DISTRICT REVENUE SECTION,ANGUL ଜିଲ୍ଲାରାଜସ୍ୱଉପବିଭାଗ, ଅନୁଗ୍ରୋଳ

COLLECTORATE, ANGUL || ଜିଲ୍ଲାପାଳଙ୍କକାର୍ଯ୍ୟାଳୟ, ଅନୁଗୋଳ Telephone: 06764-230567(O)/ 230234(R)/230685(t) || Website: www.augul.ulc.inE-mail: din-augul@ulc.in

Letter No 331 / File No.VI-09/2021 Date: 73

To

The District Information Officer, National Informatics Center , Angul

Sub:-

Hoisting of District Survey Report in web site for general information of public.

Sir,

As per G.O. No. 27689/R&DM dt.27.07.2018 the District Survey Report shall be placed in the public domain and posting it on Districts web site for receiving any public comments on the report.

The District Survey Report are enclosed here with for posting of the same in the public web site accordingly.

Yours faithfully,

Addl. District Magistrate (Revenue)
Angul

Memo No. 232 /Touzi Dt. 23.03.202/

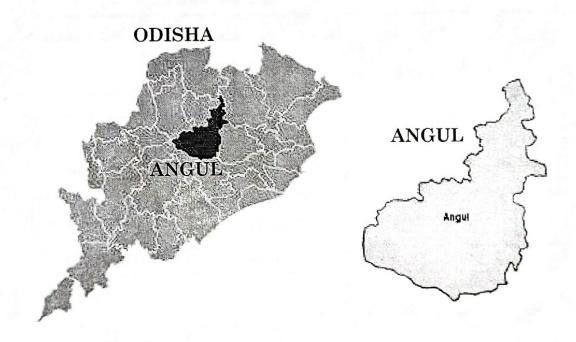
Copy forwarded to all Sub-Collectors / Tahasildars of Angul District for information & necessary follow up action .

Addl. District Magistrate (Revenue) Angul



OF ANGUL DISTRICT, ODISHA FOR RIVER SAND

(FOR PLANNING & EXPLOITING OF MINOR MINERAL RESOURCES)



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

COLLECTORATE, ANGUL

CONTENT

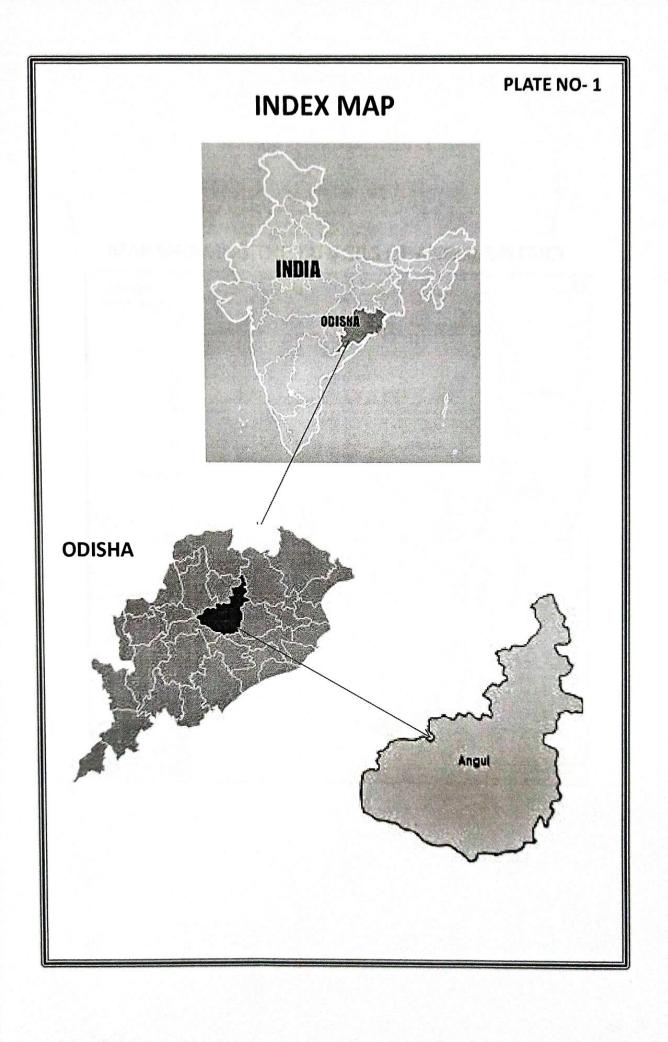
SL NO	DESCRIPTION	PAGE NO
1	INTRODUCTION	1
2	OVERVIEW OF MINING ACTIVITIES IN THE DISTRICT	1
3	LIST OF LEASES WITH LOCATION, AREA AND PERIOD OF VALIDITY	4
4	DETAILS OF ROYALTY COLLECTED	4
5	DETAILS OF PRODUCTION OF SAND	4
6	PROCESS OF DEPOSIT OF SEDIMENTS IN THE RIVERS	5
7	GENERAL PROFILE	5
8	LAND UTILISATION PATTERN	10
9	PHYSIOGRAPHY	10
10	RAINFALL	11
11	GEOLOGY AND MINERAL WALTH	11

LIST OF PLATES

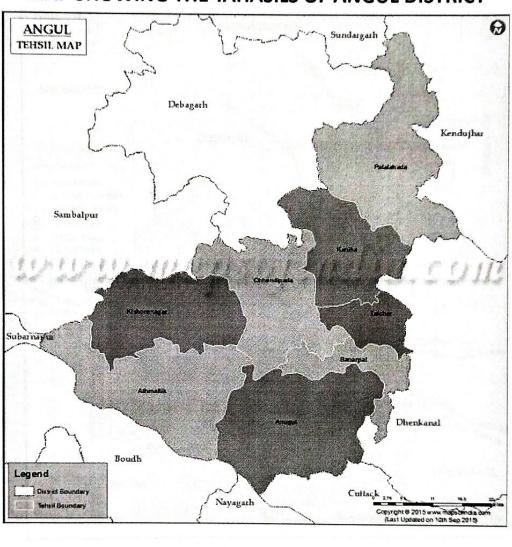
DESCRIPTION	PLATE NO
INDEX MAP OF THE DISTRICT	1
MAP SHOWING TAHASILS	2
ROAD MAP OF THE DISTRICT	3
MINERAL MAP OF THE DISTRICT	4
LEASE/POTENTIAL AREA MAP OF THE DISTRICT	5

LIST OF ANNEXURES

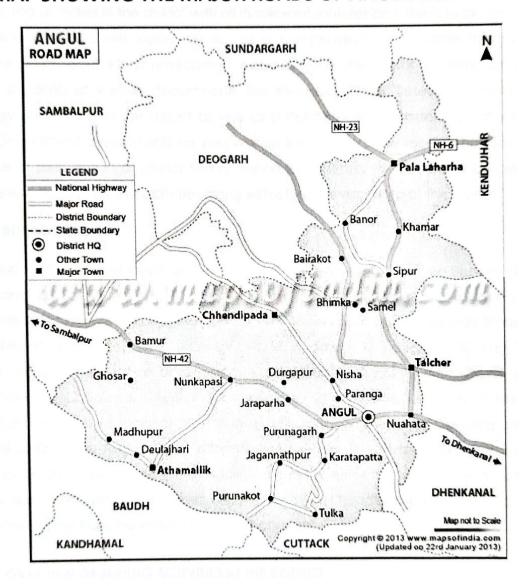
DESCRIPTION	ANNEXURE NO
LIST OF SOURCES	1



MAP SHOWING THE TAHASILS OF ANGUL DISTRICT



MAP SHOWING THE MAJOR ROADS OF ANGUL DISTRICT



PREFACE

In compliance to the notification issued by the Ministry of Environment and Forest and Climate Change Notification no. \$.O.3611 (E) NEW DELHI dated 25-07-2018 the preparation of district survey report of river 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.

1. INTRODUCTION

The district of Angul situated at the heart of Odisha was a part of Undivided Dhenkanal district till early March 1993, but for the administrative convenience, Dhenkanal District was divided into two parts i.e. Dhenkanal and Angul vide State Government Notification No. DRC-44/93/14218/R. dated 27 March 1993. Angul District came into existence as a separate district on April 1, 1993. The district is surrounded by Cuttack & Dhenkanal on the east, Sambalpur & Deogarh on the west, Sundargarh & Keonjhar on the north and Phulbani on the south. Covering an area of 6232 sq.km, Angul District is located at Latitude 20° 31' to 21°41' North to 84°16' to 85°23'East Longitude. The altitude of this place is 564 to 1187 mt. The district is abundant with natural resources. Angul, The district headquarters is about 150 kilometres (93 mi) from the state capital Bhubaneswar.

2. OVERVIEW OF MINING ACTIVITIES IN THE DISTRICT.

Angul district is enriched with many valuable economic minerals like coal, Kyanite, graphite, fireclay, china clay, precious and semi-precious stones, dimension and decorative stones etc.

Coal:

Angul district occupies a significant position in the mineral map of India beause of its vast resources of coal in the Talcher coalfield. A total reserve of 50,406 million tonnes of coal of all categories has been estimated in the district in Talcher coalfield. The Karaharbari and Barakar formations belonging to Damuda series are coal bearing. Coal produced in this area is mostly used for power generation purpose.

Fireclay:

Fireclay occurs sporadically within a stretch of 15 sq. km area in and around Badaganduri, Kansamunda and Telisinga villages of Kaniha Block, Angul district. In Talcher Lower Gondwana basin, the fireclay beds usually overly the coal seams.

Fireclay also occurs in Handapa area around Kakarpani, Ichhapur villages. The total fireclay resource of the district has been estimated at 1.22 million tonnes. This fireclay contains Lower Gondwana plant fossils like Glossopteris and Gangompteris.

Kyanite:

Kyanite occurrences are reported around Magarmuhan and Bankoli villages of Pallahara sub-division. In Magarmuhan, Kyanite occurs in association with quartzite-kyanite-schist and quartz-chlorite-kyanite schist extending over a length 1.5 km with an average width of 5 m. A reserve of 6000 tonnes of Kyanite has been inferred upto a depth of 1.5 m with Al₂O₃ content varying from 19.02% to 53.81% and silica content varying from 32.84% to 54.07%.

Graphite:

Incidence of graphite are recorded in the khondalite suite of rocks within a 25 km long and 10 km wide belt extending in NW-SE direction between Dondatopa and Patharkupa of Athmallik sub-division. The graphite occurs as flakes and disseminations. The important locations are Kamalpur, Dandatopa, Bhuasuninali, Adeswar, Girida, Akharkata, Sanrohila, Lanchi, Govindapur, Polamahal, Siariamalia, Cherkhandi, Karadagadia, Dhauragoth, Brahmanidei and Padmapokhari. Graphite occurrence near Dandatopa is high grade and pocket type where the F.C. content varies between 54% to 77%. In the remaining areas, graphite occurs as disseminations and flakes in khondalites with F.C. content ranging from 5% to 15%.

Besides the above, occurrences of graphite are reported around Badakantakul, Kanja and Talisara in Angul sub-division.

China clay:

China clay occurs is Panduripathar area of Athmallik sub-division. It extends over a strike length of 250 m with an average width of 150 m.

Precious and Semi-Precious Stones:

Garnet (pink, violet, red and honey yellow varieties), red corundum, moonstone, blue Kyanite etc. have been reported in Nuagaon, Parhang, Burubura, Kulad, Karanpal area of the district.

Manganese Ore:

Floats of Pyrolusite and psillomelane are strewn over the ground near Teleipathar, Pathartaila and Akharkata village

Decorative and Dimension stone:

Granite, granite-gneiss, porphyritic granite gneiss and charnockites exposed between Boinda and Athmallik along the roadside are suitable for decorative and dimension stone. 4800 cu. m of decorative and dimension stone has been estimated in Govinda Panasahi and Durgapur Panasahi.

Other than the above mentioned minerals, minor minerals such as river sand, laterite slabs, building stone/black stone/road metals, morrum, brick earth etc. are also available in the district.

In the district of Angul, there are ten working mines and two non-working coal mines. Besides, one sand and one quartz mines are also operating in this district. Detailed of the working/non-working mines are given below.

SI. No.	Name of working mines	Mineral	Area (in sq. km)	
1	Talcher Colliery	Coal	11.4	
2	Nandira Colliery	Coal	3.70	
3	Jagannath Colliery	Coal	5.12	
4	Bharatpur OCP	Coal	17.67	
5 Anata OCP		Coal	5.35	
6	Lingaraj	Coal	12.48	

7	Balaram OCP	Coal	11.17
8	Hingula OCP	Coal	10.64
9	Chhendipada OCP	Coal	0.24
10	Bhubaneswari	Coal	6.88
11	Mandapal Sand mine for stowing	Sand	0.18

Name of the non-working Mines:

1.	Deulabera Colliery	Coal
2.	Handidhua Colliery	Coal
3.	Kakudi & Kishoripal Sand Mines	Sand
4.	Bilinga/Bikser Sand Mines	Sand
5.	Kandapal Sand Mines	Sand
6.	Telisinga F.C. Mines	Fireclay

3. LIST OF LEASES WITH LOCATION, AREA AND PERIOD OF VALIDITY

Enclosed as Annexure I

4. DETAILS OF ROYALTY COLLECTED (Rs)

SI.No	Name Of Tahasil	2015-16	2016-17	2017-18	2018-19
31.NO	Atthamalik	224979	762239	924352	924672
2	Kishorenagar	415297	119821	0	0
2	Pallahara	0	29554	200806	180642
3	Talcher	10966344	7834495	4833791	4709150
5	Banarpal	0	0	0	0
4	Chhendipada	0	0	0	0
7	Kaniha	3983764	4307167	4270363	4077484
TOTAL		15590384	13053276	10229312	9891948

5. DETAILS OF PRODUCTION OF SAND

Name Of Tahasil	2015-16	2016-17	2017-18	2018-19
		9160	9163	9167
		4620	5295	5970
		1350	1500	1650
		127967.5	90006	86427.5
	0	0	0	0
	0	0	0	0
	65418	65588	66887	64067
Kanina		208685.5	172851	167281.5
	Name Of Tahasil Atthamalik Kishorenagar Pallahara Talcher Banarpal Chhendipada Kaniha	Atthamalik 9158 Kishorenagar 3945 Pallahara 1200 Talcher 113161.5 Banarpal 0 Chhendipada	Name Of Idilosii 250 Atthamalik 9158 9160 Kishorenagar 3945 4620 Pallahara 1200 1350 Talcher 113161.5 127967.5 Banarpal 0 0 Chhendipada 0 0 Kaniha 65418 65588	Name Of Idnasii 2013 To 2016 To 9163 Atthamalik 9158 9160 9163 Kishorenagar 3945 4620 5295 Pallahara 1200 1350 1500 Talcher 113161.5 127967.5 90006 Banarpal 0 0 0 Chhendipada 0 0 0 Kaniha 65418 65588 66887

6. PROCESS OF DEPOSIT OF SEDIMENTS IN THE RIVERS

The drainage of the district is mainly controlled by rivers like Mahanadi, Brahamani, Tikira and their tributaries. During rainy season the river water carries sand which is formed due to disintegration of rock bodies along with other suspensions. After recession of the water flow the sand gets deposited in the locations where there is less energy.

7. GENERAL PROFILE

a. Administrative set up:

SI No	ltem	Unit	Magnitude
1	Location		
	Longitude	Degree	84º16' to 85º23'East
	Latitude	Degree	20º 31' to 21º41' North
2	Geographical area	Sq.Km.	6375
3	Sub-division	Numbers	4
4	Tahasils	Numbers	8
5	C D Blocks	Numbers	8
6	Municipalities	Numbers	2
7	NACs	Numbers	1
8	Police Stations	Numbers	23
9	Gram Panchayats	Numbers	225
10	Villages	Numbers	1871
10	Inhabited	Numbers	1654
	Uninhabited	Numbers	217
11	Assembly	Numbers	5
11	constituencies	3 1111 - 1 - 2	

b. Area and Population:

The district has an area of 6375 sq. kms and 12.74 lakhs of population as per 2011 census. The district accounts for 4.09 percent of the states territory and shares 3.03 percent of the state's population. The density population of the district is 200 per sq. km as against 270 person per sq. km. of the state. It has 1871 villages (including 217 un-inhabited villages) covering 8 blocks, 8 Tahasils

and 4 Subdivisions. As per 2011 census the schedule caste population is 239552 (18.8.%) and schedule tribe population is 179603 (14.1.%). The literacy percentage of the district constitutes 77.53 against 72.9 of the state.

c. Climate:

The climate condition of the district is generally hot and high humidity during April to May and cold during November to December The monsoon generally breaks during the month of July, Average annual rainfall of the district was 1147.52 mm during last four years, which is less than the normal rainfall 1401.9 m.m.

d. Economy:

Agriculture occupies a vital place in the economy of Angul District, as it provides direct and indirect employment to around 70 % of its total work force, as per the 2001 census. The total cultivable area of this District is 2, 16,403 hectares, covering 32.7 % of its total geographical area. The major crops of the Kharif season are paddy, maize, ragi, oilseeds, pulses, small millets and vegetables etc. Paddy, wheat, maize, field pea, sunflower, garlic, ginger, potato, onion, tobacco, sugarcane and coriander etc are the major Rabi crops.

The last decade has witnessed a tremendous improvement in the industrial scenario of Angul District. Many public sector undertakings have setup up plants and offices here, like National Aluminium Company Limited (NALCO), Mahanadi Coal Fields Limited (MCL), National Thermal Power Corporation (NTPC) and Talcher Thermal Power Station (TTPS). One of the major coalfields is the Talcher coalfield, which contains huge reserves of power grade non-coking coal. Engineering Units, Rice Mills, Hotels, Fly Ash Brick units, Stone Crushers, Service Units, Bleaching units, Bread and Bakery units, Tyre Retreading units, Flour Mills and Spices Grinding units etc. are some of the small scale industries functioning here.

Dhokra casting works, Terracotta works, Wood carvings, Art textiles and Soft toys etc are some examples of the crafts that have been generating revenues for this District. The District Industries Center functioning in the District promotes its various industrial activities.

e. Industry:

The locational advantage and abundant stock of manpower and raw materials have played an important role in the industrial development of the district. The important PSUS of the district are the NALCO, the MCL. Besides, during the year 2014-15,1011 nos of Micro Small and Medium Enterprises have been Established with total capital investment of about Rs 68386.94 lakhs with 7447 nos of Employment generated in Angul district. Apart from this a good number of Thermal power plants and sponge plants have been established within the district including NTPC and various private companies due to abundant availability of thermal grade coal. Besides various kinds of handicraft works like dhocra casting, bell metals, textile products have been developed by the skilled workers and artisans of the district.

No. of MSME units	Investment	Em	ployme	ent Genera	led	Employment of women
set up	(In Rs. crores)	SC	ST	General	Total	
2325	20936.67	2337	704	4175	7216	405

f. Agriculture:

During the year 2017-18 the net area sown was 197 thousand hectares against 5356 thousand hectares of the state. The production of was as below:

Name	Pad dy	Whe	Maiz e	Mun g	Biri	Kulth	TilL	Grou ndnu t	Musta rd	Potato es	Jute	Suga rcan e
Producti on in 000 MT	188. 63	0.09	14.8	15.9	17.3	4.35	14.8	20.7	1.72	0.00	18.00	4.55

During 2017-18, the total fertilizers used in the district was about

Type of	Nitrogenous	Phosphatic	Pottasic	Total	Consumption per Ha
fertiliser	14	2005	853	7232	25.45
Quantity in MT	4354	2025	633	7202	TR. 135.88

g. Power:

Consumption of electricity in Angul district during the year 2013-14 covers 1167.05 million units and villages so far electrified as on 31.03.2014 is 1618 revenue villages which constitutes 97.8% to the total inhabited revenue villages of the district.

h. Transport & Communication:

Railway route length (14-15) km	105.51
No of Rly stations and PH(14-15)	12
Forest road (17-18) km	449.54
National Highway (16-17) km	235.93
State Highway (17-18) km	186.13
Major district road (17-18) km	64.42
Other dist road (17-18) km	739.03
Rural road(17-18) km	1391.83
Inter village road (16-17) km	2093.93
Intra village road (16-17) km	2298.06

i. Health:

The medical facilities are provided by different agencies like Govt., Private individuals and voluntary organizations in the district.

Sub divisional	hospitals	4 No
including mobile		
Beds facilities		392 No
Homoeopathic		16 No
dispensaries		10 11-
Ayurvedic dispense	aries	19 No

j. Tourist places:

There are 13 nos, of tourist center such as Angul, Banarpal, Bhimkand, Binikei, Bulajhar, Deulajhari, Tikarapada, Talchar, Handapa patrapada, Hingulapitha, khuladi, Rengali and Derjanga as identified by Department of Tourism and culture,

Odisha. During 2015 the number of Domestic tourists were 758273 and foreign tourists were 241 who visited the tourists sports of the district.

k. Forest areas:

Category of forest	Area in sq km
Reserve Forest	1760.76
Unclassified Forest	1.15
Demarcated Protected Forest (DRF)	273.21
Undemarcated Protected Forest	11.99
Other forest under Revenue Dept	669.71
Total	2716.82

I. Education:

	No. of Schools	1004
Primary School (2017-18)	Enrolment (No)	111635
WASHINGTON SHIP TO SEE THE SEE	Pupil Teacher Ratio	21.41
	No. of Schools	680
Upper Primary School 2017-18	Enrolment (No)	63888
	Pupil Teacher Ratio	19.82
Gerneral College 2017-18	Junior	43
Gerneral College 2017-18	Degree	23
	No. of Schools	282
Secondary School	Enrolment (No)	36666
	Pupil Teacher Ratio	25.71
	Male	86.0
Literacy Rate, 2011	Female	68.6
	Total	77.5

m. Culture & Heritage:

Angul district is very much rich in its fairs and festivals. Laxmi Puja is celebrated in the city of Angul. The celebration starts from Kumar Purnima and continues for long 11 days. Ganesh Puja of Talcher is one of the most famous festivals celebrated in the District. Amb Nua (fresh mango eating), Raja, Gammha Purnima, and Push Punei are functions celebrated by the people with much enthusiasm. The number of fairs and festivals observed in the district showcase its varied culture vividly.

8. LAND UTILISATION PATTERN

SI No	Landuse	Area in '000Ha
1	Forest Area	272
2	Misc. trees & Grooves	23
3	Permanent Pasture	36
4	Culturable Waste	19
5	Land put to Non Agril Use	28
6	Barren & Unculturable Land	17
7	Current Fallow	19
8	Other Fallow	17
9	Net Area Sown	197
10	Mining	10
	Geographical	638

9. PHYSIOGRAPHY

Physiographically the district can be divided into three regions:

- (i) Northern Mountainous Region
- (ii) Central Undulating Plain
- (iii) Southern & South-western Mountainous Region.

Northern Mountainous Region: This region contains WNW – ESE trending hills immediately north of the Talcher coalfield and NW-SE trending hills towards the boundary of Keonjhar district which locally changes to E-W direction and form the Malayagiri hill, in the south of Pallahara. Malayagiri hill contains one of the loftiest peaks (1,187 m.a.m.s.l in Odisha. The hills and ridges are separated by broad valleys and low hilly areas. The heights above sea level of this region vary from about 76 meters on the bank of Brahmani river to 1,187 meters on Malayagiri peak. The high hills of this region are composed of Quartzites while the lesser hills are made of Quartz-Mica schists, Granites and other rocks. The broad valleys are mostly underlain by gneissic rocks.

Central Undulating Plain: The Central part of the district is characterized by undulating plain. This region is covered by Talcher subdivision and northern parts of Angul and Athmalik subdivisions. The Brahmani valley portion of this region exposes mainly Granites and its variants and Gneisses with occasional hillocks of Khondalites,

while the remaining part from west of Murhi and north of Angul up to the western end of the district is characterized by considerably flat country underlain by sedimentary rocks of Gondwana Group having large deposits of coal (Talcher Coalfield). The general slope of the area is from WNW-ESE.

Southern and South Western Mountainous Region: The Southern and South Western parts comprise of hill ranges trending WNW-ESE and is covered by the sub-divisions of Athmalik and Angul. The elevations vary from 60 to 971 meters above sea level. Banamadali peak in Angul Sub-division is 790 meter in height. In Athamallik Subdivision the main peaks are Panchadhara and Hingamandal hills. The southern & south western 11 hilly regions form the watershed between Brahmani and Mahanadi rivers.

10. RAINFALL

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:

Year/	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	March	Total
Month	27.04	20.02	218.86	343.29	224.64	142.20	16.38	0.23	31.85	0.63	24.98	42.59	1122.62
15-16	37.04	39.93	210.00	343.23	LL III							22.44	1107.09
16-17	1.93	44.25	126.63	267.16	389.86	143.23	98.26	4.90	NIL	8.43	NIL	22.44	
17-18	1.23	35.76	201.05	213.38	213.05	143.69	109.87	16.90	NIL	NIL	NIL	0.10	935.03
		80.10	123.42	333.20	299.31	295.03	114.29	2.70	50.95	0.40	27.00	24.60	1425.34
18-19	74.34	80.10				181.04	84.70	6.18	20.70	2.36	13.00	22.43	1147.52
Avg.	28.63	50.01	167.49	289.25	281.72	181.04	34.70	0.10					

11. GEOLOGY AND MINERAL WEALTH

The rocks of Eastern Ghat Supergroup, Gorumahasani Group and Lower Bonai Group are overlain by laterites (both in-situ and transported). The Eastern Ghat Super-group of rocks mainly comprises quartz - feldspar -garnet - sillimanite - graphite schist /gneiss, garnetiferous quartzite, charnockite, pyroxene granulite, leptynite and augen gneiss. The metasedimentaries of Gorumahasani Group constitute quartzite, gritty quartzite, quartz - mica schist, fuchsite quartzite, quartz - chlorite schist, hornblende schist, and metabasics. The Lower Bonai Group

constitutes biotite gneiss, biotite-hornblende granite gneiss and granodiorite. Metasedimentaries of Lower Bonai Group consist of ferruginous shale, cherty shale, phyllite, sandstone and conglomerate. The Gondwana Supergroup consists of sandstone, shale, conglomerate and fire clay. The Quaternary sediments mainly consist of sandy clay with calacareous concretions, coarse to fine sand, silt and clay.

The geological succession in the district is as follows:

STRATIGRAPHY:

AGE	GROUP/SUPER GROUP	FORMATION	LITHOLOGY
Holocene	Quaternaries	Brahmani / Mahanadi	Alluvium
Upper Pleistocene to Holocene		formation Kaimundi formation	Gray sandy clay with calcareous concretions
Pleistocene	Tertiaries		Laterite / Latosol (in situ)
Permian to Triassic		Mahadeva Formation	Sandstone, shale
Permian	Gondwana Supergroup	Barakar, Barren Measures. Raniganj & Damuda	Conglomerate. sandstone, shale, coal
		Formations (Unclassified)	
Carboniferous (?) to Permian		Talchir Formation	Sandstone. shale, tillite
			Gabbro
Archaean to Palaeoproterozoic		Lower Bonai Group	Metavolcanics Granite, biotite gneiss, biotite - hornblende granite gneiss, granodiorite
			Ferruginous shale, cherty shale with ash IBT and tuts, mangarfilerous shale/ phyllite
		Gorumahisani Group	Gritty sandstone, orthoquartzite, conglomerate Metabasics
		Стоор	Quartzite, sericite schist, quartz schist, quartz -mica schist, mica schist, micaceous quartzite
			Actinolite quartzite, tremolite - actinolite schist
		Granitoids	Augen gneiss, garnetiferous gneiss, biotite gneiss, migmatised khondalite
Archaean			Leptynite
		Charnockite Group	Acid and intermediate charnockite
	Eastern Ghat Supergroup		Basic charnockite, pyroxene granulite
		Khondalite Group	Quartz-feldspar-garnet- sillimanite graphite schist/ gneiss Coarse crystalline quartzite, quartz-sillimanite schist. garnetiferous quartzite

- Detail of river/stream/other sand source- Sand mining in the district is confined to rivers like Mahanadi, Brahamani, Tikira and their tributaries.
- b. Availability of sand or gravel or aggregate resources- sand- 75,11,279 cum (Please refer Annexure I), Gravel- Nil, Aggregate- Nil. This is the maximum volume of sand which can be quarried out from the sources of the district and has been calculated as 60% of the quantity derived by multiplying the area of the source with 3m thickness as the exact resource of sand is not possible to calculate due flowing water of last monsoon.
- Detail of existing mining leases of sand and aggregates- For sand pl refer Annexure I.
 Aggregate- Nil

1. DETAILS OF AREAS WHERE THERE IS A CLUSTER OF MINING LEASES

Four clusters have been designated in Kaniha Tahasil and Talcher Tahasil namely Cluster 1(KAN), Cluster 2(KAN), Cluster 1(TAL) & Cluster 2(TAL). Details of the clusters are as below:

	,	KANIHA TAHASIL			
SL NO	CLUSTER NAME	QUARRY NAME	AREA(IN HA)	AREA(IN AC)	
1	CLUSTER-1(KAN)	KAMAREI SAND QUARRY	4.65	11.50	
2	CLOSTER-I(RAIV)	CHANDRABIL SAND QUARRY	2.02	5.00	
		KANIHA TAHASIL			
SL NO	CLUSTER NAME	QUARRY NAME	AREA(IN HA)	AREA(IN AC)	
1	CLUSTER-2(KAN)	KHAJURIA SAND QUARRY	6.07	15.00	
2	CLOSTER-Z(RAIN)	DERANGA SAND QUARRY	6.07	15.00	
		TALCHER TAHASIL			
SL NO	CLUSTER NAME	QUARRY NAME	AREA(IN HA)	AREA(IN AC)	
1	CHICTED 1/TALL	NIJAGARHZAMI SAND QUARRY	4.07	10.06	
2	CLUSTER-1(TAL)	DHOBAPAL SAND QUARRY	7.28	18.00	
		TALCHER TAHASIL			
SL NO	CLUSTER NAME	QUARRY NAME	AREA(IN HA)	AREA(IN AC)	
1	CHICAGO STALL	SANTHAPADA(A) SAND QUARRY	11.33	28.00	
2	CLUSTER-2(TAL)	SANTHAPADA(B) SAND QUARRY	7.28	18.00	

DRAINAGE SYSTEM AND DESCRIPTION OF SALIENT FEATURES OF MAIN RIVERS AND **STREAMS**

Detail of the potential of river sand of the district is submitted as Annexure I.

24/09/2021. R.O. Klaron. Degad Ririsin_ Cull 24/2/2021 Enls Collector, Athanellik

Well Fallamai Juscollech Pallamai

Sub Collector, Talcher.

Oivisional Forest Office Athmallik Division

Divisional Forest Officer Angul Division

Suphermon Nosi.

Collector, Angul

(Sni Sarbesmar Das, Retol E.F. MI Angul Expert Menbers, DEIAA)

17	RESERVE IN CUM	AS PER MINING PLAN	48780	00606	116995
\top	٥	N M U O Z D	1. 55	77.87	20.00
16	LATITUD	Z _ Z ⊃ ⊢ w	2	9	17
	₹		1	11	7 1
+	-	N W U O Z D	1.05	v. w. v. o. o.	4 m · n n
15	LONGIT	Z _ Z ⊃ ⊢ w	m	m	e
-	وَ عَ		∞ ν ₁	80 LV	o o
14		ADDRESS & CONTACT NO OF SUCCESFU L BIDDER	Sahoo AT/PO- Derang, PS- Kaniha, Dist- Angul, PIN- 759117 Mob- 88478331		
13	NAME	SUCCESF UL BIDDER	Parama Nanda Sahoo		
12	NO & DATE OF	GRANI OF ENV CLEARA NCE			
11	DATE OF REGISTR	ATION OF LEASE DEED			
10	ADDRESS &	CONTACT NO OF LESSEE		S/o-Benudhar Jena, AT-Naharakanta , PO-Naharakanta , PS-Mancheswar , Dist-Khurdha Mob-	
6	AA	OF LESSEE		Biswamoh an Srichanda n Ray	
80	NAME	MINO MINER AL	SAND	SAND	SAND
7	ARE	A Z O	12	12.5	13.5
9		No.	209	1, 1/32 47	240
S	1	N o N	241	#	519
4		STAT	Non- worki ng	Non- worki	Non- worki
æ		NAME OF SOURCE	Demphan ala (Sanatribi da Sand quarry)	Tikira Tolakabed aSand Quarry)	Bajrakote Sand Quarry
2	¥	E OF TAH ASIL	Kanih a	Kanih	Kanih
1		ಷ ೪	н	7	m

20606	6065.7°		11.75.0 6.00 7.00 7.00 7.00 7.00 7.00 7.00 7.			
m : in en	un me	am. mp		3		
ri m	w	99	41.9	40.85		
NH	211	A H	Pi Pi	NH		
PARKET DESCRIPTION OF THE PARKET PARKET.	N H : 4 4	N . N 9	च क ं क च	10 M . m m		
m	PV	pri	FI CONTRACTOR OF THE PARTY OF T	ø		
99 L/I	69 LA	99 V)	99 1/1	80 V		
		Sichos Subos At Pool Cerang Pool Angul Pool Mode Septissaa	S/o- Gopal Sahoo, A1/PO- Derang, PS- Kamiha, Dist- Angul, PIN- 7591117 Mob- 969253580	S/Or Sudhakar Jena, AT/PO- Kamalang, a, PS- Kantabani a, Pin-		
		Same Soft	Kishore Chandra Sahoo	Suneet lena		
SAMD	SAND	SAND	SAND	SAND		
12.5	30.5	St.	15	5.14		
85 to 25	220	0 0	0 0	1/37		
92	8:	23	55	Ħ		
Non- worki	. R. S.	P. P	Runni	Runni		
Susuba Sand Cuerry	Takua Send Querry	Majuria Sand Quarry	Derenga Sand Quarry	Rutubhuin Sand Quarry		
Cart	£ ~	e a	Kanih	Kanih		
**	us.	Ψ	_	∞		

	10654	48780
	4 4 ' 4	30.00
	4	٠,
	. 2	1 2
	8 H · H 8	1 6 5 7 7
	∞ v	м «
Dist- Dhenkana I Mob- 85949905 86		
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	Sudhakar Jena	Pabitra Mohan Sahoo
	SAND	SAND
	2	8.7
i.	118	941/
	106	57
	Runni	New
93	Dangarbe da Sand Quarry	Patakhma n Sand Quarry New)
	Kanih	Kanih
	ø	10

40501	22685	18274				
o . o m	6 4 . 72	81.41				
Н 4	80	2				
1 7	1.2	17				
42.77	2 . 6 1	0 0 0 0 0				
2	н 2	m				
∞ v ₂	80 V)	∞ ν				
S/O- Jugal Kishore Patra, AT- Brahmanb ati, PO- Badamunl ei, PS- Gobindap ur, Dist- Cuttack PIN- 754018 Mob- 94378825	S/o- Madan Sahoo AT/PO- Derang, PS- Kaniha, Dist- Angul, PIN- 759117 Mob- 88478331	S/o- Ananda Chandra Pradhan AT- Sanahar, Po- Santribida , PS- Kaniha, Dist- Angul Mob- 94383015				
Rashmi Ranjan Patra	Parama Nanda Sahoo	Sujit Kumar Pradhan				
SAND	SAND	SAND				
	m	5.2				
241	200 6/1, 224 3/1	7				
132	185	121				
New	New	New				
Denali Sand Quarry New	Burukuna Sand Quarry	Chandrabi I Sand Quarry				
Kanih	Kanih a	Kanih a				
 	12	13				

7990			35699		41695
24 . V 4			17 . 4	<u>б</u>	74.08
2			нн		∞
1			1		1 1
86.86			m 7 · m	9	48.7
т			9		v ∞
∞ v ₁			∞ v		8 4
Sanatribida Cyandra Chandra Pradhan AT- Sanahar, Po- Santribida , PS- Kaniha,	Dist- Angul Mob- 94383015	S/o- Ananda Chandra Pradhan	Sanahar, Po- Santribida , PS-	Kaniha, Dist- Angul Mob- 94383015	S/o- Madan Sahoo AT/PO- Derang, PS- Kaniha, Dist- Angul, PIN- 759117 Mob- 88478331
Sujit Kumar Pradhan			Sujit Kumar Pradhan		Parama Nanda Sahoo
75		7			
SAND			SAND		SAND
11.5	6	Ŋ.	10	201	10.5
716	3-9-	30	403	- 3	134
188,2	8	M	268		84
New	į.	É	New	2	New
Kamarei sand quarry	Pag	116	Suleipal Sand Quarry		Bol Sand Quarry
Kanih a		1 7 4	Kanih		Kanih a
14	П		15		16

28082	00006	18440	3049	18550	102347	110142	163898	131118	181015	36903
NM . 66	5 . 6	H	PI PI	V H . (D 10		H	16	a	18	36
60	6	46	4	21.60	3 . 3	44.1	110	-14.00	47.8	4 0
NH	71	7 1	7 1	714	n w	w w	0.0	SS	SS	0
m . un h	4 . 0	24.44	17.7	ω H . W m	0 0	0	0 0	70	7 0	7
N 60	NO	5 9	10 00	15 0	1 4 . 9	8 . 7	7.80	4 8 . 8	3 . 5	4 6
w 4	∞ 4	20 4	∞ 4	00 4	4 8 2	- 2	4	44	44	1 6
S/O- Mohan Ch Sahu, At- Derenga, PS- Kaniha	At- Derenga, PS- Kaniha	S/O- Uday Sahu, At- Changudi a, PS- Chhendip ada	M/S Durga Condev (P) Ltd.	S/O- Saniu Sahu, Vill- Derenga, PS- Kaniha		∞ 4	∞ v	8 V	8 V	80 V
Dharmen dra Sahu	Ajit Sahu	Jitendra Sahu	Bhagirathi Swain	Pabitra Mohan Sahu			,	,	,	
10151/SEI AA nDt. 17.12.20	8416/SEIA A Dt. 20.06.20	10192/SEI AA Dt. 17.12.20								
	04.07.20						,		r	
S/O- Mohan Ch Sahu, At- Derenga, PS- Kaniha	At- Derenga, PS- Kaniha	S/O- Uday Sahu, At- Changudia, PS- Chhendipada	M/S Durga Condev (P) Ltd.	S/O- Saniu Sahu, Vill- Derenga, PS- Kaniha			Talcher Town- 9556627975	Talcher Town- 9437042621	Talcher Town- 9556627975	Sirigida- 9938134424
Dharmen dra Sahu	Ajit Sahu	Jitendra Sahu	Bhagirathi Swain	Pabitra Mohan Sahu			Banabar Bhutia	Mahesh Ku Agrawala	Pitambar Bhutia	Sanghami tra Rhutia
SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND
7.41	12.3	4.79	2.11	5.06	14.0	15.1	22.5	18	24.8	18
690 1, 561 0	220	123 0, 105	166	401	н	688/ 840, 244/ 834, 374	100/	181/	369	179
323	6	99	332	316	51	88	83	22	446	142
New	New	New	New	New	New	New	Runni ng	Runni	Runni ng	Runni
Kampasal a Sand Quarry	Mandua Sand Quarry	Kankarpal sand quarry	Takua sand quarry	Badabare na sand quarry	Raniakata	Sanarohil a	Gopinath	Dhobapal	Nizgarhza mi	Sirigida
Chhe ndipa da	Chhe ndipa da	Chhe ndipa da	Chhe ndipa da	Chhe ndipa da	Kishor enaga r	Kishor enaga r	Talch	Talch	Talch	Talch
17		19	50	12	22	23	24	25	26	27

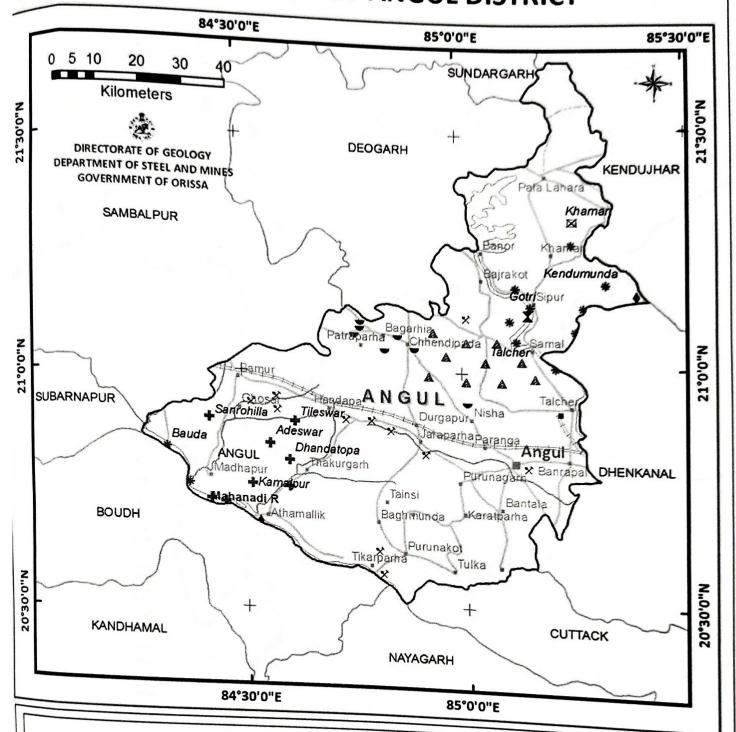
-									
	131118	193035	131118	203962	131118	125145	163898	67298	31280
. 6	7 . 7 8	24 . 6 9	47.95	r . r m	v v . o e	3 . 6	E 6 . H	8 2 . 4	а. на
	ın ın	νn	νm	v v	V 80	v 6	26	4 4	4 7
	0 0	0 0	0 0	0 7	70	0 0	70	0 0	0
٠. ७	44 .48	1.05	W . 4 L	7 7 7 7 8	100.00 1	77	7. 63	4 . 4	S . 95
	4 4	40	H 4	4 4	4.0	7	7	8.7	е 0
_	∞ v₁	∞ v	∞ v	80 V3	80 V3	∞ v	8 V	w 4	∞ 4
	,	,		ī					
		2.1	,	į ,				Lt.No.181 1/Dt 23.07.16	Lt.No.172 7/Dt 25.06.16
	1	1						26.07.201 6	02.07.201
		Santhapada- 9938338013	Santhapada- 9861217585	Santhapada- 9938871527				S/o Dhabaleswar Mahakud At:- Khadarapada P.O:- Kudgoan Dist:- Angul	S/o Dhabaleswar Mahakud At:-
		Tophan Mohanty	Bira Bikram Singh Samal	Gagan Mohanty				Nirmala Mahakud	Nirmala Mahakud
	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND
	18	26.5	18	28	18	17.1	7.7	13	50
	419 8	-	298/ 110	419 8P	744 6/80 31	61	24	410	307/
	480	39	46	480	778	106	53	33	88
_	Runni	Runni	Runni	Runni	Non- worki ng	Non- worki ng	Non- worki ng	Runni ng	Runni ng
	Santhapa da-A	Haturipal	Dasanali	Santhapa da-B	Kankili	Banabasp ur	Baghabas	Khadrapa da Sand Quarry	Puleswar Ghat River Sand Quarry
_	Talch	Talch	Talch	Talch	Talch	Talch	Talch	Atha	Atha mallik
	78	52	30	31	32	33	8	35	36

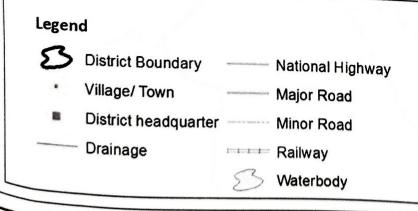
	25221	15200	220850	132066	403926	662796	2699066
	æ . N &	4 0					
	N 44	4 11	v 6 . 6	0 m u	-	0 . 4	40 . m
	0 0	0 7 0	4 4	4 10	44	4 4	9.6
	0.01	٨ . ٦	3 . 5 1	00	0 7	0 7	NN .4
	 80	5 %	3 . 5 1	4 00 · W	w . 4	7 . 6	20
	∞ 4	20 4	w 4	% 4 2.4	8 4	6 4	00 4
	J.Dt 3/Dt 13.12.16	Lt.No.172 9/Dt 25.06.16					
	24.01.17	02.07,201 Lt					
Khadarapada P.O:- Kudgoan Dist:- Angul	S/o Dharmapada Pradhan At:- Ramachandr apur P.O:- Barnur Dist:- Angul	S/o Dhabaleswar Mahakud At:- Khadarapada P.O:- Kudgoan Dist:- Angul Mob:- 8658969725					
	Rohitwasa Pradhan	Ghasiram Mahakud					
	SAND	SAND	SAND	SAND	SAND	SAND	SAND
	15.3	17	30	50.8	54.2	87.2	347.
	415	9 6	410	741	762	25	182 9, 183 0, 1,18 32
	54	840	33	22	72	7	173
	Runni	Runni	New	New	New	New	New
	Bankapal Sand Quarry	Ghodama ra Ghat River Sand Quarry	Khadarap ada sand Quarry (B)	Tainsar Sand Quarry	Nilakanth apada Sand Quarry	Keutabhuí n Sand quarry	Odasinga Sand quarry
	Atha	Atha mallik	Atha mallik	Atha malliik	Atha mallik	Atha mallik	Atha
	37	38	39	5	41	42	43

2699066	85732	2450	1230	99067	106643	7511279
40 . 8	80 · 10	44 . 6	6 1 15	H 9	1 6 . 4	
4 E	N E	2.1	4 %	7 7	1 8	
0 7	2 0	0 7	70	1 7	1 1	
	7 . 2	4 · 8	79.4	0 , 1	2 . 5 3	
9 6	9	н б	N W	5	1 6	
8 4	8 4	8 4	∞ 4	8 5	∞ v	
		Lt.No.198 3/Dt 12.09.16	Lt.No.169 8/Dt 25.06.16	1713/25.0 6.2016	1725/25.0 6.16	
		22.09.201 6	19.07.201 6	05.04.201	20.09.201 6	
		W/o Sankarshen Pradhan At:- Damamunda P.O:- Manamunda Dist:- Boudhl	S/o Hrusikesh Panda At:- Gadadharap ur P.O:- Madhapur	At/po- Odash, PS- Khamar,	At/po- Odash, PS- Khamar, 8908380997	TOTAL
		Jajneswar i Pradhan	Samir Panda	Gopaban dhu Sahoo	Gopaban dhu Sahoo	
SAND	SAND	SAND	SAND	SAND	SAND	
347.	12	17.4	13.0	13.6	14.6	
182 9, 183 0, 1,18 3,2 183 3,18 3,18	349	704	198 950	190 2, 114	542/ 139 9, 542, 684	
173	29	89	161	187	113,	
New	New	Non- Worki ng	Non- Worki ng	Runni	Runni	
Odasinga Sand quarry	Naikpada sand Quarry	Kiakata Sand Quarry	Kandhapa da Sand Quarry	River- Samakoi , Vill-	Kunjam Samakoi, Vill- Raipal, Jambua	
Atha mallik	Atha mallik	Atha	Atha mallik	Pallah ara	Pallah ara	
43	44	45	46	47	48	

	25732	35	1230	
_	90 . V	4 4 . m	W H . W	-
_	so m	5 11	4 90	
_	NO	0 7	0 0	
	Hr . 15	00	N 10 . 4	
_	10	но	ra m	
	∞ 4	∞ →	∞ →	
_		12.09.16	Lt.No.169 8/Dt 25.06.16	
		22.09.201 6	19.07.201 6	
		W/o Sankarshen Pradhan At:- Damamunda P.O:- Manamunda Dist:- Boudhl	S/o Hrusikesh Panda At:- Gadadharap ur P.O:- Madhapur Dist:- Angul	
	2022	Jajneswari Pradhan	Samir Panda	
	SAND	SAND	SAND	
_	12	17.4	13.0	
3,18	349	704	198	
	19	89	161	
	New	Non- Worki ng	Non- Worki	
	Naikpada sand Quarry	Kiakata Sand Quarry	Kandhapa da Sand Quarry	
	Atha	Atha	Atha	-
	4	45	94	

MINERAL MAP OF ANGUL DISTRICT





Mineral Occurrence △ Coal × Dimension Stone ★ Gemstone ☑ Gold ◆ Graphite ▼ Fireclay

