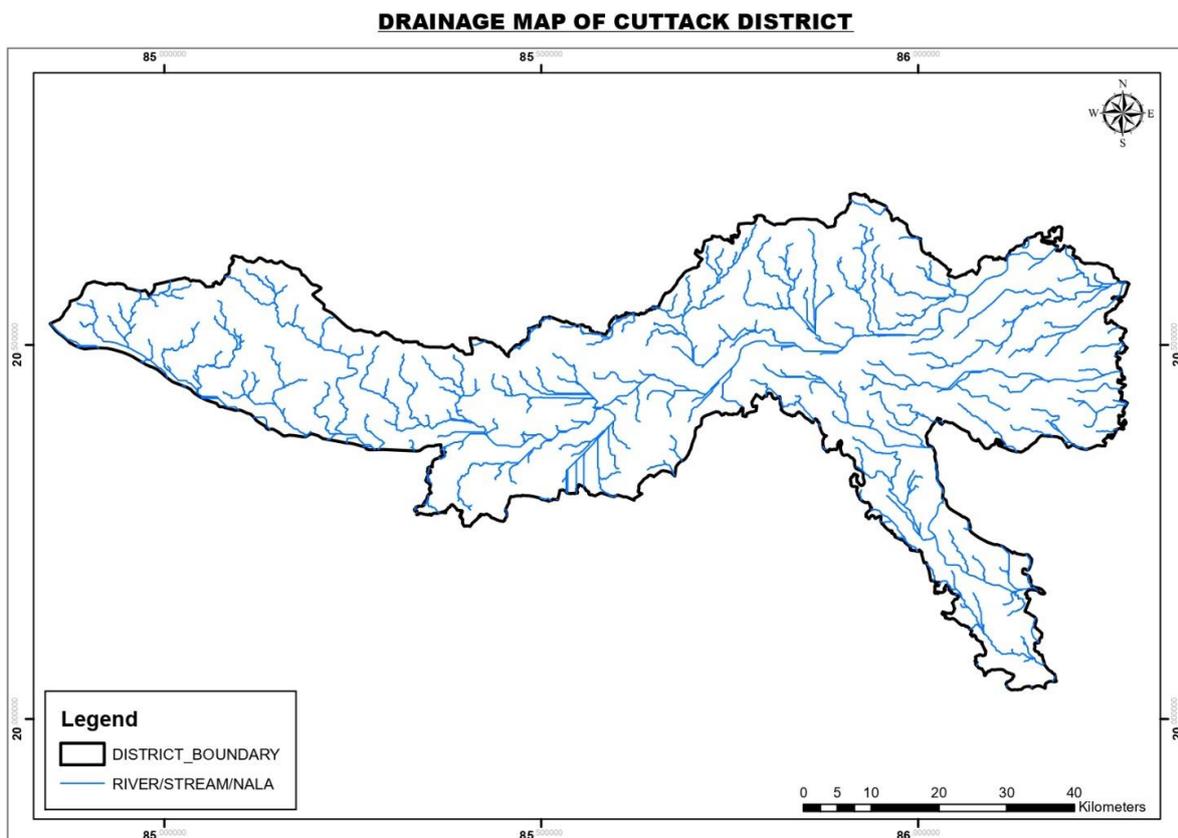
Stratigraphy:

Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies)
		Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene gneulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

- a. Detail of river/stream/other sand source- Sand mining in the district is confined to three rivers namely Kathajodi&Mahanadi.
- b. Availability of sand or gravel or aggregate resources- sand- 9579704 cum, Gravel- Nil, Aggregate- Nil
- c. Detail of existing mining leases of sand and aggregates- For sand pl refer Annexure I. Aggregate- Nil

d. Drainage system with description of main river:

The river Mahanadi and its tributaries control the drainage of the district. Birupa is the second longest river in Odisha and flows through the district in a general eastwest direction. It divides the district into two halves. Initially, the river flows in a northsouth direction, then follows a northwest-southeast course and subsequently changes to northeast-southwest direction. Finally, it changes to a northwest-southeast course near the eastern border of the district. Most part of the district falls within its basin. The Brahmani is perennial in nature with a nominal flow during the summer season. Its important tributaries are Ramiala Nadi, Nigre Nadi, Purajhor Nadi etc. The smaller streams show dendritic pattern while the major river and its tributaries show sub-parallel drainage, indicating structural control.



**Salient Features of Important Rivers & Streams:
Mineral Potential:**

Sl. No.	Name of the River or Stream	Total length in the District(in Km)	Place of origin	Altitude at Origin in metre (m)	Portion of the 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 meters)	Area recommended for mineral concession(in Sq. M)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
A1	MAHANADI RIVER	155	CHHATISGARH	475	BALARAMPUR SAND QUARRY			48560	43740
A2	MAHANADI RIVER	155	CHHATISGARH	475	Daspur Sand Quarry			49970	44982
A3	MAHANADI RIVER	155	CHHATISGARH	475	Daspur Sand Quarry			49970	44982
A4	MAHANADI RIVER	155	CHHATISGARH	475	Daspur Sand Quarry			49970	44982
A5	MAHANADI RIVER	155	CHHATISGARH	475	Brajabiharipur Sand Quarry			49970	38984.4
B1	MAHANADI RIVER	155	CHHATISGARH	475	NARANAPUR MAHANADI SAND			54030	21341
B2	MAHANADI RIVER	155	CHHATISGARH	475	KANTAPADA MAHANADI SAND			64750	31820
B3	MAHANADI RIVER	155	CHHATISGARH	475	MANGARAJAPUR MAHANADI SAND			56600	24679
B4	MAHANADI RIVER	155	CHHATISGARH	475	BANGARISINGHA MAHANDI SAND			68800	37551
B5	MAHANADI RIVER	155	CHHATISGARH	475	TUNAPUR MAHANADI SAND			52610	59080
B6	MAHANADI RIVER	155	CHHATISGARH	475	Kanjiapala Sand Bed			49970	29988

B7	MAHANADI RIVER	155	CHHATISGARH	475	Ogalpur Sand Bed			49970	29988
C1	MAHANADI RIVER	155	CHHATISGARH	475	KOTADWAR SAND GHAT			2,02,350	365400
C2	MAHANADI RIVER	155	CHHATISGARH	475	BAIDESWAR SAND SOURCE			13550	57000
C3	MAHANADI RIVER	155	CHHATISGARH	475	OSTIA SAND SOURCE			49980	130290
C4	MAHANADI RIVER	155	CHHATISGARH	475	ANUARY SAND SOURCE			50590	50130
C5	MAHANADI RIVER	155	CHHATISGARH	475	TENTULIA SAND SOURCE			50590	38360
C6	MAHANADI RIVER	155	CHHATISGARH	475	Patugadadharpur Sand Bed			49970	44982
D1	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND MUNDAMUHAN			60700	116908
D2	SIDUA RIVER	15		39	SIDUA RIVER SAND DEOKALI			20230	47970
D3	SIDUA RIVER	15		39	SIDUA RIVER SAND KORKORA			49370	132600
D4	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI R/S BIDYADHARPUR			49370	110000
D5	KUAKHAI RIVER	11		49	KUAKHAI RIVER SAND NARANPUR			49580	56000
D6	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI R/S BENTKARPADA			101170	274920
D7	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND ARILO			49370	64449

D8	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	Belagachhia Sand Bed			49970	23990.4
D9	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	Bidyadharpur Sand Bed			49970	29988
D10	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	Korkora Sand Bed			49970	38984.4
E1	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND SUBERNAPUR			82,960	75003
E2	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND TANGARHUDA			141640	329390
E3	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND UNIT 37 BADAMBADI			50590	225002
E4	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND UNIT 39 SILPAPURI			50600	224996
E5	KUAKHAI RIVER	11		49	KUAKHAI RIVER SAND UTTAMAPUR			56700	100003
E6	KUAKHAI RIVER	11		49	KUAKHAI RIVER SAND PRATAPNAGARI			52610	41238
E7	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND BRAHMAPUR			52610	34998
E8	SIDUA RIVER	15		39	SIDHUA RIVER SAND KADAMPADA			50600	131802
E9	SIDUA RIVER	15		39	SIDHUA RIVER SAND JARIPADA			101170	168018

E10	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	Bagulapada			52610	70002
E11	KUAKHAI RIVER	11		49	Arakhakuda			50590	39620
E12	KATHAJODI RIVER	17	NARAJMARTHAPUR		Rajahansa			54630	20448
E13	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND SARTOL			41680	53744
E14	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	KATHAJODI RIVER SAND KALAPADA			42490	55320
E15	SIDUA RIVER	17		41	SIDUA RIVER SAND KULASARICHUAN			42490	42650
E16	SIDUA RIVER	17		41	Khadichuandeuli			49970	29988
E17	MAHANADI RIVER	155	CHHATISGARH	475	Gatiroutpatna			49970	29988
E18	SIDUA RIVER	17		41	Baradhuleswar			49970	29988
E19	KATHAJODI RIVER	17	NARAJMARTHAPUR	41	Subhadrapur			49970	89964
E20	MAHANADI RIVER	155	CHHATISGARH	475	Kanheipur			49970	29988
F1	MAHANADI RIVER	155	CHHATISGARH	475	JATAMUNDIA SAND GHAT			49980	77260
F2	MAHANADI RIVER	155	CHHATISGARH	475	KALIKA PRASAD SAND GHAT			49980	86136
F3	MAHANADI RIVER	155	CHHATISGARH	475	Mahanadi Sand Bed			49970	29988
G1	KANDAL RIVER	21	BADAKHARMANGA	31	ARISOL ADASPUR KANDAL RIVER SAND			49800	41931

G2	DEVI RIVER	22	TITHAPADA	32	TITHAPADA-I DEVI RIVER SAND			49300	127650
G3	DEVI RIVER	22	TITHAPADA	32	BALADA-NAINLO DEVI RIVER SAND			48560	126450
G4	DEVI RIVER	22	TITHAPADA	32	SRISUNDARPUR DEVI RIVER			49300	123855
G5	DEVI RIVER	22	TITHAPADA	32	BADAKHARMANGA -EAST DEVI RIVER SAND			49970	82200
G6	DEVI RIVER	22	TITHAPADA	32	BADAKHARMANGA -WEST DEVI RIVER SAND			49800	160411
G7	DEVI RIVER	22	TITHAPADA	32	Rahamba Sand Bed			49970	29988
G8	KANDALA RIVER	21	BADAKHARMANGA	31	Manikunda Sand Bed			49970	29988
H1	MAHANADI RIVER	155	CHHATISGARH	475	HULIPUR			50000	28571
H2	MAHANADI RIVER	155	CHHATISGARH	475	UDAYPUR			50000	36230
H3	CHITTROTPALA RIVER	14.3	GUALI	34	DULUPUR			50000	42787
H4	MAHANADI RIVER	155	CHHATISGARH	475	KHENTALA MAHANADI SAND QUARRY			50000	19863
H5	MAHANADI RIVER	155	CHHATISGARH	475	BARADA MAHANADI SAND QUARRY			50000	23874
H6	CHITTROTPALA RIVER	14.3	GUALI	34	MURKUNDI CHITTROTPALA SAND QUARRY			50000	22460

H7	CHITTROTPALA RIVER	14.3	GUALI	35	MOHAMMADPUR CHITTROTPALA SAND QUARRY			50000	22717
H8	MAHANADI RIVER	155	CHHATISGARH	475	BABUJANGA MAHANADI SAND QUARRY			50000	27141
H9	MAHANADI RIVER	155	CHHATISGARH	476	DONDO MAHANADI SAND QUARRY			50000	23789
H10	MAHANADI RIVER	155	CHHATISGARH	477	KURULI MAHANADI SAND QUARRY			50000	32256
H11	MAHANADI RIVER	155	CHHATISGARH	478	PURUNAHAT MAHANADI SAND QUARRY			50000	23167
H12	MAHANADI RIVER	155	CHHATISGARH	479	Bankala			49970	23990.4
H13	MAHANADI RIVER	155	CHHATISGARH	480	Guali			49970	29988
H14	MAHANADI RIVER	155	CHHATISGARH	481	Aitipur			49970	29988
H15	CHITROPALA RIVER	14	GUALI	34	Uttarkul			49970	29988
I1	MAHANADI RIVER	155	CHHATISGARH	475	TAMARA MAHANADI SAND BED			49370	40808
I2	MAHANADI RIVER	155	CHHATISGARH	475	MANPUR (SAND)			49370	
I3	MAHANADI RIVER	155	CHHATISGARH	475	BRAHMAPURA MAHANADI SAND			49980	82104

I4	MAHANADI RIVER	155	CHHATISGARH	475	DHANIPUR (SAND)			49980	58893
I5	MAHANADI RIVER	155	CHHATISGARH	475	Muraripur Sand Bed			49970	59976
I6	MAHANADI RIVER	155	CHHATISGARH	475	Padmalapatna Sand Bed			49970	44982
J1	DEVI RIVER	22	TITHAPADA	32	NATI DEVI RIVER SAND SAIRAT SOURCE			48560	41013
J2	KANDAL RIVER	21	BADAKHARMANGA	31	POLSARA KANDAL RIVER SAND SAIRAT SOURCE			48560	60000
J3	DEVI RIVER	22	TITHAPADA	32	KULASHREE DEVI RIVER SAND SAIRAT SOURCE			46140	60300
J4	KANDAL RIVER	21	BADAKHARMANGA	31	PAHANGA KANDAL RIVER SAND SAIRAT SOURCE			48560	65258
J5	DEVI RIVER	22	TITHAPADA	32	SITHALO DEVI RIVER SAND SAIRAT			45330	20000
J6	DEVI RIVER	22	TITHAPADA	33	BACHHASAILO DEVI RIVER SAND SAIRAT			48970	52131
J7	DEVI RIVER	22	TITHAPADA	34	Sasanpada Sand Bed			49970	29988
K1	LUNA RIVER	10	JAMUNAPUR	28	LUNA RIVER SAND BALIAPADA			50000	42880
K2	CHITTROTPALA RIVER	14.3	GUALI	34	CHITROTPLA RIVER SAND BARHAMPUR			50000	38755

K3	LUNA RIVER	10	JAMUNAPUR	28	LUNA RIVER SAND DEMANDO			50000	28810
K4	CHITTROTPALA RIVER	14.3	GUALI	34	CHITROTPLA RIVER SAND KALAMISHREE JAYANTAPUR			50000	9755
K5	LUNA RIVER	10	JAMUNAPUR	28	LUNA RIVER SAND KULAGANISALO			50000	29848
K6	LUNA RIVER	10	JAMUNAPUR	29	LUNA RIVER SAND KULASUKARPADA LOKANATHPUR			50000	68104
K7	CHITTROTPALA RIVER	14.3	GUALI	34	CHITROTPLA RIVER SAND PALADA			50000	25425
K8	CHITTROTPALA RIVER	15.3	GUALI	35	CHITROTPLA RIVER SAND NAGASPUR			50000	12054
K9	LUNA RIVER	10	JAMUNAPUR	28	LUNA RIVER SAND SAHADEBPUR			50000	7940.25
K10	CHITTROTPALA RIVER	14.3	GUALI	34	CHITROTPLA RIVER SAND SANTAPUR			50000	59982
K11	CHITTROTPALA RIVER	15.3	GUALI	35	Janardanpur			49970	29988
K12	CHITTROTPALA RIVER	16.3	GUALI	36	Jaladia			49970	23990.4
K13	CHITTROTPALA RIVER	17.3	GUALI	37	Sanaroutpati			49970	23990.4
K14	LUNA RIVER	11	JAMUNAPUR	29	Sadhaknagar			49970	23990.4
L1	BIRUPA RIVER	27	JAGATPUR	42	BIRUPA RIVER SAND, NARADA			43340	27568

L2	BIRUPA RIVER	27	JAGATPUR	43	BIRUPA RIVER SAND, BADABHIMRAJPUR			41380	34883
L3	MAHANADI RIVER	155	CHHATISGARH	475	MAHANADI RIVER SAND, GOPINATHAPUR			44520	15840
L4	BIRUPA RIVER	27	JAGATPUR	42	BIRUPA RIVER SAND BHAIRPUR			50590	31224
L5	BIRUPA RIVER	27	JAGATPUR	43	Chahapada			49970	20991.6
L6	MAHANADI RIVER	155	CHHATISGARH	475	Barabodia-I			49970	44982
L7	MAHANADI RIVER	155	CHHATISGARH	475	Barabodia-II			49970	44982
L8	BIRUPA RIVER	27	JAGATPUR	42	Ganipur			49970	20991.6
L9	MAHANADI RIVER	155	CHHATISGARH	475	Atoda			49970	38984.4
L10	MAHANADI RIVER	155	CHHATISGARH	475	Atoda			49970	38984.4
L11	BIRUPA RIVER	27	JAGATPUR	42	Sanabhimrajpur			49970	29988
M1	MAHANADI RIVER	155	CHHATISGARH	475	MAHANADI RIVER SAND NUAPATNA			49780	78750
M2	BIRUPA RIVER	27	JAGATPUR	42	BIRUPA RIVER SAND BHATIMUNDA			49940	39780
N1	MAHANADI RIVER	155	CHHATISGARH	475	HATAMAL SAND QUARRY			60700	75642

Boulder(MT)	Bajari(MT)	Sand(MT)	Total Mineable Mineral Potential(MT)	Annual Deposition
NA	NA	14369556	10241113.58	

Sl. No.	Name of the River or Stream	Portion of the 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 meters)	Area recommended for mineral concession(in Sq. M)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
A1	MAHANADI RIVER	BALARAMPUR SAND QUARRY			48560	43740
A2	MAHANADI RIVER	Daspur Sand Quarry			49970	44982
A3	MAHANADI RIVER	Daspur Sand Quarry			49970	44982
A4	MAHANADI RIVER	Daspur Sand Quarry			49970	44982
A5	MAHANADI RIVER	Brajabiharipur Sand Quarry			49970	38984.4
B1	MAHANADI RIVER	NARANAPUR MAHANADI SAND			54030	21341

B2	MAHANADI RIVER	KANTAPADA MAHANADI SAND			64750	31820
B3	MAHANADI RIVER	MANGARAJAPUR MAHANADI SAND			56600	24679
B4	MAHANADI RIVER	BANGARISINGHA MAHANDI SAND			68800	37551
B5	MAHANADI RIVER	TUNAPUR MAHANADI SAND			52610	59080
B6	MAHANADI RIVER	Kanjiapala Sand Bed			49970	29988
B7	MAHANADI RIVER	Ogalpur Sand Bed			49970	29988
C1	MAHANADI RIVER	KOTADWAR SAND GHAT			2,02,350	365400
C2	MAHANADI RIVER	BAIDESWAR SAND SOURCE			13550	57000
C3	MAHANADI RIVER	OSTIA SAND SOURCE			49980	130290

C4	MAHANADI RIVER	ANUARY SAND SOURCE			50590	50130
C5	MAHANADI RIVER	TENTULIA SAND SOURCE			50590	38360
C6	MAHANADI RIVER	Patugadadharpur Sand Bed			49970	44982
D1	KATHAJODI RIVER	KATHAJODI RIVER SAND MUNDAMUHAN			60700	116908
D2	SIDUA RIVER	SIDUA RIVER SAND DEOKALI			20230	47970
D3	SIDUA RIVER	SIDUA RIVER SAND KORKORA			49370	132600
D4	KATHAJODI RIVER	KATHAJODI R/S BIDYADHARPUR			49370	110000
D5	KUAKHAI RIVER	KUAKHAI RIVER SAND NARANPUR			49580	56000
D6	KATHAJODI RIVER	KATHAJODI R/S BENTKARPADA			101170	274920
D7	KATHAJODI RIVER	KATHAJODI RIVER SAND ARILO			49370	64449
D8	KATHAJODI RIVER	Belagachhia Sand Bed			49970	23990.4
D9	KATHAJODI RIVER	Bidyadharpur Sand Bed			49970	29988

D10	KATHAJODI RIVER	Korkora Sand Bed			49970	38984.4
E1	KATHAJODI RIVER	KATHAJODI RIVER SAND SUBERNAPUR			82,960	75003
E2	KATHAJODI RIVER	KATHAJODI RIVER SAND TANGARHUDA			141640	329390
E3	KATHAJODI RIVER	KATHAJODI RIVER SAND UNIT 37 BADAMBADI			50590	225002
E4	KATHAJODI RIVER	KATHAJODI RIVER SAND UNIT 39 SILPAPURI			50600	224996
E5	KUAKHAI RIVER	KUAKHAI RIVER SAND UTTAMAPUR			56700	100003
E6	KUAKHAI RIVER	KUAKHAI RIVER SAND PRATAPNAGARI			52610	41238
E7	KATHAJODI RIVER	KATHAJODI RIVER SAND BRAHMAPUR			52610	34998
E8	SIDUA RIVER	SIDHUA RIVER SAND KADAMPADA			50600	131802
E9	SIDUA RIVER	SIDHUA RIVER SAND JARIPADA			101170	168018
E10	KATHAJODI RIVER	Bagulapada			52610	70002
E11	KUAKHAI RIVER	Arakhakuda			50590	39620
E12	KATHAJODI RIVER	Rajahansa			54630	20448

E13	KATHAJODI RIVER	KATHAJODI RIVER SAND SARTOL			41680	53744
E14	KATHAJODI RIVER	KATHAJODI RIVER SAND KALAPADA			42490	55320
E15	SIDUA RIVER	SIDUA RIVER SAND KULASARICHUAN			42490	42650
E16	SIDUA RIVER	Khadichuandeuli			49970	29988
E17	MAHANADI RIVER	Gatiroutpatna			49970	29988
E18	SIDUA RIVER	Baradhuleswar			49970	29988
E19	KATHAJODI RIVER	Subhadrapur			49970	89964
E20	MAHANADI RIVER	Kanheipur			49970	29988
F1	MAHANADI RIVER	JATAMUNDIA SAND GHAT			49980	77260
F2	MAHANADI RIVER	KALIKA PRASAD SAND GHAT			49980	86136
F3	MAHANADI RIVER	Mahanadi Sand Bed			49970	29988

G1	KANDAL RIVER	ARISOL ADASPUR KANDAL RIVER SAND			49800	41931
G2	DEVI RIVER	TITHAPADA-I DEVI RIVER SAND			49300	127650
G3	DEVI RIVER	BALADA-NAINLO DEVI RIVER SAND			48560	126450
G4	DEVI RIVER	SRISUNDARPUR DEVI RIVER			49300	123855
G5	DEVI RIVER	BADAKHARMANGA - EAST DEVI RIVER SAND			49970	82200
G6	DEVI RIVER	BADAKHARMANGA - WEST DEVI RIVER SAND			49800	160411
G7	DEVI RIVER	Rahamba Sand Bed			49970	29988
G8	KANDALA RIVER	Manikunda Sand Bed			49970	29988
H1	MAHANADI RIVER	HULIPUR			50000	28571
H2	MAHANADI RIVER	UDAYPUR			50000	36230
H3	CHITTROTPALA RIVER	DULUPUR			50000	42787

H4	MAHANADI RIVER	KHENTALA MAHANADI SAND QUARRY			50000	19863
H5	MAHANADI RIVER	BARADA MAHANADI SAND QUARRY			50000	23874
H6	CHITTROTPALA RIVER	MURKUNDI CHITTROTPALA SAND QUARRY			50000	22460
H7	CHITTROTPALA RIVER	MOHAMMADPUR CHITTROTPALA SAND QUARRY			50000	22717
H8	MAHANADI RIVER	BABUJANGA MAHANADI SAND QUARRY			50000	27141
H9	MAHANADI RIVER	DONDO MAHANADI SAND QUARRY			50000	23789
H10	MAHANADI RIVER	KURULI MAHANADI SAND QUARRY			50000	32256
H11	MAHANADI RIVER	PURUNAHAT MAHANADI SAND QUARRY			50000	23167
H12	MAHANADI RIVER	Bankala			49970	23990.4

H13	MAHANADI RIVER	Guali			49970	29988
H14	MAHANADI RIVER	Aitipur			49970	29988
H15	CHITROPALA RIVER	Uttarkul			49970	29988
I1	MAHANADI RIVER	TAMARA MAHANADI SAND BED			49370	40808
I2	MAHANADI RIVER	MANPUR (SAND)			49370	
I3	MAHANADI RIVER	BRAHMAPURA MAHANADI SAND			49980	82104
I4	MAHANADI RIVER	DHANIPUR (SAND)			49980	58893
I5	MAHANADI RIVER	Muraripur Sand Bed			49970	59976
I6	MAHANADI RIVER	Padmalapatna Sand Bed			49970	44982

J1	DEVI RIVER	NATI DEVI RIVER SAND SAIRAT SOURCE			48560	41013
J2	KANDAL RIVER	POLSARA KANDAL RIVER SAND SAIRAT SOURCE			48560	60000
J3	DEVI RIVER	KULASHREE DEVI RIVER SAND SAIRAT SOURCE			46140	60300
J4	KANDAL RIVER	PAHANGA KANDAL RIVER SAND SAIRAT SOURCE			48560	65258
J5	DEVI RIVER	SITHALO DEVI RIVER SAND SAIRAT			45330	20000
J6	DEVI RIVER	BACHHASAILO DEVI RIVER SAND SAIRAT			48970	52131
J7	DEVI RIVER	Sasanpada Sand Bed			49970	29988
K1	LUNA RIVER	LUNA RIVER SAND BALIAPADA			50000	42880
K2	CHITTROTPALA RIVER	CHITROTPLA RIVER SAND BARHAMPUR			50000	38755
K3	LUNA RIVER	LUNA RIVER SAND DEMANDO			50000	28810
K4	CHITTROTPALA RIVER	CHITROTPLA RIVER SAND KALAMISHREE JAYANTAPUR			50000	9755
K5	LUNA RIVER	LUNA RIVER SAND KULAGANISALO			50000	29848

K6	LUNA RIVER	LUNA RIVER SAND KULASUKARPADA LOKANATHPUR			50000	68104
K7	CHITTROTPALA RIVER	CHITROTPLA RIVER SAND PALADA			50000	25425
K8	CHITTROTPALA RIVER	CHITROTPLA RIVER SAND NAGASPUR			50000	12054
K9	LUNA RIVER	LUNA RIVER SAND SAHADEBPUR			50000	7940.25
K10	CHITTROTPALA RIVER	CHITROTPLA RIVER SAND SANTAPUR			50000	59982
K11	CHITTROTPALA RIVER	Janardanpur			49970	29988
K12	CHITTROTPALA RIVER	Jaladia			49970	23990.4
K13	CHITTROTPALA RIVER	Sanaroutpati			49970	23990.4
K14	LUNA RIVER	Sadhaknagar			49970	23990.4
L1	BIRUPA RIVER	BIRUPA RIVER SAND, NARADA			43340	27568
L2	BIRUPA RIVER	BIRUPA RIVER SAND, BADABHIMRAJPUR			41380	34883

L3	MAHANADI RIVER	MAHANADI RIVER SAND, GOPINATHAPUR			44520	15840
L4	BIRUPA RIVER	BIRUPA RIVER SAND BHAIRPUR			50590	31224
L5	BIRUPA RIVER	Chahapada			49970	20991.6
L6	MAHANADI RIVER	Barabodia-I			49970	44982
L7	MAHANADI RIVER	Barabodia-II			49970	44982
L8	BIRUPA RIVER	Ganipur			49970	20991.6
L9	MAHANADI RIVER	Atoda			49970	38984.4
L10	MAHANADI RIVER	Atoda			49970	38984.4
L11	BIRUPA RIVER	Sanabhimraipur			49970	29988
M1	MAHANADI RIVER	MAHANADI RIVER SAND NUAPATNA			49780	78750
M2	BIRUPA RIVER	BIRUPA RIVER SAND BHATIMUNDA			49940	39780
N1	MAHANADI RIVER	HATAMAL SAND QUARRY			60700	75642

Details of Sand/M-Sand Sources

a) Rivers:

River Name/M-Sand plant	Total Stretch of River (in KM)	Type of River (Perennial or Non-Perennial)
MAHANADI	155	Perennial
KATHAJODI	17	Perennial
KUAKHAI	11	Perennial
SIDUA	15	Perennial

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

Name of Reservoir/Dams	Maintain/Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size(Ha)
Damadamani Dam	Govt.	Kochilanuagaon	CUTTACK	Tangi choudwar	Kochilanuagaon	25.9
Bada Jaria Dam	Govt.	Gayala Banka	CUTTACK	Banki Dampara	Gayala Banka	4.37

c) Patta Lands/Khatedari Land:

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

d) M-Sand Plants:

Plant Name	Owner	District	Tehsil	Village	Geo- location	Quantity Tonnes/Annum

List of Potential Mining Leases (existing & proposed)**Rivers:****Patta Lands/Khatedari Land: (existing & proposed)**

Owner	Sy. No	Area	District	Tehsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing /Proposed

De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & proposed)

Name of Reservoir/Dams	Maintain /Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size (Ha)	Quantity MT/Year	Existing /Proposed

M-Sand Plants:(existing & proposed)

Plant Name	Owner	District	Tehsil	Village	Geo- location	Quantity Tonnes/Annum	Existing/Proposed

Cluster & Contiguous Cluster details

Clusters:

SI No.	Name of Tahasil	Cluster Name	Details of the area & Location	Number of Mining leases in Cluster
1	BARANGA	KATHAJODI R/S BENTKARPADA	Mouza- Bentkarpada, Khata-57, Plot-70(P)-25.00 Ac, Kissam-Nadi, Lat-20°27'57.5"N to 20°28'4.9"N Long-85°49'31.2"E to 85°49'48.6"E	2
	CUTTACK SADAR	KATHAJODI RIVER SAND TANGARHUDA	Mouza-TANGARHUDA, Khata-3, Plot-24-35.000Ac ,Kissam-Nadi, Lat-20°27'56.80"N to 20°28'8.80"N Long-85°49'57.40"E to 85°50'17.50"E	

Contiguous Clusters:

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

Annexure-IV

Transportation Routes for individual leases and leases in Cluster

Lease No.	Transportation Route No.	Number of tippers/day of lease	Number of tippers/day of all the lease on route	Length of route in KM	Type of road(Black Topped/unpaved)	Recommendation for road (Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location
A1	Mouza- Balarampur, Khata-197, Plot- 399(P)-12.00Ac, ,Kissam-Nadi, Lat-20°27'35.68"N to 20°27'44.51"N Long-85°44'21.17"E to 85°44'32.01"E	NH16		7.7	Black Topped	Black Topped	Govt	Mouza-Balarampur
A2	Mouza-Daspur, Khata no-165, Plot no-550, lat-20.443, Long-85.702	NH16		9.5	Black Topped	Black Topped	Govt	Mouza-Daspur
A3	Mouza-Daspur, Khata no-165, Plot no-371, lat-20.444, Long-85.714	NH16		9.1	Black Topped	Black Topped	Govt	Mouza-Daspur
A4	Mouza-Daspur, Khata no-165, Plot no-538, lat-20.447, Long-85.722	NH16		7.9	Black Topped	Black Topped	Govt	Mouza-Daspur

A5	Mouza- Brajabiharipur, Khata no-21, Plot no-142, lat-20.506, Long-85.814	NH16			8.2	Black Topped	Black Topped	Govt	Mouza- Brajabiharipur
B1	Mouza- Naranpur, Khata-156, Plot- 1053-13.35Ac, Kissam-Nadi, Lat-20°23'21.6"N to 20°23'26.9"N Long-85°25'47.0"E to 85°26'02.8"E	NH655			8.8	Black Topped	Black Topped	Govt	Mouza- Naranpur
B2	Mouza- Kantapada, Khata-439, Plot- 3278-16.00Ac, Kissam-Nadi, Lat-20°22'25.0"N to 20°22'35.1"N Long-85°20'18.9"E to 85°20'33.6"E	NH655			5.2	Black Topped	Black Topped	Govt	Mouza- Kantapada
B3	Mouza- Mangarajpur, Khata-641, Plot- 3720/3749-14.00Ac, Kissam-Nadi, Lat-20°22'26.9"N to 20°22'35.5"N Long-85°18'39.6"E to 85°18'47.7"E	NH655			5.6	Black Topped	Black Topped	Govt	Mouza- Mangarajpur
B4	Mouza- Bangarsingha, Khata-903, Plot- 7388/7570-17.00Ac, Kissam-Nadi, Lat-20°23'20.7"N to	NH16			4	Black Topped	Black Topped	Govt	Mouza- Bangarsingha

	20°23'27.0" N Long- 85°27'59.9"E to 85°28'17.5"E								
B5	Mouza- Tunapur, Khata- 504, Plot- 4007- 7.70Ac,Plot- 4007/4051-5.30Ac ,Kissam-Nadi, Lat- 20°22'58.1"N to 20°23'04.9" N Long- 85°23'02.6"E to 85°23'15.7"E	NH16			5.5	Black Topped	Black Topped	Govt	Mouza- Tunapur
B6	Mouza- Kanjapala,Khata no- 279,Plot no- 1639,Kissam-Nadi,Lat- 20.366,Long-85.305	NH16			4.5	Black Topped	Black Topped	Govt	Mouza-Kanjapala
B7	Mouza-Ogalpur,Khata no-200,Plot no- 1137/1898,Lat- 20°21'57.90"N to 20°22'04.80"N Long- 85°16'36.30"E to 85°16'47.60"E	NH16			6.5	Black Topped	Black Topped	Govt	Mouza-Ogalpur
C1	Mouza- Patugadadharpur, Khata-1, Plot- 25- 50.00Ac, Kissam-Nadi, Lat-20°22'23.00"N to 20°22'43.50" N Long-	NH16			0.7	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur

	85°30'11.80"E to 85°30'35.50"E								
C2	Mouza- Patugadadharpur, Khata-1, Plot- 3/1- 33.00Ac, Kissam-Nadi, Lat-20°21'33.916"N to 20°21'42.779" N Long- 85°24'0.971"E to 85°24'22.040"E	NH16			1.6	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
C3	Mouza- Patugadadharpur, Khata-1, Plot- 38(P)- 12.35Ac, Kissam-Nadi, Lat-20°27'11.334"N to 20°27'20.267" N Long- 85°37'29.958"E to 85°37'40.414"E	NH16			7.5	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
C4	Mouza- Patugadadharpur, Khata-1, Plot-6- 12.50Ac, Kissam-Nadi, Lat-20°21'27.251"N to 20°21'32.790"N Long- 85°25'23.915"E to 85°25'41.134"E	NH16			1.1	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur

C5	Mouza- Patugadadharpur, Khata-1, Plot- 29/1-12.50Ac, Kissam-Nadi, Lat-20°24'38.90"N to 20°24'46.00"N Long- 85°32'05.40"E to 85°32'14.60"E	NH16			10.4	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
C6	Mouza- Patugadadharpur, Khata no-1, Plot no- 28(P), 29, Kissam-Nadi, Lat-20.407, Long- 85.546	NH16			1.7	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
D1	Mouza- Mundamuhan, Khata-27, Plot- 76/p-15.00Ac, Kissam-Nadi, Lat-20°26'58.4"N to 20°27'10.0"N Long- 85°50'13.3"E to 85°50'26.6"E	NH16			0.79	Black Topped	Black Topped	Govt	Mouza- Mundamuhan
D2	Mouza- Deokali, Khata-100, Plot-293(P)-5.00Ac, Kissam-Nadi, Lat-20°22'4.80"N to 20°22'8.70"N Long- 85°57'11.10"E to 85°57'16.80"E	NH16			9.8	Black Topped	Black Topped	Govt	Mouza- Deokali

D3	Mouza- Korkora, Khata-314, Plot-385(P)-12.20Ac, Kissam-Nadi, Lat-20°21'38.7"N to 20°21'46.0"N Long-85°59'19.2"E to 85°59'28.3"E	NH16			14.5	Black Topped	Black Topped	Govt	Mouza- Korkora
D4	Mouza- Bidyadharpur, Khata-331, Plot-102(P)-12.20Ac, Kissam-Nadi, Lat-20°28'28.7"N to 20°28'34.3"N Long-85°48'42.0"E to 85°48'54.5"E	NH16			8.5	Black Topped	Black Topped	Govt	Mouza- Bidyadharpur
D5	Mouza- Naranpur, Khata-196, Plot-1(P)-12.250Ac, Kissam-Nadi, Lat- 20°26'30.70"N to 20°26'39.90"N Long-85°50'58.5"E to 85°51'06.2"E	NH16			1	Black Topped	Black Topped	Govt	Mouza- Naranpur
D6	Mouza- Bentkarpada, Khata-57, Plot-70(P)-25.00 Ac, Kissam-Nadi, Lat- 20°27'57.5"N to 20°28'4.9"N Long-85°49'31.2"E to 85°49'48.6"E	NH16			6.4	Black Topped	Black Topped	Govt	Mouza- Bentkarpada
D7	Mouza- Arilo, Khata-249, Plot-5(P)-12.20 Ac, Kissam-Nadi, Lat-20°28'43.45896"N to	NH16			5.2	Black Topped	Black Topped	Govt	Mouza- Arilo

	20°28'50.70540"N Long- 85°47'08.41272"E to 85°47'16.30536"E								
D8	Mouza- Belagachhia, Khata no- 757, Plot no-933, Kissam- Nadi, Lat-20.423, Long- 85.861	NH16			2	Black Topped	Black Topped	Govt	Mouza- Belagachhia
D9	Mouza- Bidyadharpur, Khata no- 331, Plot no-949, Kissam- Nadi, Lat-20.46, Long- 85.816	NH16			4	Black Topped	Black Topped	Govt	Mouza- Bidyadharpur
D10	Mouza-Korkora, Khata no-314, Plot no- 385, Kissam-Nadi, Lat- 20.365, Long-85.999	NH316A			6	Black Topped	Black Topped	Govt	Mouza-Korkora
E1	Mouza-SUBERNAPUR, Khata-1, Plot- 1- 20.500Ac, , Kissam-Nadi, Lat-20°27'48.34"N to 20°27'56.75"N Long - 85°50'37.29"E to 85°50'52.69"E	NH16			5	Black Topped	Black Topped	Govt	Mouza- SUBERNAPUR
E2	Mouza-TANGARHUDA, Khata-3, Plot-24- 35.000Ac, Kissam-Nadi, Lat-20°27'56.80"N to 20°28'8.80"N Long-	NH16			5.6	Black Topped	Black Topped	Govt	Mouza- TANGARHUDA

	85°49'57.40"E to85°50'17.50"E								
E3	Mouza- UNIT 37 BADAMBADI, Khata- 540, Plot-661- 7.000Ac,663- 5.500Ac,Kissam-Nadi, Lat-20°26'58.70"N to 20°27'8.51"N Long- 85°52'53.47"E to 85°53'2.56"E	NH16			2	Black Topped	Black Topped	Govt	Mouza-UNIT 37 BADAMBADI
E4	Mouza- UNIT 39 SILPAPURI, Khata-327, Plot-685-6.500Ac,876- 6.000Ac,Kissam-Nadi, Lat-20°26'3.10"N to 20°26'13.00"N Long- 85°53'55.50"E to 85°54'4.50"E	NH16			2.5	Black Topped	Black Topped	Govt	Mouza-UNIT 39 SILPAPURI
E5	Mouza- UTTAMAPUR, Khata-255, Plot-861- 14.000Ac, ,Kissam-Nadi, Lat- 20°25'34.04"N to20°25'42.35"N Long- 85°51'53.68"E to 85°52'3.42"E	NH16			2.2	Black Topped	Black Topped	Govt	Mouza- UTTAMAPUR

E6	Mouza- PRATAPNAGARI, Khata- 1030, Plot-1248- 13.000Ac, ,Kissam-Nadi, Lat-20°23'40.87"N to20°23'53.84"N Long- 85°52'9.60"E to 85°52'19.81"E	NH16			2	Black Topped	Black Topped	Govt	Mouza- PRATAPNAGARI
E7	Mouza- BRAHMAPUR, Khata-677, Plot-1- 13.000Ac, ,Kissam-Nadi, Lat-20°25'37.06"N to 20°25'46.04"N Long- 85°54'34.81"E to 85°54'45.46"E	NH16			4	Black Topped	Black Topped	Govt	Mouza- BRAHMAPUR
E8	Mouza- KADAMPADA, Khata-610, Plot-2638- 12.500Ac, ,Kissam-Nadi, Lat-20°23'41.80"N to20°23'49.00"N Long- 85°54'43.10"E to 85°54'54.90"E	NH16			7	Black Topped	Black Topped	Govt	Mouza- KADAMPADA
E9	Mouza- JARIPADA, Khata-428, Plot-395- 25.000Ac, ,Kissam-Nadi, Lat-20°24'16.90"N to 20°24'33.60"N Long- 85°54'8.30"E to85°54'15.60"E	NH16			4	Black Topped	Black Topped	Govt	Mouza-JARIPADA

E10	Mouza- BAGULAPADA, Khata-25, Plot-116- 13.000Ac,Kissam-Nadi, Lat- 20°26'14.38"N to 20°26'22.15"N Long- 85°56'21.52"E to 85°56'33.52"E	NH55			1.5	Black Topped	Black Topped	Govt	Mouza- BAGULAPADA
E11	Mouza- ARAKHAKUDA, Khata-172, Plot-1- 12.500Ac, ,Kissam-Nadi, Lat- 20°22'43.92"N to20°22'53.66"N Long- 85°52'31.92"E to 85°52'42.87"E	NH16			4	Black Topped	Black Topped	Govt	Mouza- ARAKHAKUDA
E12	Mouza- RAJAHANSA, Khata-960, Plot-857- 13.500Ac, ,Kissam-Nadi, Lat-20°25'20.98"N to 20°25'35.89"N Long- 85°57'14.63"E to 85°57'23.15"E	NH55			3	Black Topped	Black Topped	Govt	Mouza- RAJAHANSA
E13	Mouza-Sartol, Khata- 204, Plot-1052(P)-10.30 Ac, Kissam-Nadi, Lat- 20°25'59.23920"N to 20°26'06.48348"N Long- 85°55'17.39316"E to 85°55'25.46688"E	NH55			5.5	Black Topped	Black Topped	Govt	Mouza-Sartol
E14	Mouza-Kalapada, Khata-1009, Plot-02(P)- 10.50 Ac, Kissam-Nadi, Lat- 20°23'51.58644"N	NH55			5.6	Black Topped	Black Topped	Govt	Mouza-Kalapada

	to 20°24'00.83808"N Long- 85°58'09.58980"E to 85°58'19.78716"E								
E15	Mouza-Kularichuan, Khata-682, Plot-02(P)- 10.50 Ac, Kissam-Nadi, Lat- 20°23'51.58644"N to 20°24'00.83808"N Long- 85°58'09.58980"E to 85°58'19.78716"E	NH55			5.8	Black Topped	Black Topped	Govt	Mouza- Kularichuan
E16	Mouza- Khadichuandeuli, Khata no-391, Plot no- 1162, Kissam-Nadi, Lat- 20.379, Long-85.95	NH316			9.5	Black Topped	Black Topped	Govt	Mouza- Khadichuandeuli,
E17	Mouza- Gatiroutpatna, Khata no-695, Plot no- 188, Kissam-Nadi, Lat- 20.448, Long-85.956	NH55			3	Black Topped	Black Topped	Govt	Mouza- Gatiroutpatna
E18	Mouza- Baradhuleswar, Khata no-275, Plot no- 1444, Kissam-Nadi, Lat- 20.387, Long-85.934	NH16			8.5	Black Topped	Black Topped	Govt	Mouza- Baradhuleswar
E19	Mouza- Subhadrapur, Khata no- 454, Plot no-1,2, Kissam- Nadi, Lat-20.451, Long- 85.87	NH16			3.5	Black Topped	Black Topped	Govt	Mouza- Subhadrapur

E20	Mouza-Kanheipur,Khata no-252,Plot no-1,Kissam-Nadi,Lat-20.464,Long-85.922	NH55			2.5	Black Topped	Black Topped	Govt	Mouza-Kanheipur
F1	Mouza- MAHANADI, Khata-12, Plot-27-12.350Ac, Kissam-BALICHAR, Lat-20°25'3.20"N to 20°25'9.63"N Long-85°36'30.71"E to 85°36'40.38"E	NH16			1.5	Black Topped	Black Topped	Govt	Mouza-MAHANADI
F2	Mouza- MAHANADI, Khata-12, Plot-36-12.350Ac, Kissam-BALICHAR, Lat-20°26'59.60"N to 20°27'5.70"N Long-85°38'16.50"E to 85°38'26.10"E	NH16			1.5	Black Topped	Black Topped	Govt	Mouza-MAHANADI
F3	Mouza-Mahanadi,Khata no-12,Plot no-39,41,Lat-20.451,Long-85.649,	NH16			2.5	Black Topped	Black Topped	Govt	Mouza-MAHANADI
G1	Mouza-Adaspur,Khata-1277, Plot-3857(P)-3.41Ac, Kissam-NADI,Mouza-Arisole,Khata-429, Plot-531-8.89Ac, Kissam-	NH316			4	Black Topped	Black Topped	Govt	Mouza-Adaspur

	NADI Lat-20°13'04.10"N to 20°13'17.30"N Long-86°01'56.30"E to 86°02'08.50"E								
G2	Mouza-TITHAPADA, Khata-75, Plot-287-12.200Ac, Kissam-NADI, Lat-20°21'17.30"N to 20°21'25.60"N Long-86°1'0.90"E to 86°1'11.20"E	NH316			14	Black Topped	Black Topped	Govt	Mouza-TITHAPADA
G3	Mouza-Balada, Khata-331, Plot-128-12.000Ac, Kissam-NADI, Lat-20°16'22.70"N to 20°16'32.70"N Long-86°2'53.10"E to 86°3'3.20"E	NH316			11.5	Black Topped	Black Topped	Govt	Mouza-Balada
G4	Mouza-SIRSUNDARPUR, Khata-441, Plot-521-12.200Ac, Kissam-NADI, Lat-20°20'51.60"N to 20°22'52.80"N Long-86°1'9.40"E to 86°1'21.00"E	NH316			15	Black Topped	Black Topped	Govt	Mouza-SIRSUNDARPUR
G5	Mouza-BADA KHARAMANGA, Khata-235, Plot-654-12.350Ac, Kissam-NADI, Lat-20°17'13.90"N to	NH316			11	Black Topped	Black Topped	Govt	Mouza-BADA KHARAMANGA

	20°17'22.00"N Long- 86°2'4.70"E to 86°2'12.10"E								
G6	Mouza-BADA KHARAMANGA, Khata- 235, Plot-633-12.300Ac, Kissam-NADI, Lat- 20°17'28.20"N to 20°17'37.10"N Long- 86°1'55.80"E to 86°2'4.60"E	NH316			10	Black Topped	Black Topped	Govt	Mouza-BADA KHARAMANGA
G7	Mouza-Rahamba, Khata no-875, Plot no- 500, Kissam-Nadi, Lat- 20.263, Long-86.063	NH55			14	Black Topped	Black Topped	Govt	Mouza-Rahamba
G8	Mouza- Manikunda, Khata no- 204, Plot no-294, Kissam- Nadi, Lat-20.25, Long- 86.018	NH316			4	Black Topped	Black Topped	Govt	Mouza- Manikunda
H1	Mouza-HULIPUR, Khata- 882, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°25'49.60"N to 20°25'58.80"N Long- 86°4'1.10"E to 86°4'11.00"E	NH316A			12	Black Topped	Black Topped	Govt	Mouza-HULIPUR

H2	Mouza- UDEYPUR,Khata-179, Plot-1282-12.355Ac, Kissam-NADI, Lat- 20°24'13.70"N to 20°24'23.10"N Long- 86°8'24.90"E to 86°8'36.10"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza-UDEYPUR
H3	Mouza- DULUPUR,Khata-579, Plot-1-4.355Ac,5- 8.000Ac, Kissam-NADI, Lat-20°23'19.50"N to 20°23'30.90"N Long- 86°13'6.10"E to 86°13'24.70"E	NH316A			6	Black Topped	Black Topped	Govt	Mouza-DULUPUR
H4	Mouza-KHENTAL,Khata- 188, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°23'46.58"N to 20°23'56.29"N Long- 86°8'13.44"E to 86°8'23.16"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza-KHENTAL
H5	Mouza- BARADA,Khata- 1213, Plot-2-12.355Ac, Kissam-NADI, Lat- 20°26'15.10"N to 20°26'24.40"N Long- 86°1'37.90"E to86°1'46.00"E	NH316A			5	Black Topped	Black Topped	Govt	Mouza-BARADA

H6	Mouza- MURKUNDI,Khata-505, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°27'18.40"N to 20°27'32.00"N Long- 86°3'58.10"E to 86°4'7.50"E	NH316A			13	Black Topped	Black Topped	Govt	Mouza- MURKUNDI
H7	Mouza- MAHAMMADPUR,Khata -773, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°24'8.02"N to 20°24'15.04"N Long- 86°15'36.40"E to 86°15'46.20"E	NH316A			2	Black Topped	Black Topped	Govt	Mouza- MAHAMMADPUR
H8	Mouza- BABUJANGA,Khata- 817, Plot-1676- 12.355Ac, Kissam-NADI, Lat-20°22'57.74"N to 20°23'8.01"N Long- 86°11'35.36"E to 86°11'45.79"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza- BABUJANGA
H9	Mouza- DONDO,Khata- 882, Plot-1235- 12.355Ac, Kissam-NADI, Lat-20°25'15.22"N to 20°25'25.62"N Long- 86°6'57.15"E to 86°7'8.17"E	NH316A			7.5	Black Topped	Black Topped	Govt	Mouza-DONDO

H1 0	Mouza- KURULI,Khata-451, Plot-1004-12.100Ac, Kissam-NADI, Lat-20°26'10.16"N to 20°26'17.34"N Long-86°4'31.53"E to 86°4'41.43"E	NH316A			9	Black Topped	Black Topped	Govt	Mouza-KURULI,
H1 1	Mouza- PURUNAHAT,Khata-423, Plot-1395 1395/1401-12.355Ac, Kissam-NADI, Lat-20°25'32.36"N to 20°25'39.10"N Long-86°6'36.77"E to 86°6'45.74"E	NH316A			10.5	Black Topped	Black Topped	Govt	Mouza- PURUNAHAT
H1 2	Mouza-Bankala,Khata no-103,Plot no-280,Kissam-Nadi,Lat-20.368,Long-86.198	NH316A			5	Black Topped	Black Topped	Govt	Mouza-Bankala
H1 3	Mouza-Guali,Khata no-1051,Plot no-1614,Kissam-Nadi,Lat-20.453,Long-86.073	NH55			5	Black Topped	Black Topped	Govt	Mouza-Guali
H1 4	Mouza-Aitipur,Khata no-486,Plot no-9,Kissam-Nadi,Lat-20.437,Long-85.991	NH56			3	Black Topped	Black Topped	Govt	Mouza-Aitipur
H1 5	Mouza-Uttarkul,Khata no-526,Plot no-52,Kissam-Nadi,Lat-20.398,Long-86.237	NH316A			1.5	Black Topped	Black Topped	Govt	Mouza-Uttarkul

11	Mouza-TAMARA,Khata-414, Plot-1750-12.200Ac, Kissam-NADI, Lat-20°23'42.29"N to 20°23'51.72"N Long-85°9'39.17"E to 85°9'50.83"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza-TAMARA
12	Mouza-MANPUR,Khata-280, Plot-2251 & 2252-12.200Ac, Kissam-NADI, Lat-20°23'35.99"N to 20°23'40.24"N Long-85°10'26.76"E to 85°10'41.05"E	NH16			10	Black Topped	Black Topped	Govt	Mouza-MANPUR
13	Mouza-BRAHMAPURA,Khata-158, Plot-1141-12.350Ac, Kissam-NADI, Lat- 20°25'2.04"N to 20°25'7.37"N Long-85°6'9.84"E to85°6'21.45"E	NH16			6	Black Topped	Black Topped	Govt	Mouza-BRAHMAPURA
14	Mouza-DHANIPUR,Khata-640, Plot- 06-12.350Ac, Kissam-NADI, Lat-20°24'52.32"N to 20°24'57.07"N Long-85°5'32.15"E to 85°5'44.53"E	NH16			8	Black Topped	Black Topped	Govt	Mouza-DHANIPUR

I5	Mouza- Muraripur, Khata no- 324, Plot no- 1219, Kissam-Nadi Lat- 20°24'38.53"N, long-, 85° 6'39.35"E	NH16			6.5	Black Topped	Black Topped	Govt	Mouza-Muraripur
I6	Mouza- Padmalapatna, Khata no-269, Plot no- 1072, Kissam-Nadi, Lat- 20° 23' 40.36", Long- 85° 9' 38.99"	NH16			11	Black Topped	Black Topped	Govt	Mouza- Padmalapatna
J1	Mouza-NATI, Khata-604, Plot- 2510(P)-12.000Ac, Kissam-NADI, Lat- 20°10'45.90"N to 20°11'4.99"N Long- 86°8'47.95"E to 86°8'59.33"E	NH316A			13.5	Black Topped	Black Topped	Govt	Mouza-NATI
J2	Mouza-POLSARA, Khata- 711, Plot-1317(P)- 12.000Ac, Kissam-NADI, Lat- 20°10'28.15"N to 20°10'38.26"N Long- 86°6'28.99"E to 86°6'45.22"E	NH316A			9.5	Black Topped	Black Topped	Govt	Mouza-POLSARA
J3	Mouza- KULASHREE, Khata- 1194, Plot- 3(P)- 11.400Ac, Kissam-NADI, Lat-20°14'0.05"N to	NH316A			10	Black Topped	Black Topped	Govt	Mouza- KULASHREE

	20°14'6.50"N Long- 86°5'33.81"E to 86°5'51.83"E								
J4	Mouza- PAHANGA,Khata-1339, Plot-2584-12.000Ac, Kissam-NADI, Lat- 20°10'5.06"N to 20°10'11.77"N Long- 86°7'13.69"E to 86°7'30.38"E	NH316A			11.5	Black Topped	Black Topped	Govt	Mouza-PAHANGA
J5	Mouza-SITHALO,Khata- 1641, Plot-1489 (P)- 11.200Ac, Kissam-NADI, Lat- 20°11'25.97"N to 20°11'37.68"N Long- 86°7'13.71"E to 86°7'23.86"E	NH316A			9.5	Black Topped	Black Topped	Govt	Mouza-SITHALO
J6	Mouza- BACHHASAILO,Khata- 436,Plot-1659/2366- 12.100Ac, Kissam-NADI, Lat-20°11'25.97"N to 20°12'52.38"N Long- 86°8'49.42"E to 86°8'55.25"E	NH316A			12	Black Topped	Black Topped	Govt	Mouza- BACHHASAILO
J7	Mouza- Sasanpada,Khata no- 511,Plot no- 1444/2222,Kissam-	NH316A			12.5	Black Topped	Black Topped	Govt	Mouza-Sasanpada

	Nadi,Lat-20.219,Long-86.136								
K1	Mouza-BALIAPADA,Khata-1006,Plot-1210-12.355Ac, Kissam-NADI, Lat- 20°27'10.52"N to 20°27'15.63"N Long-86°12'30.27"E to 86°12'42.44"E	NH316A			3.5	Black Topped	Black Topped	Govt	Mouza-BALIAPADA
K2	Mouza-BARAHAMPUR,Khata-231,Plot- 634-12.355Ac, Kissam-NADI, Lat-20°23'37.07"N to 20°23'45.77"N Long-86°11'56.81"E to 86°12'9.06"E	NH316A			4	Black Topped	Black Topped	Govt	Mouza-BARAHAMPUR
K3	Mouza-DEMANDO,Khata-325,Plot- 192-12.355Ac, Kissam-NADI, Lat-20°27'7.98"N to 20°27'16.81"N Long-86°11'13.38"E to 86°11'23.90"E	NH316A			3.5	Black Topped	Black Topped	Govt	Mouza-DEMANDO

K4	Mouza-KALAMISIRI JAYNTAPUR,Khata- 296,Plot- 1-12.355Ac, Kissam-NADI, Lat- 20°27'7.41"N to 20°27'10.65"N Long- 86°8'45.97"E to 86°8'54.39"E	NH316A			4	Black Topped	Black Topped	Govt	Mouza- KALAMISIRI JAYNTAPUR,
K5	Mouza- KULAGANISALO,Khata- 817,Plot-1920,1921- 12.355Ac, Kissam-NADI, Lat- 20°27'46.42"N to 20°27'54.25"N Long- 86°15'16.64"E to 86°15'29.77"E	NH316A			1	Black Topped	Black Topped	Govt	Mouza- KULAGANISALO
K6	Mouza- KULASUKARAPADA,Kha ta-371,Plot-1022- 12.355Ac, Kissam-NADI, Lat- 20°27'19.52"N to20°27'30.08"N Long- 86°13'54.28"E to 86°14'8.12"E	NH316A			3	Black Topped	Black Topped	Govt	Mouza- KULASUKARAPAD A
K7	Mouza- PALADA,Khata- 548,Plot-169-12.355Ac, Kissam-NADI, Lat- 20°25'17.30"N to 20°25'31.78"N Long- 86°10'39.53"E to 86°10'55.31"E	NH316A			8.5	Black Topped	Black Topped	Govt	Mouza-PALADA

K8	Mouza- NAGASPUR,Khata- 1013,Plot-535- 12.355Ac, Kissam-NADI, Lat-20°24'35.23"N to 20°24'46.79"N Long- 86°11'5.90"E to 86°11'23.95"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza- NAGASPUR
K9	Mouza- SAHADEBPUR,Khata- 563,Plot-49-12.355Ac, Kissam-NADI, Lat- 20°27'8.15"N to 20°27'13.09"N Long- 86°13'18.47"E to 86°13'32.40"E	NH316A			4.5	Black Topped	Black Topped	Govt	Mouza- SAHADEBPUR
K10	Mouza- SANTAPUR,Khata- 313,Plot-71-12.355Ac, Kissam-NADI, Lat- 20°25'28.59"N to 20°25'35.85"N Long- 86°10'18.23"E to 86°10'33.17"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza- SANTAPUR
K11	Mouza-Janardanpur ,Khata no-288,Plot no- 5,Kissam-Nadi,Lat- 20.457,Long-86.13	NH316A			3.5	Black Topped	Black Topped	Govt	Mouza- Janardanpur
K12	Mouza-Jaladia ,Khata no-139,Plot no- 444,Kissam-Nadi,Lat- 20.433,Long86.168	NH316A			7	Black Topped	Black Topped	Govt	Mouza-Jaladia

K1 3	Mouza-Sanaroutpati ,Khata no-49,Plot no- 185,Kissam-Nadi,Lat- 20.462,Long-86.134	NH316A			2.5	Black Topped	Black Topped	Govt	Mouza- Sanaroutpati
K1 4	Mouza-Sadhaknagar ,Khata no-140,Plot no- 428,Kissam-Nadi,Lat- 20.455,Long-86.178	NH316A			4	Black Topped	Black Topped	Govt	Mouza- Sadhaknagar
L1	Mouza-NARADA, Khata- 535, Plot-1-10.710Ac, Kissam-Nadi, Lat- 20°33'53.15"N to 20°34'2.78"N Long- 86°4'1.97"E to 86°4'11.01"E	NH16			4	Black Topped	Black Topped	Govt	Mouza-NARADA
L2	Mouza- BADABHIMARAJPUR, Khata-818, Plot-1- 10.225Ac, Kissam-Nadi, Lat-20°32'35.64"N to 20°32'43.70"N Long- 86°1'41.63"E to86°2'47.50"E	NH16			4.5	Black Topped	Black Topped	Govt	Mouza- BADABHIMARAJP UR
L3	Mouza-GOPINATHPUR, Khata-589, Plot-1001- 11.000Ac, Kissam-Nadi, Lat-20°28'28.14"N to 20°28'32.47"N Long- 85°57'21.43"E to 85°57'35.14"E	NH16			5.5	Black Topped	Black Topped	Govt	Mouza- GOPINATHPUR

L4	Mouza- BHAIRPUR, Khata-655, Plot-1- 12.500Ac, Kissam-Nadi, Lat-20°30'44.70"N to 20°30'51.02"N Long- 85°58'43.02"E to 85°58'55.56"E	NH16			4.5	Black Topped	Black Topped	Govt	Mouza- BHAIRPUR
L5	Mouza- Chahapada,Khata no- 1020,Plot no-1,LAT- 20.544,Long-86.05	NH16			6	Black Topped	Black Topped	Govt	Mouza-Chahapada
L6	Mouza-Barabodia- I,Khata no-553,Plot no- 1514,Lat-20.456,Long- 85.992	NH55			9.5	Black Topped	Black Topped	Govt	Mouza-Barabodia- I
L7	Mouza-Barabodia- II,Khata no-553,Plot no- 1494,Lat-20.46,Long- 85.987	NH55			8.5	Black Topped	Black Topped	Govt	Mouza-Barabodia- II
L8	Mouza-Ganipur,Khata no-172,Plot no-1,Lat- 20.517,Long-86.004	NH16			8	Black Topped	Black Topped	Govt	Mouza-Ganipur
L9	Mouza-Atoda,Khata no- 1204,Plot no-3950,Lat- 20.448,Long-86.019	NH55			12	Black Topped	Black Topped	Govt	Mouza-Atoda
L10	Mouza-Atoda,Khata no- 1204,Plot no-4021,Lat- 20.447,Long-86.007	NH55			11.5	Black Topped	Black Topped	Govt	Mouza-Atoda
L11	Mouza- Sanabhimrajpur,Khata no-331,Plot no-1,Lat- 20.532,Long-86.032	NH16			6	Black Topped	Black Topped	Govt	Mouza- Sanabhimrajpur,

M1	Mouza-NUAPATNA, Khata-329, Plot-959- 12.300Ac, Kissam-Nadi, Lat-20°30'27.20"N to 20°30'33.20"N Long- 85°49'36.00"E to 85°49'55.00"E	NH55			2.5	Black Topped	Black Topped	Govt	Mouza- NUAPATNA
M2	Mouza-BHATIMUNDA, Khata-441, Plot- 1116/P - 12.340Ac, Kissam- Nadi, Lat-20°32'4.20"N to 20°32'23.20"N Long- 86°1'33.10"E to 86°1'42.20"E	NH16			5	Black Topped	Black Topped	Govt	Mouza- BHATIMUNDA
N1	Mouza-Hatamal, Khata- 275, Plot-1282- 11.750Ac,1260/1288- 3.250Ac, Kissam-Nadi, Lat-20°24'16.50"N to 20°24'23.60"N Long- 85°30'41.70"E to 86°30'41.50"E	NH16			4	Black Topped	Black Topped	Govt	Mouza-Hatamal

Final List of Potential Mining Leases (existing & proposed)

Rivers

Lease No.	River Details	Lease Details	Area (in Ac/Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in Tonnes /Annum considering digging depth max as 3 meters	Mineral to be mined in tonnes (Sand/ Bajri/ RBM etc.)	Existing/ Proposed
A1	MAHANADI RIVER	Mouza- Balarampur, Khata-197, Plot- 399(P)- 12.00Ac, Kissam-Nadi, Lat-20°27'35.68"N to 20°27'44.51"N Long- 85°44'21.17"E to 85°44'32.01"E	12.00 Acre/4.856Ha	BR-1Km,PA-5Km	5		109350	94311	Existing
A2	MAHANADI RIVER	Mouza-Daspur, Khata no- 165, Plot no-550, lat- 20.443, Long-85.702	12.35Ac/4.997Ha	BR- 3.71Km, PA- 4Km	4		112455	67473	Proposed
A3	MAHANADI RIVER	Mouza-Daspur, Khata no- 165, Plot no-371, lat- 20.444, Long-85.714	12.35Ac/4.997Ha	BR- 2.50Km, PA- 4.7Km	4.7		112455	67473	Proposed
A4	MAHANADI RIVER	Mouza-Daspur, Khata no- 165, Plot no-538, lat- 20.447, Long-85.722	12.35Ac/4.997Ha	BR- 1.74Km, PA- 5.7Km	5.7		112455	67473	Proposed
A5	MAHANADI RIVER	Mouza- Brajabiharipur, Khata no- 21, Plot no-142, lat- 20.506, Long-85.814	12.35Ac/4.997Ha	BR- 1.64Km, PA- 6Km	6		97461	58476.6	Proposed

B1	MAHANADI RIVER	Mouza- Naranpur, Khata-156, Plot- 1053-13.35Ac ,Kissam-Nadi, Lat- 20°23'21.6"N to 20°23'26.9"N Long- 85°25'47.0"E to 85°26'02.8"E	13.35 Acre/5.403Ha	BR- 5.42Km,PA- 6.8Km	6.8		65841	32011.5	Existing
B2	MAHANADI RIVER	Mouza- Kantapada, Khata-439, Plot- 3278-16.00Ac ,Kissam-Nadi, Lat-20°22'25.0"N to 20°22'35.1"N Long- 85°20'18.9"E to 85°20'33.6"E	16.00 Acre/6.475Ha	BR- 4.27Km,PA- 5.3Km	5.3		54421.5	47730	Existing
B3	MAHANADI RIVER	Mouza- Mangarajpur, Khata-641, Plot- 3720/3749-14.00Ac ,Kissam-Nadi, Lat- 20°22'26.9"N to 20°22'35.5"N Long- 85°18'39.6"E to 85°18'47.7"E	14.00 Acre/05.66Ha	BR- 7.20Km,PA- 5.8Km	5.8		42586.5	37018.5	Existing
B4	MAHANADI RIVER	Mouza- Bangarsingha, Khata-903, Plot- 7388/7570-17.00Ac ,Kissam-Nadi, Lat- 20°23'20.7"N to 20°23'27.0" N Long- 85°27'59.9"E to 85°28'17.5"E	17.00 Acre/06.88Ha	BR- 9.30Km,PA- 10Km	10		64206	56326.5	Existing

B5	MAHANADI RIVER	Mouza- Tunapur, Khata-504, Plot- 4007-7.70Ac,Plot- 4007/4051-5.30Ac ,Kissam-Nadi, Lat-20°22'58.1"N to 20°23'04.9" N Long-85°23'02.6"E to 85°23'15.7"E	13.00 Acre/5.261Ha	BR-720m,PA-5.7Km	5.7		104406	88620	Existing
B6	MAHANADI RIVER	Mouza-Kanjiapala,Khata no-279,Plot no-1639,Kissam-Nadi,Lat-20.366,Long-85.305	12.35Ac/4.997Ha	BR-8.10Km,PA-7Km	7		74970	44982	Proposed
B7	MAHANADI RIVER	Mouza-Ogalpur,Khata no-200,Plot no-1137/1898,Lat-20°21'57.90"N to 20°22'04.80"N Long-85°16'36.30"E to 85°16'47.60"E	12.35Ac/4.997Ha	BR-10.82Km,PA-6.4Km	6.4		74970	44982	Proposed
C1	MAHANADI RIVER	Mouza- Patugadadharpur, Khata-1, Plot- 25-50.00Ac, Kissam-Nadi, Lat-20°22'23.00"N to 20°22'43.50" N Long-85°30'11.80"E to 85°30'35.50"E	50.00 Acre/20.235Ha	BR-11.47Km,PA-12Km	12		589860	548100	Existing

C2	MAHANADI RIVER	Mouza- Patugadadharpur, Khata-1, Plot- 3/1- 33.00Ac, Kissam-Nadi, Lat-20°21'33.916"N to 20°21'42.779" N Long- 85°24'0.971"E to 85°24'22.040"E	33.00 Acre/13.355Ha	BR- 1.89Km,PA- 9Km	9		155250	85500	Existing
C3	MAHANADI RIVER	Mouza- Patugadadharpur, Khata-1, Plot- 38(P)- 12.35Ac, Kissam-Nadi, Lat-20°27'11.334"N to 20°27'20.267" N Long- 85°37'29.958"E to 85°37'40.414"E	12.35 Acre/4.998Ha	BR- 3.72Km,PA- 4.4Km	4.4		224910	195435	Existing
C4	MAHANADI RIVER	Mouza- Patugadadharpur, Khata-1, Plot-6- 12.50Ac, Kissam-Nadi, Lat- 20°21'27.251"N to 20°21'32.790"N Long- 85°25'23.915"E to 85°25'41.134"E	12.50 Acre/5.059Ha	BR- 4.25Km,PA- 10Km	10		151761	75195	Existing
C5	MAHANADI RIVER	Mouza- Patugadadharpur, Khata-1, Plot- 29/1- 12.50Ac, Kissam-Nadi, Lat-20°24'38.90"N to 20°24'46.00"N Long- 85°32'05.40"E to 85°32'14.60"E	12.50 Acre/5.059Ha	BR- 7.05Km,PA- 7.4Km	7.4		63987	57540	Existing
C6	MAHANADI RIVER	Mouza- Patugadadharpur, Khata no-1, Plot no-	12.35Ac/4.997Ha	BR- 6.16Km,PA- 9Km	9		112455	67473	Proposed

		28(P),29,Kissam-Nadi,Lat-20.407,Long-85.546							
D1	KATHAJODI RIVER	Mouza- Mundamuhan, Khata-27, Plot- 76/p-15.00Ac, Kissam-Nadi, Lat-20°26'58.4"N to 20°27'10.0"N Long-85°50'13.3"E to 85°50'26.6"E	15.00 Acre/6.070Ha	BR-690m,PA-11Km	11		200310	175362	Existing
D2	SIDUA RIVER	Mouza- Deokali, Khata-100, Plot-293(P)-5.00Ac, Kissam-Nadi, Lat-20°22'4.80"N to 20°22'8.70"N Long-85°57'11.10"E to 85°57'16.80"E	5.00 Acre/2.023Ha	BR-2.19Km,PA-18Km	18		91035	71955	Existing
D3	SIDUA RIVER	Mouza- Korkora, Khata-314, Plot-385(P)-12.20Ac, Kissam-Nadi, Lat-20°21'38.7"N to 20°21'46.0"N Long-85°59'19.2"E to 85°59'28.3"E	12.200 Acre/4.937Ha	BR-1.66Km,PA-22Km	22		222165	198900	Existing
D4	KATHAJODI RIVER	Mouza- Bidyadharpur, Khata-331, Plot-102(P)-12.20Ac, Kissam-Nadi, Lat-20°28'28.7"N to 20°28'34.3"N Long-85°48'42.0"E to 85°48'54.5"E	12.200 Acre/4.937Ha	BR-3.51Km,PA-11Km	11		185145	165000	Existing

D5	KUAKHAI RIVER	Mouza- Naranpur, Khata-196, Plot-1(P)-12.250Ac, Kissam-Nadi, Lat-20°26'30.70"N to 20°26'39.90"N Long-85°50'58.5"E to 85°51'06.2"E	12.250 Acre/4.958Ha	BR-800m,PA-8Km	8		96671.25	84000	Existing
D6	KATHAJODI RIVER	Mouza- Bentkarpada, Khata-57, Plot-70(P)-25.00 Ac, Kissam-Nadi, Lat- 20°27'57.5"N to 20°28'4.9"N Long-85°49'31.2"E to 85°49'48.6"E	25.00 Acre/10.117Ha	BR-2.6Km,PA-7Km	7	YES	455265	412380	Existing
D7	KATHAJODI RIVER	Mouza- Arilo, Khata-249, Plot-5(P)-12.20 Ac, Kissam-Nadi, Lat-20°28'43.45896"N to 20°28'50.70540"N Long-85°47'08.41272"E to 85°47'16.30536"E	12.200 Acre/4.937Ha	BR-690m,PA-8.7Km	8.7		185287.5	96673.5	Existing
D8	KATHAJODI RIVER	Mouza-Belagachhia, Khata no-757, Plot no-933, Kissam-Nadi, Lat-20.423, Long-85.861	12.35Ac/4.997Ha	BR-1.1Km,PA-8Km	8		59976	35985.6	Proposed
D9	KATHAJODI RIVER	Mouza- Bidyadharpur, Khata no-331, Plot no-949, Kissam-Nadi, Lat-20.46, Long-85.816	12.35Ac/4.997Ha	BR-3.3Km,PA-6.4Km	6.4		74970	44982	Proposed

D10	KATHAJODI RIVER	Mouza-Korkora,Khata no-314,Plot no-385,Kissam-Nadi,Lat-20.365,Long-85.999	12.35Ac/4.997Ha	BR-2.5Km,PA-2.3Km	2.3		97461	58476.6	Proposed
E1	KATHAJODI RIVER	Mouza-SUBERNAPUR, Khata-1, Plot- 1-20.500Ac, ,Kissam-Nadi, Lat-20°27'48.34"N to20°27'56.75"N Long - 85°50'37.29"E to 85°50'52.69"E	20.500 Acre/8.296Ha	BR-650m,PA-9Km	9		199108.5	112504.5	Existing
E2	KATHAJODI RIVER	Mouza-TANGARHUDA, Khata-3, Plot-24-35.000Ac ,Kissam-Nadi, Lat-20°27'56.80"N to 20°28'8.80"N Long-85°49'57.40"E to85°50'17.50"E	35.00 Acre/14.164Ha	BR-1.82Km,PA-8Km	8	YES	537870	494085	Existing
E3	KATHAJODI RIVER	Mouza- UNIT 37 BADAMBADI, Khata-540, Plot-661-7.000Ac,663-5.500Ac,Kissam-Nadi, Lat-20°26'58.70"N to 20°27'8.51"N Long-85°52'53.47"E to 85°53'2.56"E	12.50 Acre/5.059Ha	BR-1.39Km,PA-11Km	11		682911	337503	Existing

E4	KATHAJODI RIVER	Mouza- UNIT 39 SILPAPURI, Khata-327, Plot-685-6.500Ac,876- 6.000Ac,Kissam-Nadi, Lat- 20°26'3.10"N to 20°26'13.00"N Long- 85°53'55.50"E to 85°54'4.50"E	12.500 Acre/5.06Ha	BR- 1.07Km,PA- 12.4Km	12.4		591855	337494	Existing
E5	KUAKHAI RIVER	Mouza- UTTAMAPUR, Khata-255, Plot-861- 14.000Ac, ,Kissam-Nadi, Lat- 20°25'34.04"N to20°25'42.35"N Long- 85°51'53.68"E to 85°52'3.42"E	14.00 Acre/05.67Ha	BR- 970m,PA- 8.6Km	8.6		339942	150004.5	Existing
E6	KUAKHAI RIVER	Mouza- UTTAMAPUR, Khata-255, Plot-861- 14.000Ac, ,Kissam-Nadi, Lat- 20°25'34.04"N to20°25'42.35"N Long- 85°51'53.68"E to 85°52'3.42"E	14.00 Acre/05.67Ha	BR- 480m,PA- 9Km	9		118374.75	61857	Existing
E7	KATHAJODI RIVER	Mouza- BRAHMAPUR, Khata-677, Plot-1- 13.000Ac, ,Kissam-Nadi, Lat-20°25'37.06"N to 20°25'46.04"N Long- 85°54'34.81"E to 85°54'45.46"E	13.00 Acre/5.261Ha	BR- 580m,PA- 13.3Km	13.3		94698	52497	Existing

E8	SIDUA RIVER	Mouza- KADAMPADA, Khata-610, Plot-2638-12.500Ac, ,Kissam-Nadi, Lat-20°23'41.80"N to20°23'49.00"N Long-85°54'43.10"E to 85°54'54.90"E	12.500 Acre/5.06Ha	BR-3.8Km,PA-13.6Km	13.6		228069	197703	Existing
E9	SIDUA RIVER	Mouza- JARIPADA, Khata-428, Plot-395-25.000Ac, ,Kissam-Nadi, Lat-20°24'16.90"N to 20°24'33.60"N Long-85°54'8.30"E to85°54'15.60"E	25.00 Acre/10.117Ha	BR-2.8Km,PA-12.3Km	12.3		281448	252027	Existing
E10	KATHAJODI RIVER	Mouza- BAGULAPADA, Khata-25, Plot-116-13.000Ac,Kissam-Nadi, Lat- 20°26'14.38"N to 20°26'22.15"N Long-85°56'21.52"E to 85°56'33.52"E	13.00 Acre/5.261Ha	BR-3.6Km,PA-16.6Km	16.6		227637	105003	Existing
E11	KUAKHAI RIVER	Mouza- ARAKHAKUDA, Khata-172, Plot-1-12.500Ac, ,Kissam-Nadi, Lat- 20°22'43.92"N to20°22'53.66"N Long-85°52'31.92"E to 85°52'42.87"E	12.50 Acre/5.059Ha	BR-2.18Km,PA-10Km	10		142866	59430	Existing

E12	KATHAJODI RIVER	Mouza- RAJAHANSA, Khata-960, Plot-857-13.500Ac, ,Kissam-Nadi, Lat-20°25'20.98"N to 20°25'35.89"N Long-85°57'14.63"E to 85°57'23.15"E	13.500 Acre/5.463Ha	BR-1.49Km,PA-18Km	18		63003	30672	Existing
E13	KATHAJODI RIVER	Mouza-Sartol, Khata-204, Plot-1052(P)-10.30 Ac, Kissam-Nadi, Lat-20°25'59.23920"N to 20°26'06.48348"N Long-85°55'17.39316"E to 85°55'25.46688"E	10.30 Acre/4.168Ha	BR-2.22Km,PA-15.2Km	15.2		156525	80616	Existing
E14	KATHAJODI RIVER	Mouza-Kalapada, Khata-1009, Plot-02(P)-10.50 Ac, Kissam-Nadi, Lat-20°23'51.58644"N to 20°24'00.83808"N Long-85°58'09.58980"E to 85°58'19.78716"E	10.50 Acre/4.249Ha	BR-3.83Km,PA-19.5Km	19.5		160762.5	82980	Existing
E15	SIDUA RIVER	Mouza-Kulasarichuan, Khata-682, Plot-02(P)-10.50 Ac, Kissam-Nadi, Lat-20°23'51.58644"N to 20°24'00.83808"N Long-85°58'09.58980"E to 85°58'19.78716"E	10.50 Acre/4.249Ha	BR-3.93Km,PA-19.4Km	19.4		127014	63975	Existing
E16	SIDUA RIVER	Mouza-Khadichuandeuli, Khata no-391, Plot no-	12.35Ac/4.997Ha	BR-2.90Km,PA-21Km	21		74970	44982	Proposed

		1162,Kissam-Nadi,Lat-20.379,Long-85.95							
E17	MAHANADI RIVER	Mouza-Gatiroutpatna,Khata no-695,Plot no-188,Kissam-Nadi,Lat-20.448,Long-85.956	12.35Ac/4.997Ha	BR-5.68Km,PA-18.4Km	18.4		74970	44982	Proposed
E18	SIDUA RIVER	Mouza-Baradhuleswar,Khata no-275,Plot no-1444,Kissam-Nadi,Lat-20.387,Long-85.934	12.35Ac/4.997Ha	BR-4.82Km,PA-16Km	16		74970	44982	Proposed
E19	KATHAJODI RIVER	Mouza-Subhadrapur,Khata no-454,Plot no-1,2,Kissam-Nadi,Lat-20.451,Long-85.87	12.35Ac/4.997Ha	BR-2.29Km,PA-10Km	10		224910	134946	Proposed
E20	MAHANADI RIVER	Mouza-Kanheipur,Khata no-252,Plot no-1,Kissam-Nadi,Lat-20.464,Long-85.922	12.35Ac/4.997Ha	BR-1.82Km,PA-15.4Km	15.4		74970	44982	Proposed
F1	MAHANADI RIVER	Mouza- MAHANADI, Khata-12, Plot-27-12.350Ac, Kissam-BALICHAR, Lat-20°25'3.20"N to 20°25'9.63"N Long-85°36'30.71"E to 85°36'40.38"E	12.35 Acre/4.998Ha	BR-610m,PA-3.5Km	3.5		135990	115890	Existing

F2	MAHANADI RIVER	Mouza- MAHANADI, Khata-12, Plot-36-12.350Ac, Kissam-BALICHAR, Lat-20°26'59.60"N to 20°27'5.70"N Long-85°38'16.50"E to 85°38'26.10"E	12.35 Acre/4.998Ha	BR-5.23Km,PA-2.4Km	2.4		149970	129204	Existing
F3	MAHANADI RIVER	Mouza-Mahanadi,Khata no-12,Plot no-39,41,Lat-20.451,Long-85.649,	12.35Ac/4.997Ha	BR-5.61Km,PA-2.3Km	2.3		74970	44982	Proposed
G1	KANDAL RIVER	Mouza-Adaspur,Khata-1277, Plot-3857(P)-3.41Ac, Kissam-NADI,Mouza-Arisole,Khata-429, Plot-531-8.89Ac, Kissam-NADI Lat-20°13'04.10"N to 20°13'17.30"N Long-86°01'56.30"E to 86°02'08.50"E	12.30 Acre/4.98Ha	BR-940m,PA-33Km	33		112050	62896.5	Existing
G2	DEVI RIVER	Mouza-TITHAPADA, Khata-75, Plot-287-12.200Ac, Kissam-NADI, Lat-20°21'17.30"N to 20°21'25.60"N Long-86°1'0.90"E to 86°1'11.20"E	12.20 Acre/4.93Ha	BR-3.3Km,PA-28Km	28		221850	191475	Existing

G3	DEVI RIVER	Mouza-Balada, Khata-331, Plot-128-12.000Ac, Kissam-NADI, Lat-20°16'22.70"N to 20°16'32.70"N Long-86°2'53.10"E to 86°3'3.20"E	12.00 Acre/4.856Ha	BR-940m,PA-32.4Km	32.4		218533.5	189675	Existing
G4	DEVI RIVER	Mouza-SIRSUNDARPUR, Khata-441, Plot-521-12.200Ac, Kissam-NADI, Lat-20°20'51.60"N to 20°22'52.80"N Long-86°1'9.40"E to 86°1'21.00"E	12.20 Acre/4.93Ha	BR-2.5Km,PA-Km	28.2		221850	185782.5	Existing
G5	DEVI RIVER	Mouza-BADA KHARAMANGA, Khata-235, Plot-654-12.350Ac, Kissam-NADI, Lat-20°17'13.90"N to 20°17'22.00"N Long-86°2'4.70"E to 86°2'12.10"E	12.36 Acre/4.997Ha	BR-1.05Km,PA-Km	30.6		149910	123300	Existing
G6	DEVI RIVER	Mouza-BADA KHARAMANGA, Khata-235, Plot-633-12.300Ac, Kissam-NADI, Lat-20°17'28.20"N to 20°17'37.10"N Long-86°1'55.80"E to 86°2'4.60"E	12.30 Acre/4.98Ha	BR-470m,PA-Km	30.4		63081	240616.5	Existing

G7	DEVI RIVER	Mouza-Rahamba,Khata no-875,Plot no-500,Kissam-Nadi,Lat-20.263,Long-86.063	12.35Ac/4.997Ha	BR-920m,PA-Km	34.2		74970	44982	Proposed
G8	KANDALA RIVER	Mouza-Manikunda,Khata no-204,Plot no-294,Kissam-Nadi,Lat-20.25,Long-86.018	12.35Ac/4.997Ha	BR-2.9Km,PA-30.3Km	30.3		74970	44982	Proposed
H1	MAHANADI RIVER	Mouza-HULIPUR,Khata-882, Plot-1-12.355Ac, Kissam-NADI, Lat-20°25'49.60"N to 20°25'58.80"N Long-86°4'1.10"E to 86°4'11.00"E	12.355 Acre/5.00Ha	BR-2.3Km,PA-30Km	30		57838.5	42856.5	Existing
H2	MAHANADI RIVER	Mouza-UDEYPUR,Khata-179, Plot-1282-12.355Ac, Kissam-NADI, Lat-20°24'13.70"N to 20°24'23.10"N Long-86°8'24.90"E to 86°8'36.10"E	12.355 Acre/5.00Ha	BR-6Km,PA-37.4Km	37.4		64548	54345	Existing
H3	CHITTROTPALA RIVER	Mouza-DULUPUR,Khata-579, Plot-1-4.355Ac,5-8.000Ac, Kissam-NADI, Lat-20°23'19.50"N to 20°23'30.90"N Long-86°13'6.10"E to 86°13'24.70"E	12.355 Acre/5.00Ha	BR-3Km,PA-45.6Km	45.6		75000	64180.5	Existing

H4	MAHANADI RIVER	Mouza-KHENTAL,Khata-188, Plot-1-12.355Ac, Kissam-NADI, Lat-20°23'46.58"N to 20°23'56.29"N Long-86°8'13.44"E to 86°8'23.16"E	12.355 Acre/5.00Ha	BR-6Km,PA-37Km	37		75000	29794.5	Existing
H5	MAHANADI RIVER	Mouza- BARADA,Khata-1213, Plot-2-12.355Ac, Kissam-NADI, Lat-20°26'15.10"N to 20°26'24.40"N Long-86°1'37.90"E to86°1'46.00"E	12.355 Acre/5.00Ha	BR-5.6Km,PA-25.7Km	25.7		75000	35811	Existing
H6	CHITTROTPALA RIVER	Mouza- MURKUNDI,Khata-505, Plot-1-12.355Ac, Kissam-NADI, Lat-20°27'18.40"N to 20°27'32.00"N Long-86°3'58.10"E to 86°4'7.50"E	12.355 Acre/5.00Ha	BR-1.1Km,PA-26.7Km	26.7		45472.5	33690	Existing
H7	CHITTROTPALA RIVER	Mouza- MAHAMMADPUR,Khata-773, Plot-1-12.355Ac, Kissam-NADI, Lat-20°24'8.02"N to 20°24'15.04"N Long-86°15'36.40"E to 86°15'46.20"E	12.355 Acre/5.00Ha	BR-760m,PA-Km	45.1		40509	34075.5	Existing

H8	MAHANADI RIVER	Mouza- BABUJANGA,Khata- 817, Plot-1676-12.355Ac, Kissam-NADI, Lat- 20°22'57.74"N to 20°23'8.01"N Long- 86°11'35.36"E to 86°11'45.79"E	12.355 Acre/5.00Ha	BR- 4.2Km,PA- 41Km	41		40711.5	31671	Existing
H9	MAHANADI RIVER	Mouza- DONDO,Khata- 882, Plot-1235-12.355Ac, Kissam-NADI, Lat- 20°25'15.22"N to 20°25'25.62"N Long- 86°6'57.15"E to 86°7'8.17"E	12.355 Acre/5.00Ha	BR- 2.9Km,PA- 32.4Km	32.4		44848.5	35683.5	Existing
H10	MAHANADI RIVER	Mouza- KURULI,Khata- 451, Plot-1004-12.100Ac, Kissam-NADI, Lat- 20°26'10.16"N to 20°26'17.34"N Long- 86°4'31.53"E to 86°4'41.43"E	12.10 Acre/4.896Ha	BR- 1.6Km,PA- 28Km	28		95175	48384	Existing
H11	MAHANADI RIVER	Mouza- PURUNAHAT,Khata-423, Plot-1395 1395/1401- 12.355Ac, Kissam-NADI, Lat-20°25'32.36"N to 20°25'39.10"N Long- 86°6'36.77"E to86°6'45.74"E	12.355 Acre/5.00Ha	BR- 2.16Km,PA- 32.6Km	32.6		44245.5	34750.5	Existing

H12	MAHANADI RIVER	Mouza-Bankala,Khata no-103,Plot no-280,Kissam-Nadi,Lat-20.368,Long-86.198	12.35Ac/4.997Ha	BR-3.1Km,PA-42.4Km	42.4		59976	35985.6	Proposed
H13	MAHANADI RIVER	Mouza-Guali,Khata no-1051,Plot no-1614,Kissam-Nadi,Lat-20.453,Long-86.073	12.35Ac/4.997Ha	BR-3.4Km,PA-27.4Km	27.4		74970	44982	Proposed
H14	MAHANADI RIVER	Mouza-Aitipur,Khata no-486,Plot no-9,Kissam-Nadi,Lat-20.437,Long-85.991	12.35Ac/4.997Ha	BR-9.4Km,PA-21.7Km	21.7		74970	44982	Proposed
H15	CHITROPALA RIVER	Mouza-Uttarkul,Khata no-526,Plot no-52,Kissam-Nadi,Lat-20.398,Long-86.237	12.35Ac/4.997Ha	BR-2Km,PA-43.4Km	43.4		74970	44982	Proposed
I1	MAHANADI RIVER	Mouza-TAMARA,Khata-414, Plot-1750-12.200Ac, Kissam-NADI, Lat-20°23'42.29"N to 20°23'51.72"N Long-85°9'39.17"E to 85°9'50.83"E	12.200 Acre/4.937Ha	BR-940m,PA-43.3Km	43.3		74056.5	61212	Existing
I2	MAHANADI RIVER	Mouza-MANPUR,Khata-280, Plot-2251 & 2252-12.200Ac, Kissam-NADI, Lat-20°23'35.99"N to 20°23'40.24"N Long-85°10'26.76"E to 85°10'41.05"E	12.200 Acre/4.937Ha	BR-6Km,PA-8.1Km	8.1		74056.5	61260	Existing

13	MAHANADI RIVER	Mouza- BRAHMAPURA,Khata- 158, Plot-1141-12.350Ac, Kissam-NADI, Lat- 20°25'2.04"N to 20°25'7.37"N Long- 85°6'9.84"E to85°6'21.45"E	12.350Acre/4.998Ha	BR-2Km,PA- 7Km	7		165000	123156	Existing
14	MAHANADI RIVER	Mouza-DHANIPUR,Khata- 640, Plot- 06-12.350Ac, Kissam-NADI, Lat- 20°24'52.32"N to 20°24'57.07"N Long- 85°5'32.15"E to 85°5'44.53"E	12.350Acre/4.998Ha	BR- 2.8Km,PA- 6Km	6		104485.5	88339.5	Existing
15	MAHANADI RIVER	Mouza-Muraripur,Khata no-324,Plot no- 1219,Kissam-NadiLat- 20°24'38.53"N,long-,85° 6'39.35"E	12.35Ac/4.997Ha	BR-1Km,PA- 7.4Km	7.4		149940	89964	Proposed
16	MAHANADI RIVER	Mouza- Padmalapatna,Khata no- 269,Plot no-1072,Kissam- Nadi,Lat-20° 23' 40.36",Long- 85° 9' 38.99"	12.35Ac/4.997Ha	BR- 4.4Km,PA- 9.4Km	9.4		112455	67473	Proposed
J1	DEVI RIVER	Mouza-NATI,Khata-604, Plot- 2510(P)-12.000Ac, Kissam-NADI, Lat- 20°10'45.90"N to 20°11'4.99"N Long-	12.00Acre/4.856Ha	BR- 1.3Km,PA- 45.4Km	45.4		72846	61519.5	Existing

		86°8'47.95"E to 86°8'59.33"E							
J2	KANDAL RIVER	Mouza-POLSARA,Khata-711, Plot-1317(P)-12.000Ac, Kissam-NADI, Lat- 20°10'28.15"N to 20°10'38.26"N Long- 86°6'28.99"E to 86°6'45.22"E	12.00Acre/4.856Ha	BR-2.3Km,PA-42.8Km	42.8		145899	90000	Existing
J3	DEVI RIVER	Mouza-KULASHREE,Khata-1194, Plot- 3(P)-11.400Ac, Kissam-NADI, Lat- 20°14'0.05"N to 20°14'6.50"N Long- 86°5'33.81"E to 86°5'51.83"E	11.400Acre/4.614Ha	BR-750m,PA-37.5Km	37.5		105765	90450	Existing
J4	KANDAL RIVER	Mouza-PAHANGA,Khata-1339, Plot-2584-12.000Ac, Kissam-NADI, Lat-20°10'5.06"N to 20°10'11.77"N Long- 86°7'13.69"E to 86°7'30.38"E	12.00Acre/4.856Ha	BR-1.6Km,PA-44Km	44		145692	97887	Existing

J5	DEVI RIVER	Mouza-SITHALO,Khata-1641, Plot-1489 (P)-11.200Ac, Kissam-NADI, Lat- 20°11'25.97"N to 20°11'37.68"N Long- 86°7'13.71"E to 86°7'23.86"E	11.200Acre/4.533Ha	BR-670m,PA-43Km	43		78288	30000	Existing
J6	DEVI RIVER	Mouza-BACHHASAILO,Khata-436,Plot-1659/2366-12.100Ac, Kissam-NADI, Lat-20°11'25.97"N to 20°12'52.38"N Long- 86°8'49.42"E to 86°8'55.25"E	12.100 Acre/4.897Ha	BR-1.3Km,PA-43.7Km	43.7		100935	78196.5	Existing
J7	DEVI RIVER	Mouza-Sasanpada,Khata no-511,Plot no-1444/2222,Kissam-Nadi,Lat-20.219,Long-86.136	12.35Ac/4.997Ha	BR-890m,PA-43.4Km	43.4		74970	44982	Proposed
K1	LUNA RIVER	Mouza-BALIAPADA,Khata-1006,Plot-1210-12.355Ac, Kissam-NADI, Lat-20°27'10.52"N to 20°27'15.63"N Long- 86°12'30.27"E to 86°12'42.44"E	12.355Acre/5.00Ha	BR-3.6Km,PA-Km	37.7		75000	64320	Existing

K2	CHITTROTPALA RIVER	Mouza- BARAHAMPUR, Khata- 231, Plot- 634-12.355Ac, Kissam-NADI, Lat- 20°23'37.07"N to 20°23'45.77"N Long- 86°11'56.81"E to 86°12'9.06"E	12.355Acre/5.00Ha	BR- 1.4Km, PA- Km	40.6		69625.5	58132.5	Existing
K3	LUNA RIVER	Mouza-DEMANDO, Khata- 325, Plot- 192-12.355Ac, Kissam-NADI, Lat- 20°27'7.98"N to 20°27'16.81"N Long- 86°11'13.38"E to 86°11'23.90"E	12.355Acre/5.00Ha	BR- 1.3Km, PA- Km	37.3		48652.5	43215	Existing
K4	CHITTROTPALA RIVER	Mouza-KALAMISIRI JAYNTAPUR, Khata- 296, Plot- 1-12.355Ac, Kissam-NADI, Lat- 20°27'7.41"N to 20°27'10.65"N Long- 86°8'45.97"E to 86°8'54.39"E	12.355Acre/5.00Ha	BR- 2.8Km, PA- Km	32.4		21246	14632.5	Existing
K5	LUNA RIVER	Mouza- KULAGANISALO, Khata- 817, Plot-1920,1921- 12.355Ac, Kissam-NADI, Lat- 20°27'46.42"N to 20°27'54.25"N Long- 86°15'16.64"E to 86°15'29.77"E	12.355Acre/5.00Ha	BR- 770m, PA- Km	42		50868	44772	Existing

K6	LUNA RIVER	Mouza- KULASUKARAPADA, Khata- 371, Plot-1022-12.355Ac, Kissam-NADI, Lat- 20°27'19.52"N to 20°27'30.08"N Long- 86°13'54.28"E to 86°14'8.12"E	12.355Acre/5.00Ha	BR- 1.7Km, PA- Km	41		124806	102156	Existing
K7	CHITTROTPALA RIVER	Mouza- PALADA, Khata- 548, Plot-169-12.355Ac, Kissam-NADI, Lat- 20°25'17.30"N to 20°25'31.78"N Long- 86°10'39.53"E to 86°10'55.31"E	12.355Acre/5.00Ha	BR- 1.4Km, PA- Km	37.2		44325	38137.5	Existing
K8	CHITTROTPALA RIVER	Mouza- NAGASPUR, Khata- 1013, Plot-535-12.355Ac, Kissam-NADI, Lat- 20°24'35.23"N to 20°24'46.79"N Long- 86°11'5.90"E to 86°11'23.95"E	12.355Acre/5.00Ha	BR- 1.2Km, PA- Km	38.5		25113	18081	Existing
K9	LUNA RIVER	Mouza- SAHADEBPUR, Khata- 563, Plot-49-12.355Ac, Kissam-NADI, Lat- 20°27'8.15"N to 20°27'13.09"N Long- 86°13'18.47"E to 86°13'32.40"E	12.355Acre/5.00Ha	BR- 2.8Km, PA- Km	39		28125	11910.375	Existing

K10	CHITTROTPALA RIVER	Mouza- SANTAPUR, Khata-313, Plot-71-12.355Ac, Kissam-NADI, Lat-20°25'28.59"N to 20°25'35.85"N Long-86°10'18.23"E to 86°10'33.17"E	12.355Acre/5.00Ha	BR-810m, PA-Km	36.4		104548.5	89973	Existing
K11	CHITTROTPALA RIVER	Mouza-Janardanpur, Khata no-288, Plot no-5, Kissam-Nadi, Lat-20.457, Long-86.13	12.35Ac/4.997Ha	BR-4.7Km, PA-Km	32.2		74970	44982	Proposed
K12	CHITTROTPALA RIVER	Mouza-Jaladia, Khata no-139, Plot no-444, Kissam-Nadi, Lat-20.433, Long-86.168	12.35Ac/4.997Ha	BR-170m, PA-Km	35.3		59976	35985.6	Proposed
K13	CHITTROTPALA RIVER	Mouza-Sanaroutpati, Khata no-49, Plot no-185, Kissam-Nadi, Lat-20.462, Long-86.134	12.35Ac/4.997Ha	BR-4.3Km, PA-Km	30.5		59976	35985.6	Proposed
K14	LUNA RIVER	Mouza-Sadhaknagar, Khata no-140, Plot no-428, Kissam-Nadi, Lat-20.455, Long-86.178	12.35Ac/4.997Ha	BR-370m, PA-Km	30.4		59976	35985.6	Proposed
L1	BIRUPA RIVER	Mouza-NARADA, Khata-535, Plot-1-10.710Ac, Kissam-Nadi, Lat-20°33'53.15"N to 20°34'2.78"N Long-86°4'1.97"E to 86°4'11.01"E	10.710Acre/4.334Ha	BR-2.8Km, PA-19Km	19		65014.5	41352	Existing

L2	BIRUPA RIVER	Mouza- BADABHIMARAJPUR, Khata-818, Plot-1- 10.225Ac, Kissam-Nadi, Lat-20°32'35.64"N to 20°32'43.70"N Long- 86°1'41.63"E to86°2'47.50"E	10.225Acre/4.138Ha	BR- 2.2Km,PA- 17Km	17		62092.5	52324.5	Existing
L3	MAHANADI RIVER	Mouza-GOPINATHPUR, Khata-589, Plot-1001- 11.000Ac, Kissam-Nadi, Lat-20°28'28.14"N to 20°28'32.47"N Long- 85°57'21.43"E to 85°57'35.14"E	11.00Acre/4.452Ha	BR- 4.4Km,PA- 18.2Km	18.2		48555	23760	Existing
L4	BIRUPA RIVER	Mouza- BHAI RPUR, Khata-655, Plot-1- 12.500Ac, Kissam-Nadi, Lat-20°30'44.70"N to 20°30'51.02"N Long- 85°58'43.02"E to 85°58'55.56"E	12.500Acre/5.059Ha	BR-5Km,PA- 18Km	15.5		52710	46836	Existing
L5	BIRUPA RIVER	Mouza-Chahapada,Khata no-1020,Plot no-1,LAT- 20.544,Long-86.05	12.35Ac/4.997Ha	BR- 560m,PA- Km	18		52479	31487.4	Proposed
L6	MAHANADI RIVER	Mouza-Barabodia-I,Khata no-553,Plot no-1514,Lat- 20.456,Long-85.992	12.35Ac/4.997Ha	BR- 8.6Km,PA- 21.4Km	21.4		112455	67473	Proposed
L7	MAHANADI RIVER	Mouza-Barabodia-II,Khata no-553,Plot no-1494,Lat- 20.46,Long-85.987	12.35Ac/4.997Ha	BR- 7.9Km,PA- 22Km	22		112455	67473	Proposed

L8	BIRUPA RIVER	Mouza-Ganipur,Khata no-172,Plot no-1,Lat-20.517,Long-86.004	12.35Ac/4.997Ha	BR-2.6Km,PA-17.6Km	17.6		52479	31487.4	Proposed
L9	MAHANADI RIVER	Mouza-Atoda,Khata no-1204,Plot no-3950,Lat-20.448,Long-86.019	12.35Ac/4.997Ha	BR-6Km,PA-23.5Km	23.5		97461	58476.6	Proposed
L10	MAHANADI RIVER	Mouza-Atoda,Khata no-1204,Plot no-4021,Lat-20.447,Long-86.007	12.35Ac/4.997Ha	BR-7Km,PA-23.7Km	23.7		97461	58476.6	Proposed
L11	BIRUPA RIVER	Mouza-Sanabhimrajpur,Khata no-331,Plot no-1,Lat-20.532,Long-86.032	12.35Ac/4.997Ha	BR-970m,PA-19Km	19		74970	44982	Proposed
M1	MAHANADI RIVER	Mouza-NUAPATNA, Khata-329, Plot-959-12.300Ac, Kissam-Nadi, Lat-20°30'27.20"N to 20°30'33.20"N Long-85°49'36.00"E to 85°49'55.00"E	12.300Acre/4.978Ha	BR-740m,PA-8.2Km	8.2		168007.5	118125	Existing
M2	BIRUPA RIVER	Mouza-BHATIMUNDA, Khata-441, Plot- 1116/P - 12.340Ac, Kissam-Nadi, Lat-20°32'4.20"N to 20°32'23.20"N Long-86°1'33.10"E to 86°1'42.20"E	12.340Acre/4.994Ha	BR-1.3Km,PA-19Km	19		74895	59670	Existing

N1	MAHANADI RIVER	Mouza-Hatamal, Khata-275, Plot-1282-11.750Ac,1260/1288-3.250Ac, Kissam-Nadi, Lat-20°24'16.50"N to 20°24'23.60"N Long-85°30'41.70"E to 86°30'41.50"E	15.00 Acre/6.07Ha	BR-9.7Km,PA-8Km	8		136587	113463	Existing
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Final List of Cluster & Contiguous Cluster

Clusters:

Cluster No.	Transportation Route No.	Number of tippers/day of cluster	Number of tippers/day of all the cluster on route	Length of route in KM	Type of road (Black Topped/unpaved)	Recommendation for road (Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location
1	NH16			6.4	Black Topped	Black Topped	GOVT.	NH16,,MOUZA-BENTKARPADA
	NH16			5.6	Black Topped	Black Topped	GOVT.	NH16,Mouza-tangarhuda

River Name	Cluster No.	Lease No	Location (Riverbed / Patta Land)	Village	Area (in Ha)	Total Excavation (Ton)	Total Mineral Excavation (Ton)
KATHAJODI RIVER	1	D6	KATHAJODI R/S BENTKARPADA,Mouza- Bentkarpada, Khata-57, Plot-70(P)- 25.00 Ac, Kissam-Nadi, Lat- 20°27'57.5"N to 20°28'4.9"N Long- 85°49'31.2"E to 85°49'48.6"E	BENTKARPADA	10.117	101170	274920
		E2	KATHAJODI RIVER SAND TANGARHUDA,Mouza- TANGARHUDA, Khata-3, Plot-24- 35.000Ac ,Kissam-Nadi, Lat- 20°27'56.80"N to 20°28'8.80"N	TANGARHUDA	14.16	141640	329390

			Long-85°49'57.40"E to85°50'17.50"E				
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Final Transportation Routes for Individual leases and leases in Cluster

Lease No.	Transportation Route No.	Number of tippers/day of lease	Number of tippers/day of all the lease on route	Length of route in KM	Type of road(Black Topped/unpaved)	Recommendation for road (Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location
A1	Mouza- Balarampur, Khata-197, Plot- 399(P)-12.00Ac, ,Kissam-Nadi, Lat-20°27'35.68"N to 20°27'44.51"N Long-85°44'21.17"E to 85°44'32.01"E	NH16		7.7	Black Topped	Black Topped	Govt	Mouza-Balarampur
A2	Mouza-Daspur,Khata no-165,Plot no-550,lat-20.443,Long-85.702	NH16		9.5	Black Topped	Black Topped	Govt	Mouza-Daspur
A3	Mouza-Daspur,Khata no-165,Plot no-371,lat-20.444,Long-85.714	NH16		9.1	Black Topped	Black Topped	Govt	Mouza-Daspur
A4	Mouza-Daspur,Khata no-165,Plot no-538,lat-20.447,Long-85.722	NH16		7.9	Black Topped	Black Topped	Govt	Mouza-Daspur

A5	Mouza- Brajabiharipur, Khata no-21, Plot no-142, lat-20.506, Long-85.814	NH16			8.2	Black Topped	Black Topped	Govt	Mouza- Brajabiharipur
B1	Mouza- Naranpur, Khata-156, Plot- 1053-13.35Ac, Kissam-Nadi, Lat-20°23'21.6"N to 20°23'26.9"N Long-85°25'47.0"E to 85°26'02.8"E	NH655			8.8	Black Topped	Black Topped	Govt	Mouza- Naranpur
B2	Mouza- Kantapada, Khata-439, Plot- 3278-16.00Ac, Kissam-Nadi, Lat-20°22'25.0"N to 20°22'35.1"N Long-85°20'18.9"E to 85°20'33.6"E	NH655			5.2	Black Topped	Black Topped	Govt	Mouza- Kantapada
B3	Mouza- Mangarajpur, Khata-641, Plot- 3720/3749-14.00Ac, Kissam-Nadi, Lat-20°22'26.9"N to 20°22'35.5"N Long-85°18'39.6"E to 85°18'47.7"E	NH655			5.6	Black Topped	Black Topped	Govt	Mouza- Mangarajpur
B4	Mouza- Bangarsingha, Khata-903, Plot- 7388/7570-17.00Ac, Kissam-Nadi, Lat-20°23'20.7"N to	NH16			4	Black Topped	Black Topped	Govt	Mouza- Bangarsingha

	20°23'27.0" N Long- 85°27'59.9"E to 85°28'17.5"E								
B5	Mouza- Tunapur, Khata- 504, Plot- 4007- 7.70Ac,Plot- 4007/4051-5.30Ac ,Kissam-Nadi, Lat- 20°22'58.1"N to 20°23'04.9" N Long- 85°23'02.6"E to 85°23'15.7"E	NH16			5.5	Black Topped	Black Topped	Govt	Mouza- Tunapur
B6	Mouza- Kanjapala,Khata no- 279,Plot no- 1639,Kissam-Nadi,Lat- 20.366,Long-85.305	NH16			4.5	Black Topped	Black Topped	Govt	Mouza-Kanjapala
B7	Mouza-Ogalpur,Khata no-200,Plot no- 1137/1898,Lat- 20°21'57.90"N to 20°22'04.80"N Long- 85°16'36.30"E to 85°16'47.60"E	NH16			6.5	Black Topped	Black Topped	Govt	Mouza-Ogalpur
C1	Mouza- Patugadadharpur, Khata-1, Plot- 25- 50.00Ac, Kissam-Nadi, Lat-20°22'23.00"N to 20°22'43.50" N Long-	NH16			0.7	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur

	85°30'11.80"E to 85°30'35.50"E								
C2	Mouza- Patugadadharpur, Khata-1, Plot- 3/1- 33.00Ac, Kissam-Nadi, Lat-20°21'33.916"N to 20°21'42.779" N Long- 85°24'0.971"E to 85°24'22.040"E	NH16			1.6	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
C3	Mouza- Patugadadharpur, Khata-1, Plot- 38(P)- 12.35Ac, Kissam-Nadi, Lat-20°27'11.334"N to 20°27'20.267" N Long- 85°37'29.958"E to 85°37'40.414"E	NH16			7.5	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
C4	Mouza- Patugadadharpur, Khata-1, Plot-6- 12.50Ac, Kissam-Nadi, Lat-20°21'27.251"N to 20°21'32.790"N Long- 85°25'23.915"E to 85°25'41.134"E	NH16			1.1	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur

C5	Mouza- Patugadadharpur, Khata-1, Plot- 29/1-12.50Ac, Kissam-Nadi, Lat-20°24'38.90"N to 20°24'46.00"N Long- 85°32'05.40"E to 85°32'14.60"E	NH16			10.4	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
C6	Mouza- Patugadadharpur, Khata no-1, Plot no- 28(P), 29, Kissam-Nadi, Lat-20.407, Long- 85.546	NH16			1.7	Black Topped	Black Topped	Govt	Mouza- Patugadadharpur
D1	Mouza- Mundamuhan, Khata-27, Plot- 76/p-15.00Ac, Kissam-Nadi, Lat-20°26'58.4"N to 20°27'10.0"N Long- 85°50'13.3"E to 85°50'26.6"E	NH16			0.79	Black Topped	Black Topped	Govt	Mouza- Mundamuhan
D2	Mouza- Deokali, Khata-100, Plot-293(P)-5.00Ac, Kissam-Nadi, Lat-20°22'4.80"N to 20°22'8.70"N Long- 85°57'11.10"E to 85°57'16.80"E	NH16			9.8	Black Topped	Black Topped	Govt	Mouza- Deokali

D3	Mouza- Korkora, Khata-314, Plot-385(P)-12.20Ac, Kissam-Nadi, Lat-20°21'38.7"N to 20°21'46.0"N Long-85°59'19.2"E to 85°59'28.3"E	NH16			14.5	Black Topped	Black Topped	Govt	Mouza- Korkora
D4	Mouza- Bidyadharpur, Khata-331, Plot-102(P)-12.20Ac, Kissam-Nadi, Lat-20°28'28.7"N to 20°28'34.3"N Long-85°48'42.0"E to 85°48'54.5"E	NH16			8.5	Black Topped	Black Topped	Govt	Mouza- Bidyadharpur
D5	Mouza- Naranpur, Khata-196, Plot-1(P)-12.250Ac, Kissam-Nadi, Lat- 20°26'30.70"N to 20°26'39.90"N Long-85°50'58.5"E to 85°51'06.2"E	NH16			1	Black Topped	Black Topped	Govt	Mouza- Naranpur
D6	Mouza- Bentkarpada, Khata-57, Plot-70(P)-25.00 Ac, Kissam-Nadi, Lat- 20°27'57.5"N to 20°28'4.9"N Long-85°49'31.2"E to 85°49'48.6"E	NH16			6.4	Black Topped	Black Topped	Govt	Mouza- Bentkarpada
D7	Mouza- Arilo, Khata-249, Plot-5(P)-12.20 Ac, Kissam-Nadi, Lat-20°28'43.45896"N to	NH16			5.2	Black Topped	Black Topped	Govt	Mouza- Arilo

	20°28'50.70540"N Long- 85°47'08.41272"E to 85°47'16.30536"E								
D8	Mouza- Belagachhia,Khata no- 757,Plot no-933,Kissam- Nadi,Lat-20.423,Long- 85.861	NH16			2	Black Topped	Black Topped	Govt	Mouza- Belagachhia
D9	Mouza- Bidyadharpur,Khata no- 331,Plot no-949,Kissam- Nadi,Lat-20.46,Long- 85.816	NH16			4	Black Topped	Black Topped	Govt	Mouza- Bidyadharpur
D10	Mouza-Korkora,Khata no-314,Plot no- 385,Kissam-Nadi,Lat- 20.365,Long-85.999	NH316A			6	Black Topped	Black Topped	Govt	Mouza-Korkora
E1	Mouza-SUBERNAPUR, Khata-1, Plot- 1- 20.500Ac, ,Kissam-Nadi, Lat-20°27'48.34"N to20°27'56.75"N Long - 85°50'37.29"E to 85°50'52.69"E	NH16			5	Black Topped	Black Topped	Govt	Mouza- SUBERNAPUR
E2	Mouza-TANGARHUDA, Khata-3, Plot-24- 35.000Ac ,Kissam-Nadi, Lat-20°27'56.80"N to 20°28'8.80"N Long-	NH16			5.6	Black Topped	Black Topped	Govt	Mouza- TANGARHUDA

	85°49'57.40"E to85°50'17.50"E								
E3	Mouza- UNIT 37 BADAMBADI, Khata- 540, Plot-661- 7.000Ac,663- 5.500Ac,Kissam-Nadi, Lat-20°26'58.70"N to 20°27'8.51"N Long- 85°52'53.47"E to 85°53'2.56"E	NH16			2	Black Topped	Black Topped	Govt	Mouza-UNIT 37 BADAMBADI
E4	Mouza- UNIT 39 SILPAPURI, Khata-327, Plot-685-6.500Ac,876- 6.000Ac,Kissam-Nadi, Lat-20°26'3.10"N to 20°26'13.00"N Long- 85°53'55.50"E to 85°54'4.50"E	NH16			2.5	Black Topped	Black Topped	Govt	Mouza-UNIT 39 SILPAPURI
E5	Mouza- UTTAMAPUR, Khata-255, Plot-861- 14.000Ac, ,Kissam-Nadi, Lat- 20°25'34.04"N to20°25'42.35"N Long- 85°51'53.68"E to 85°52'3.42"E	NH16			2.2	Black Topped	Black Topped	Govt	Mouza- UTTAMAPUR

E6	Mouza- PRATAPNAGARI, Khata-1030, Plot-1248-13.000Ac, ,Kissam-Nadi, Lat-20°23'40.87"N to20°23'53.84"N Long-85°52'9.60"E to 85°52'19.81"E	NH16			2	Black Topped	Black Topped	Govt	Mouza- PRATAPNAGARI
E7	Mouza- BRAHMAPUR, Khata-677, Plot-1-13.000Ac, ,Kissam-Nadi, Lat-20°25'37.06"N to 20°25'46.04"N Long-85°54'34.81"E to 85°54'45.46"E	NH16			4	Black Topped	Black Topped	Govt	Mouza- BRAHMAPUR
E8	Mouza- KADAMPADA, Khata-610, Plot-2638-12.500Ac, ,Kissam-Nadi, Lat-20°23'41.80"N to20°23'49.00"N Long-85°54'43.10"E to 85°54'54.90"E	NH16			7	Black Topped	Black Topped	Govt	Mouza- KADAMPADA
E9	Mouza- JARIPADA, Khata-428, Plot-395-25.000Ac, ,Kissam-Nadi, Lat-20°24'16.90"N to 20°24'33.60"N Long-85°54'8.30"E to85°54'15.60"E	NH16			4	Black Topped	Black Topped	Govt	Mouza-JARIPADA

E10	Mouza- BAGULAPADA, Khata-25, Plot-116- 13.000Ac,Kissam-Nadi, Lat- 20°26'14.38"N to 20°26'22.15"N Long- 85°56'21.52"E to 85°56'33.52"E	NH55			1.5	Black Topped	Black Topped	Govt	Mouza- BAGULAPADA
E11	Mouza- ARAKHAKUDA, Khata-172, Plot-1- 12.500Ac, ,Kissam-Nadi, Lat- 20°22'43.92"N to20°22'53.66"N Long- 85°52'31.92"E to 85°52'42.87"E	NH16			4	Black Topped	Black Topped	Govt	Mouza- ARAKHAKUDA
E12	Mouza- RAJAHANSA, Khata-960, Plot-857- 13.500Ac, ,Kissam-Nadi, Lat-20°25'20.98"N to 20°25'35.89"N Long- 85°57'14.63"E to 85°57'23.15"E	NH55			3	Black Topped	Black Topped	Govt	Mouza- RAJAHANSA
E13	Mouza-Sartol, Khata- 204, Plot-1052(P)-10.30 Ac, Kissam-Nadi, Lat- 20°25'59.23920"N to 20°26'06.48348"N Long- 85°55'17.39316"E to 85°55'25.46688"E	NH55			5.5	Black Topped	Black Topped	Govt	Mouza-Sartol
E14	Mouza-Kalapada, Khata-1009, Plot-02(P)- 10.50 Ac, Kissam-Nadi, Lat- 20°23'51.58644"N	NH55			5.6	Black Topped	Black Topped	Govt	Mouza-Kalapada

	to 20°24'00.83808"N Long- 85°58'09.58980"E to 85°58'19.78716"E								
E15	Mouza-Kularichuan, Khata-682, Plot-02(P)- 10.50 Ac, Kissam-Nadi, Lat- 20°23'51.58644"N to 20°24'00.83808"N Long- 85°58'09.58980"E to 85°58'19.78716"E	NH55			5.8	Black Topped	Black Topped	Govt	Mouza- Kularichuan
E16	Mouza- Khadichuandeuli, Khata no-391, Plot no- 1162, Kissam-Nadi, Lat- 20.379, Long-85.95	NH316			9.5	Black Topped	Black Topped	Govt	Mouza- Khadichuandeuli,
E17	Mouza- Gatiroutpatna, Khata no-695, Plot no- 188, Kissam-Nadi, Lat- 20.448, Long-85.956	NH55			3	Black Topped	Black Topped	Govt	Mouza- Gatiroutpatna
E18	Mouza- Baradhuleswar, Khata no-275, Plot no- 1444, Kissam-Nadi, Lat- 20.387, Long-85.934	NH16			8.5	Black Topped	Black Topped	Govt	Mouza- Baradhuleswar
E19	Mouza- Subhadrapur, Khata no- 454, Plot no-1,2, Kissam- Nadi, Lat-20.451, Long- 85.87	NH16			3.5	Black Topped	Black Topped	Govt	Mouza- Subhadrapur

E20	Mouza-Kanheipur,Khata no-252,Plot no-1,Kissam-Nadi,Lat-20.464,Long-85.922	NH55			2.5	Black Topped	Black Topped	Govt	Mouza-Kanheipur
F1	Mouza- MAHANADI, Khata-12, Plot-27-12.350Ac, Kissam-BALICHAR, Lat-20°25'3.20"N to 20°25'9.63"N Long-85°36'30.71"E to 85°36'40.38"E	NH16			1.5	Black Topped	Black Topped	Govt	Mouza-MAHANADI
F2	Mouza- MAHANADI, Khata-12, Plot-36-12.350Ac, Kissam-BALICHAR, Lat-20°26'59.60"N to 20°27'5.70"N Long-85°38'16.50"E to 85°38'26.10"E	NH16			1.5	Black Topped	Black Topped	Govt	Mouza-MAHANADI
F3	Mouza-Mahanadi,Khata no-12,Plot no-39,41,Lat-20.451,Long-85.649,	NH16			2.5	Black Topped	Black Topped	Govt	Mouza-MAHANADI
G1	Mouza-Adaspur,Khata-1277, Plot-3857(P)-3.41Ac, Kissam-NADI,Mouza-Arisole,Khata-429, Plot-531-8.89Ac, Kissam-	NH316			4	Black Topped	Black Topped	Govt	Mouza-Adaspur

	NADI Lat-20°13'04.10"N to 20°13'17.30"N Long-86°01'56.30"E to 86°02'08.50"E								
G2	Mouza-TITHAPADA, Khata-75, Plot-287-12.200Ac, Kissam-NADI, Lat-20°21'17.30"N to 20°21'25.60"N Long-86°1'0.90"E to 86°1'11.20"E	NH316			14	Black Topped	Black Topped	Govt	Mouza-TITHAPADA
G3	Mouza-Balada, Khata-331, Plot-128-12.000Ac, Kissam-NADI, Lat-20°16'22.70"N to 20°16'32.70"N Long-86°2'53.10"E to 86°3'3.20"E	NH316			11.5	Black Topped	Black Topped	Govt	Mouza-Balada
G4	Mouza-SIRSUNDARPUR, Khata-441, Plot-521-12.200Ac, Kissam-NADI, Lat-20°20'51.60"N to 20°22'52.80"N Long-86°1'9.40"E to 86°1'21.00"E	NH316			15	Black Topped	Black Topped	Govt	Mouza-SIRSUNDARPUR
G5	Mouza-BADA KHARAMANGA, Khata-235, Plot-654-12.350Ac, Kissam-NADI, Lat-20°17'13.90"N to	NH316			11	Black Topped	Black Topped	Govt	Mouza-BADA KHARAMANGA

	20°17'22.00"N Long- 86°2'4.70"E to 86°2'12.10"E								
G6	Mouza-BADA KHARAMANGA, Khata- 235, Plot-633-12.300Ac, Kissam-NADI, Lat- 20°17'28.20"N to 20°17'37.10"N Long- 86°1'55.80"E to 86°2'4.60"E	NH316			10	Black Topped	Black Topped	Govt	Mouza-BADA KHARAMANGA
G7	Mouza-Rahamba, Khata no-875, Plot no- 500, Kissam-Nadi, Lat- 20.263, Long-86.063	NH55			14	Black Topped	Black Topped	Govt	Mouza-Rahamba
G8	Mouza- Manikunda, Khata no- 204, Plot no-294, Kissam- Nadi, Lat-20.25, Long- 86.018	NH316			4	Black Topped	Black Topped	Govt	Mouza- Manikunda
H1	Mouza-HULIPUR, Khata- 882, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°25'49.60"N to 20°25'58.80"N Long- 86°4'1.10"E to 86°4'11.00"E	NH316A			12	Black Topped	Black Topped	Govt	Mouza-HULIPUR

H2	Mouza- UDEYPUR,Khata-179, Plot-1282-12.355Ac, Kissam-NADI, Lat- 20°24'13.70"N to 20°24'23.10"N Long- 86°8'24.90"E to 86°8'36.10"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza-UDEYPUR
H3	Mouza- DULUPUR,Khata-579, Plot-1-4.355Ac,5- 8.000Ac, Kissam-NADI, Lat-20°23'19.50"N to 20°23'30.90"N Long- 86°13'6.10"E to 86°13'24.70"E	NH316A			6	Black Topped	Black Topped	Govt	Mouza-DULUPUR
H4	Mouza-KHENTAL,Khata- 188, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°23'46.58"N to 20°23'56.29"N Long- 86°8'13.44"E to 86°8'23.16"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza-KHENTAL
H5	Mouza- BARADA,Khata- 1213, Plot-2-12.355Ac, Kissam-NADI, Lat- 20°26'15.10"N to 20°26'24.40"N Long- 86°1'37.90"E to86°1'46.00"E	NH316A			5	Black Topped	Black Topped	Govt	Mouza-BARADA

H6	Mouza- MURKUNDI,Khata-505, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°27'18.40"N to 20°27'32.00"N Long- 86°3'58.10"E to 86°4'7.50"E	NH316A			13	Black Topped	Black Topped	Govt	Mouza- MURKUNDI
H7	Mouza- MAHAMMADPUR,Khata -773, Plot-1-12.355Ac, Kissam-NADI, Lat- 20°24'8.02"N to 20°24'15.04"N Long- 86°15'36.40"E to 86°15'46.20"E	NH316A			2	Black Topped	Black Topped	Govt	Mouza- MAHAMMADPUR
H8	Mouza- BABUJANGA,Khata- 817, Plot-1676- 12.355Ac, Kissam-NADI, Lat-20°22'57.74"N to 20°23'8.01"N Long- 86°11'35.36"E to 86°11'45.79"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza- BABUJANGA
H9	Mouza- DONDO,Khata- 882, Plot-1235- 12.355Ac, Kissam-NADI, Lat-20°25'15.22"N to 20°25'25.62"N Long- 86°6'57.15"E to 86°7'8.17"E	NH316A			7.5	Black Topped	Black Topped	Govt	Mouza-DONDO

H10	Mouza- KURULI,Khata-451, Plot-1004-12.100Ac, Kissam-NADI, Lat-20°26'10.16"N to 20°26'17.34"N Long-86°4'31.53"E to 86°4'41.43"E	NH316A			9	Black Topped	Black Topped	Govt	Mouza-KURULI,
H11	Mouza-PURUNAHAT,Khata-423, Plot-1395 1395/1401-12.355Ac, Kissam-NADI, Lat-20°25'32.36"N to 20°25'39.10"N Long-86°6'36.77"E to 86°6'45.74"E	NH316A			10.5	Black Topped	Black Topped	Govt	Mouza-PURUNAHAT
H12	Mouza-Bankala,Khata no-103,Plot no-280,Kissam-Nadi,Lat-20.368,Long-86.198	NH316A			5	Black Topped	Black Topped	Govt	Mouza-Bankala
H13	Mouza-Guali,Khata no-1051,Plot no-1614,Kissam-Nadi,Lat-20.453,Long-86.073	NH55			5	Black Topped	Black Topped	Govt	Mouza-Guali
H14	Mouza-Aitipur,Khata no-486,Plot no-9,Kissam-Nadi,Lat-20.437,Long-85.991	NH56			3	Black Topped	Black Topped	Govt	Mouza-Aitipur
H15	Mouza-Uttarkul,Khata no-526,Plot no-52,Kissam-Nadi,Lat-20.398,Long-86.237	NH316A			1.5	Black Topped	Black Topped	Govt	Mouza-Uttarkul

11	Mouza-TAMARA,Khata-414, Plot-1750-12.200Ac, Kissam-NADI, Lat-20°23'42.29"N to 20°23'51.72"N Long-85°9'39.17"E to 85°9'50.83"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza-TAMARA
12	Mouza-MANPUR,Khata-280, Plot-2251 & 2252-12.200Ac, Kissam-NADI, Lat-20°23'35.99"N to 20°23'40.24"N Long-85°10'26.76"E to 85°10'41.05"E	NH16			10	Black Topped	Black Topped	Govt	Mouza-MANPUR
13	Mouza-BRAHMAPURA,Khata-158, Plot-1141-12.350Ac, Kissam-NADI, Lat- 20°25'2.04"N to 20°25'7.37"N Long-85°6'9.84"E to85°6'21.45"E	NH16			6	Black Topped	Black Topped	Govt	Mouza-BRAHMAPURA
14	Mouza-DHANIPUR,Khata-640, Plot- 06-12.350Ac, Kissam-NADI, Lat-20°24'52.32"N to 20°24'57.07"N Long-85°5'32.15"E to 85°5'44.53"E	NH16			8	Black Topped	Black Topped	Govt	Mouza-DHANIPUR

15	Mouza- Muraripur, Khata no- 324, Plot no- 1219, Kissam-Nadi Lat- 20°24'38.53"N, long-, 85° 6'39.35"E	NH16			6.5	Black Topped	Black Topped	Govt	Mouza-Muraripur
16	Mouza- Padmalapatna, Khata no-269, Plot no- 1072, Kissam-Nadi, Lat- 20° 23' 40.36", Long- 85° 9' 38.99"	NH16			11	Black Topped	Black Topped	Govt	Mouza- Padmalapatna
J1	Mouza-NATI, Khata-604, Plot- 2510(P)-12.000Ac, Kissam-NADI, Lat- 20°10'45.90"N to 20°11'4.99"N Long- 86°8'47.95"E to 86°8'59.33"E	NH316A			13.5	Black Topped	Black Topped	Govt	Mouza-NATI
J2	Mouza-POLSARA, Khata- 711, Plot-1317(P)- 12.000Ac, Kissam-NADI, Lat- 20°10'28.15"N to 20°10'38.26"N Long- 86°6'28.99"E to 86°6'45.22"E	NH316A			9.5	Black Topped	Black Topped	Govt	Mouza-POLSARA
J3	Mouza- KULASHREE, Khata- 1194, Plot- 3(P)- 11.400Ac, Kissam-NADI, Lat-20°14'0.05"N to	NH316A			10	Black Topped	Black Topped	Govt	Mouza- KULASHREE

	20°14'6.50"N Long- 86°5'33.81"E to 86°5'51.83"E								
J4	Mouza- PAHANGA,Khata-1339, Plot-2584-12.000Ac, Kissam-NADI, Lat- 20°10'5.06"N to 20°10'11.77"N Long- 86°7'13.69"E to 86°7'30.38"E	NH316A			11.5	Black Topped	Black Topped	Govt	Mouza-PAHANGA
J5	Mouza-SITHALO,Khata- 1641, Plot-1489 (P)- 11.200Ac, Kissam-NADI, Lat- 20°11'25.97"N to 20°11'37.68"N Long- 86°7'13.71"E to 86°7'23.86"E	NH316A			9.5	Black Topped	Black Topped	Govt	Mouza-SITHALO
J6	Mouza- BACHHASAILO,Khata- 436,Plot-1659/2366- 12.100Ac, Kissam-NADI, Lat-20°11'25.97"N to 20°12'52.38"N Long- 86°8'49.42"E to 86°8'55.25"E	NH316A			12	Black Topped	Black Topped	Govt	Mouza- BACHHASAILO
J7	Mouza- Sasanpada,Khata no- 511,Plot no- 1444/2222,Kissam-	NH316A			12.5	Black Topped	Black Topped	Govt	Mouza-Sasanpada

	Nadi,Lat-20.219,Long-86.136								
K1	Mouza-BALIAPADA,Khata-1006,Plot-1210-12.355Ac, Kissam-NADI, Lat- 20°27'10.52"N to 20°27'15.63"N Long-86°12'30.27"E to 86°12'42.44"E	NH316A			3.5	Black Topped	Black Topped	Govt	Mouza-BALIAPADA
K2	Mouza-BARAHAMPUR,Khata-231,Plot- 634-12.355Ac, Kissam-NADI, Lat-20°23'37.07"N to 20°23'45.77"N Long-86°11'56.81"E to 86°12'9.06"E	NH316A			4	Black Topped	Black Topped	Govt	Mouza-BARAHAMPUR
K3	Mouza-DEMANDO,Khata-325,Plot- 192-12.355Ac, Kissam-NADI, Lat-20°27'7.98"N to 20°27'16.81"N Long-86°11'13.38"E to 86°11'23.90"E	NH316A			3.5	Black Topped	Black Topped	Govt	Mouza-DEMANDO

K4	Mouza-KALAMISIRI JAYNTAPUR,Khata- 296,Plot- 1-12.355Ac, Kissam-NADI, Lat- 20°27'7.41"N to 20°27'10.65"N Long- 86°8'45.97"E to 86°8'54.39"E	NH316A			4	Black Topped	Black Topped	Govt	Mouza- KALAMISIRI JAYNTAPUR,
K5	Mouza- KULAGANISALO,Khata- 817,Plot-1920,1921- 12.355Ac, Kissam-NADI, Lat- 20°27'46.42"N to 20°27'54.25"N Long- 86°15'16.64"E to 86°15'29.77"E	NH316A			1	Black Topped	Black Topped	Govt	Mouza- KULAGANISALO
K6	Mouza- KULASUKARAPADA,Kha ta-371,Plot-1022- 12.355Ac, Kissam-NADI, Lat- 20°27'19.52"N to20°27'30.08"N Long- 86°13'54.28"E to 86°14'8.12"E	NH316A			3	Black Topped	Black Topped	Govt	Mouza- KULASUKARAPAD A
K7	Mouza- PALADA,Khata- 548,Plot-169-12.355Ac, Kissam-NADI, Lat- 20°25'17.30"N to 20°25'31.78"N Long- 86°10'39.53"E to 86°10'55.31"E	NH316A			8.5	Black Topped	Black Topped	Govt	Mouza-PALADA

K8	Mouza- NAGASPUR,Khata- 1013,Plot-535- 12.355Ac, Kissam-NADI, Lat-20°24'35.23"N to 20°24'46.79"N Long- 86°11'5.90"E to 86°11'23.95"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza- NAGASPUR
K9	Mouza- SAHADEBPUR,Khata- 563,Plot-49-12.355Ac, Kissam-NADI, Lat- 20°27'8.15"N to 20°27'13.09"N Long- 86°13'18.47"E to 86°13'32.40"E	NH316A			4.5	Black Topped	Black Topped	Govt	Mouza- SAHADEBPUR
K10	Mouza- SANTAPUR,Khata- 313,Plot-71-12.355Ac, Kissam-NADI, Lat- 20°25'28.59"N to 20°25'35.85"N Long- 86°10'18.23"E to 86°10'33.17"E	NH316A			7	Black Topped	Black Topped	Govt	Mouza- SANTAPUR
K11	Mouza-Janardanpur ,Khata no-288,Plot no- 5,Kissam-Nadi,Lat- 20.457,Long-86.13	NH316A			3.5	Black Topped	Black Topped	Govt	Mouza- Janardanpur
K12	Mouza-Jaladia ,Khata no-139,Plot no- 444,Kissam-Nadi,Lat- 20.433,Long86.168	NH316A			7	Black Topped	Black Topped	Govt	Mouza-Jaladia

K1 3	Mouza-Sanaroutpati ,Khata no-49,Plot no- 185,Kissam-Nadi,Lat- 20.462,Long-86.134	NH316A			2.5	Black Topped	Black Topped	Govt	Mouza- Sanaroutpati
K1 4	Mouza-Sadhaknagar ,Khata no-140,Plot no- 428,Kissam-Nadi,Lat- 20.455,Long-86.178	NH316A			4	Black Topped	Black Topped	Govt	Mouza- Sadhaknagar
L1	Mouza-NARADA, Khata- 535, Plot-1-10.710Ac, Kissam-Nadi, Lat- 20°33'53.15"N to 20°34'2.78"N Long- 86°4'1.97"E to 86°4'11.01"E	NH16			4	Black Topped	Black Topped	Govt	Mouza-NARADA
L2	Mouza- BADABHIMARAJPUR, Khata-818, Plot-1- 10.225Ac, Kissam-Nadi, Lat-20°32'35.64"N to 20°32'43.70"N Long- 86°1'41.63"E to86°2'47.50"E	NH16			4.5	Black Topped	Black Topped	Govt	Mouza- BADABHIMARAJP UR
L3	Mouza-GOPINATHPUR, Khata-589, Plot-1001- 11.000Ac, Kissam-Nadi, Lat-20°28'28.14"N to 20°28'32.47"N Long- 85°57'21.43"E to 85°57'35.14"E	NH16			5.5	Black Topped	Black Topped	Govt	Mouza- GOPINATHPUR

L4	Mouza- BHAIRPUR, Khata-655, Plot-1- 12.500Ac, Kissam-Nadi, Lat-20°30'44.70"N to 20°30'51.02"N Long- 85°58'43.02"E to 85°58'55.56"E	NH16			4.5	Black Topped	Black Topped	Govt	Mouza- BHAIRPUR
L5	Mouza- Chahapada,Khata no- 1020,Plot no-1,LAT- 20.544,Long-86.05	NH16			6	Black Topped	Black Topped	Govt	Mouza-Chahapada
L6	Mouza-Barabodia- I,Khata no-553,Plot no- 1514,Lat-20.456,Long- 85.992	NH55			9.5	Black Topped	Black Topped	Govt	Mouza-Barabodia- I
L7	Mouza-Barabodia- II,Khata no-553,Plot no- 1494,Lat-20.46,Long- 85.987	NH55			8.5	Black Topped	Black Topped	Govt	Mouza-Barabodia- II
L8	Mouza-Ganipur,Khata no-172,Plot no-1,Lat- 20.517,Long-86.004	NH16			8	Black Topped	Black Topped	Govt	Mouza-Ganipur
L9	Mouza-Atoda,Khata no- 1204,Plot no-3950,Lat- 20.448,Long-86.019	NH55			12	Black Topped	Black Topped	Govt	Mouza-Atoda
L10	Mouza-Atoda,Khata no- 1204,Plot no-4021,Lat- 20.447,Long-86.007	NH55			11.5	Black Topped	Black Topped	Govt	Mouza-Atoda
L11	Mouza- Sanabhimrajpur,Khata no-331,Plot no-1,Lat- 20.532,Long-86.032	NH16			6	Black Topped	Black Topped	Govt	Mouza- Sanabhimrajpur,

M1	Mouza-NUAPATNA, Khata-329, Plot-959- 12.300Ac, Kissam-Nadi, Lat-20°30'27.20"N to 20°30'33.20"N Long- 85°49'36.00"E to 85°49'55.00"E	NH55			2.5	Black Topped	Black Topped	Govt	Mouza- NUAPATNA
M2	Mouza-BHATIMUNDA, Khata-441, Plot- 1116/P - 12.340Ac, Kissam- Nadi, Lat-20°32'4.20"N to 20°32'23.20"N Long- 86°1'33.10"E to 86°1'42.20"E	NH16			5	Black Topped	Black Topped	Govt	Mouza- BHATIMUNDA
N1	Mouza-Hatamal, Khata- 275, Plot-1282- 11.750Ac,1260/1288- 3.250Ac, Kissam-Nadi, Lat-20°24'16.50"N to 20°24'23.60"N Long- 85°30'41.70"E to 86°30'41.50"E	NH16			4	Black Topped	Black Topped	Govt	Mouza-Hatamal

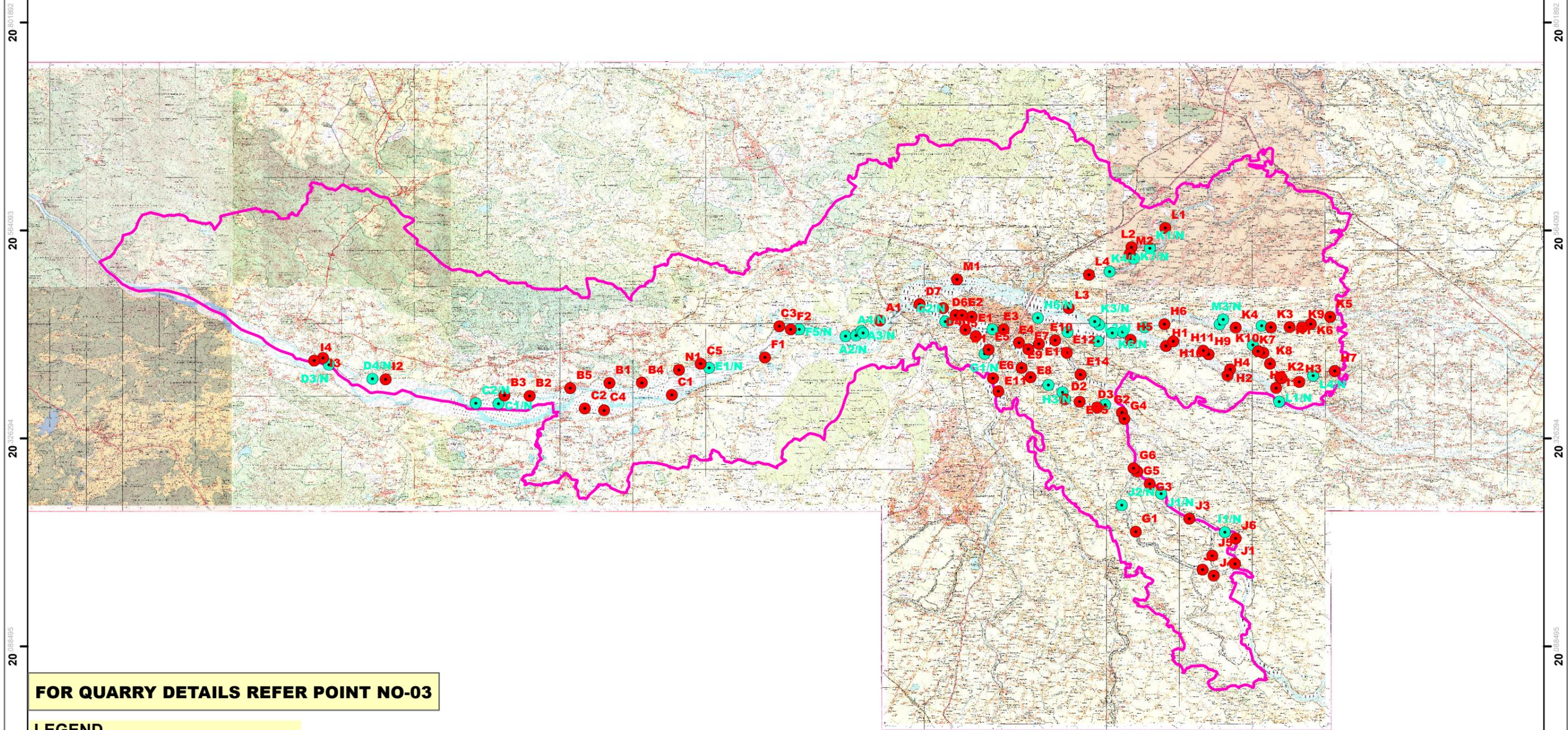
Cluster No.	Transportation Route No.	Number of tippers/day of cluster	Number of tippers/day of all the cluster on route	Length of route in KM	Type of road (Black Topped/unpaved)	Recommendation for road (Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location
1	NH16			6.4	Black Topped	Black Topped	GOVT.	NH16,,MOUZA-BENTKARPADA
	NH16			5.6	Black Topped	Black Topped	GOVT.	NH16,Mouza-tangarhuda

MINING LEASES (SAND) MARKED ON THE DISTRIC TOPO-MAP OF CUTTACK

84 814752 85 161664 85 508576 85 855488 86 202400



SCALE-1:500,000



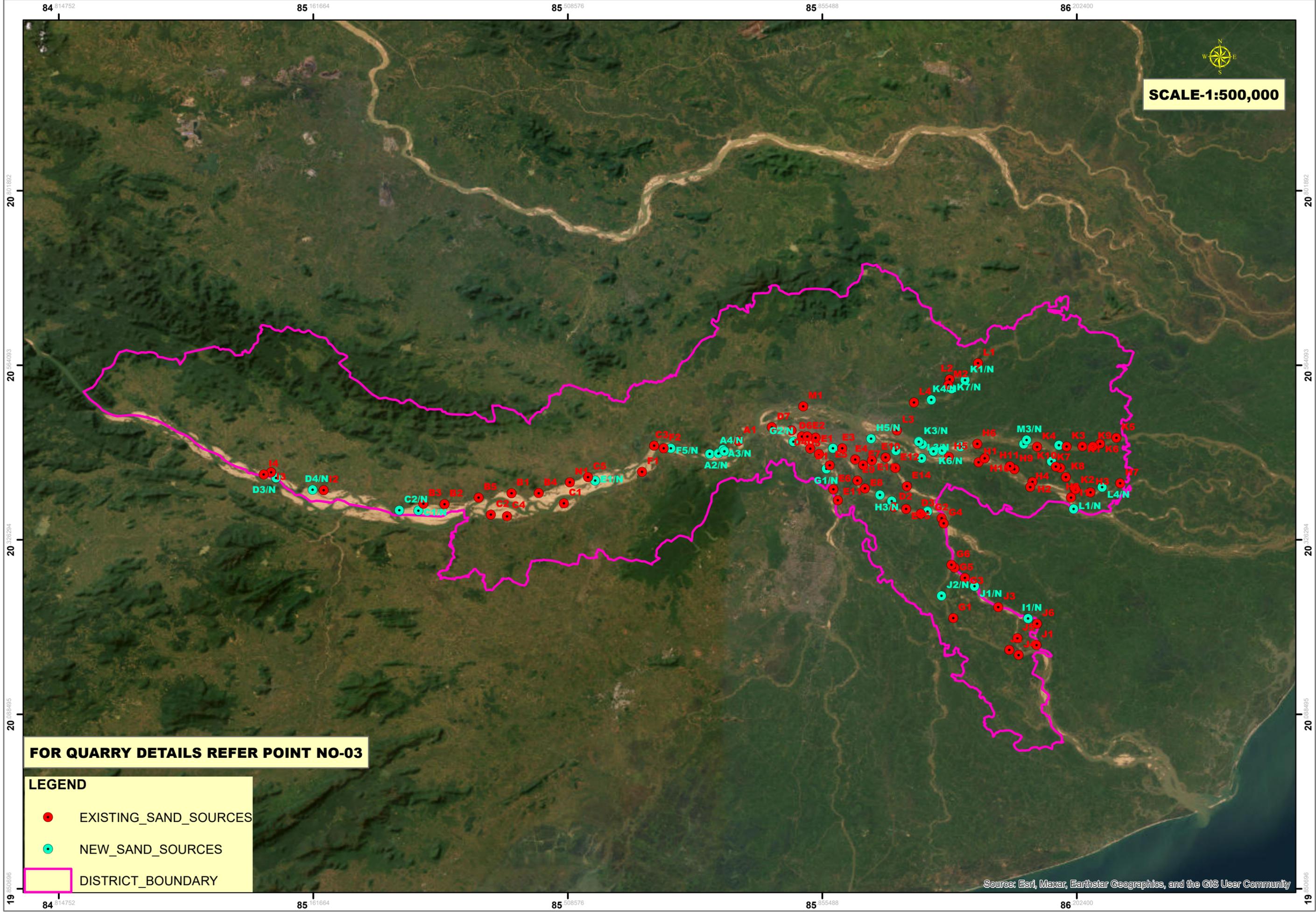
FOR QUARRY DETAILS REFER POINT NO-03

LEGEND

- EXISTING_SAND_SOURCES
- NEW_SAND_SOURCES
- ▭ DISTRICT_BOUNDARY

84 814752 85 161664 85 508576 85 855488 86 202400

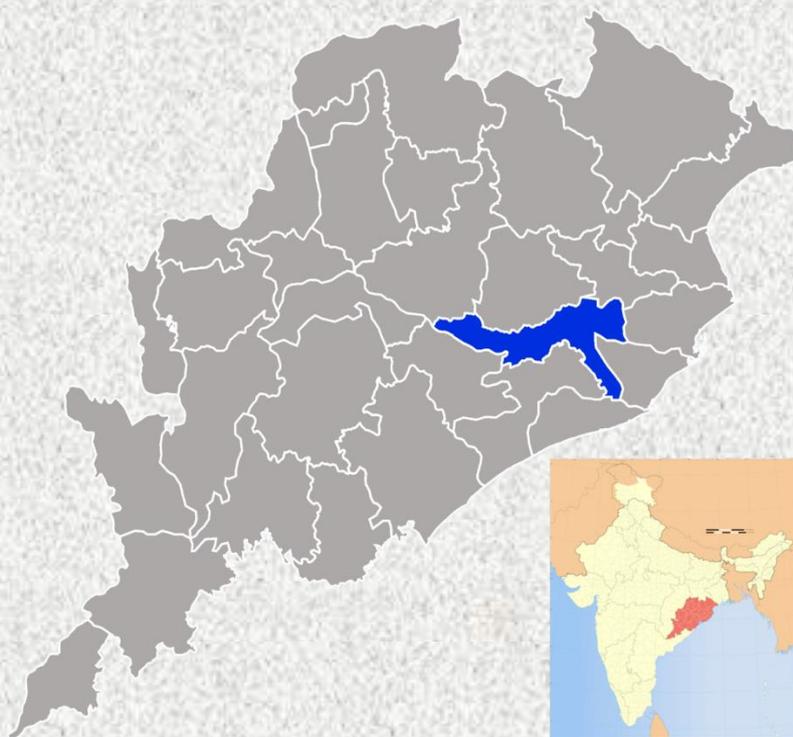
MINING LEASES (SAND) MARKED ON THE DISTRICT SATELLITE-MAP OF CUTTACK





DISTRICT SURVEY REPORT (DSR) OF CUTTACK DISTRICT, ODISHA FOR LATERITE STONE QUARRY MINING

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



**COLLECTORATE CUTTACK
NOVEMBER-2024**

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PREFACE

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

OBJECTIVES

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

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

01. INTRODUCTION.

District is one of the oldest Districts of Odisha. It is an important city and District headquarters. Cuttack, which lends its name to the District, is known as the business capital of Odisha. The word Cuttack derives its name from the anglicized Sanskrit word Kataka, which has two meanings—one being military camp and the other being the seat of government, protected by the army. Literally, it also means the fort, referring to the ancient Barabati Fort, around which the city developed. This city takes pride in the fact that it had been the capital of Odisha, before its shifting to Bhubaneswar, the new capital.

Geographically, it is located at a latitude of 20 degree 03" to 20 degree 40" N and a longitude of 84 degree 58" to 86 degree 20" E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq kms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoons, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall.

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra, Dokra Casting, Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes

gives a boost to this handicraft industry. There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are either chemical based, textile based, leather based or any other category based. The most important aspect as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipeline, prominent among them being Odisha Cement Ltd, Tata Power, Visa Power, Nilachal Power, Arati Steel etc. Secondary Board High School, Ravenshaw University, SCB Medical College, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT), National Law University (NLU) , Shri Shri University, National Rice Research Institute (CRR), National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya are some of the prominent personalities this District.

02. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT.

Cuttack District has rich Minor Mineral resources which is essential for infrastructure development in and around Cuttack District. The availability of minor minerals like Sand, Stone, Laterite, Morrum and ordinary earth contribute significantly to the local economy and construction industry. The artisan grade khondalite occurs in Tangi-Choudwar Tehsil of Cuttack District; which is known for its quality and is utilized in different applications, including construction and decorative purposes. The Geology of Cuttack provides a diverse range of materials that meet the demands of both residential and commercial constructions.

The implementation of the i4ms system for minor minerals has brought about a more systematic approach to monitoring and managing these resources. Utilizing Drone surveys can further improve operational efficiency by offering precise mapping and resource assessments, which aid in planning and management. The effective management and monitoring of these resources, along with the integration of technology, can significantly enhance sustainable development in the region, benefiting both the economy and the community at large.

Mineral Resources Overview:

- Laterite: Laterite occurs as capping and develops by intensive weathering of underlying parent rock. These are porous, vesicular, concretionary often forms a hard crust, and can reach thicknesses of up to 10 meters or more.
- Road Metal/Stone: Road metals typically consist of durable and hard rock types that are suitable for construction and road building. It constitutes granite gneiss, charnockite, pyroxene granulite, khondalite and its variants which are invariably fractured jointed and associated with hairline cracks and other microstructures.
- Morrum: Association of morrum with laterite is predominantly observed in the district. There are few morrum sources identified and proposed. Mainly these are used in filling up the project sites, laying out railway tracks etc.

- Sand: Mahanadi along with Kathajodi, Kuakhai, Sidhua, Devi, Kandala, Birupa, Luna and Chitrotpala which emerge as distributaries from Mahanadi River system, drain easterly and merge with the Bay of Bengal. These rivers are rich sources for River Sand. During flood season, replenishment of the sand takes place in the aforesaid Rivers, which contributes immensely to the sustainability of the resources.

Cuttack District has 91 operational Minor Mineral sources including 80 sand, 8 stone and 3 Laterite sources. Further, the district has one operational Decorative stone mine which produces artisan grade Khondalite. The District is blessed with fireclay deposits which is located in the Talabasta village of Dompada Tehsil. Due to its proximity to the Chandaka Wildlife Sanctuary, all fireclay concessions are temporarily suspended.

Cuttack District is the major supplier of the Minor Minerals; especially sand, to the various developmental projects in Bhubaneswar, Puri, Anugul, Jagatsinghpur, Dhenkanal and Kendrapara.

03. GENERAL PROFILE OF THE DISTRICT.

Geographical position: Geographically, it is located at a latitude of 20 degree 03 to 20 degree 40 N and a longitude of 84 degree 58" to 86 degree 20 E. Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms, the District is highly populated. The District experiences tropical climate, with the summer being hot and the winter cold. The maximum temperature that, this District experiences is well above 40 degree Celsius (during summer) and the minimum is as low as 10 deg C (during winter). Summer generally lasts from March to June and winter, from October to February. Rainfall is generally heavy during the monsoon, which occur during the months of July and August. The average rainfall received is around 1892.55 mm in the District. South West monsoon is primarily responsible for the rainfall. Monsoon rains last the city till September to middle of October. Winter season, between November and beginning of January is characterized by chilled wind blows from north and long nights when sun sets in around 5.30 pm IST in December. People wear heavy woollen clothes at night to beat the Winter. Between middle January to the middle of March, the climate is pleasant with temperatures ranging a minimum of 22.2oC. and a maximum of 33.4oC. This is ideal to visit the city.

Area & Population: -

Cuttack city is flanked by Mahanadi river on the north and Kathajodi river on the south. Covering a geographical area of 3932 sq K.Ms as per 2011 census. total population of the district is 2624470 which consists of 1352760 (Male) and 1271710 (Female). The population density of the district is 667 per Sq. Km. and the Literacy Rate is 85.5 percent. Sex ratio of the district is 940 female per 1000 male.. Cuttack district is divided into three Sub- divisions namely: Cuttack, Athagarh and Banki. It has 15 Tahasils 14 Blocks, one Municipal Corporation, 373 Gram Panchayats & 1950 villages. Established as a Municipality in the year 1876, Cuttack City became the Municipal Corporation during in 1994. There are Two NACs like Athagarh & Banki and one Municipality i.e. Choudwar Municipality. Cuttack has 9 Assembly Constituencies. 87-

Baramba, 88-Banki, 89-Athagarh, 90-Barabati-Cuttack, 91- Chudwar-Cuttack, 92-Niali, 93-Cuttack Sadar, 94-Salepur & 95-Mahanga.

Climate: -

The climate condition of the district is generally hot with high humidity during April to May and cold during December to January. The monsoon generally breaks during the month of July.

Economy:

Cuttack district in the lap of river Mahanadi is holding its economy through agriculture. The economy of the district is primarily agrarian and more than 76% people are directly or indirectly earning their livelihood from agriculture. Paddy is the subsistence crop and grown as a major cereal in the district. Apart increased in the subsequent years. The district has a distinct place in the production of groundnut and pulses. Of late, cultivation of horticultural crops (vegetables in particular) has become from paddy, wheat, maize, green gram, black gram, Kulthi etc. is grown in the district. Paddy production and the production of commercial crops like Jute and Sugar cane has substantially popular. Rice is the major crop in kharif season and so are pulses & oilseeds in Rabi season. Prawn culture presently seeks an important position in the economic scenario of cuttack district. This culture has assumed a great deal of significance following the brackish water prawn culture.

Cuttack is one of the oldest industrial backbone of Odisha. Industrial sector has a substantial role in shaping the economy of the district. Cuttack is having 12547 numbers of micro and small scale industries, 15 large / medium scale industries and a few in the process of installation in the district. The medium scale engineering industry is the centralized part of the Industrial economy of cuttack. The storage of economically important mineral in close proximity, serve the industries of cuttack to a large extent.

Choudwar which is near to the city of Cuttack is better known for Ferroalloys. The Handloomworks of Athagarh are famous for its quality production of materials. From the era of Independence the Barang has made its foot prints in Ceramic and Glass works which has established itself in a prominent position

in the map of Indian Industries. Popularly known as Silver City, Cuttack is also growing as a centre of Information Technology (IT). Some IT companies operating in the District are providing software exports and other IT services to various sectors, through which it has provided job opportunities to skilled man power. There are also some private companies that are manufacturing household products like soap, detergent, phenyl etc. and have become an important agent of District's Economic growth.

From time immemorial Cuttack has also earned reputation in making finest Filigree and Gold works which has emerged as big business platform for many people. Jagatpur, near to Cuttack city has given birth to many small, medium and micro industries. A number of enterprises in near past have utilized their skills in manufacturing of electrical equipments, building materials, pharmaceutical products etc. The District is slowly moving ahead through the creation of some cottage, home- based and agro- based industries.

In Toto, from the era of British Raj the coastal District of Odisha, Cuttack has established its prominence as a front ranking District of the State because of its manifold Economic activities.

Industry:

With limited industrialization, the people of this District depend upon agriculture as their main source of livelihood, with about 76 percentage of the population being dependent on it. Agriculture in this District is sustained by the numerous rivers and canals flowing through it. Rice, pulses, oil seeds, jute, sugarcane, coconut and turmeric are the major crops grown here. This District is a major exporter of cash crops, which in turn contributes immensely towards its economic growth. A number of reforms have been implemented in this agricultural sector by the government. Example of some of these reforms are broad basing of agriculture & allied sectors by bringing stake holders to a common platform and empowering farmers' organization & utilizing farmers' input into programme planning and resource allocations etc. National Rice Research Institute (NRRI) located at Bidyadharpur village on the Cuttack-Paradeep Road.is one of the premier national research institute under the

Indian Council of Agricultural Research. Among other industries, the District has a rich tradition of handicraft and cottage industries. The District is famous for its silver filigree works. Horn works, Patta Chitra. Dokra Casting. Terra Cota, Wood Carving, Art Leather and Brass/Bell Metal works are also quite evolved here. The District also generates substantial revenues from the exports of these handicraft products. The presence of a number of handicraft cooperatives and handicraft training institutes gives a boost to this handicraft industry. Silver filigree work of Cuttack city attracts the visitors from near and abroad. Among others wood carving work is mostly practised in the Cuttack town as well as in Salipur Block. Banki-Dampada and Jilinda Narsinghpur is famous for cane and Bamboo work. Terracotta work in Banki and Jute craft in Nischintkoili and Salipur Block is famous. Dhokra casting in Baramba Narsinghpur. Bhatimunda of Tangi Choudwar is famous for Brass and Bell Metal. Mahanga is known for stone carving. Applique work is also followed as occupation in Banki as well as in Cuttack City. Baranga is for art leather. Athagarh is famous for Patta Chitta work and Palm leaf products of Cuttack Sadar Block is famous. Artisans do Jarimali works and also horn works in Cuttack Town too.

There are a number of other large and medium industries functioning in this District as well. Some of the prominent among them are Indian Metals and Ferro Alloys (IMFA), Paradeep Oxygen and Odisha Magnetics etc. The micro and small industries functioning here are chemical based, textile based, leather based or any other category based. The most important aspects as regards the industrial growth of the District is the presence of industrial estates. Many enterprises are also in the pipelines, prominent among them being Odisha Cement Ltd, Tata power, Visa Power, Nilachal Power, Arati Steel etc. The district is also important for mining of minerals like decorative stone(Khondalite), building stone & earth.

Demography: -

description	Value
Area	3932 sq.km
No. of Sub-Division	3
No. of Blocks	14
No. of Tahasils	15

No. of Revenue Circle	171
No. of Municipalities	01
No. of Municipal Corporation	01
No. of Gram Panchayats	373
No. of NACs	02
No. of Revenue Villages	1950

Culture & Tourism:

Tourism of Cuttack District occupies a profound place in the State of Odisha. The ruins of Barabati Fort with its moat and gate and the earthen mounded of the nine-storied palace of the Ganga dynasty lie on the bank of the river Mahanadi as the silent witness of the vicissitudes of Odishan history. Another item of interest is the Barabati stadium adjacent to the fort. The stadium with its impressive structures covers an area of twenty-five acres and affords sitting capacity for thirty-five thousand persons. Goddess Katak Chandi and Gadachandi are presiding deities of Cuttack City. Besides there are many Hindu temples we find many Musjids, Churches, Jain temples, Gurudwara in Cuttack City.

Surrounded by the holy river Mahanadi , Kathajodi, it is the scenic beauty of water at Jobra Bride, Mahanadi Bridge and Naraj Bridge which attracts the Tourists.

The famous Ansupa lake coming under Banki Sub-Division in opposite side of Banki And Mahanadi, is a source of attraction to the tourists. Though it is a small, a picturesque freshwater lake that offers asylum to migratory birds in winter. The water spread is ideal for fishing and boating. A picturesque island in Mahanadi, the place named after its is the presiding deity Lord Sree Dhabaleswar(Shiva) is also a great source of attraction to devotees as well as tourist.

From the northern side of Cuttack boats ply on the Mahanadi river straight to the island of Dhabaleswar, Maa Bhattarika Sakti Pitha of Badamba, Sri Sri Singhanath Dev Pitha Baramba, in the Sri Sri Champanath Temple at Champeswar, Narsinghpur, Maa Mahakali Temple of Kharod, Baramba, Maa Pragala Pitha, Baramba, Sri Sri Singhanath dev Pitha, Sri Sri Radha Gobinda Dev Temple of Athagarh are major source of attraction for tourists. Coming to Cuttack Sadar Sub Division one can find

the Famous Madhab Temple and Sobhaneswar Temple in Niali, Sri Sri Achutananda Pitha of Nishcintkoili, Sri Sri Gangeswar Mahadev Temple at Dharmagatpur, Salipur, Sri Sri Baladevjew and Sri Sri Hanuman temple of Umar, Mahanga , Sri Sri Harachandi Temple at Nishcintkoili, Dhakulei Pitha of Pratap Nagari and Sri Sri Paramhansa Mahadev Temple at Cuttack Sadar Block are some of the places of tourism and Cultural importance in Cuttack District. Situated on the Origin of river Kathajori, a tributary of Mahanadi, gives panoramic view of the vast expanse of the river Mahanadi.

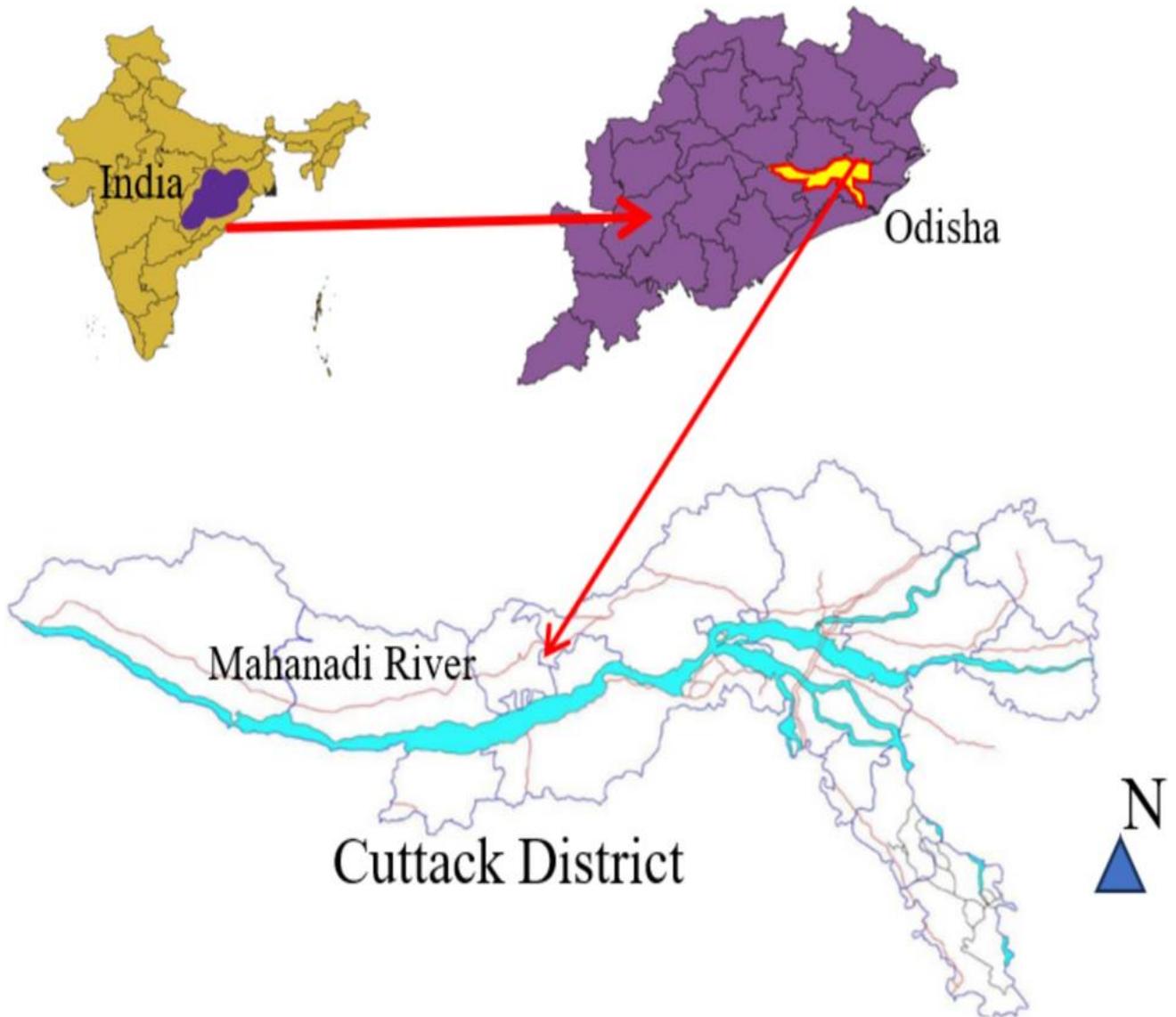
Silver Filigree work, uniqueness of Cuttack City: -

Silver Filigree work of Cuttack is distinguished from other ornaments and jewellery work by excellent finish, fine foils, textures and snowy glaze. That is why these are presented as gifts to persons of national and international eminence visiting the state. Decorative pieces of Lord Krishna's chariot, Konark Chakra and variety of other eye catching and spectacular silver ornaments are a craze among the modern fashion loving people. Very soon Cuttack is going to be hub of "World Filigree Centre" with all support of Govt.

Education: -

Secondary Board High School, Ravenshaw University, Ravenshaw Collegiate School, SCB Medical College, National Law University (NLU) , Shri Shri University, Madhusudan Law College are some of the premier educational institutions of the District. It has also a number of technical institutes like Bhubanananda Odisha School of Engineering (BOSE), IPSAR, Institute of Textile Technology (ITT,) etc. National Institute of Rehabilitation and Training (NIRTAR), Regional Spinal Injury Centre (RSIC) and Acharya Harihar Regional Cancer Research Centre (AHRCRC) are the pioneer research institutes functioning here. Netaji Subash Chandra Bose, Utkal Gourav Madhusudan Das, Karma Veera Gouri Shankar Ray, Dr. Radhanath Rath, Dr. Harekrushna Mahatab, Biju patnaik, Pyarimohan Acharya were some of the prominent personalities this District who have earned name and fame in world abroad due to their noble did for their contribution to Odisha as well as for our Country.

INDEX MAP





04. GEOLOGY OF THE DISTRICT.

Cuttack district comprises six geomorphic surfaces viz. (i) denudational surface (Archaean & Gondwana terrain) (ii) Bolgarh surface (iii) Kaimundi surface (iv) Brahmani surface (v) Bankigarh surface & finally present-day surface.

Denudational surfaces (Archaean terrain in the west and narrow fringe at the northern boundary as well as areas occupied by Athgarh formation & Bolgarh formation) are covered by reserve forests. Rest of the surfaces, mainly kaimundi, bankigarh and present-day depositional surfaces are extensively cultivated.

Upper Gondwana formation, covering an area of approximately 1100 sq km occupies either side of river Mahanadi. The principal lithological units representing Gondwanas are sandstone of various grain size, colour & composition, red shale, silt stone, clay and conglomerate.

Cuttack district comprises rocks from Archaean to Late Holocene age. distributed more or less from west to east. Eastern Ghat Supergroup forms the oldest suit of rocks in this area. It occupies western high land and can be classified into Khondalite and Charnockite group. Khondalite group contains quartz-feldspar-garnet-sillimanite graphite schist gneiss and granetiferous quartzite. Charnockite group comprises acid to intermediate charnockite. basic charnockite and pyroxene granulite.

Gondwana Supergroup is represented by Athgarh formation which occupies patches in central and southern part of this district. It contains sandstone.

conglomerate, shale and clay. Laterite and latosol of Bolgarh formation occupies northern part of this district with fringe of charnockite at its northern boundary. Other formations in descending antiquity are Kaimundi, Brahmani, Bankigarh and present-day deposits. Brahmani formation contains residual soil of Pleistocene to Holocene age. Kaimundi formation comprises caliche bearing greyish white clay. Bankigarh formation includes upper and lower deltaic facies represented by brownish silty clay and black clay. Present day deposits contain sand to silt in flood plains, point bars and meander scrolls.

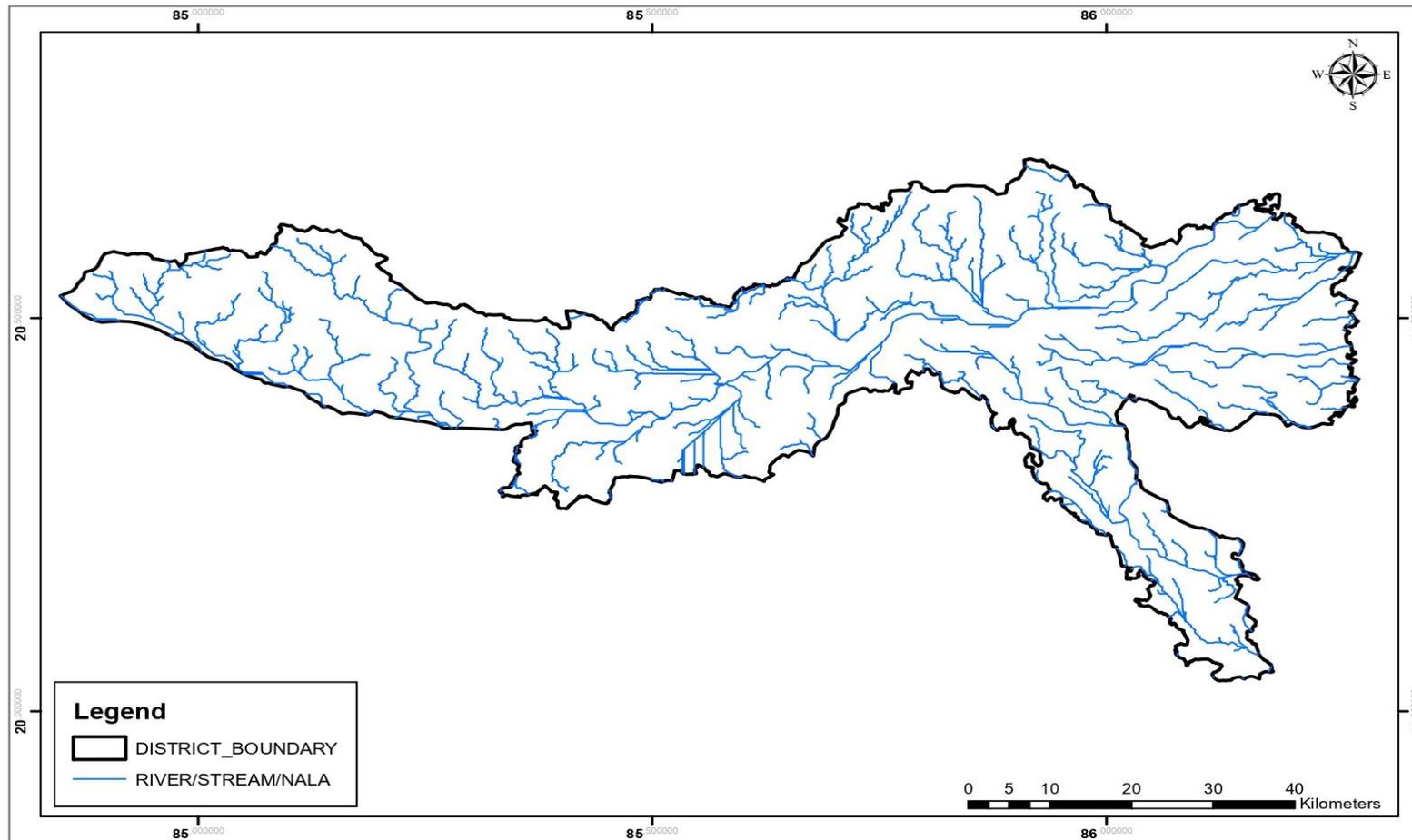
Stratigraphy:

Age	Formation	Lithology
Late Holocene	Present day coastal/ Flood plain deposit	Sand & silt (point & lateral bars & meander scrolls)
Middle to late Holocene	Bankigarh	Black Clay (Lower Deltaic Facies)
		Brownish Silty and Alluvium
Pleistocene to Holocene	Brahmani/ Mahanadi	Residual Soil and Alluvium
Late Pleistocene to Early Holocene	kaimundi	Clay with calcareous concretions
Pleistocene	Bolagarh	Laterite/Latosol(Insitu)
Jurassic to Cretaceous	Athagarh	Sandstone, Shale
Archaean		Granite gneiss, augen gneiss, granetiferous granite gneiss, granitiferous leucogranite/ leptynite
		Acid to intermediate charnockite/ basic charnockite. Pyroxene geanulite
		Quartz-Feldspar-Granet-sillimanite+- Graphite Schist/ Gneiss

05. DRAINAGE AND IRRIGATION PATTERN.

The river Brahmani and its tributaries control the drainage of the district. Brahmani is the second longest river in Odisha and flows through the district in a general east-west direction. It divides the district into two halves. Initially, the river flows in a north-south direction, then follows a northwest-southeast course and subsequently changes to northeast-southwest direction. Finally, it changes to a northwest-southeast course near the eastern border of the district. Most part of the district falls within its basin. The Brahmani is perennial in nature with a nominal flow during the summer season. Its important tributaries are Ramiala Nadi, Nigre Nadi, Purajhor Nadi etc. The smaller streams show dendritic pattern while the major river and its tributaries show sub-parallel drainage, indicating structural control. Major part of the district is irrigated through canal irrigation from the dam at Rengali.

DRAINAGE MAP OF CUTTACK DISTRICT



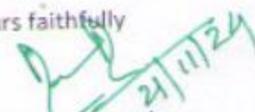
06. LAND UTILISATION PATTERN IN THE DISTRICT: FOREST, AGRICULTURAL, HORTICULTURAL, MINING ETC.

Sl. No	Landuse	Area in 'Ha'
1	Forest Area	36
2	Misc. Tree & Groves	54
3	Permanent pasture	11
4	Culturable Waste	10
5	Land Put to Non Agril Use	83
6	Barren & Unculturable Land	9
7	Current Fallow	31
8	Other Fallow	1
9	Net Area Sown	157
10	Mining	1
	Geographical Area	393

Land utilization pattern of Horticulture within Cuttack District

Sl.No.	Name of the Crop	Area Covered in Hectares
1	Fruits	4327
2	Vegetables	10235
3	Flowers	257
4	Plantation crops	3986
5	Spices	2716
6	Betel vine	210

Yours faithfully


Dy. Director of Horticulture
Cuttack

07. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT.

The drainage systems i.e. rivers of the district gets filled with water during the monsoon and the gradually it decreases from the month of January to June of each year. In the summer season all rivers become almost dry excepting narrow flow of water within the basin.

The variation of ground water table in the district is as follows:

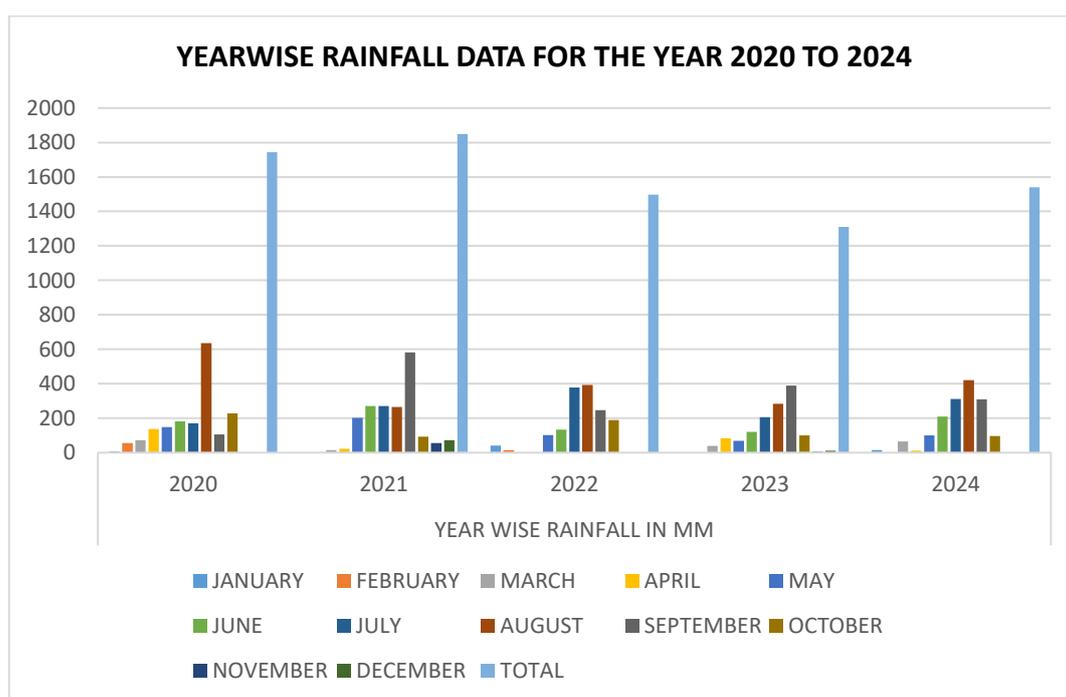
Depth of water level (mbgl)/ Period	April	August	November	January
Minimum	0.66	0.26	0.37	0.5
maximum	10.5	7.20	6.6	8.2

08. RAINFALL OF THE DISTRICT AND CLIMATIC CONDITION.

The district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of July and continues till end of October. The temperature goes as high as up to 45°C in the summer and up to 7^o-8^o C during peak winter.

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

YEARWISE RAINFALL DATA FOR THE YEAR 2020 TO 2024					
MONTH	YEAR WISE RAINFALL IN MM				
	2020	2021	2022	2023	2024
JANUARY	8.39	0	40.72	0	14.74
FEBRUARY	55.1	0	15.85	0	1.06
MARCH	72.94	15.55	0	38.83	64.53
APRIL	136.33	22.31	0	83.29	10.61
MAY	147.76	202.12	101.21	68.12	100.76
JUNE	181.02	270.5	132.68	120.85	209.5
JULY	170.11	271.21	377.63	206.43	312.01
AUGUST	635.14	264.88	393.52	283.54	420.34
SEPTEMBER	106.6	581.32	245.91	390.03	310.31
OCTOBER	228.65	93.31	189.46	100.97	96.9
NOVEMBER	1.15	56.24	0	6.37	
DECEMBER	0	71.83	0	11.66	
TOTAL	1743.19	1849.27	1496.98	1310.09	1540.76



09. DETAILS OF THE MINING LEASES IN THE DISTRICT AS PER THE FOLLOWING FORMAT.

Sl.No	Name of the Mineral	Name of the Lessee	Adress & Contact No. of leseee	Mining lease Grant Order No. & date	Area of Mining lease (in AC)	Period of Mining lease (Initial)		Date of commencement of mining operation	Status (Working Non Working/Temp . working for despatch etc.)	Obtained Environmenta l clearance (Y/N) if Y letter No. with date of grant of E.C	Location of the mining lease Land Schedule and (Latitude & Longitute)
						From	To				
1	2	3	4	5	6	7	8	11	12	14	15
A.Name of the Tahasil:- TANGI CHOWDAR											
A1	LATERITE STONE QUARRY KANPUR	SUKANTA MUDULI	AT. TRISULIA, PO. BRAHMANIGAON PS. BARANGA DIST. CUTTACK , 754005	Letter no- 2657/ Dt:25.03.202 1	2.420Ac/0.979Ha	07.02.202 2	06.02.202 7	07.02.2022	Non-Working	Letter no- 3916/SEIAA Dt:28.01.202 2	Mouza- KANHAPUR, Khata-228, Plot- 186- 2.420Ac,Kissam -PATITA, Lat- 20°38'52.90"N to 20°38'57.00"N Long- 86°0'12.50"E to 86°0'17.30"E
A2	LATERITE STONE QUARRY MANIA	KRUSHNA CHANDRA DAS	AT.GANDARPUR , PO. / PS. CHAULIAGANJ DIST. CUTTACK ,	Letter no- 2663/ Dt:25.03.202 1	2.590Ac/1.048Ha	02.04.202 2	01.04.202 7	02.04.2022	Non-Working	Letter no- 2855/SEIAA Dt:22.09.202 1	Mouza- MANIA, Khata-529, Plot- 186- 2.590Ac,Kissam -PATITA, Lat- 20°37'9.70"N to 20°37'19.80"N Long- 86°0'22.00"E to 86°0'28.90"E

A3	LATERITE STONE QUARRY JEMADEIPUR	CHINMAYE E MUDULI	W/O-SUKANTA MUDULI ,AT-TRISULIA, P.O.-BRAHMANIGAON , P.S-BARANGA,DIST-CUTTACK	Letter no-2660/ Dt:25.03.2021	3.000Ac/1.214Ha	13.06.2022	12.06.2022	13.06.2022	Non-Working	Letter no-3910/SEIAA Dt:28.01.2022	Mouza-JEMADEIPUR, Khata-353, Plot- 1/904-3.000Ac,Kissam -PATITA, Lat-20°36'22.60"N to 20°36'25.60"N Long-85°54'36.40"E to 85°54'41.90"E
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B.Name of the Tahasil:- Athagarh A

NEW SOURCE

B1	Machhyapur Laterite stone Quarry 1				12.35Ac/4.998 Ha						Mouza-Machhyapur , Khata-43, plot-6/268, lat-20.575424°, Long-85.766528°
B2	Machhyapur Laterite stone Quarry 2				12.35Ac/4.998 Ha						Mouza-Machhyapur , Khata-43, plot-6/268, lat-20.573441°, Long-85.764624°

NB: in the above table omitted Columns are,
Column- 09 & 10 Period of Mining lease (Renew) -NA
Column-13 Use (Captive/ Non-Captive) - All Non-Captive
Column- 16 Method of Mining (Opencast/Underground) - All Open cast

10. DETAILS OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

Revenue collected for **Laterite Stone**.

Sl. No.	Name of the Tahasil	Name of Source	Revenue Collected for last three years (in Rs)Lakh		
			2021-22	2022-23	2023-24
A1	TANGI CHOUWAR	LATERITE STONE QUARRY KANPUR	3821817	4800000	-
A2		LATERITE STONE QUARRY MANIA	-	5796414	-
A3		LATERITE STONE QUARRY JEMADEIPUR	2837625	-	-

11. DETAILS OF PRODUCTION OF MINOR MINERAL IN LAST THREE YEARS.

Production of **Laterite Stone**

Sl. No.	Name of the Tahasil	Name of Source	Production for last three years (in Cum)		
			2021-22	2022-23	2023-24
A1	TANGI CHOUWAR	LATERITE STONE QUARRY KANPUR			
A2		LATERITE STONE QUARRY MANIA			
A3		LATERITE STONE QUARRY JEMADEIPUR			

13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY AS PER THE FOLLOWING FORMAT.

Sl.No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of LOI	Use(Captive/Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9
NA	NA	NA	NA	NA	NA	NA	NA	NA

** The selected bidder shall be required to execute quarry lease in Form-N within three weeks from the date of intimation of his selection, if the approval of the mining plan and environment clearance has been obtained before auction, and in other cases, three months from the date of intimation, failing which, the intimation shall stand cancelled and the security deposit shall stand forfeited:*

*Provided that the Controlling Authority may, for genuine and sufficient reasons, extend the said period, if it is satisfied that the delay in execution of lease deed is not due to reasons attributable to the selected bidder (See **Rule-27(13) of OMMCR-2016**).*

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT.

SL. NO.	NAME OF SOURCE WITH LOCATION	GEOLOGICAL RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINERAL POTENTIAL OF NON OPERATIONAL & PROPOSED SOURCES AS PER FIELD OBSERVATION (IN M3)	MINEABLE RESERVE OF OPERATIONAL QUARRIES AS PER APPROVED MINING PLAN /MINEABLE RESOURCE OF NON OPERATIONAL & PROPOSED QUARRIES AS PER FIELD OBSERVATION (IN M3)
A1	LATERITE STONE QUARRY KANPURMouza- KANPUR, Khata-228, Plot- 186-2.420Ac,Kissam-PATITA, Lat-20°38'52.90"N to 20°38'57.00"N Long-86°0'12.50"E to 86°0'17.30"E	53845	30250
A2	LATERITE STONE QUARRY MANIAMouza- MANIA, Khata-529, Plot- 186-2.590Ac,Kissam-PATITA, Lat-20°37'9.70"N to 20°37'19.80"N Long-86°0'22.00"E to 86°0'28.90"E	39920	16548
A3	LATERITE STONE QUARRY JEMADEIPURMouza- JEMADEIPUR, Khata-353, Plot-1/904-3.000Ac,Kissam-PATITA, Lat-20°36'22.60"N to 20°36'25.60"N Long-85°54'36.40"E to 85°54'41.90"E	60700	44900
NEW SOURCE			

B1	Machhyapur Laterite stone Quarry 1, Mouza- Machhyapur , Khata-43, plot-6/268, lat- 20.574590°, Long- 85.765464°	419940	
B2	Machhyapur Laterite stone Quarry 2, Mouza- Machhyapur , Khata-43, plot-6/268, lat- 20.574594°, Long- 85.765458°	419940	

15. QUALITY /GRADE OF MINERAL AVAILABLE IN THE DISTRICT.

Due to less content of Alumina, the laterite of the district is suitable for construction of walls related boundary or houses after manual sizing of the slabs.

16. USE OF MINERAL.

Laterite of the district is used mainly for construction of walls related boundary or houses after manual sizing of the slabs.

17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS.

The demand for laterite is primarily driven by its use in the construction industry, particularly for affordable housing, road construction, and other infrastructure projects. It also benefits from its status as a sustainable building material, though its use can be constrained by environmental regulations and regional availability. The demand is strong in tropical regions, particularly in developing countries where cost-effective, locally sourced building materials are essential.

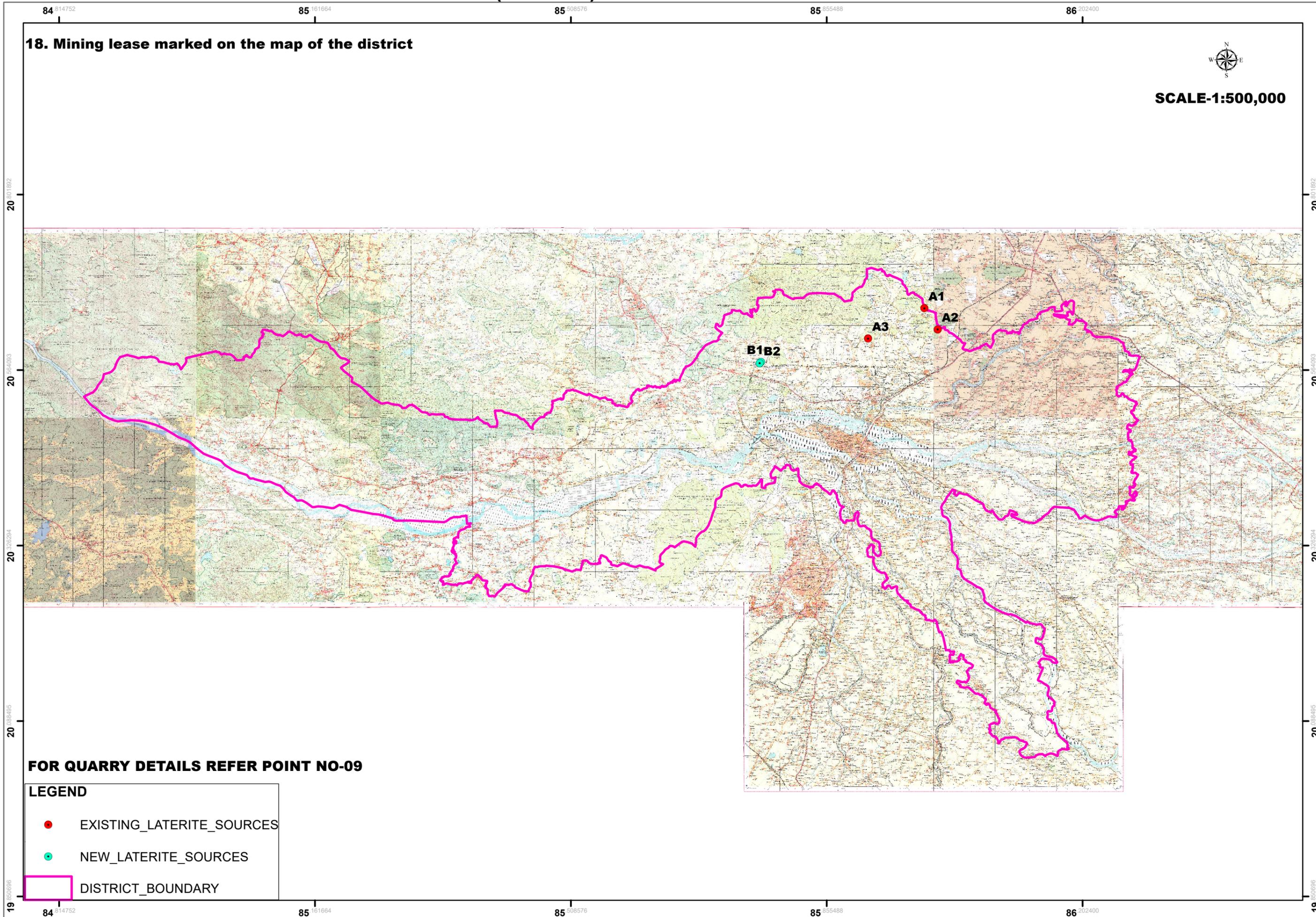
The supply of laterite is heavily dependent on its natural abundance in tropical and subtropical regions, the efficiency of extraction methods, and the presence of transportation infrastructure. While laterite is widely available in certain parts of the world, its extraction can be constrained by environmental regulations, logistical challenges, and market forces. Areas with significant deposits of laterite are generally able to supply the material locally, but its supply for larger-scale or more distant projects may be limited by factors like cost, transportation, and regulatory hurdles.

MINING LEASES (LATERITE) MARKED ON THE DISTRIC TOPO-MAP OF CUTTACK

18. Mining lease marked on the map of the district



SCALE-1:500,000



FOR QUARRY DETAILS REFER POINT NO-09

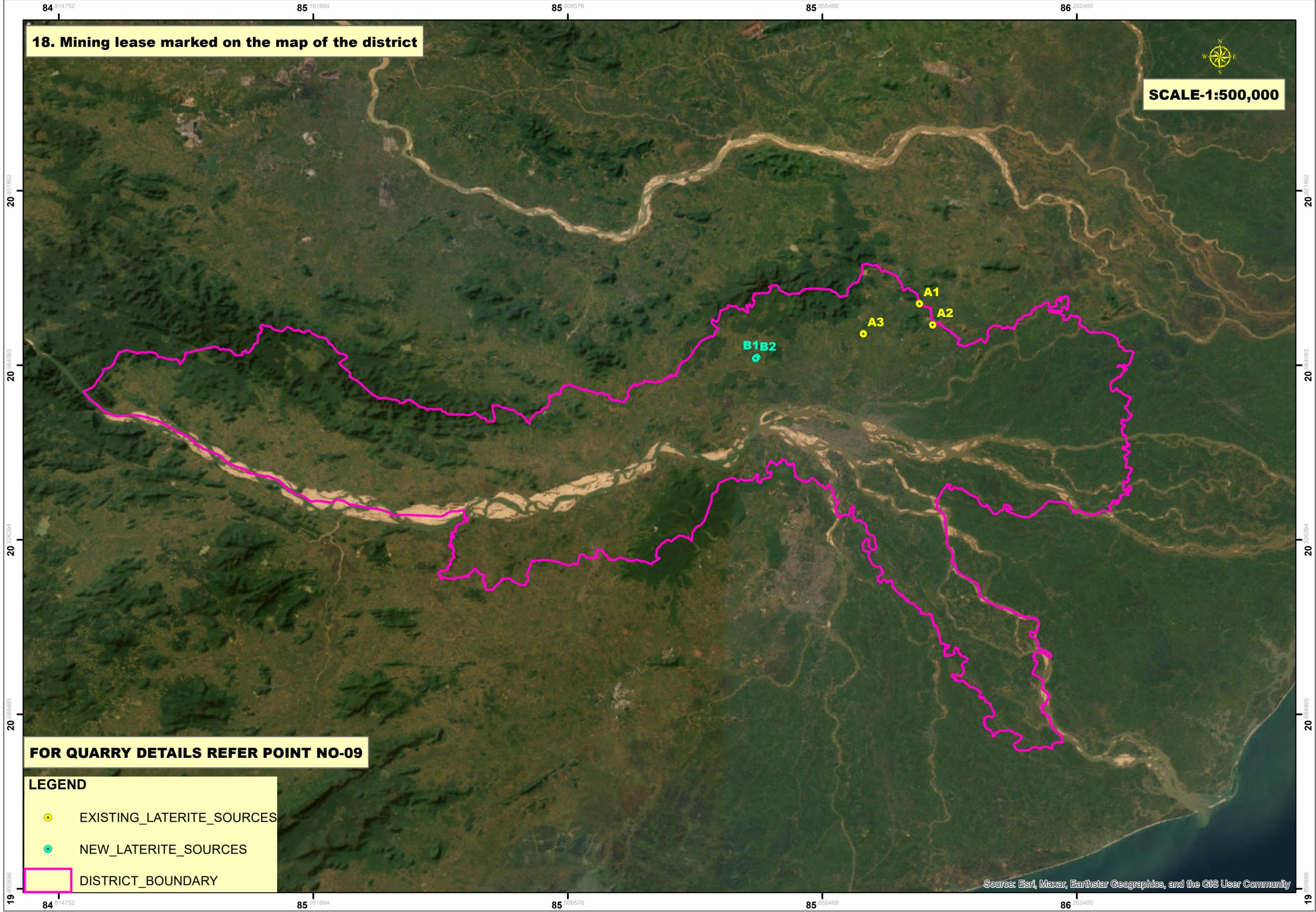
LEGEND

- EXISTING_LATERITE_SOURCES
- NEW_LATERITE_SOURCES
- ▭ DISTRICT_BOUNDARY

MINING LEASES (LATERITE) MARKED ON THE DISTRICT SATELLITE-MAP OF CUTTACK

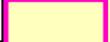
18. Mining lease marked on the map of the district

SCALE-1:500,000



FOR QUARRY DETAILS REFER POINT NO-09

LEGEND

-  EXISTING_LATERITE_SOURCES
-  NEW_LATERITE_SOURCES
-  DISTRICT_BOUNDARY

19. DETAILS OF THE AREA OF WHERE THERE IS A CLUSTER OF MINING LEASES VIZ. NUMBER OF MINING LEASES, LOCATION (LATITUDE AND LONGITUDE).

Quarries existing within 500m radius are considered as cluster of Mining Leases as per the MoEF guide lines.

SI No.	Name of Tahasil	Cluster Name	Details of the area & Location	Number of Mining leases in Cluster
NA	NA	NA	NA	NA

20. DETAILS OF ECO-SENSITIVE AREA, IF ANY, IN THE DISTRICT.

Kapilash Sanctuary and its eco-sensitive zone are located within the District of Dhenkanal has been notified by MoEF & CC, Govt. of India on date 17th June, 2025. Some portion of the Cuttack District under Cuttack Forest Division included in the Eco-Sensitive Zone of the Kapilash Wildlife Sanctuary. There is only one village i.e. Banjhama is coming within the Eco-sensitive Zone. The Latitude & Longitude of the village Banjhama is N20.37' .2.54" E85.52'.41.92".

21. IMPACT ON THE ENVIRONMENT (AIR, WATER, NOISE, SOIL, FLORA & FAUNA, LAND USE, AGRICULTURE, FOREST ETC.) DUE TO MINING ACTIVITY.

Generally, the environment impact can be categorized as either primary or secondary. Primary Impacts are those, which are attributed directly by the project. Secondary impacts are those which are indirectly induced and typically include the associated investment and changed pattern of social and economic activities by the proposed action.

The impact has been ascertained for the project assuming that the pollution due to mining activity has been completely spelled out under the base line environmental status for the entire ROM which is proposed to be exploited from the mines.

Impacts on Ambient Air

Mining operation are carried out by opencast manual, semi mechanized/ mechanized methods generating dust particles due to various activities likes, excavation, loading, handling of mineral and transportation. The air quality in the mining areas depends upon the nature and concentration of emissions

and meteorological conditions. The major air pollutants due to mining activities include:-

- Particulate matter (dust) of various sizes.
- Gases, such as sulphur dioxide, oxides of nitrogen, carbon monoxide etc from machine & vehicular exhaust.

Dust is the single air pollutant observed in the open cast mines. Diesel operating drilling machines, blasting and movement of machineries/ vehicles produce NO_x , SO₂ and CO emissions, usually at low levels. Dust can be of significant nuance surrounding land user and potential health risk in some circumstances.

Impacts on Water

Sometimes the mining operation leads to intersect the water table causing ground water depletion. Due to the interference with surface water sources like river, nallah etc drainage pattern of the area is altered.

Noise impacts

Noise pollution mainly due to operation of machineries and occasional plying of machineries. These actives will create noise pollution in the surrounding area.

Impact on Land environment

The topography of the area will change certain changes due to mining activity which may cause some alteration to the entire eco system.

Impact on Flora & Fauna

The impact on biodiversity is difficult to quantify because of it's diverse and dynamic characteristics.

Mining activities generally result in the deforestation, land degradation, water, air and noise pollution which directly or indirectly affect the faunal and flora status of the project area.

However, occurrence and magnitude of these impacts are entirely dependent upon the project location, mode of operation and technology involved.

22. REMEDIAL MEASURES TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT.

Air

Mitigation measures suggested for air pollution controls are to be based on the baseline ambient air quality of the project/cluster area and would include measures such as:

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust particles.
- Controlled blasting techniques shall be adopted.
- Water sprinkling on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be undertaken.
- Transport of materials in trucks are to be covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mine area.
- Information on wind direction and meteorology are to be considered during planning, so that pollutants, which cannot be fully suppressed by engineering techniques, will be prevented from reaching the nearby agricultural land, if any.
- Comprehensive greenbelt around overburden dumps and periphery of the mining projects/clusters has to be carried out to reduce to fugitive dust transmission from the project area in order to create clean & healthy environment.

Water

- Construction of garland drains and settling tanks to divert surface run – off of the mining area to the natural drainage.
- Construction of check dams/ gully plugs at strategic places to arrest silt wash off from broken up area.
- Retaining walls with weep hole are to be constructed around the mine boundaries to arrest silt wash off.

- The mined out pits shall be converted in to the water reservoir at the end of mine life. This will help in recharging ground water table by acting as a water harvesting structure.
- Periodic analysis of mine pit water and ground water quality in nearby villages are to be undertaken.
- Domestic sewage from site office & urinals/latrines provided within ML/QL areas is to be discharged in septic tank followed by soak pits.

Noise

- Periodic maintenance of machineries, equipments shall be ensured to keep the noise generated within acceptable limit.
- Development of thick green belt around mining/cluster area, haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities like blasting, excavation site etc. Worker and operators at work sites will be provided with earmuffs.
- Conducting periodical medical check-up of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise related effects.
- Periodic noise monitoring at locations within the mining area and nearby habitations to assess efficacy of adopted control measures.
- During blasting optimum spacing, burden and charging of holes will be made under the supervision of competent qualified mines foreman, mate etc.

Biological Environment

- Development of green belt/gap filling saplings in the safety barrier left around the quarry area/ cluster area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy laves on the inactive mined out upper benches.

- Development of dense poly culture plantation using local floral species in the mining areas at conceptual stage if the mine is not continued much below the general ground level.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.

23. RECLAMATION OF MINED OUT AREA (BEST PRACTICE ALREADY IMPLEMENTED IN THE DISTRICT, REQUIREMENT AS PER RULES AND REGULATION, PROPOSED RECLAMATION PLAN).

As per statute all mines/quarries are to be properly reclaimed before final closure of the mine. Reclamation of exhausted mines are planned to be undertaken in below three possible means:

1. If, substantial amount of waste is there, the exhausted quarry can be fully or partly backfilled using the stored waste. The backfilled areas are to be brought under plantation of local species.

2. If the generation of waste is much less as in the case of minor mineral mining, the exhausted quarries can be reclaimed by

a. Plantation on the broken-up surface if the depth of quarry is not much below the surrounding surface level.

b. Converted to water reservoir after stabilization of the slopes if the exhausted quarry continues much below the surrounding surface level. It is preferred to cordon the water reservoir either through wire fencing or retaining wall with plantation from the safety point of view.

Most of the quarry/mining lease areas are yet to be exhausted from ore point of view. Hence, reclamation would be taken up only after exhaustion of the ore/mineral content from these areas. The exhausted minor mineral quarries of the district have been converted to water reservoirs.

24. RISK ASSESSMENT & DISASTER MANAGEMENT PLAN.

The only risk involved related to mining of minor mineral excepting natural calamities is slope failure and probable accidents due to high and ill maintained bench walls. This can only be addressed through making of regular benches and undertaking mining in benching pattern.

The disaster management plan (DMP) is supposed be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is to be aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated through rehearsal/induction conducted by the respective department from time to time.

General responsibilities of employees' during an emergency:

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the worker in charge, should adopt safe and emergency shut down and attend to any prescribed duty. If no such responsibility is assigned, the workers should adopt a safe course to assembly point and wait instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

Co-ordination with local authorities:

The Mine Manger who is responsible for emergency will always keep a jeep ready at site. In case of any eventuality, the victim will be taken to the nearby hospitals after carrying out the first aid at the site. The Manger should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shops, district revenue authorities etc. and use them efficiently during the case of emergency.

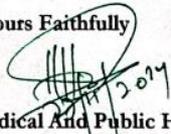
25. DETAILS OF THE OCCUPATIONAL HEALTH ISSUES IN THE DISTRICT. (LAST FIVE-YEAR DATA OF NUMBER OF PATIENTS OF SILICOSIS & TUBERCULOSIS IS ALSO NEEDS TO BE SUBMITTED).

As per the guidelines of the Mine Rules 1995, occupational health safety has been stipulated by the ILO/WHO. The proponent's will take necessary precautions to fulfill the stipulations. Normal sanitary facilities have to be provided within the lease area. The management will carry out periodic health checkup of workers.

Occupational hazards involved in mines are related to dust pollution, noise pollution, blasting and injuries from moving machineries & equipment and fall from high places. DGMS has given necessary guidelines for safety against these occupational hazards. The management has to strictly follow these guidelines. All necessary first aid and medical facilities are to be provided to the workers. The mine shall be well equipped with personal protective equipment (PPE). Further, all the necessary ported equipments such as helmet, safety goggles, earplugs, earmuffs ets are to be provided to mine workers as per Mines Rules. All operators and mechanics are to be trained to handle fire fighting equipments.

TB ACTIVITIES	2019-20	2020-21	2021-22	2022-23	2023-24
TOTAL NUMBER OF PATIENTS DIAGNISED	2155	1794	2371	2765	2672
TOTAL NUMBER OF PATIENTS NOTIFIED	2155	1794	2371	2765	2672
MDR	72	46	52	57	40
TBTREATMENT CURED	829	730	698	820	937
TBTREATMENT COMPLETED	1009	813	1350	1685	1401
DIED	140	152	172	163	128
FAILURE	13	9	7	11	5
TREATMENT CHANGED	42	25	42	41	26
NOT EVALUTED	11	4	1	2	23
ON TREATMENT	0	0	0	5	120
NOT STARTED TREATMENT	34	25	27	18	16
SILICOSIS ACTIVITIES	0	0	0	3	0
OPD PATIENTS	0	0	0	0	0
IPD PATIENTS	0	0	0	3	0

Yours Faithfully


Chief District Medical And Public Health Officer

Cuttack

26. PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASES ALREADY GRANTED IN THE DISTRICT.

As most of the minor mineral mines/quarries of the district are yet to be exhausted of their mineral content no sort of reclamation measures including plantation has been undertaken excluding gap plantation of local species in the peripheral safety zones of the quarries/ clusters and in some of the haul roads.

27. ANY OTHER INFORMATION.

NIL