



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

**(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, RAYAGADA

CONTENT

SL NO	DESCRIPTION	PAGE NO
1	INTRODUCTION	1
2	OVERVIEW OF MINING ACTIVITIES IN THE DISTRICT	2
3	GENERAL PROFILE	2
4	GEOLOGY	4
5	DRAINAGE AND IRRIGATION PATTERN	6
6	LANDUSE PATTERN	7
7	SURFACE WATER & GROUND WATER SCENARIO	7
8	RAINFALL & CLIMATIC CONDITION	8
9	DETAILS OF MINING LEASES	8
10	DETAILS OF ROYALTY COLLECTED	8
11	DETAILS OF PRODUCTION	9
12	MINERAL MAP OF THE DISTRICT	9
13	LIST OF LOI HOLDERS ALONG WITH VALIDITY	9
14	TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT	9
15	QUALITY/GRADE OF MINERAL	10
16	USE OF MINERAL	10
17	DEMAND & SUPPLY OF THE MINERAL	10
18	MINING LEASES MARKED ON THE MAP OF THE DISTRICT	12
19	DETAILS OF AREAS WHERE THERE IS A CLUSTER OF MINING LEASES	12
20	DETAILS OF ECO-SENSITIVE AREA	15
21	IMPACT ON THE ENVIRONMENT (AIR, WATER, NOISE, SOIL FLORA & FAUNA, LAND USE, AGRICULTURE, FOREST ETC.) DUE TO MINING	15
22	REMEDIAL MEASURES TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT	16
23	RECLAMATION OF MINED OUT AREA (BEST PRACTICE ALREADY IMPLEMENTED IN THE DISTRICT, REQUIREMENT AS PER RULES AND REGULATION, PROPOSED RECLAMATION PLAN)	18
24	RISK ASSESSMENT & DISASTER MANAGEMENT PLAN	19

25	DETAILS OF THE OCCUPATION HEALTH ISSUES IN THE DISTRICT. (LAST FIVE- YEAR DATA OF NUMBER OF PATIENTS OF SILICOSIS & TUBERCULOSIS IS ALSO NEEDS TO BE SUBMITTED)	20
26	PLANTATION OF GREEN BELT DEVELOPMENT IN RESPECT OF LEASES ALREADY GRANTED IN THE DISTRICT	21
27	ANY OTHER INFORMATION	21

LIST OF PLATES

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

PLATE NO- 1

INDEX MAP

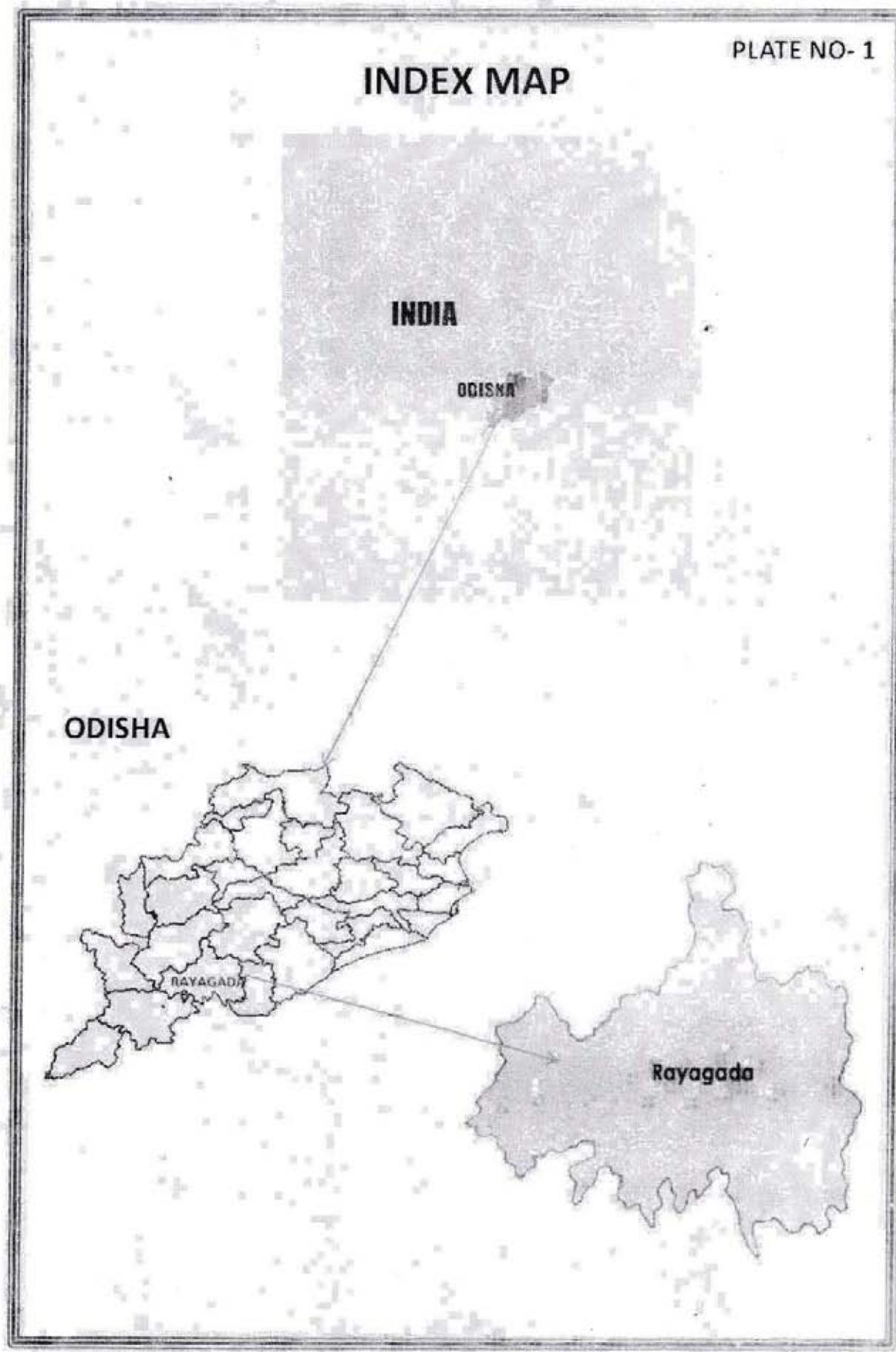
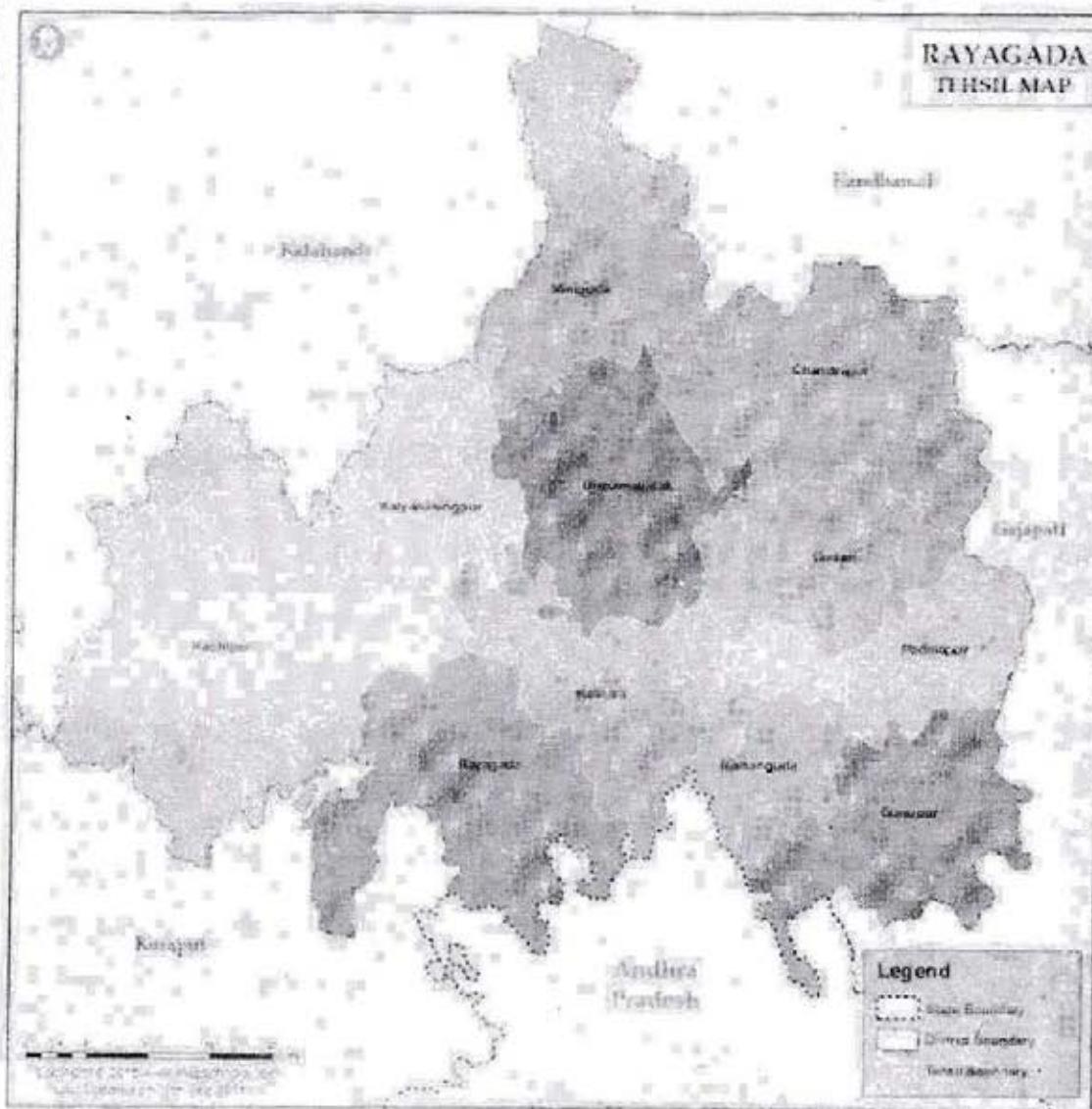
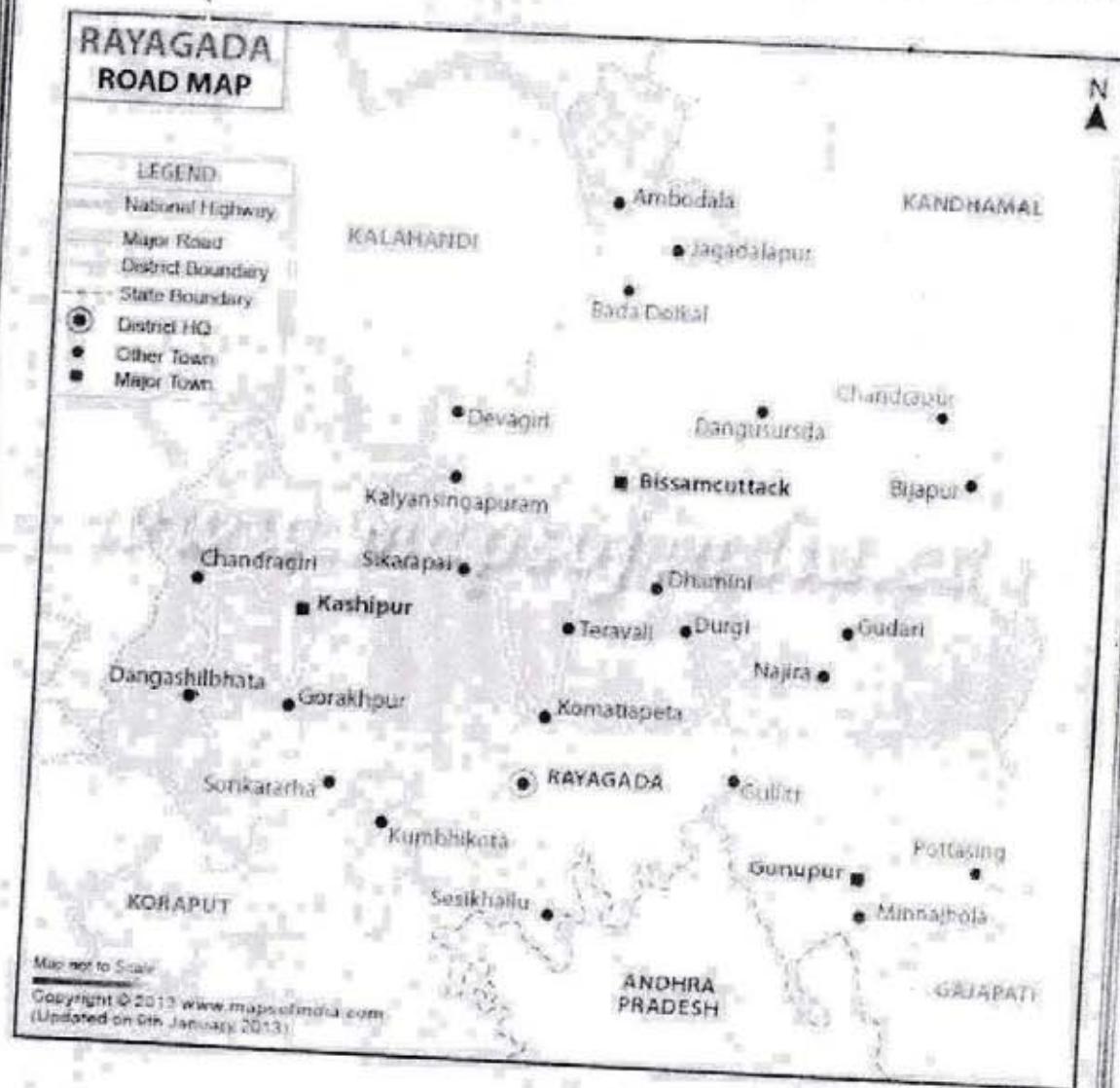


PLATE NO- 2

MAP SHOWING THE TAHASILS OF RAYAGADA DISTRICT



MAP SHOWING THE MAJOR ROADS OF RAYAGADA DISTRICT



PREFACE

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 road metal/building stone mining has been prepared in accordance with Clause II of Appendix X of the notification. Every effort has been made to cover road metal/building stone mining locations, future potential areas and overview of road metal 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 is 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. 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

Rayagada is a district in southern Odisha, a state in India, which became a separate district in October 1992. Its population consists mainly of tribes, primarily the Khonds and the Soras. In addition to Odia, Kui and Sora are spoken by the district's indigenous population.

Rayagada covers an area of 7,584.7 square kilometres (2,928.5 sq mi), and is divided into eleven blocks. Agriculture is the chief source of income and paddy, wheat, ragi, green and black gram, groundnut, sweet potato and maize being the district's major crops.

Rayagada district is known as the most famous region of the state because of its longest human history. It has long and glorious historical records evident by copper plates, rock inscriptions as well as different coins, which clearly indicate the region was the centre of attraction in all ages. In the third century B.C., during the reign of Ashoka the Great, it was covered under Kalinga empire.

The district is surrounded by Kandhamal district in the North, Gajapati district in the East, Koraput district and state of AP in the South and Kalahandi in the West.

2. OVERVIEW OF MINING ACTIVITIES IN THE DISTRICT.

Rayagada district has a potential reserve of graphite, manganese, bauxite, chinaclay, limestone, quartz, gemstones etc. The following paragraphs are a brief account of the minerals of the district.

Bauxite

The district has many high level bauxite occurrences. Important bauxite deposits of the district are Sijimali, Kutrumali, Baphilimali, Sashubohumali, Lakharsi. Kutrumali and Sijimali deposits extend into both Rayagada and Kalahandi districts.

Gibbsite is the main aluminous mineral. Al_2O_3 content ranges from 44 to 57.80%, SiO_2 content is between 0.40 to 8.74%, Fe_2O_3 content ranges between 16.2 to 27%. The resource of bauxite in the district is more than 600 Mt. However, this figure is likely to be much higher in view of numerous occurrences of smaller plateaux whose potentiality has not been quantified through detailed exploration. Almost all the plateaux rising more than 900 m above MSL contain bauxite which have been explored by Directorate of Geology and GSI.

Manganese

Manganese Ore deposits in the district are associated with khondalite suite of rocks belonging to Eastern Ghat Supergroup. Nishikhal manganese deposit is the most important, single largest deposit in the area with a reserve of nearly 10.2mt (Mn-28-38%). It is currently being mined by OMC and fed to Vishakapatnam Steel Plant. The other deposits in the area are Podakona-Taldhodshi(7mt), Kuttinga-Debjholla(1mt) etc. Manganese occurrences have been reported around Devajhola, Kutingpadar, Nisikhali, Rukunibadi, Paikaranipinda, Kandharanipinda, Taladoshi, Upardoshi, Podakona, Kinchikhal, Koka, Liliguma, Sirijodi, Balkapai, Bhitar dulki, Sikapai, Pariguda, Katubadi, Sunakhunti, Anjorhi, Bada Siringul, Purunapani, Mandhara etc. Manganese content varies from 7% to 38%.

Graphite

Graphite occupies a very prominent position in the district with regard to its extension, reserve and number of deposits. There are quite a number of graphite deposits in the district occurring at the contact of the khondalite and the granite gneiss. The important occurrences which are under active mining are in the famous

Tumudibandh belt. Nearly 150 occurrences of graphite have been identified. The most important occurrences of the district are Bandhamandi, Solagudi, Birida, Naringponga, Jagdalpur, Dukkum, Pangadi, Hajaridangu, Sada, Minahala, Pichaliguda, Rauli, Bhitar dulki, Jholaguda, Sikabarhi, Kaliapalli, Patrani, Gandrugam, Dallurgam, Malimunda, Disidaku, Deulbadi, Alanda, Budaguda, Murkakona, Ajaygarh, Pipliguda, Bhitar saja, Kumbhikota, Boragaon, Dongipadar, Tutter etc. Graphite is mostly of crystalline & flaky variety. It occurs in form of disseminations, veins, pockets, lenses and also as bedded deposits. Mineralisation is controlled by lithology, stratigraphy and structure. Graphite is associated with khondalite, calc-granulite, and granite gneiss and also with pegmatites and quartz veins. The fixed carbon value in low grade and high grade graphite occurrences varies between 5 to 25 % and 30 to 80 % respectively.

Limestone

Limestone occurrences in the district has been reported from Talasaja, Salimi, Gummigurha, Sikarpai, Ranjabadi, Bhitarjhola, Bheja, Santinagar, Nilabadi, Karlakona etc. Limestone occurs as lenticular bands associated with calc-granulite. The average CaO content varies from 28 % to 52 %.

Chinaclay / Kaolin

Chinaclay / kaolin occurrences have been reported in the district from Ambadola, Bandhamandi, Pipliguda, Kanipai, Bondichuan, Ladiponga, Loharahira, Bantichura etc. These occurrences are associated with khondalite, granite gneiss as pockets & lenses. The occurrences are highly gritty.

Quartz

Quartz veins of different dimensions are reported in the district. Among them, the notable occurrences are found around Bainibasa, Jamraguda, Bhaliapadar, Dangipada, Torumohra, Gudikhali, Sikampadar, Machhkhunti, Srirampur, Purlikona, Chitikapangu, Kusumpadar, Kasli etc.

Quartzite

There are several quartzite bands analysing more than 97% SiO₂ content in the Eastern Ghats Super Group of rocks. Notable among them are the occurrences

around Kondakora, Karlakona, Sana Kuanga, Loharasahi, Malkajuba, Pordiguda, Bhitarjhola, Matiguda, Adabarhi, Guriaguda and Sikarpai etc.

Calc-Tufa

Minor occurrences of calc-tuffa have been reported from Kiribiri, Durgi, Podabai, areas of Rayagada district. These occur as pockets in khondalites.

Red-Ochre

Red-ochre has been reported to occur at Marichakona with Fe_2O_3 content of 20.4 to 42.8% and Al_2O_3 content of 28.58 to 42.4 %. Red-ochre has also been found at Ganiabhadra with Fe_2O_3 of 36.16-36.69%, SiO_2 of 12.40-12.56% and also at Budharaja Parbat with Fe_2O_3 of 25.20-42.44%, Al_2O_3 -28.58-42.44% and SiO_2 of 0.03-0.85%

Gemstones

(i) **Garnet:** Hessonite garnets are reported around Bandhaguda, Hata dahikhal, Lataguda.

(ii) **Chrysoberyl:** Gem quality chrysoberyl occurrences are reported in the area around Dhakalguda, Berhu. Often, the chrysoberyl exhibits cat's eye effects.

(iii) **Sillimanite Cat's eye:** Fibrolite variety of this group with excellent cat's eye effect is reported from the areas around Hamsa, Anabadi, Bada irkubadi.

Dimension and decorative stones

The district has good potential as regards to the occurrences of dimension and decorative stones. The massive granite and charnockite serve as excellent construction material extensively used in foundation structures, roads and buildings. Of these, the pink granite of Gurumulu, porphyritic granites of Chatikona, granite gneiss of Bissamcuttack are important.

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.

3. GENERAL PROFILE

a. Administrative set up:

SI No	Item	Unit	Magnitude
1	Location		
	Longitude	Degree	82°54' to 84°02' East
	Latitude	Degree	19° 00' to 19°58' North
2	Geographical area	Sq.Km.	7073
3	Sub-division	Numbers	2
4	Tahasils	Numbers	11
5	C D Blocks	Numbers	11
6	Municipalities	Numbers	2
7	NACs	Numbers	1
8	Police Stations	Numbers	17
9	Gram Panchayats	Numbers	182
10	Villages	Numbers	2665
	Inhabited	Numbers	2468
	Uninhabited	Numbers	197
11	Assembly constituencies	Numbers	3

b. Area and Population:

The district has an area of 7073 sq.kms and 9.68 lakhs of population as per 2011 census. The district accounts for 4.54 percent of the states territory and shares 2.31. percent of the state's population. The density of population of the district is 137 per sq. kms. As against 270 person per sq.km of the state. It has 2667 villages (including 200 un-inhabited villages) covering 11 blocks, 11 Tahasils and 2 Subdivisions. As per 2011 census the schedule caste population is 139514 (14.4 %) and schedule tribe population 541905(56.0%). The literacy percentage of the district covers 49.8 against 72.9 of the state.

c. Climate :

The climate condition of the district is generally hot with high humidity during May and June and cold during November and December. The monsoon

generally breaks during the month of June. Average annual rainfall of last four years was 1299.1 mm which is more than the normal rainfall (1285.9 m.m).

d. Economy:

The district is rich in bauxite deposit suitable for alumina plant for which mining of bauxite and alumina plant have become the second source of income of the district next to agriculture.

e. Industry:

No. of MSME units set up	Investment (In Rs. crores)	Employment Generated				Employment of women
		SC	ST	General	Total	
1721	9457.17	1030	1277	2237	4544	125

f. Agriculture:

During the year 2017-18 the net area sown was 174 thousand hectares against 5356 thousand hectares of the state. The production of was as below:

Name	Padd Y	Whea t	Maize	Mung	Birl	Kulthi	TILL	Groun dnut	Mustard	Potatoe s	Jute	Sug car
Production in 000 MT	193.11	0.20	46.50	1.42	5.27	4.37	2.20	3.58	1.53	0.00	3.60	29.9

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

Type of fertiliser	Nitrogenous	Phosphatic	Pottasic	Total	Consumption per Ha
Quantity in MT	10204	3632	1532	15368	69.25

g. Transport & Communication:

Railway route length (14-15) km	176.69
No of Rly stations and PH(14-15)	27
Forest road (17-18) km	210.51
National Highway (16-17) km	122.70
State Highway (17-18) km	171.81
Major district road (17-18) km	97.30
Other dist road (17-18) km	274.95
Rural road(17-18) km	1670.32
Inter village road (16-17) km	3812.36
Intra village road (16-17) km	2537.12

h. Health:

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

Sub divisional hospitals including mobile	20 No
Beds facilities	291 No
Homoeopathic dispensaries	19 No
Ayurvedic dispensaries	14 No

i. Tourist places:

There are 7 nos. of tourist center such as Bissam-Cuttack, Chatikona, Devagiri, Halipathar, Minajhola, Niyamgiri hill and Padmapur identified by department of Tourism and Culture, Odisha. During 2010-11, the numbers of Domestic tourists were 374095 and foreign tourists were 435 who visited the tourists spots of the district.

j. Forest areas:

Category of forest	Area in sq km
Reserve Forest	771.62
Unclassified Forest	0.96
Demarcated Protected Forest (DRF)	1147.19
Undemarcated Protected Forest	0
Other forest under Revenue Dept	892.56
Total	2812.33

k. Education:

Primary School (2017-18)	No. of Schools	1345
	Enrolment (No)	110686
	Pupil Teacher Ratio	22.14
Upper Primary School 2017-18	No. of Schools	573
	Enrolment (No)	51686
	Pupil Teacher Ratio	19.74
General College 2017-18	Junior	31
	Degree	11
	No. of Schools	233
Secondary School	Enrolment (No)	23074
	Pupil Teacher Ratio	31.70
	Male	61.0
Literacy Rate, 2011	Female	39.2
	Total	49.8

4. GEOLOGY

The rock types exposed in the district can broadly be grouped into Eastern Ghat Supergroup, granite gneiss and Quaternary formations. Eastern Ghat Supergroup are represented by quartz-garnet-sillimanite graphite schist, garnet sillimanite schist, quartzite, calc granulite etc. belonging to khondalite group and acid to intermediate charnockite with minor basic charnockites constitute the Charnockite Group. These are intimately associated with garnetiferous granite gneiss and leptynite. The Eastern extremity of the district is occupied by granite gneiss. The litho boundaries and structure show a general north-south strike with easterly dip. All the rock types have attained granulite facies of metamorphism. Except for the lateritic patches over the granulites, Quaternary formations are mostly confined to the Nagabaili and Banshadhara river basins and catchment area.

The geological succession in the district is as follows:

STRATIGRAPHY:

Age	Super Group	Group	Lithology
Late Holocene		Present flood deposit	day plain Soil/Alluvium
Cainozoic			Laterite/ bauxite Lateritic
Archaean	Eastern Ghat Super Group	Charnockite Group Khondalite Group	Garnetiferous Granite gneiss Leptynite Acid/intermediate charnockite Basic charnockite Quartz-garnet- sillimanite schist/gneiss Quartzite Calc silicate

5. DRAINAGE AND IRRIGATION PATTERN.

There are four main river streams flows through this District. They are Sana Nala Tributary, Badanala Tributary, Sikarpai Tributary and Bhanginalla Tributary which are

the tributaries of the main River Nagavalli and River Bansadhara. The details are as under,

DRAINAGE SYSTEM WITH DESCRIPTION OF MAIN RIVER									Volume of sand deposited in last 3yrs(year wise)	Any important note
b	Name of the River	Place of origin	Altitude of origin	Total length in the district (in km)	Area drained (sq km)	% Area drained in the district	Process of deposition of sediments	i		
c	Sananalla (Tributary of Nagavalli River),	Singar i	560.00	6.00	61.00	100.00	Soil, sand & rocks are added to a land through the process of weathering and transportation of existing land mass by wind, water, gravity etc and deposition of the said transported material takes place due to loss of kinetic energy building up layers of sediments.	Nil		
c	Bodanalla (Tributary of Nagavalli River)	Singar i	550.00	8.00	180.0 0	100.00				
c	Sikarpali (Tributary of Nagavalli River)	Kharj ada	580.00	25.00	60.00	100.00				
c	Bhanginalla (Tributary of Bansadhara River)	Mundi padar	540.00	15.00	166.0 0	100.00				

Rayagada district is rich in water resources. A series of check dams have been constructed across various distinct nallahs for in-stream storage, ground water recharge, incidental irrigation during late Khariff and Rabi by storing water at the end of monsoon mainly through lifting devices as well as canal flow, irrigation use of water flowing down drainage channels, and other uses like bathing, washing, recreation etc. By the end of July 2019, 861 nos. of Check Dams have been accorded administrative approval. Out of these, 789 nos. of check dams have been completed achieving an ayacut of 4973 Ha., 52 nos of Check Dams are in progress and 20 nos of Check Dams are dropped due to various reasons.

6. LANDUSE PATTERN

SI No	Landuse	Area in '000Ha
1	Forest Area	281
2	Misc. trees & Grooves	18
3	Permanent Pasture	26
4	Culturable Waste	22
5	Land put to Non Agril Use	124
6	Barren & Unculturable Land	38
7	Current Fallow	19
8	Other Fallow	5
9	Net Area Sown	174
10	Mining	
	Geographical Area	707

7. SURFACE WATER & GROUND WATER SCENARIO

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	2.15	0.80	1.1	1.65
Maximum	12.6	10.40	9.4	11.0

8. RAINFALL & CLIMATIC CONDITION

The climate of the district is typically tropical to sub tropical with three distinct seasons e.g. Summer, Winter and Monsoon. December is the coldest month with mean daily average temperature of 20 degree celcius which reaches 42 degree celcius in May. The rain fall in the area is mostly from the South west monsoon lasts from middle of June to October. The average annual rainfall varies from 1031.21 mm to 1569.50 mm.

F. year /month	MONTH WISE RAINFALL (mm) DATE OF THE DISTRICT (LAST 3 YEARS) (DISTRICT OFFICE)												
	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR CH	TG
2015-16	114.2	63.2	257.2	152.4	244.9	266.2	25.4	13.6	8.5	8.0	5.9	37.6	11
2016-17	25.9	78.7	188.0	267.8	239.2	199.3	87.7	0.8	0.0	3.9	0.0	46.3	11
2017-18	5.1	70.4	221.2	363.6	281.7	184.7	178.7	26.1	0.0	0.0	0.0	0.5	13
2018-19	111.2	80.4	136.1	457.9	392.4	153.5	120.0	0.9	61.7	1.2	3.4	11.4	15
AVG	27.8	20.1	34.0	114.5	98.1	38.4	30.0	0.2	15.4	0.3	0.8	2.9	12

9. DETAILS OF MINING LEASES OF ROAD METAL

Attached vide Annexure I

10. DETAILS OF ROYALTY COLLECTED (Rs)

Sl.No	Name Of Tahasil	2015-16	2016-17	2017-18	2018-19
1	Kolnara	278460	1559870	3161524	2925000
2	Rayagada	1745450	2091680	4023728	4119826
3	Gunpur	1110798	1272270	1334676	1057839
4	Kalyansinghpur	0	0	380814	0
5	Muniguda	289578	530037	768370	7748595
6	Gudari	0	0	0	120285
7	Padmapur	563000	1868000	2010000	1381446
8	Kashipur	0	0	613936	0
9	Bissam Cuttack	0	484637	782335	782335
TOTAL		3987286	7806494	13075383	18135326

11. DETAILS OF PRODUCTION OF MINOR MINERAL

Yearwise Production of Road metal in cum

SI.No	Name of Tahasil	2015-16	2016-17	2017-18	2018-19
1	Kolnara	2142	11999	23452	25448
2	Rayagada	13367	15977	31524	30534
3	Gunpur	8594	8559	8560	3950
4	Kalyansinghpur	0	4085	4180	4275
5	Muniguda	7275	7725	8310	56038
6	Gudari	0	0	1800	1836
7	Padmapur	8475	10147	12285	5985
8	Kashipur	5500	5500	5500	5500
9	Bissam Cuttack	3483	5483	31343	31343
TOTAL		48836	69475	126954	164909

12. MINERAL MAP OF THE DISTRICT

Attached as Plate No 4.

13. LIST OF LOI HOLDERS ALONG WITH VALIDITY

List enclosed as Annexure II

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT

Total mineral reserve of road metal/buildingstone/blackstone/white stone is 17,22,14,175 cum which may increase after detail investigation.

Details of the potential areas submitted as Annexure III.

MAR	TO
7.6	119
5.3	113
5	133
4	153
9	129

15. QUALITY/GRADE OF MINERAL

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

17. DEMAND & SUPPLY OF THE MINERAL

The tentative annual demand is to the tune of 10 lakh cum of road metal and is mainly supplied from different tahasils of the district and adjoining districts of Koraput and Gajapati.

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

Attached as Plate No 5.

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

Not applicable

20. DETAILS OF ECO-SENSITIVE AREA

Not applicable.

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

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 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 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 spraying 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 gulland 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 checkup 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 leaves 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 wafer 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 savage 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 Manager 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 Manager 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 OCCUPATION 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 etc are to be provided to mine workers as per Mines Rules. All operators and mechanics are to be trained to handle fire fighting equipments.

There is no case of Silicosis found in the district within the time frame mentioned above.

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

26. PLANTATION OF 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

APPROVED BY DEIAA COMMITTEE, RAYAGADA

Sub-Collector,
Rayagada
-cum-
Member Secretary,
DEIAA
Rayagada

Sri A.K. Sharda,
President
Dandakaranya NGO,
-cum-
EXPERT Member,
DEIAA Rayagada

Divisional Forest Officer,
-cum-
Member, DEIAA,
Rayagada

COLLECTOR
-cum-
Chairperson,
DEIAA, Rayagada

ANNEXURE I

**ROAD METAL/ BLACKSTONE/WHITESTONE ALREADY
LEASED OUT AND EXECUTED**

Sl. N. o.	Name of Min or Min eral	Name e of villa ge	Name of lessee	Address & lease grant No of lessee	Mini ng lease grant order No & date	Period of QL	Date of comm ence /Temp working for minig opera tion	Status (workin g/ non- working Non- capti ve)	Capti ve or Non- capti ve	Lt No (GPS co- ordinates or Khata & Plot No)	Location of Resource	Longitude			Latitude			Mineabl e mineral potentia l as per approve d mining plan (in cum)			
												D eg re	M in ut	S ec on d	D eg re	Mi nut on d	S ec on d				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	21	22	23
Ko In ar a	Haz rid ang V	Haza rida ng	MSRB Verma	Rayaga da	1690 /09.0 6.16	20 20 16- 21	20 20 - 2016	13.12.	Working	Non- capti ve	745/ 20.09 .16	K-6,P-84	83	30	07	19	15	34	OC 5	12140. 112417	
Ko In ar a	Haz rid ang VI	Haza rida ng	Bhaska Mishra	Rayaga da	3200 1.201 6	20 16- 21	20 - 2018	27.07.	Working	Non- capti ve	359/ 25.03 .17	K-6,P-98	83	29	56	-	-	-	-	-	
Ko In ar a	Gua kon a III	Cua Choud hry	P Arun Choud da	422/ 09.03 .2015	20 15- 16	20 - 20	19 - 2016	11.01.	Working	Non- capti ve	2496 /22.0 6.15	K-27,P- 195/1	83	28	12. 0	19	13	10. 5	OC 5	12140. 255888	
Ko In ar a	Cha mpi a	Cha mpia	P Arun Choud hry	Rayaga da	2022 7.201 7	20 21	20 - 22	19.02. 2019	Working	Non- capti ve	455/ 03.08 .18	K-26,P-137	83	29	04.	19	12	10. 28	OC 1	20234. 257127	
Ko In ar a	Pipa Igud a	Pipal guda	Jalandh ar Naik	Rayaga da	2594 /15.0 9.16	20 16- 17	20 - 21	22.11. 2018	Working	Non- capti ve	459/ 03.08 23/1	K-20,P- 83	29	46.	19	13	04	OC 56	40468. 513760		

6	In	Haz	Hazza	Bhaska	Ravaga	2025/24.0	20	20	21	07.12.	Working	Non-capti ve	1742/11.1	K-5,P-37	83	29	45.	19	15	1.6	OC	12140.	84625	
7	In	ar	arid	rida	Ramakr	Rayaga/05.0	2214	20	21	12.10.	Working	Non-capti ve	1740/11.1	K-20,P-20,36	83	29	44.	19	13.	55.	OC	8093.7	1	
8	In	ar	Igud	Pipal	Ramakr	Rayaga/22.1	3246	20	20	20	10.08.	Working	Non-capti ve	147/12.03	K-6,P-98	83	30	00.	19	14	54.	OC	40468.	56
9	In	ar	ang	ng	Ram	Rayaga/1.16	1.16	17	21	-	2018	Working	Non-capti ve	18.08	K-18,P-178	83	30	03	19	15	20.	OC	40468.	148230
10	In	ar	hodi	Both	PVP	Rayaga/24.0	2031	20	20	21	03.08.	Non-working	Non-capti ve	561/12.3.	K-12,P-19	83	28	42.	19	11	55.	OC	20234.	14868
11	Ra	ya	GO	GOG	P Arun	Rayaga/1.9.	1544	20	20	21	21.6.1	Working	Not Capti ve	135/18.08	K-20,P-139	83	28	9	19	15	22	OC	20234.	15
12	Ra	ya	GO	OND	P Arun	Rayaga/17.	1.9.	18	22	-	8	Working	Not Capti ve	12.3.	K-12,P-19	83	28	9	19	15	22	OC	20234.	94395
13	Ra	ya	NDA	A	P Arun	Rayaga/17.	17.	18	22	-	8	Working	Not Capti ve	143/12.3.	K-20,P-139	83	28	.7	19	12	47.	OC	20234.	157109
14	Ra	ya	OJH	OLL	JL Patel	Rayaga/21.6	1169	20	20	21	28.3.1	Working	Not Capti ve	143/12.3.	K-20,P-139	83	28	.7	19	12	47.	OC	20234.	3
15	Ra	ga	OJH	OLL	JL Patel	Rayaga/1.17	1.17	18	22	-	8	Working	Not Capti ve	18	K-30,P-188	83	27	32.	19	12	48	OC	12140.	58
16	Ra	ya	KASI	KASI	P Ram	Kasili/19.1	1829	20	19	15-	1.9.16	Working	Not Capti ve	512/5.7.1	K-30,P-188	83	27	06	19	12	48	OC	12140.	58
17	Ra	ga	LI-II	LI-II	P Ram	Murty/1.17	0.15	16	20	-	1.9.16	Working	Not Capti ve	6	K-20,P-40	83	28	1.9	19	12	51.	OC	10117.	15
18	Ra	ya	NTR	NTR	P Arun	Debod/1.7.	2245	20	20	21	21.6.1	Working	Not Capti ve	137/12.3.	K-20,P-40	83	28	8	19	12	26	OC	205259	53855

1	Ra ya ga da	MA NTR OJH OLL A-IV	MA NTR OJH OLL A-IV	Narasin gha Manda ngi	Mantro jholla	1578 /28.8 .15	20 15- 20.	20 19 6	20.8.1	Working	Not Capti ve	468/ 5.7.1 6	K-20, P-116	83	27	58. 92	19 12	55. 29	OC OC	12140. 58	109949
1	Ra ya ga da	KASI LI-I	KASI LI-I	Rames h Choura sia	J K Pur	2151 /21.6 .17	20 16- 21	20 4.7.18	Working	Not Capti ve	133/ 12.3. 18	K-30, P-122	83	27	33. 14	19 12	19. 39	OC OC	12140. 58	108906	
1	Ra ya ga da	GO GO NDA	GOG OND A-I	Harisc Ch Behera	Mantra jholla	1580 /28.8 .15	20 15- 16	20 - 6	26.8.1	Working	Not Capti ve	488/ 5.7.1 6	K-12,P-19	83	28	25. 47	19 11	43. 51	OC OC	8C33.7 2	80294
1	Ra ya ga da	MA NTR OLL A-VI	MA NTR OJH Oil A-VI	Mada Rao Kondag ori	Ravaga da	1584 /28.8 .15	20 15- 20	19 6	1.12.1	Working	Not Capti ve	474/ 5.7.1 6	K,20,P-112	83	26	56. 10	19 13	4.3 7	OC OC	20234. 3	179586
1	Ra ya ga da	BILL ESU	BILL ESU	A Lokesh	Ravaga sda	1586 /7.9. 17	20 17- 22	21 8	26.4.1	Working	Not Capti ve	129/ 12.3. 18	K-70,P-40	83	23	34. 02	19 00	26. 83	OC OC	12140. 58	100121
1	Ra ya ga da	MA NTR NTR	MA NTR OJH OLL	P Kasi Naidu	Kotape ta	1651 /9.9. 15	20 19- 16	20 - 16	26.10. Working	Not Capti ve	476/ 5.7.1 6	K-20, P-122	83	27	54. 1	19 12	50. 9	OC OC	12140. 58	67076	
2	Ra ya ga da	MA NTR OJH OLL	MA NTR OJH OLL	Rayaga da	2169 /21.6 .17	20 17- 18	21 8	28.3.1	Working	Not Capti ve	191/ 12.3. 18	K-20, P-118	83	28	02. 62	19 12	39. 55	OC OC	20234. 3	189447	
2	Ra ya ga da	MA NTR NTR	MA NTR OJH OLL	R R Pati	Rayaga da	2170 /21.6 .17	20 17- 18	21 3.4.18	Working	Not Capti ve	131/ 12.3. 18	K-30, P-119	83	27	56. 32	19 12	40. 41	OC OC	12140. 58	112976	

2	Ra ya ga da	KASI LI-II	KASI LI-II	R R Pati da	Rayaga /28.8 .15	1582 710/ 27.5. 16	20 15- 20	20 19 6	26.8.1 Working	Not Capti ve	518/ 508/ 5.7.1 6	K-30,P-188	83	27	29.	19	12	3.6 5	OC	12140. 58	88636
2	Ra ya ga da	GO NDA -III	GOG OND A-III	M Prakas h Rao	Gogon da	710/ 20 16- 17	20 20 6	20 19.9.1 Working	Not Capti ve	508/ 5.7.1 6	K-12,P-118	83	28	29.	19	11	3.6 5	OC	24281. 16	277783	
2	Ra ya ga da	KULI KULI	P Arun choudh ry	Debod olla	2244 /1.7. 17- 18	20 21 8	20 21 8	21.6.1 Working	Not Capti ve	139/ 12.3. 18	K-58,P-18	83	28	6.5 1	19	12	42. 40	OC	16187. 44	269973	
2	Ra ya ga da	MA NTR NTR	MA JL	Rayaga da	2225 /17.1. .15	20 19 8	20 19 8	28.3.1 Working	Not Capti ve	147/ 12.3. 18	K-20,P-102	83	28	.70	19	12	47. 48	OC	20234. 3	180500	
2	Ra ya ga da	RAJ PUR	RAJP UR	R Lachi Naidu	1845 /29.1 0.15	20 19 16	20 19 16	22.11. Not working	Not Capti ve	472/ 5.7.1 6	K-8,P-1	83	25	1.7 6	19	04	17. 27	OC	20234. 3	57582	
2	G un pu l SQ	Gun pur pur i SQ	Gun Pradee p Ch. Jogi	Sourap radhan iguda,R ayagad a, Ph- 943706 3254	L.No. 1639 /15 dt.02 .07.2 015	20 19 15- 2015	20 19 2015	02.07. Working	Non- Capti ve	3509 /SEIA ADt.2 2/06 /201 5	K. No- 330,pho- 1522, Ac.11.00	83	49	58. 7	19	05	19. 05	OC	44515. 46	11050	
2	G un pu l SQ	Gun pur pur i SQ	Gun Nilakan thaJogi	Sourap radhan iguda, Rayaga da, Ph- 824949 7094	L.No. 1638 /15 dt.02 07.2 015	20 19 15- 2015	20 19 20	01.07. Working	Non- Capti ve	3517 /SEIA ADt.2 2/06 /201 5	Khata-330, plotno- 1522,- Ac.10.10	83	48	47. 8	19	05	54. 9	OC	40873. 24	11000	

2 9	G un pu r	Cha krab hata SQ.	Chak rabh ata	Srinivas Soni	Niladri bihar lane- 2,gunu pur, Ravaga da, Ph- 943810 5497	L.No. 1882 /15. Dt.25 16	20 19 2015	20 19 02.07. Working	Non- Capti ve	3521 /SEIA ADt.2 2/06 /201 5	Khata-07, plotno-33, Ac.10.00	16. 1 19 05 50. 01	40468. 6 8600	
3 0	G un pu r	Lob a SQ.	Loba	K.Naqib husan	Chalak amba, Rayaga da,Ph- 845596 3455	L.No. 1882 /15. Dt.25 16	20 19 2015	20 19 2015 Working	Non- Capti ve	3507 /SEIA ADt.2 2/06 /201 5	Khata-105, plotno- 100, Ac.4.39	19. 11 50 OC 69	17765. 12333	
3 1	K. Si ng hp ur	Kani pai SQ.	Kani pai	MS RB Verma 5799	Rayaga da, 943744 2017	20 9.10. 16- 17	20 09.10. 2017	20 09.10. 2017	Non- Capti ve	293/ 12.06 .2017	K-31 P-40	83 18 52	14. 19 22 12. 08	18000 140782
3 2	M un ig ud a	Kant raba li SQ. -II	Kant raba Kumar Rana	Akshra 'Ravag ada 809303 1950	Bissam cuttack 599/ Dt. 09.03	20 20 15	01.04. 2017	Working	Non- Capti ve	2259 /Dt. 30.11 790	K-N-114. Pl. No. - 4" E	83 33 4" E	58. 19 39' 4" N	80000 Sq. M 315861
3 3	M un ig ud a	Bad Bada Man juru kup a SQ.	Bada Ratanya I Jain 3349	Munig uda/ 797870 .15	3616 /Dt. 26.08 15	20 20 20	01.04. 2017	Working	Capti ve	522/ DIEA A, Dt. 05.07 .2016	K. No- 17, Pl. No. 54	83 70" E	12. 19 45' N	58. 80" OC Sq. M. 62066
3 4	M un ig ud a	Am bad adol a SQ.	Ratanya I Jain	Munig uda/ 797870 .15	3616 /Dt. 26.08 15	20 20 2017	01.04. Working	Capti ve	1981 /SEIA A, Dt. 12.09 .2016	K. No. 186, Pl. No. 668	83 0 E	28 40" 19 49' 20" N	29. 80" OC Sq. M. 110480 5 146313	

3 5	G ud ari	Kara sing SQ.	Balip ang /	K. Ramakr ishna	Boligud a, Po- /	1533 / 14.09 1456	20 17- 18	20 21 - 2019	03.12. Working	Non- Capti ve	688/ 27.11 .2018	K. No- 14, Pl. No. 53	83	49	86	19	20	3.2 3 N	OC	18200	10520
3 6	Pa d m ap ur	Khil amu nda- da-II II SQ.	J.VENK AT- UKKA MBA MBA	J.VENK AT- UKKA MBA 8945	1456 486/ 25.03 .2015	20 19 - 2016	20 19 - 2016	20 19 - 2016	27.12. working	Non- Capti ve	755/ 20.09 .2016	Khata No.- 16, plot no- 9	83	49	43	19	15	30. 2	OC	1463	12500
3 7	Pa d m ap ur	Akh usin g SQ.	D.R.BH ARAT, MD ASIP- SPL (IV)	D.R.BH ARAT, MD ASIP- SPL (IV)	1526 / 10.09 993704 .2015	20 19 - 2015	20 19 - 2015	20 19 - 2015	10.09. working	Non- Capti ve	4122 / 17.08 .2015	Khata No.- 114, plot no-467	83	49	58. 55	19	15	57. 51	OC	321	6649
3 8	Pa d m ap ur	Khil amu nda- da-I I SQ.	Khi mun da-I SPL (IV)	Khilam unda 993704 6560	1527 / 10.09 993704 .2015	20 19 - 2015	20 19 - 2015	20 19 - 2015	10.09. working	Non- Capti ve	4124 / 17.08 .2015	Khata No.- 16, plot no- 114	83	49	58	19	15	49. 2	OC	35410	28728
3 9	Ka sh ip ur	Sarg iud a SQ.	Gandhi Nagar, 2nd lane, Rayaga da,943 796636	Gandhi Nagar, 2nd lane, Rayaga da,943 796636	1527 / 10.09 993704 6560	20 19 - 2015	20 19 - 2015	20 19 - 2015	working	Non- Capti ve	490/ 05.07 .2016	Khata No.71 Plot No.126,199 ,205,206 & 207	83	07	26. 7	19	11	09. 7	OC		
4 0	Ka sh ip ur	Mu nda Bao n-II SQ.	Brahmi n Street, Chanda Panda	Brahmi n Street, Chanda Panda	1527 / 10.09 993704 6560	20 19 - 2017	20 19 - 2017	20 19 - 2017	working	Non- Capti ve	492/ 05.07 .2016	Khata No.290 Plot No.1167	83	03	45. 4	19	08	41. 6	OC	2290.5 2	19532

Bi ss a	Dhu anb adi	Sri V Suresh Rao	Durgi, Bissam Cuttack / 09.10	20 19 2016	20 19 29.09. 2016	Working	Non- Capti ve	3929 /, 14.08 .2015	Khata- 130,plotno 58.Ac.4.60. 00	12. 0C 5	18615.	145548	
4 1	Cu tt ac k	Bi ss a	Leli ngp adar SQ.	Lelin gpad ar	Sri D. Sriniva s Rao	Po- Ratatiki ri, Bissam Cuttack 29.09 2016	20 19 13.07. 2016	Working	Non- Capti ve	3927 /, 14.08 .2015	Khata- 23,plotno- 178,Ac.10. 00	83 34 8 19 30 5 0C 6	
4 2	Cu tt ac k	Bi ss a	Tele ngas arth eli SQ.	Tele ngas arth eli	Sri P Sriniva Rao	AT Po- Auroob Ind / Nagar, JK Pur, Rayaga da	1565 20 16 11.05 2017	20 20 21.11. 2017	Working	Non- Capti ve	299/ 12.06 33, AC. 05.00	Khata- 03,plotno- 33, AC. 03.00	83 28 3 19 32 9 0C 3
4 3	Cu tt ac k	Bi ss a	Bara dag uda SQ.	Bara dagu da	Sri Ishwar i, Gopal Chetty	At Po- Sikarpa / 03.07 2018	1260 20 17- 18 21	20 20 18.01. 2019	Working	Non- Capti ve	297/ 12.06 60,AC.12.0 0	Khata- 5,plotno- 60,AC.12.0 0	83 33 3 19 22 1 0C 3
4 4	Cu tt ac k											48562. 467801	

ANNEXURE II

SOURCES ALREADY AUCTIONED BUT NOT EXECUTED (LOI ISSUED)

Sl. No	Name of Tahsil	Name of village	Name of Minor Mineral	Name of the Successful auction holder	Address & Contact No of Letter of Intent Holder	Letter of Grant Order No., & date	Validity of LoI	Use (Captiv e/ Non- Captive)	Location of the Source recommended for		Longitude	Latitude	Area of the mineral potential patch [in sq m]	Mineable mineral potential (in cum)			
									Deg ree	Min ute	Seco nd	Deg ree	Min ute	Seco nd			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Kolnara	Jharadi	Jharadi	Ganesh Prasad Chaurasia	J.K. Pur 0.18	3057/25.1 2022- 23	Non CAP	K-47,P-350	83	36	54.23	19	12	26.93	12141	169974	
2	Kolnara	Hajarida ng	Hajarida -II	MSRB Verma	Rayagada	1689/25.0 6.19	2023- 23	Non CAP	K-6,P-37	83	29	46.94	19	15	11.61	20234	283276
3	Kolnara	Hajarida ng	Hajarida -II	MSRB Verma	Rayagada	1690/25.0 6.19	2023- 24	Non CAP	K-6,P-99	83	29	47.22	19	15	16.23	20234	283276
4	Kolnara	Jamulelli badi	Akili Kumar	Rayagada Das	1691/25.0 6.19	2023- 24	Non CAP	K-21,P-203	83	29	59.41	19	14	59.95	40469	56566	
5	Kolnara	Guakona IV	Satikant Sutar	Jaypur	3310/17.1 1.18	2022- 23	Non CAP	K-27,P-191/1	83	27	57.27	19	13	8.33	12141	169974	
6	Ramanagud a	Tumbakko na	Tumbakko a Stone Quarry	Sri Chandra Sekhar Panigrahi	974 Dated: 01.07.19	2023- 24	Non CAP Ac:2.00	Khato No 21 Plot No 13 Area in Rayagada	83	40	29.17	19	10	49	8000	112000	
7	Rayagada	DUMAG UDA	DUMAGUD A	P SRINIVAS H RAO	RAYAGAD A	3060/20.7 .18	2022- 23	Non CAP	K-27,P-20	83	26	511	19	120	29.55,	20234.3	283280.2
8	Rayagada	KASLI	KASLI-IV	L SURESH A	KOTABET A	333/29.1 18	2022- 23	Non CAP	K-30,P-231	83	27	83.94	19	12	29.03	12140.5	169967
9	Rayagada	GOGON DA	GOGONDA -I	HEPRIKA U	UTKAPAD 18	2022- 23	Non CAP	K-12,P-119	83	28	39.79	19	11	42.26	16187.4	226623.6	

10	Rayagada	KASILI	KASILI	MARUTI KU SWAIN	CUTTACK	4267/20.1	2022-	Non CAP	K-30,P-188	83	27	83.94	19	12	29.03	8093.7	113311.8
11	Rayagada	GUMMA	GUMMA-II	B RAGHURA	KERADA	460/5.2.1	2022-	Non CAP	K-18,P-107	83	17	30.0	19	11	55.7	20234.3	283280.2
12	Rayagada	KULI	KULI-I Stone Quarry,	G GANGARA	SINGPUR	590/19.2.	2022-	Non CAP	K-58,9 P-18	83	27	58.8	19	12	30.6	80937	1133118
13	Rayagada	BADHA	BADAHAN	B RAGHURA	KERADA	3175/16.8	2023-	Non CAP	K-31,P-130	83	25	34.52	19	04	23.47	52609	736526
14	Rayagada	HATSESK HAL	HATSESK HAL	B RAGHURA	KERADA	3174/16.8	2023-	Non CAP	K-21,P-93/165	83	25	34.52	19	04	23.47	52609	736526
15	Rayagada	KHILMIS GUDA	KHILMIS GUDA	CHINA APUDU PUALA	KHILMIS GUDA	3175/16.8	2023-	Non CAP	K-41,P-57	83	27	03.12	19	00	48.72	60702	849828
16	Rayagada	ARIGUD A	KADAMB A	MANOJ RIGUDA	KOTAPET	2022-	Non CAP	K-10,P-71	83	25	22.3	19	12	53.5	59003	826042	
17	Muniguda	Kantraba li Stone Quarry - Kantrabali	Stone quarry	Ajit Gouda	At/po-Muniguda LN 2678/ DT 11.9.2019	LN 2985/ DT 17.10.201	5 years	Non-Captive	Khata no 114 plot no 631	83	32	29.9	19	39	32 N	46201	646814
18	Gunupur	Jaltar	Jaltar Stone Quarry	K.Srinivas rao	At/po-Chalakam dt.18.04.2018	L.No.1842,L.No.3139 dt.4.08.2018	5yrs	Non-Captive	Khata no.771, plot no.435	83	52	43.17	19	06	37.15	36422	458917.2
19	Gunupur	Souraprad haniguda dhanigu da	Stone quarry	Marathigu da,Dsit-018	Marathigu da,Dsit-018 Rayagada	L.No.3139 dt.4.08.2018	5yrs	Non-Captive	Khata no.35, plotno.40, Ac.3.26	83	49	22.98	19	06	24.80	13193	73880.8
20	Padmapur	Koilikota	Koilikota SQ	Bishnu Prasad Panda	91323122 2.2	1613/ 21.08.19	5 years	Non Captive	Khato No.53, Plot No.47/1	83	49	26.4	19	16	9.27	48562	6015831
21	Muniguda	Bangana Gan	Bangana Gan SQ	Rabindra Muniguda	Jagdalpur, 4175/17.1 0.2015	2015-16 to 2019-20	Non Captive	Khata no.25, plot no-243	83	32	55.44	19	44	15.07	127200	445200	

POTENTIAL ROAD METAL/ BLACKSTONE/WHITESTONE OF THE DISTRICT

ANNEXURE III

Sl. No.	Name of Tahasil	Name of village	Status	Name of Minor Mineral	Location of the Source (Total Hillock)		Longitude		Latitude		Area of the mineral potential patch (in sq m)	Mineable mineral potential (in cum) (in cum)			
					De gre e	Min ute	Seco nd	Degr ee	Minu te	Second					
1	2	3	4	5	6	Khata	Plot	7	8	9	10	11	12	13	14
1	Kolnara	Kailashpur	New	Kailashpur SQ	22	285	83	32	37.74	19	12	54.56	20234.28	1062300	
2	Kolnara	Badapadu	New	Badapadu SQ	30	1	83	21	44.2	19	20	44.1	12140.83	169971.6	
3	Kolnara	Bothodi	New	Bothodi-II SQ	18	178	83	30	11.2	19	15	27.9	20234.72	283286.1	
4	Kolnara	Bothodi	New	Bothodi-III SQ	18	178	83	30	16.6	19	15	22.2	20234.72	283286.1	
5	Kolnara	Deopur	New	Deopur SQ	35	633	83	26	50.86	19	20	55.02	36260.62	507648.7	
6	Kolnara	Hazaridang	New	Hazaridang IV SQ	6	84	83	30	10.5	19	12	51.15	12140.56	254951.8	
7	Kolnara	Hazaridang	Running	Hazaridang V SQ	6	84	83	30	07.92	19	15	12.34	12140.5	781848.2	
8	Kolnara	Hazaridang	Running	Hazaridang VI SQ	6	98	83	29	56.60	19	14	50.00	12140.5	790346.6	
9	Kolnara	Guakona	Running	Guakona III SQ	27	195/1	83	28	12.0	19	13	10.5	20234.28	1331416	
10	Kolnara	Champia	Running	Champia SQ	26	137	83	28	12.0	19	13	10.5	10117.1	672787.2	
11	Kolnara	Pipalguda	Running	Pipalguda SQ	20	23/1	83	29	46.08	19	13	59.04	40468.56	2719487	
12	Kolnara	Hazaridang	Running	Hazaridang SQ	6	37	83	29	46.66	19	15	1.66	12140.5	824340	
13	Kolnara	Pipalguda	Running	Pipalguda II SQ	20	20,36	83	29	44.82	19	13	55.20	8093.71	555228.5	
14	Kolnara	Hazaridang	Running	Hazaridang VII SQ	6	98	83	30	00.00	19	14	54.19	40468.56	2804471	
15	Kolnara	Bothodi	Running	Bothodi SQ	18	178	83	30	10.03	19	15	20.22	20234.28	1416400	
16	Kolnara	Jharadi	LOI	Jharadi	47	350	83	36	54.23	19	12	26.93	12141	1189818	
17	Kolnara	Hajaridang	LOI	Hajaridang-II	6	37	83	29	47.22	19	15	16.23	20234	1997096	

18	Kolnara	Hajaridang	LOI	Hajaridang-III	6	99	83	29	47.22	19	15	16.23	20234	2011260
19	Kolnara	Jamuleibadi	LOI	Jamuleibadi	21	203	83	29	59.41	19	14	59.95	40469	4050947
20	Kolnara	Guakona	LOI	Guakona IV	27	191/1	83	27	57.27	19	13	8.33	12141	1223813
21	Kolnara	Hazaridang	New	Hazaridang-VII	6	84	83	30	10.5	19	12	51.15	12140.5	169967
22	Ravagada	GOGONDA	Running	GOGONDA	K-12,P-19	83	28	42.9	19	11	55.40	10117.15	240788.2	
23	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-I	K-20,P-139	83	28	.7	19	12	47.48	20234.3	1005645	
24	Ravagada	KASIL-II	Running	KASIL-II	K-30,P-188	83	27	32.06	19	12	16.16	12140.58	382428.3	
25	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-II	K-20,P-40	83	28	1.98	19	12	51.26	10117.15	269116.2	
26	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-IV	K-20,P-116	83	27	58.92	19	12	55.29	12140.58	747859.7	
27	Ravagada	KASIL-I	Running	KASIL-I	K-30,P-122	83	27	33.14	19	12	19.39	12140.58	977316.7	
28	Ravagada	GOGONDA-I	Running	GOGONDA-I	K-12,P-19	83	28	25.47	19	11	43.51	8093.72	254952.2	
29	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-VI	K-20,P-112	83	26	56.10	19	13	4.37	20234.3	864004.6	
30	Ravagada	BILLESU	Running	BILLESU	K-70,P-40	83	23	34.02	19	00	26.83	12140.58	518402.8	
31	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-V	K-20,P-122	83	27	54.1	19	12	50.9	12140.58	900831	
32	Ravagada	MANTROJHOL	Running	MANTROJHOLLA	K-20,P-118	83	28	02.62	19	12	39.55	20234.3	1487221	
33	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-III	K-30,P-119	83	27	56.32	19	12	40.41	12140.58	407923.5	
34	Ravagada	KASIL-II	Running	KASIL-II	K-30,P-188	83	27	29.16	19	12	3.65	12140.58	739361.3	
35	Ravagada	GOGONDA-III	Running	GOGONDA-III	K-12,P-118	83	28	29.86	19	11	38.55	24281.16	509904.4	
36	Ravagada	KULI	Running	KULI	K-58,P-18	83	28	6.51	19	12	42.40	16187.44	691203.7	
37	Ravagada	MANTROJHOL	Running	MANTROJHOLLA-VII	K-20,P-102	83	28	.70	19	12	47.48	20234.3	637380.5	
38	Ravagada	RAJPUR	Running	RAJPUR	K-8,P-1	83	25	1.76	19	04	17.27	20234.3	1812993	
39	Ravagada	DUMAGUDA	Running	DUMAGUDA	K-27,P-20	83	26	5.11	19	120	29.55	20234.3	1133121	
40	Ravagada	KASIL-IV	Running	KASIL-IV	K-30,P-231	83	27	83.94	19	12	29.037	12140.58	552396.4	
41	Ravagada	GOGONDA-II	Running	GOGONDA-II	K-12,P-119	83	28	39.79	6	19	11	42.260	16187.44	509904.4
42	Ravagada	KASIL-I	Running	KASIL-I	K-30,P-188	83	27	83.94	19	12	29.037	8093.72	169968.1	

43	Rayagada	GUMMA-II	Running	GUMMA-II	K-18,P-107	83	17	30.0	19	11	55.7
44	Rayagada	KULI-I	Running	KULI-I	K-58,P-18	83	27.	58.8	19	12	30.6
45	Rayagada	DUMGUDA	LOI	DUMAGUDA	K-27,P-20	83	26	5.11	19	120	29.55
46	Rayagada	KASILI	LOI	KASILI-IV	K-30,P-231	83	27	83.94	19	12	29.037
47	Rayagada	GOGONDA	LOI	GOGONDA-II	K-12,P-119	83	28	39.79	19	11	42.260
48	Rayagada	KASILI	LOI	KASILI	K-30,P-188	83	27	83.94	19	12	29.037
49	Rayagada	GUMMA	LOI	GUMMA-II	K-18,P-107	83	17	30.0	19	11	55.7
50	Rayagada	Balumati	New	Balumati Stone Quarry	K-17,P-88	83	27	38.29	19	05	48.85
51	Gunpur	Srirampur	New	Srirampur SQ	K-28,P-282,Ac.5.25	83	27	58.8	19	12	30.6
52	Gunpur	Regeda	New	Regeda SQ	K-130,P-798,Ac.4.00	83	25	34.52	19	04	23.47
53	Gunpur	Sourapradhan iguda	New	Sourapradhaniguda SQ	K-35,P-40,Ac.3.26	83	25	34.52	19	04	23.47
54	Gunpur	Jaltar	New	Jaltar SQ	Khata no.771, plotno.435, Ac.9.00	83	27	03.12	19	00	48.72
55	Gunpur	Narsinghamun da	New	Narsinghamunda SQ	Khata no.23, plotno.52,53&54.	83	25	22.3	19	12	53.5
56	Gunpur	Gunupur-I	Running	Gunupur-I SQ	Khata-330,plotno- 1522,Ac.11.00	83	49	58.7	19	05	19.05
57	Gunpur	Gunupur-II	Running	Gunupur-II SQ	K-330,plotno-1522, Ac.10.10	83	48	47.8 E	19	05	54.9
58	Gunpur	Chakrabhatta	Running	Chakrabhatta SQ	Khata-07,plotno-33 Ac.10.00	83	46	16.1	19	05	50.01
59	Gunpur	Loba	Running	Loba SQ	Khata-105,plotno- 100,Ac.4.39	83	51	12.5	19	11	19.50
60	Kalwansingh pur	Belakana	New	Belakana SQ.9.58	K.NO 30 P NO 393	83	21	51	19	22	57
61	K.singhpur	Belakana	New	Belakana SQ	K. No 30 P No 287	83	21	19	19	22	52
62	K.singhpur	Belakana	New	Belakana SQ	K No 30 P No- 405	83	21	52	19	22	54
63	K.singhpur	Belakana	New	Belakana SQ	K No 30 P No 188	83	22	0	19	23	36
64	K.singhpur	Belakana	New	Belakana SQ	K No 30 P No 225	83	21	48	19	23	76283.24
65	K.singhpur	Belakana	New	Belakana SQ	K No 30 P No 271	83	21	18	19	23	15
66	K.singhpur	Belakana	New	Belakana SQ	K No 30 P No 327	83	21	43	19	23	21

67	K.Singhpur	Belakana	New	Belakana S Q.	K No 30, P No 328	83	22	0	19	23	21	128285.3	4489986
68	K.Singhpur	Belakana	New	Belakana S Q.	K No 30, P No 332	83	22	8	19	23	30	33184.2	1161447
69	K.Singhpur	Belakana	New	Belakana S Q.	K No 30 P No 330	83	22	14	19	23	52	427348.04	14957181
70	K.Singhpur	Belakana	New	Belakana S Q.	K No 30 P No 331	83	22	10	19	23	50	232694.2	8144297
71	K.Singhpur	Belakana	New	Belakana S Q.	K No 30 P No 362	83	21	32	19	23	7	55230.52	1933068
72	K.Singhpur	Kandakara	New	Kandakara S Q.	K No 11 P No -1	83	17	0	19	23	46	157625.06	6620253
73	K.Singhpur	Kandakara	New	Kandakara S Q.	K No 11 P No -62	83	17	8	19	23	40	96598.46	4057135
74	Kalyansingh	Kandakara	New	Kandakara S Q.	K No 11 P No -91	83	17	12	19	23	28	142975.44	6004968
75	Kalyansingh	Kandakara	New	Kandakara S Q.	K No 11 P No -115	83	17	27	19	23	32	161874	6798708
76	Kalyansingh	Kandakara	New	Kandakara S Q.	K No 11 P No -119	83	17	27	19	23	26	36624.05	1538210
77	Kalyansingh	Kusumsila	New	Kusumsila S Q.	K No 30 P No -10	83	16	52	19	27	26	36624.05	1538210
78	Kalyansingh	Kalyansinghpur	New	K. Singhpur S Q.	K No -109 P No - 2,5,61,2/800,2/801, 2/802,1/804,362/82	83	17	31.29	19	31	28.99	121000	7623000
79	K.Singhpur	Kanipai	Running	K. Singhpur S Q.	K-31 P-40	83	18	14.52	19	22	12.08	18000	252000
80	Kashipur	Maikanch	New	Maikanch S Q.	K.-198 198 .201 P-	83	2	43.1	19	20	5.5	4050	17010
81	Kashipur	Naua Gaon	New	Naua gaon S Q.	K.- 72, P.-427	83	02	43.9	19	20	04.7	4050	17010
82	Kashipur	Renga	New	Renga stone quarry	K.- 72, P-826	19	18	37.2	83	7	18.5	607500	2551500
83	Kashipur	Mundaagan	New	Mundaagan-I S Q.	K.- 290 Plot No.1166	83	03	45.2	19	08	41.0	32643	137100.6
84	Kashipur	Naktiguda	New	Naktiguda S Q.	K 147, Plot No.73	83	05	24.8	19	09	14.1	38475	161595
85	Kashipur	Anajore	New	Anajore S Q.	K.- 143 , Plot No1888	83	06	41.8	19	08	13.0	28309	118897.8
86	Kashipur	Kaliapada	New	Kaliapada S Q.	5.75 AC	83	07	43.6	19	10	11.8	22541.48	110453.3
87	Kashipur	Sargiguda	Running	Sargiguda S Q.	K.-71 P-126,199 .205,206 & 207	83	07	26.7	19	11	09.7	11299	47455.8
88	Kashipur	Mundagaon	Running	Mundagaon-II S Q.	K.-290 P-1167	83	03	45.4	19	08	41.6	5670	19845
89	mungiguda	Kantrabali	Running	Kantrabali - II S Q.	K.- 114. P. - 790	83°	33°	58.4"	19°	39°	39.4" N	80000 Sq. M	168000
90	mungiguda	Bada	Running	Bada Manjurukupa	K. No- 17, Pl. No. 54	83°	27'	12.70	19°	45'	58.80"	18840 Sq. M.	26376

91	muniguda	Ambadola	Running	Ambadola Stone Quarry	K. No. 186, Pl. No. 568	83°	28'	59.40 "E	19°	49' N	29.20"	110480 Sq. M	38668C	
92	muniguda	Banganagan	LOI	Banganagan stone quarry	Khata no-25, Plot no-243	83	32	55.44	19	44	15.07	127200	445200	
93	muniguda	Katubadi	New	Katubadi stone	khata no 18 plot no 31	83	29	40.6	19	47	22.3	3360	2352	
94	muniguda	sanamudra	New	Sanamudra stone quarry	khata no 9 plot no 1	83	30	09.89	19	34	36.25	168000	823200	
95	muniguda	Anojodi	New	Anogodi stone quarry	khata no 11 plot no 13, 92	83	28	33.3	19	48	14	45600	63840	
96	muniguda	Deraguma	New	Deraguma stone quarry	khata no 14 plot no 138	83	25	50.9	19	52	25.5	20000	14000	
97	muniguda	Litiguda	New	Litiguda Stonequarry	khata no 67 plot no 374	83	31	6.8	19	37	55.2	1320	924	
98	muniguda	Bainibasa	New	Bainibasa SQ	K-17 plot no 60	83	29	20.7	19	38	19.4	23500	131600	
99	muniguda	Madhu	New	Madhumunda SQ	khata no 40 plot no 129	83	36	21.6	19	39	9.9	13080	9156	
100	muniguda	Asurapada	New	Asurapada SQ	khata no 36 plot no 19	83	26	7.1	19	42	12.1	5440	3808	
101	muniguda	Kaliaripeta	New	Kaliaripeta SQ	Khata No 16 Plot No 51	83	29	44.9	19	52	10	148320	2076480	
102	muniguda	Turukupa	New	Turukupa SQ	Khata no 11 plot no 79	83	32	43	19	46	29	6070	84980	
103	muniguda	Deokupuli	New	Deokupuli SQ	Khata no 69 plot no 172	83	33	48.6	19	38	37.04	136584	1912176	
104	Muniguda	Kantrabali - I	SQ	Kantrabali-I SQ	Khata no 114 plot no 631	83	32	29.9	19	39	32	46201	32340.7	
105	Ramnaguda	Tumbakona	Running	Tumbakona	Khato No 21 Plot No 13 Area in Ac:2.00	83	40	29.17	19	10	49	8000	168000	
106	Padmapur	Khilamunda	Running	Khilamunda	Khata No.-16, plot no-9	83	49	43	19	15	30.2	35410	173509	
107	Padmapur	Akhusing	Running	Akhusing	Akhusing SQ	Khata No.-114, plot no-467	83	49	58.55	19	15	57.51	34399	36118.95
108	Padmapur	Khilamunda	Running	Khilamunda-I SQ	Khata No.-16, plot no-114	83	49	58	19	15	49.2	20234.72	56657.22	
109	Padmapur	Arei	New	Arei	Khata No.-66, plot no-312/ 989	83	49	26.47	19	16	09.27	4000	47500	

110	Gudari	Balipanga	Running	Karasing SQ	K. No- 14, Pl. No. 53	83	49	44.86 E	19	20	3.23 N	18200	165620	
111	Bissam	Dhuanbadi	Running	Dhuanbadi Stone	Khata-130, plotno- 58, Ac.4.60.00	83	35	53	19	21	12.5	18615.5	104246.8	
112	Cuttack	Bissam	Lelingpadar	Running	Lelingpadar Stone Quarry	Khata-23,plotno- 178,Ac.10.00	83	34	44.8	19	30	17.5	40468.6	509904.4
113	Bissam	Cuttack	Telengasarthi II	Running	Telengasarthi Stone Quarry	Khata-03,plotno-33, Ac.-05.00	83	28	35.3	19	32	03.9	20234.3	113312.1
114	Bissam	Cuttack	Baradaguda	Running	Baradaguda Stone Quarry	Khata-5,plotno- 60,Ac.12.00	83	33	59.3	19	22	26.1	48562.3	67987.22
115	Bissam	Cuttack	Baxisiripur	New	Baxisiripur Stone Quarry	Khata no.33, plotno.3, Ac.1.00	83	30	29.45	19	36	0.9	4046.818	33993.27
116	Bissam	Cuttack	Drubaguda	New	Drubaguda Stone Quarry	Khata no.26, plotno.77, Ac.10.00	83	35	18.39	19	22	19.32	40468.6	339936.2

APPROVED BY DEIAA COMMITTEE, RAYAGADA

Sub-Collector, Rayagada
-cum-
Member Secretary, DEIAA
Rayagada

EXPERT Member, DEIAA Rayagada

Sri A.K. Sharda, President
Dandakaranya NGO,
-cum-
Member, DEIAA, Rayagada

Divisional Forest Officer,
--cum--
Collector -cum-Chairperson,
DEIAA, Rayagada

NEWLY DECLARED SOURCES INSERTED IN THE DISTRICT SURVEY REPORT OF RAYAGADA DISTRICT AT ANNEXURE III
POTENTIAL ROAD METAL/ BLACKSTONE/ WHITESTONE/ MORRUM OF THE DISTRICT

Sl. No.	Name of Tahasil	Name of village	Status	Name of Minor Mineral	Location of the Source (Total Hilllock) recommended for mineral concession (GPS co-ordinates or Khata & Plot No) (Sketch map to be attached)	Longitude		Latitude		Area of the mineral potential patch (in sq m)	Mineable mineral potential (in cum)					
						5	6	7	8	9	10	11	12	13	14	
					Khata	Plot										
117.	1	Rayagada	Seriguda	New	Seriguda -1 MQ	K No.-27,p no-67	83	23	7.84	19	10	43.74	8900	39800		
118.	2	Rayagada	Seriguda	New	Seriguda -2 MQ	K No.-27, p no-27	83	23	28.82	19	11	01.07	8090	52600		
119.	3	Rayagada	Jurudi	New	Jurudi MQ	K No.-29,p no-95	83	26	48.19	19	09	27.59	12140	68160		
120.	4	Rayagada	Durgapadu	New	Durgapadu -1 MQ	K No.-79, p no-81	83	31	46.92	19	03	17.11	10120	70980		
121.	5	Rayagada	Durgapadu	New	Durgapadu -2 MQ	K No.-79,p no- 83	83	31	43.44	19	03	04.90	10120	55566		
122.	6	Rayagada	Limbesu	New	Limbesu MQ	K No.-10, p no-60	83	27	36.23	19	02	09.59	16180	155556		
123.	7	Rayagada	Gumma	New	Gumma MQ	K No.-18,p no-106	83	17	15.14	19	11	47.42	20230	153916		
124.	8	Rayagada	Tamparabuduni	New	Tamparabuduni MQ	K No.-21, p no-53	83	26	9.26	19	17	28.79	16180	141336		
125.	9	Rayagada	Pitamahal	New	Pitamahal MQ	K No.-22,p no-55/1	83	24	24.52	19	08	02.19	16180	157374		
126.	10	Rayagada	Kuli	New	Kuli MQ	K No.-58, p no-43	83	27	02.81	19	12	09.79	20230	208444		
127.	11	Rayagada	Kasili	New	Kasili MQ	K No.-30,p no-227	83	26	59.92	19	12	14.47	20230	104796		
128.	12	Kolnara	Badakhilapadar	New	Badakhilapadar MQ	K No.-40, p no-724	83	31	47.47	19	17	58.31	8093.71	49530		
129.	13	Kolnara	Kandha Champia	New	Kandha Champia MQ	K No.-15, p no-41	83	36	01.11	19	15	0.53	8093.71	65845		
130.	14	Kolnara	Bhujabal	New	Bhujabal MQ	K No.-44, p no-355	83	27	23.55	19	14	26.13	12140.56	79856		
131.	15	Kolnara	Kumbheiguda	New	Kumbheiguda MQ	K No.-14, p no-20	83	30	18.67	19	16	50.48	8093.71	53746		

16	Kolnara	Keutaguda	New	Keutaguda MQ.	K No.-18, p no-7	83	22	19.40	19	18	36.13	8093.71	55575
17	Kolnara	Hazaridang	New	Hazaridang-VIII SQ.	K No.-06, p no-84	83	30	01.49	19	15	00.93	12140.56	88717
18	Kolnara	Guakona	New	Guakona-V SQ.	K No-27,Pno-190/1	83	27	30	19	12	30	8093.71	567292
19	Kashipur	Patiasiltunda	New	Patiasiltunda MQ.	K No-106,Pno-559	83	09	37.91	19	07	39.11	40460	347434
20	Kashipur	Adatakiri	New	Adatakiri MQ.	K No-55,Pno-50	83	03	33.12	19	29	31.76	12140	76938
21	Kashipur	Kashipur	New	Kashipur MQ.	K No-1446,Pno-664	83	05	54.70	19	20	40.03	24280	169936
22	Kashipur	Nuagaon	New	Nuagaon MQ.	K No-72,Pno-116	83	01	27.75	19	17	52.30	26300	279724
23	Gudari	Silmi	New	Silmi MQ.	K No-20,Pno-01	83	47	58.81	19	22	50.77	32375	152272

Approved

Approved

Approved

Approved

2020
R.K.4.7.2020

19/8/2020
Divisional Forest Officer,

Collector -cum-
Chairperson, DEIAA, Rayagada

Sub-Collector, Rayagada
-cum-
Member Secretary, DEIAA

Rayagada

EXPERT Member, DEIAA, Rayagada

ANNEXURE-I

SPECIFIED MINOR MINERAL FOR DECORATIVE STONE EXECUTED UNDER RAYAGADA DISTRICT.

Sl N o.	Name of Tahsil	Name of Village	Name of Lessee	Address & contact No. of lessee	Mining Lease Grant Order No. & Date	Period of lease	Date of commencement of mining operation	Status (Working or Non Working for despatch)	Cap tive & date of grant of EC	Lt. No.	Location of co-ordinates co-ordinates or Khata & Plot No.)(Sketch map to be attached)	Co-ordinates containing the boundary points	Method of mining	Area leased for mineral concession (in sq.m)	Mineable lea 1 potenti al as per approved mining plan (in cum.)		
														Latitude	Longitude		
MINING LEASE																	
1	Gunupur	Basing-Gorja	M/s Stone fields	B-231, 4th Cross, Sainikpuri, Secunderabad (Telangana) (9437909273)	16000/06.11.20	20.12.20	19.12.20	25.12.20	Working	Non - capti ve	9/P	19'06.39 to 19'06.45	83°51'55" to 83°58'08"	Ope n cast	24280	183009	
2	Muniguda	Paitamadhakholia	M/s Hindustani Mineral Industries	Plot No.613/4132, Near, Punama Gate, Old Town, Bhubaneswar, Dist-Khurda (9861058996)	ML 17	01.12.20	30.11.20	09.03.20	Working	Non - captive	3085/SE IAA, dt.05.06.17	27/119/P	19'41.25 to 19°41.09	83°34'57" to 83°35'09"	Ope n cast	63450	279708
3	B.Cuttack	Furtigurh	M/s U. Ganapa ti Exports	Sri A.Ganesh Raj, Prasadaropera, Jeypore, Dist-koraput (9437435161)	6991 / 01.06.20	05.12.20	04.12.20	08.04.20	Applied for RML	Non - captive	20 & 23 101/P, 112/P & 100/P	19'25" to 19'20"	83°30' to 83°35'	Ope n cast	10930	Mining Plan not submitted	
4	B.Cuttack	Tedeligud	M/s Risabh Mining(P) Ltd.	IDCO Industrial Area, Titagarh, Dist- Bolangir (8826162971)	2545 / 23.02.20	23.10.20	22.10.20	Surface granted.	Right not granted.	Captive	4108/SE IAA, dt.15.02.18	15/.1/Part	19°24'14".2" to .5"	83°32'36" to 83°32'54"	Ope n cast	11083	371.99
PROSPECTING LICENSE																	
5	Rayagada	Hazarida	Sri Balakrisna Padhy	Sunari Street, Jeyapore, Dist-Koraput. (8327718893)	3994 / 23.03.20	11.05.20	10.05.20	26.09.20	Prospecting License executed & applied for Mining Lease	Non - captive	117/48/P	19'07.13 to 19'07.44	83°23'29" to 83°23'39"	Ope n cast	87810	Prospecti ng Report not submitted	

6	Gunupur	Arei	M/S Baba Granites	Prop-Smt.Sujata Sahu, Kashinagar Road, Near Gunagada,PO- Ramipeta,PS- Parikhemundi, Dist-Gajapati.	139/09	04.07.20	03.07.20	10.08.20	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	66/312/490/P, 312/493/P& 312/494/P	19°11'01" to 19°11'24"	83°31'54" to 83°32'25"	Ope n cast	303510	1644672	
7	B.Cutta ck	Chilikaram bhu & Tedeliguda es	M/S Aditi Resourc e	40-67-3, Ground Floor, Sri Nilayam Lane, Opposite to Siddartha public School, Vijayawada (A.P) [9849085477]	5239/DM, 6	04.06.201	29.08.20	28.08.20	11.10.20	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	Chilikarambu No.53 95/4/P & 96/6/P Techilguda No.64 15/165/P	19°24'00" to 19°24'22"	83°32'28" to 83°45.7"	Ope n cast	137390	Prospecti ng Report not submitted
8	B.Cutta ck	Chilikaram bhu	M/s Aditi Resourc es	-do-	5232/6	04.06.201	29.08.20	28.08.20	11.10.20	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	90/P & 92/P	16/.8 to .5"	83°32'39" to 83°49.0"	Ope n cast	48160	Prospecti ng Report not submitted
9	Kaship ur	Toraput ur	M/s Devi Mines and Mineral s	IDCO Plot 7/7, Chandaka Industrial Estate, Chandrasekharp ur, Patta, Bhubaneswar (06742-2745300)	13134/06	27.10.20	10.07.20	09.07.20	19.09.20	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	39/291/P	19°24'20" to 19°24'32"	83°32'39" to 83°49.0"	Ope n cast	52290	
10	Gunup ur	Basing gorja	M/s Gramar Enterpr ises	New No.2, Old No.6, Link Street, 4th Main Road, Kottur Garden, Chennai(TN) [9952033399]	7882/16	29.08.20	18.11.20	17.11.20	09.01.20	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	9/.33/P	19°05'51" to 19°06'00"	83°32'12" to 83°52'26"	Ope n cast	78240	188588
11	Gunup ur	Basing gorja	M/s Gramar Enterpr ises	-do-	11365/14	30.12.20	13.02.20	12.02.20	09.01.20	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	9/.30/P	.9" to .5"	83°32'12" to 83°52'26"	Ope n cast	87090	339768
12	Rayaga da	Punjapai	M/s Uhi Exports (Granite) Ltd	Sri A.Ganesh Raj, Frasaddaopeta, Jevpore, Dist-Koraput (9437435161)	7296/09	10.06.20	-	-	-	Prospectin g License executed & applied for Mining Lease	Non capti ve	-	43/.116/P & 117/P	19°07'29" to 19°06'44"	83°14'18" to 83°14'37"	Ope n cast	209060	Not executed
13	Rayaga da	Punjapai	M/s Uhi Ganapat hi Exports (Granite) (P)Ltd	-do-	7291/09	10.06.20	-	-	-	Non capti ve	-	22.43.43.14.43 ,22/344.345.347,3 48,349 & 358	19°06'42" to 19°06'44"	83°13'34" to 83°13'40"	Ope n cast	43620	Not executed	

ANNEXURE-

SPECIFIED MINOR MINERAL FOR DECORATIVE STONE (LOI ISSUED, BUT NOT GRANTED) UNDER RAYAGADA DISTRICT.

Sl No.	Name of Tahsil	Name of Village	Name of Lessee	Address & contact No. of lessee	Min grant Lease Grant Order No. & Date	Period of lease	Date of commencement of mining operation	Status /Working or working for despatch	Captiv e or Non-captiv e	Lt. No. & date of grant of EC	Location of co-ordinates or Khata & Plot No. Sketch map to be attached)	Co-ordinates containing the boundary points	Method of mining	Area leased for mineral concession (in sq.m)	Mineable minor potential as per approved mining plan (in cum.)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PROSPECTING LICENSE																	
153.																	
1	Gunupur	Arei	Smt Y. Gangalaxmi	Plot No.13, Govinda Nagar, Behind Abhudaya Degree College, Srikakulam (AP) (8464971507)	New No.2, Old No.6, Link Street, 4th Main Road, Kottur Garden, Chennai(TN) (9952033399)	LOI Issued for grant of Mining Lease	Non-captive	-	9/P	19'06" to 19'11'07"	83°51'07" to 83°51'09"	Open cast	60540	236203			
										29/P	8" to 83°52'22.2						
154.																	
2	Gunupur	Basinggoria	M/s Gramar Enterprises	Plot No.613/4132, Near Punama Gate, Old Town, Bhubaneswar, Dist-Khurda (9861058996)	LOI Issued for grant of Mining Lease	Non-captive	-	518/P & 578/P	61'/0" to 19'38"43.8	83°33'26.8 to 83°33'44.4	Open cast	35770	172089	5			
									114'/643/P	0" to 19'39"42"							
155.																	
3	Muniguada	Bad-Agula	M/s Hindustan Mineral Indust.	Plot No.613/4132, Near Punama Gate, Old Town, Bhubaneswar, Dist-Khurda (9861058996)	LOI Issued for grant of Mining Lease	Non-captive	-	19'39"33.4 to 19'39"42"	83°32'54" to 83°33'1.50	Open cast	161310	67925C					
									0" to 0"								
156.																	
4	Muniguda	Kantarabali	M/s Hindustan Mineral Indust.	Plot No.613/4132, Near Punama Gate, Old Town, Bhubaneswar, Dist-Khurda (9861058996)	LOI Issued for grant of Mining Lease	Non-captive	-	19'38'49.5 to 19'39"16.5	83°33'45.7 to 83°34'40"	Open cast	30030	75632					
								0" to 0"									
157.																	
5	Muniguda	Bad-Agula	M/s Hindustan Mineral Indust.	Plot No.613/4132, Near Punama Gate, Old Town, Bhubaneswar, Dist-Khurda (9861058996)	LOI Issued for grant of Mining Lease	Non-captive	-	61'/582/P	0" to 83°35'4.40"	Open cast	120190	18368					
								582/P	to 83°35'4.40"								

ANNEXURE-I

SPECIFIED MINOR MINERAL FOR DECORATIVE STONE RAYAGADA DISTRICT.

Sl No.	Name of Tahsil	Name of Village	Status	Name of Specified Minor Mineral	Location of the Source (Total Hilltop recommended for mineral concession (GPS co-ordinates or Khata & Plot No.)(Sketch map to be attached)	Latitude			longitude			Area of the mineral potential (in cum. m ²)	Mineable mineral potential (in cum.)
						Degree	Minute	Second	Degree	Minute	Second		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
MINING LEASE													
140.	Gunupur	Basing-Gorja	Working	Decorative Stone	9/ 2/P	19°06'39" to 19°06'45"			83°51'55" to 83°58'08"			24280	133009
141.	Muniguda	Paikamadhakholia	Working	-do-	27/ 119/P	19°41'25" to 19°41'29"			83°34'57" to 83°35'09"			63450	279708
142.	3	B.Cuttack	Furtigurha	Non-working due to want of order from Govt. in Deptt. of Steel & Mines, Odisha under Rule-8A of OMMC Rule, 2016.	-do-	20°8'23" 101/P, 112/P & 100/P	19°25' to 19°20'		83°30' to 83°35'			10930	Mining Plant not submitted
143.	4	B.Cuttack	Tedeliguda	Non-working due to want of permission for surface operation by the Collector.	-do-	15/ 1/Part	19°24'14.2" to 19°24'27.5"		83°32'36.2" to 83°32'54.2"			110830	37199
PROSPECTING LICENSE													
144.	5	Rayagada	Hazaridang	Applied for Mining Lease	-do-	117/ 48/P	19°07'13" to 19°07'44"		83°23'29" to 83°23'39"			87810	Prospecting Report not submitted
145.	6	Gunupur	Arei	-do-	-do-	66/ 312/490/P, 312/491/P, 312/493/P & 312/494/P	19°11'01" to 19°11'24"		83°51'54" to 83°52'25"			303510	1644672
146.	7	B.Cuttack	Chilikarambhu & Tedeliguda	-do-	-do-	Chilikarambu No.63 95/4/P & 96/6/P 15/ 165/P	19°24'00.3" to 19°24'22.4"		83°32'28.1" to 83°32'45.7"			137390	Prospecting Report not submitted
147.	8	B.Cuttack	Chilikarambhu	-do-	-do-	16/ 90/P & 92/P	19°24'20.8" to 19°24'32.5"		83°32'39.8" to 83°32'49.0"			48160	Prospecting Report not submitted
148.	9	Kashipur	Toypat	-do-	-do-	39/ 241/P	19°09'04" to 19°09'20"		83°11'05" to 83°11'23"			52290	

10	Gunupur	Basing-gorja	-do-	-do-	9/ 33/P	19°05'51.9" to 19°06'00.5"	83°32'12.5" to 83°52'26.1"	78240	188588
11	Gunupur	Basing-gorja	-do-	-do-	9/ 30/P	19°05'51.9" to 19°06'00.5"	83°52'12.5" to 83°52'26.1"	87090	333768
150.									
151.	Rayagada	Punjapi	-do-	-do-	43/ 116/P & 117/P	19°07'29.6" to 19°06'44.6"	83°14'18.7" to 83°14'37.7"	209060	Not executed
152.	Rayagada	Punjapi	-do-	-do-	22,43,43,14,43,22/ 344,345,347,348,349 & 358	19°06'42.7" to 19°06'44.6"	83°13'34.5" to 83°13'40.2"	43620	Not executed
153.	Gunupur	Arei	LOI issued for grant of Mining Lease	-do-	66/ 312/492	19°11'07" to 19°11'09"	83°51'07" to 83°51'09"	60540	236203.3
154.	Gunupur	Basing-gorja	-do-	-do-	9/ 29/P	19°06'17.50" to 19°06'24.20"	83°52'16.08" to 83°52'22.20"	35770	172089.25
155.	Muniguda	Bad-Agula	-do-	-do-	61/ 518/P & 578/P	19°38'43.80" to 19°39'8.60"	83°33'26.80" to 83°33'44.40"	161310	679250
156.	Muniguda	Kantabali	-do-	-do-	114/ 643/P	19°39'33.40" to 19°39'42"	83°32'54" to 83°33'1.50"	30030	75632
157.	Muniguda	Bad-Agula	-do-	-do-	61/ 582/P	19°38'49.50" to 19°39'16.50"	83°33'45.70" to 83°33'54.40"	120190	183684

APPROVED BY DEIAA COMMITTEE, RAYAGADA

Rayagada - 6.2021

Sub-Collector, Rayagada
-cum-
Member Secretary, DEIAA
Rayagada

Sri A.K. Sharda, President
Dandakaranya NGO,
-cum-
EXPERT Member, DEIAA Rayagada

Divisional Forest Officer,
-cum-
Member, DEIAA, Rayagada

COLLECTOR
-cum-
Chairperson, DEIAA,
Rayagada

Mo/6/2021