DRAFT DISTRICT SURVEY REPORT (DSR)

OF

RAYAGADA DISTRICT, ODISHA

FOR

ROAD METAL / BUILDING STONE / BLACK STONE

(FOR PLANNING & EXPLOITING OF MINOR MINERAL RESOURCES)

ODISHA

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

LIST OF PLATES

PLATE NO- 1

INDEX MAP

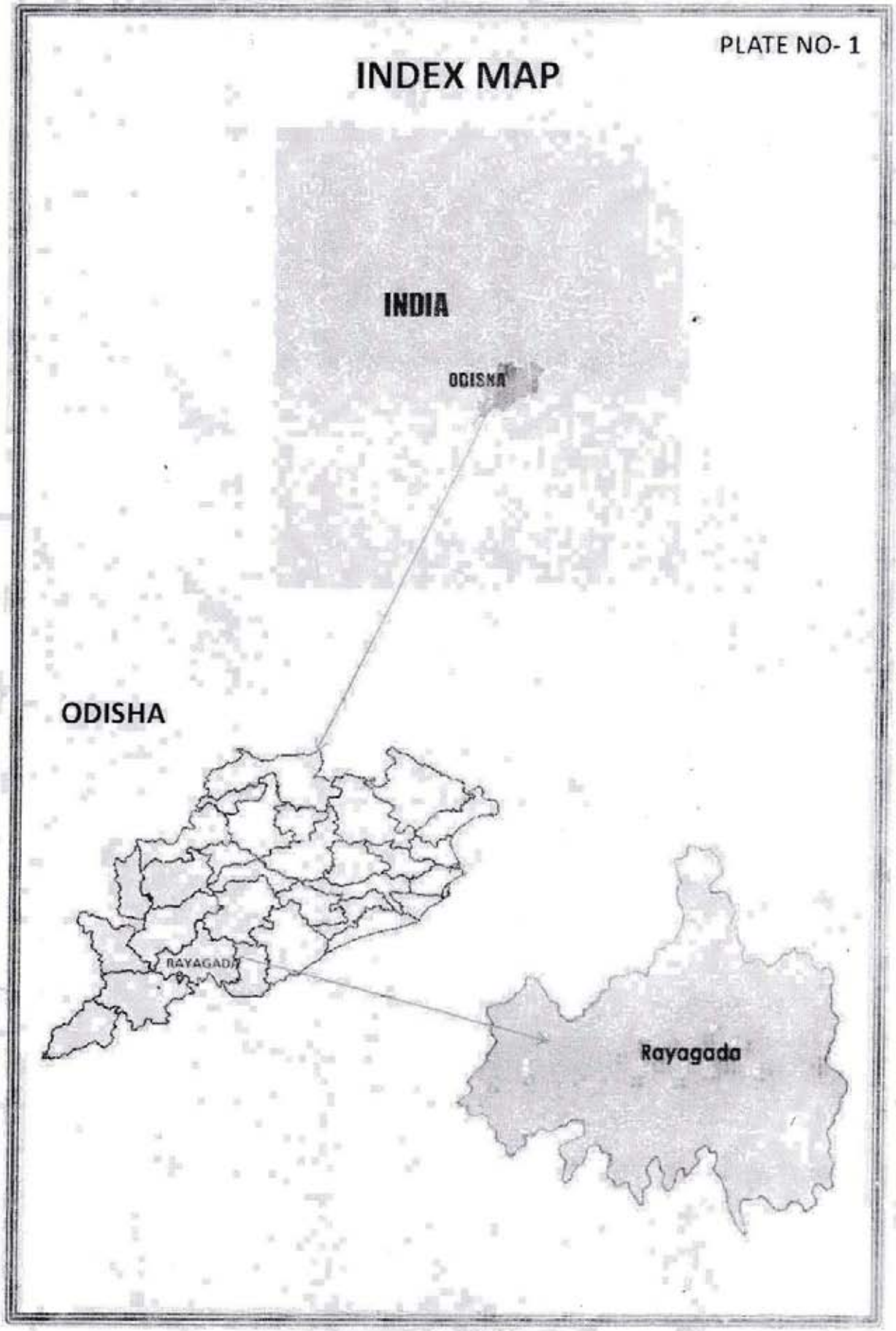


PLATE NO- 2

MAP SHOWING THE TAHASILS OF RAYAGADA DISTRICT

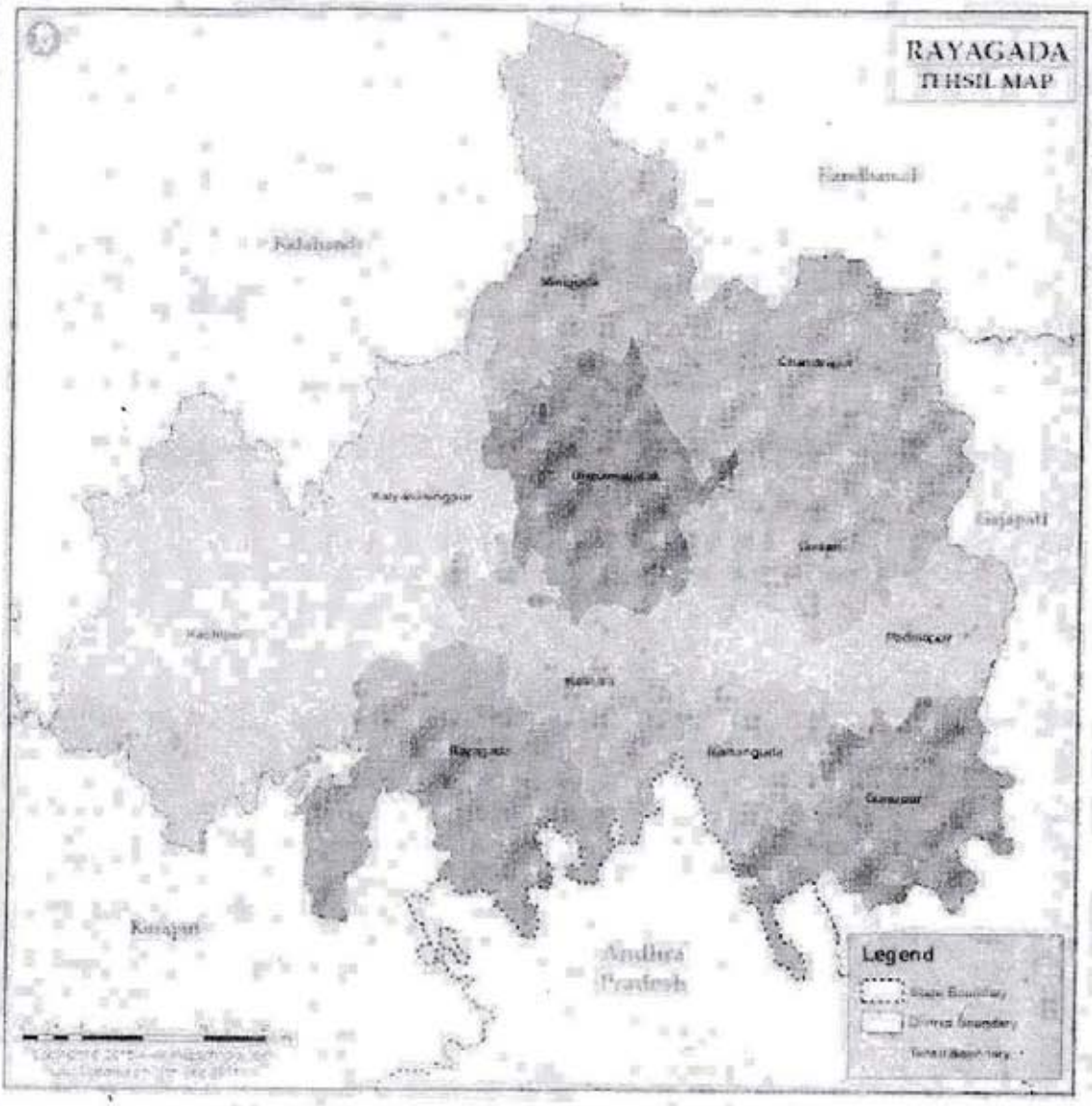
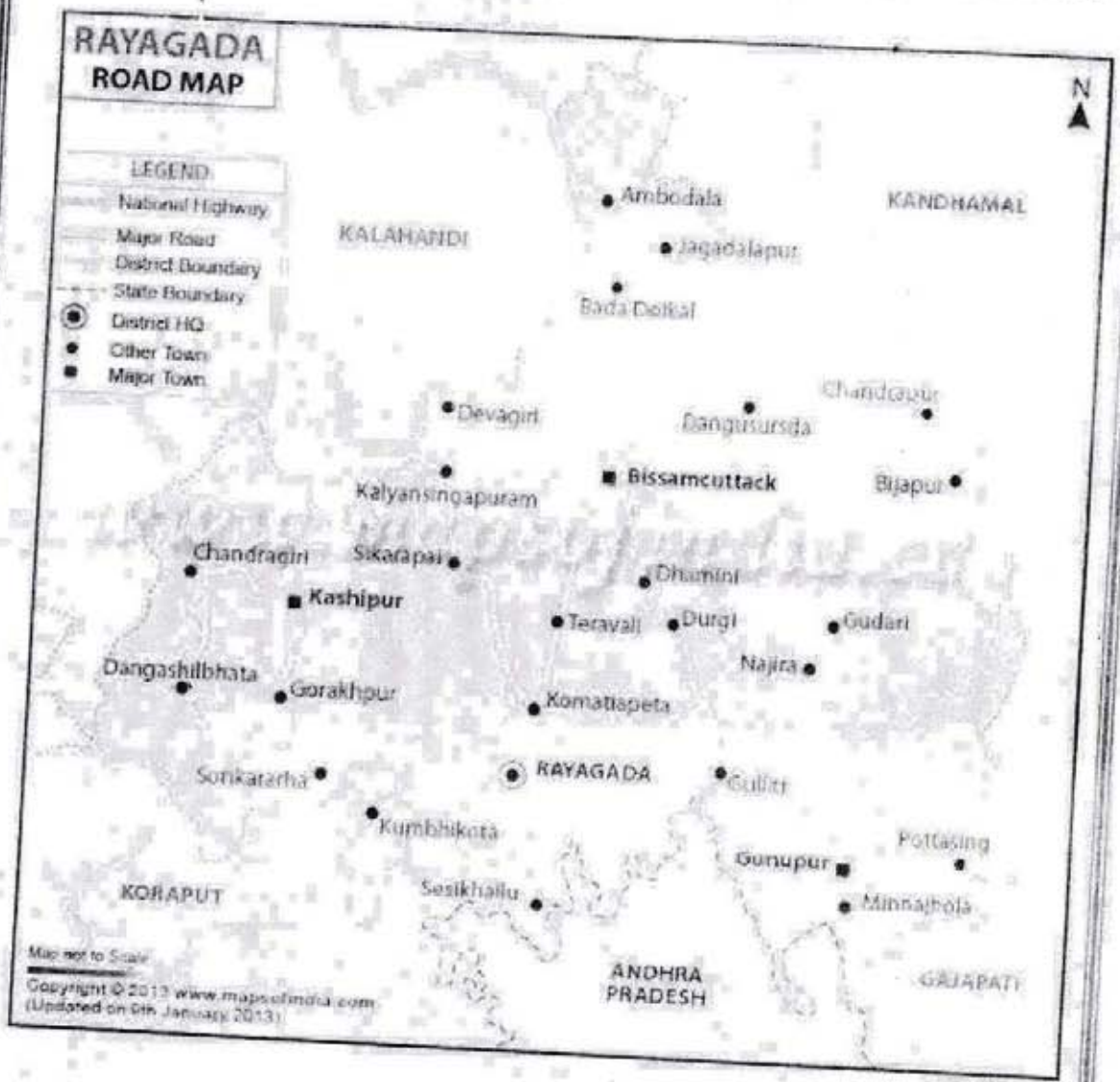


PLATE NO- 3

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 Kandhmal district in the North, Gajapati district in the East, Koraputdistrict and satate 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, Lakharasi. 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, Nisikhal, Rukunibadi, Paikaranipinda, Kandharanipinda, Taladoshi, Upardoshi, Podakona, Kinchikhal, Koka, Liliguma, Sirijodi ,Balkapai,Bhitardulki, 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, Bhitardulki, Jholaguda, Sikabarhi, Kaliapalli, Patrani, Gandrugam, Dallurgam, Malimunda, Disidaku, Deulbadi, Alanda, Budaguda, Murkakona, Ajaygarh, Pipliguda, Bhitarsaja, 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, Gudikhal, Sikampadar, Machhkhunti, Srirampur, Purlikona, Chitikapangu, Kusumpadar, Kasli etc.

Quartzite

There are several quartzite bands analysing more than 97% SiO_2 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:

Sl 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	Paddy	Wheat	Maize	Mung	Biri	Kulthi	Till	Groundnut	Mustard	Potatoes	Jute	Sug cat
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, Hatipathar, 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
Secondary School	No. of Schools	233
	Enrolment (No)	23074
	Pupil Teacher Ratio	31.70
Literacy Rate, 2011	Male	61.0
	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 day flood plain deposit	Soil/Alluvium
Cainozoic			Laterite/ bauxite — Lateritic
Archaean	Eastern Ghat Super Group	Charnockite Group	Garnetiferous Granite gneiss Leptynite Acid/intermediate charnockite Basic charnockite
		Khondalite Group	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

a	Name of the River	Place of origin	Attitude of origin	Total length in the district (in km)	Area drained (sq km)	% Area drained in the district	Process of deposition of sediments	Volume of sand deposited in last 3yrs(year wise)	Any important note
a	b	c	d	e	f	g	h	i	J
	Sananalla (Tributary of Nagavali River)	Singari	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	
	Badanala (Tributary of Nagavali River	Singari	550.00	8.00	180.00	100.00		Nil	
	Sikarpai(Tributary of Nagavali River	Kharjada	580.00	25.00	60.00	100.00		Nil	
	Bhanginalla (Tributary of Bansadhara River)	Mundipadar	540.00	15.00	166.00	100.00		Nil	

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

Sl 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 lats from middle of June to October. The average annual rainfall varies from 1031.21 mm to 1569.50 mm.

MONTH WISE RAINFALL (mm) DATE OF THE DISTRICT (LAST 3 YEARS) (DISTRICT OFFICE)

F. year /month	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MARCH	TO
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

Sl.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.

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 & FAUNAL , 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 likes, excavation, loading, handling of mineral and transportation. The air quality in the mining areas depends upon the nature and concentration of emissions and meteorological conditions.

The major air pollutants due to mining activities include:-

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

Dust is the single air pollutant observed in the open cast mines. Diesel operating drilling machines, blasting and movement of machineries/ vehicles produce NOx , 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 diction and meteorology are to be considered during planning, so that pollutants, which cannot be fully suppressed by engineering techniques, will be prevented from reaching the nearby agricultural land, if any.
- Comprehensive greenbelt around overburden dumps and periphery of the mining projects/clusters has to be carried out to reduce to fugitive dust transmission from the project area in order to create clean & healthy environment.

Water

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

NOISE

- Periodic maintenance of machineries, equipments shall be ensured to keep the noise generated within acceptable limit.

- Development of thick green belt around mining/cluster area, haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities like blasting, excavtion 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 laves on the inactive mined out upper benches.
- Development of dense poly culture plantation using local floral species in the mining areas at conceptual stage if the mine is not continued much below the general ground level.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.

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

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

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

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

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

   b. Converted to water reservoir after stabilization of the slopes if the exhausted quarry continues much below the surrounding surface level. It is preferred to cordon the water reservoir either through wire fencing or retaning 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 Manger who is responsible for emergency will always keep a jeep ready at site. In case of any eventuality, the victim will be taken to the nearby hospitals after carrying out the first aid at the site. The Manger should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shops, district revenue authorities etc. and use them efficiently during the case of emergency.

25. DETAILS OF THE 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. No.	Name of Tahasil	Name of Minor Mineral	Name of village	Name of lessee	Address & contact No of lessee	Mining lease grant order No & date	Period of QL		Date of commencement of minig operation	Status (working/ non-working /Temp working for depatch)	Captive or Non-captive	Lt No & date of grant of EC	Location of Resource (GPS co-ordinates or Khata & Plot No) (Sketch map to be attached)	Longitude			Latitude			Method of mining	Area leased for mineral concession (in sq m)	Mineable mineral potential as per approved mining plan (in cum)
							From	To						Degree	Minute	Second	Degree	Minute	Second			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Kolnara	Hazariding V	Hazriding	MSRB Verma	Rayagada	1690/09.06.16	2016-17	2020-21	13.12.2016	Working	Non-captive	745/20.09.16	K-6,P-84	83	30	07.92	19	15	12.34	OC	12140.5	112417
2	Kolnara	Hazariding VI	Hazriding	Bhaskar Mishra	Rayagada	3200/11.11.2016	2016-17	2020-21	27.07.2018	Working	Non-captive	359/25.03.17	K-6,P-98	83	29	56.60	19	14	50.00	OC	12140.5	255888
3	Kolnara	Guakona III	Cuakona	P Arun Choudhry	Rayagada	422/09.03.2015	2015-16	2019-20	11.01.2016	Working	Non-captive	2496/22.06.15	K-27, P-195/1	83	28	12.0	19	13	10.5	OC	20234.28	257127
4	Kolnara	Champia	Champia	P Arun Choudhry	Rayagada	2022/24.07.2017	2017-18	2021-22	19.02.2019	Working	Non-captive	455/03.08.18	K-26,P-137	83	29	04.86	19	12	10.28	OC	10117.1	82525
5	Kolnara	Pipalguda	Pipalguda	Jalandhar Naik	Rayagada	2594/15.09.16	2016-17	2020-21	22.11.2018	Working	Non-captive	459/03.08.2018	K-20, P-23/1	83	29	46.08	19	13	59.04	OC	40468.56	513760

6	In ar a	Haz arid ang	Haza rida ng	Bhaska r Mishra	Rayaga da	2025 /24.0 7.17	20 17- 18	20 21 - 22	07.12. 2018	Working	Non- capti ve	1742 /11.1 0.201 7	K-6, P-37	83	29	46. 66	19	15	1.6 6	OC	12140. 5	84625
7	Ko In ar a	Pipl Igud a II	Pipal guda	P Ramakr ishna	Rayaga da	2214 /05.0 8.17	20 17- 18	20 21 - 22	12.10. 2018	Working	Non- capti ve	1740 /11.1 0.17	K-20,P- 20,36	83	29	44. 82	19	13	55. 20	OC	8093.7 1	29044
8	Ko In ar a	Haz arid ang VII	Haza rida ng	PVP Ramu	Rayaga da	3246 /22.1 1.16	20 16- 17	20 20 - 21	10.08. 2018	Working	Non- capti ve	147/ 12.03 .18	K-6,P-98	83	30	00. 00	19	14	54. 19	OC	40468. 56	148230
9	Ko In ar a	Bot hodi	Both odi	PVP Ramu	Rayaga da	2031 /24.0 7.17	20 17- 18	20 21 - 22	03.08. 2018	Non- working	Non- capti ve	561/ 18.08 .18	K-18,P-178	83	30	10. 03	19	15	20. 22	OC	20234. 28	14868
10	Ra ya ga da	GO GO NDA	GOG OND A	P Arun choudu ry	Debod olla	1544 /1.9. 17	20 17- 18	20 21 - 22	21.6.1 8	Working	Not Capti ve	135/ 12.3. 18	K-12,P-19	83	28	42. 9	19	11	55. 40	OC	10117. 15	94395
11	Ra ya ga da	MA NTR OJH OLL A-I	MA NTR OJH OLL A-I	J L Patel	Rayaga da	1169 /21.6 .17	20 17- 18	20 21 - 22	28.3.1 8	Working	Not Capti ve	143/ 12.3. 18	K-20, P-139	83	28	.7	19	12	47. 48	OC	20234. 3	157109
12	Ra ya ga da	KASI LI-III	KASI LI-III	P Ram Murty	Kasili	1829 /19.1 0.15	20 15- 16	20 19 - 20	1.9.16	Working	Not Capti ve	512/ 5.7.1 6	K-30, P-188	83	27	32. 06	19	12	16. 16	OC	12140. 58	205259
13	Ra ya ga da	MA NTR OJH OLL A-II	MA NTR OJH OLL A-II	P Arun choudu ry	Debod olla	2245 /1.7. 17	20 17- 18	20 21 - 22	21.6.1 8	Working	Not Capti ve	137/ 12.3. 18	K-20,P-40	83	28	1.9 8	19	12	51. 26	OC	10117. 15	53855

14	Rayagada	MANTRI OJHOLLA-IV	MANTRI OJHOLLA-IV	Narasingha Mandangi	Mantrojholia	1578/28.8.15	2015-16	2019-20	20.8.16	Working	Not Captive	468/5.7.16	K-20, P-116	83	27	58.92	19	12	55.29	OC	12140.58	109949
15	Rayagada	KASILI-I	KASILI-I	Ramesh Chourasia	J K Pur	2151/21.6.17	2016-17	2020-21	4.7.18	Working	Not Captive	133/12.3.18	K-30, P-122	83	27	33.14	19	12	19.39	OC	12140.58	108906
16	Rayagada	GOGONDA-I	GOGONDA-I	Harisch Behera	Mantrojholia	1580/28.8.15	2015-16	2019-20	26.8.16	Working	Not Captive	488/5.7.16	K-12,P-19	83	28	25.47	19	11	43.51	OC	8093.72	80294
17	Rayagada	MANTRI OJHOLLA-VI	MANTRI OJHOLLA-VI	Mada Rao Kondagori	Rayagada	1584/28.8.15	2015-16	2019-20	1.12.16	Working	Not Captive	474/5.7.16	K,20,P-112	83	26	56.10	19	13	4.37	OC	20234.3	179586
18	Rayagada	BILLESU	BILLESU	A Lokesh	Rayagasda	1586/7.9.17	2017-18	2021-22	26.4.18	Working	Not Captive	129/12.3.18	K-70,P-40	83	23	34.02	19	00	26.83	OC	12140.58	100121
19	Rayagada	MANTRI OJHOLLA-V	MANTRI OJHOLLA-V	P Kasi Naidu	Kotapeta	1651/9.9.15	2015-16	2019-20	26.10.16	Working	Not Captive	476/5.7.16	K-20, P-122	83	27	54.1	19	12	50.9	OC	12140.58	67076
20	Rayagada	MANTRI OJHOLLA	MANTRI OJHOLLA	D.K.Thakar	Rayagada	2169/21.6.17	2017-18	2021-22	28.3.18	Working	Not Captive	191/12.3.18	K-20, P-118	83	28	02.62	19	12	39.55	OC	20234.3	189447
21	Rayagada	MANTRI OJHOLLA-III	MANTRI OJHOLLA-III	R R Pati	Rayagada	2170/21.6.17	2017-18	2021-22	3.4.18	Working	Not Captive	131/12.3.18	K-30, P-119	83	27	56.32	19	12	40.41	OC	12140.58	112976

22	Rayagada	KASILI-II	KASILI-II	R R Pati	Rayagada	1582/28.8.15	2015-16	2019-20	26.8.16	Working	Not Captive	518/5.7.16	K-30, P-188	83	27	29.16	19	12	3.65	OC	12140.58	88636
23	Rayagada	GOGONDA-III	GOGONDA-III	M Prakash Rao	Gogonda	710/27.5.16	2016-17	2020-21	19.9.16	Working	Not Captive	508/5.7.16	K-12, P-118	83	28	29.86	19	11	38.55	OC	24281.16	277783
24	Rayagada	KULI	KULI	P Arun choudury	Debodolla	2244/1.7.17	2017-18	2021-22	21.6.18	Working	Not Captive	139/12.3.18	K-58,P-18	83	28	6.51	19	12	42.40	OC	16187.44	269973
25	Rayagada	MANTROJHOLL A-VII	MANTROJHOLL A-VII	J L Patel	Rayagada	2225/17.1.15	2015-16	2019-20	28.3.18	Working	Not Captive	147/12.3.18	K-20, P-102	83	28	.70	19	12	47.48	OC	20234.3	180500
26	Rayagada	RAJPUR	RAJPUR	R Lachi Naidu	Rajpur	1845/29.10.15	2015-16	2019-20	22.11.16	Not working	Not Captive	472/5.7.16	K-8, P-1	83	25	1.76	19	04	17.27	OC	20234.3	57582
27	Gunpur	Gunpur-I SQ	Gunpur	Pradeep Ch. Jogi	Souraradhanigiuda,Rayagada, Ph-9437063254	L.No.1639/15 dt.02.07.2015	2015-16	2019-20	02.07.2015	Working	Non-Captive	3509/SEIADt.22/06/2015	K. No-330,plno-1522, Ac.11.00	83	49	58.7	19	05	19.05	OC	44515.46	11050
28	Gunpur	Gunpur –II SQ	Gunpur	NilakanthaJogi	Souraradhanigiuda,, Rayagada, Ph-8249497094	L.No.1638/15 dt.02.07.2015	2015-16	2019-20	01.07.2015	Working	Non-Captive	3517/SEIADt.22/06/2015	Khata-330, plotno-1522, Ac.10.10	83	48	47.8	19	05	54.9	OC	40873.24	11000

29	Gunpur	Chakrabhata SQ	Chakrabhata	Srinivas Sahu	Niladribihar lane-2,Gunupur, Rayagada, Ph-9438105497	L.No. 1640/15. Dt.02.07.2015	2015-16	2019-20	02.07.2015	Working	Non-Captive	3521/SEIAADt.22/06/2015	Khata-07, plotno-33 , Ac.10.00	83	46	16.1	19	05	50.01	OC	40468.6	8600
30	Gunpur	Loba SQ	Loba	K.Nagbhusan	Chalakamba, Rayagada,Ph-8455963455	L.No. 1882/15 dt.25.07.2015	2015-16	2019-20	25.07.2015	Working	Non-Captive	3507/SEIAADt.22/06/2015	Khata-105, plotno-100, Ac.4.39	83	51	12.5	19	11	19.50	OC	17765.69	12333
31	K. Singhpur	Kanipai SQ	Kanipai	MS RB Verma	Rayagada , 9437445799	464/9.10.2017	2016-17	2020-21	09.10.2017	Working	Non Captive	293/12.06.2017	K-31 P-40	83	18	14.52	19	22	12.08	OC	18000	140782
32	Muniguda	Kantrabali SQ - II	Kantrabali	Akshra Kumar Rana	Bissam cuttack ,Rayagada 8093031950	599/ Dt. 09.03.16	2015	2020	01.04.2017	Working	Non-Captive	2259 / Dt. 30.11.16	K. N- 114. Pl. No. - 790	83°	33'	58.4" E	19°	39'	39.4" N	OC	80000 Sq. M	315861
33	Muniguda	Bada Manjurukupa SQ	Bada Manjurukupa	Ratanlal Jain	Muniguda/ 7978703349	3616 / Dt. 26.08.15	2015	2020	01.04.2017	Working	Captive	522/ DIEAA, Dt. 05.07.2016	K. No- 17, Pl. No. 54	83°	27'	12.70" E	19°	45'	58.80" N	OC	18840 Sq. M.	62066
34	Muniguda	Ambadola SQ	Ambadola	Ratanlal Jain	Muniguda/ 7978703349	3616 / Dt. 26.08.15	2015	2020	01.04.2017	Working	Captive	1981/SEIAA, Dt. 12.09.2016	K. No. 186, Pl. No. 668	83°	28'	59.40" E	19°	49'	29.20" N	OC	110480 Sq. M	1463135

35	Gudari	Karasing SQ	Balipanga/	K. Ramakrishna	Boliguda , Po-Gudari, 9938431456	1533/14.09.2017	2017-18	2021-22	03.12.2019	Working	Non-Captive	688/27.11.2018	K. No- 14, Pl. No. 53	83	49	44.86 E	19	20	3.23 N	OC	18200	10520
36	Padmapur	Khilamunda-II SQ	Khilamunda-II	J.VENKAT RAO, UKKA MBA	AT-UKKA MBA 8658798945	486/25.03.2015	2015-16	2019-20	27.12.2016	working	Non-Captive	755/20.09.2016 (D)	Khata No.-16, plot no-9	83	49	43	19	15	30.2	OC	1463	12500
37	Padmapur	Akhusing SQ	Akhusing	D.R.BHARAT, MD ASIP-SIPL (JV)	Khilamunda 9937046560	1526/10.09.2015	2015-16	2019-20	10.09.2015	working	Non-Captive	4122/17.08.2015	Khata No.-114, plot no-467	83	49	58.55	19	15	57.51	OC	321	6649
38	Padmapur	Khilamunda-I SQ	Khimunda-I	D.R.BHARAT, MD ASIP-SIPL (JV)	Khilamunda 9937046560	1527/10.09.2015	2015-16	2019-20	10.09.2015	working	Non-Captive	4124/17.08.2015	Khata No.-16, plot no-114	83	49	58	19	15	49.2	OC	35410	28728
39	Kashipur	Sargiguda SQ	Sargiguda	Srinivas Rao	Gandhi Nagar, 2nd lane, Rayagada,9437966369		2015-16	2019-20		working	Non-Captive	490/05.07.2016	Khata No.71 Plot No.126,199,205,206 & 207	83	07	26.7	19	11	09.7	OC		
40	Kashipur	Mundagaon-II SQ	Mundagaon-II	Dwitiya Chanda Panda	Brahmin Street, Rayagada, 9439093333		2015-16	2019-20	15.02.2017	working	Non-Captive	492/05.07.2016	Khata No.290 Plot No.1167	83	03	45.4	19	08	41.6	OC	2290.52	19532

41	Bissam Cuttack	Dhuanbadi SQ	Dhuanbadi	Sri V Suresh Rao	Durgi, Bissam Cuttack, Rayagada	1089/09.10.2015	2015-16	2019-20	29.09.2016	Working	Non-Captive	3929/, 14.08.2015	Khata-130,plotno-58,Ac.4.60.00	83	35	53	19	21	12.5	OC	18615.5	145548
42	Bissam Cuttack	Lelingpadar SQ	Lelingpadar	Sri D. Srinivas Rao	Po-Ratatikiri, Bissam Cuttack, Rayagada	2694/29.09.2016	2015-16	2019-20	13.07.2016	Working	Non-Captive	3927/, 14.08.2015	Khata-23,plotno-178,Ac.10.00	83	34	44.8	19	30	17.5	OC	40468.6	379912.50
43	Bissam Cuttack	Telengasartheli SQ	Telengasartheli	Sri P Srinivas Rao	AT Po-Auroobind Nagar, JK Pur, Rayagada	1565/11.05.2017	2016-17	2020-21	21.11.2017	Working	Non-Captive	299,/12.06.2017	Khata-03,plotno-33, Ac.-05.00	83	28	35.3	19	32	03.9	OC	20234.3	68248
44	Bissam Cuttack	Baradaguda SQ	Baradagu da	Sri Ishwar Gopal Chetty	At Po-Sikarpai, Rayagada	1260/03.07.2018	2017-18	2020-21	18.01.2019	Working	Non-Captive	297/12.06.2017	Khata-5,plotno-60,Ac.12.00	83	33	59.3	19	22	26.1	OC	48562.3	467801.6

ANNEXURE II

SOURCES ALREADY AUCTIONED BUT NOT EXECUTED (LOI ISSUED)

Sl. No.	Name of Tahasil	Name of village	Name of Minor Mineral	Name of the Successful auction holder	Address & Contact No of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Validity of LoI	Use (Captive/ Non-Captive)	Location of the Source 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)
										Degree	Minute	Second	Degree	Minute	Second		
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	3057/25.10.18	2022-23	Non CAP	K-47,P-350	83	36	54.23	19	12	26.93	12141	169974
2	Kolnara	Hajaridang	Hajaridang-II	MSRB Verma	Rayagada	1689/25.06.19	2023-23	Non CAP	K-6,P-37	83	29	46.94	19	15	11.61	20234	283276
3	Kolnara	Hajaridang	Hajaridang-III	MSRB Verma	Rayagada	1690/25.06.19	2023-24	Non CAP	K-6,P-99	83	29	47.22	19	15	16.23	20234	283276
4	Kolnara	Jamuleli badi	Jamuleliba di	Akil Kumar Das	Rayagada	1691/25.06.19	2023-24	Non CAP	K-21, P-203	83	29	59.41	19	14	59.95	40469	566566
5	Kolnara	Guakona	Guakona IV	Sasikant Sutar	Jaypur	3310/17.11.18	2022-23	Non CAP	K-27,P-191/1	83	27	57.27	19	13	8.33	12141	169974
6	Ramanagud a	Tumbako na	Tumbakon a Stone Quarry	Sri Chandra Sekhar Panigrahi	At/Po: Gunupur Dist :Rayagada	974 Dated: 01.07.19	2023-24	Non CAP	Khata No 21 Plot No 13 Area in Ac:2.00	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	5.11	19	120	29.55	20234.3	283280.2
8	Rayagada	KASILI	KASILI-IV	L SURESH	KOTAPET A	333/29.1.18	2022-23	Non CAP	K-30,P-231	83	27	83.943	19	12	29.037	12140.5	169967
9	Rayagada	GOGON DA	GOGONDA -II	SANKARI HEPRIKA	UTKAPAD U	719/26.2.18	2022-23	Non CAP	K-12,P-119	83	28	39.796	19	11	42.260	16187.4	226623.6

10	Rayagada	KASILI	KASILI	MARUTI KU SWAIN	CUTTACK	4267/20.10.18	2022-23	Non CAP	K-30,P-188	83	27	83.943	19	12	29.037	8093.7	113311.8
11	Rayagada	GUMMA	GUMMA-II	B RAGHURAM	KERADA	460/5.2.18	2022-23	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, 1.78	G GANGARAJU	K SINGPUR	590/19.2.18	2022-23	Non CAP	K- 58,9 P-18	83	27	58.8	19	12	30.6	80937	1133118
13	Rayagada	BADAHANSA	BADAHANSA	B RAGHURAM	KERADA	3175/16.8.19	2023-24	Non CAP	K-31,P-130	83	25	34.52	19	04	23.47	52609	736526
14	Rayagada	HATSESKHAL	HATSESKHAL	B RAGHURAM	KERADA	3174/16.8.19	2023-24	Non CAP	K-21,P-93/165	83	25	34.52	19	04	23.47	52609	736526
15	Rayagada	KHILMISGUDA	KHILMISGUDA	CHINA APUDU PUALA	KHILMISGUDA	3176/16.8.19	2023-24	Non CAP	K-41, P-57	83	27	03.12	19	00	48.72	60702	849828
16	Rayagada	KADAMBARIGUDA	KADAMBARIGUDA	MANOJ KU SAHU	KOTAPETA		2022-23	Non CAP	K-10,P-71	83	25	22.3	19	12	53.5	59003	826042
17	Muniguda	Kantrabali Stone Quarry - I	Stone quarry Kantrabali-I	Ajit Gouda	At/po-Muniguda LN 2678/DT 11.9.2019	LN 2985/DT 17.10.2019	5 years	Non-Captive	Khata no 114 plot no 631	83	32	29.9 E	19	39	32 N	46201	64681.4
18	Gunupur	Jaltar	Jaltar Stone Quarry	K.Srinivas rao	At/po-Chalakamba,Dist-Rayagada	L.No.1842,dt.18.04.2018	5yrs	Non-Captive	Khata no.771, plot no.435	83	52	43.17	19	06	37.15	36422	458917.2
19	Gunupur	Sourapradhanigu da	Souraprad hanigu da Stone quarry	Udaya Gomango	At/Po-Marathigu da,Dsit-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	9132312222	1613/21.08.19	5 years	Non Captive	Khato No-53, Plot No-47/1	83	49	26.4	19	16	9.27	48562	6016831
21	Muniguda	Banganagan	Banganagan SQ	Rabindra Panigrahi	Sabarinala, Jagdalpur, Muniguda 9439809997	4175/17.10.2015	2015-16 to 2019-20	Non Captive	Khata no-25, Plot no-243	83	32	55.44	19	44	15.07	127200	445200

ANNEXURE III

POTENTIAL ROAD METAL/ BLACKSTONE/WHITESTONE OF THE DISTRICT

Sl. No.	Name of Tahasil	Name of village	Status	Name of Minor Mineral	Location of the Source (Total Hillock) 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)
							Degree	Minute	Second	Degree	Minute	Second		
1	2	3	4	5	6		7	8	9	10	11	12	13	14
					Khata	Plot								
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	Jamulelibadi	LOI	Jamulelibadi	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-VIII	6	84	83	30	10.5	19	12	51.15	12140.5	169967
22	Rayagada	GOGONDA	Running	GOGONDA	K-12,P-19		83	28	42.9	19	11	55.40	10117.15	240788.2
23	Rayagada	MANTROJHOLLA-I	Running	MANTROJHOLLA-I	K-20, P-139		83	28	.7	19	12	47.48	20234.3	1005645
24	Rayagada	KASILI-III	Running	KASILI-III	K-30, P-188		83	27	32.06	19	12	16.16	12140.58	382428.3
25	Rayagada	MANTROJHOLLA-II	Running	MANTROJHOLLA-II	K-20,P-40		83	28	1.98	19	12	51.26	10117.15	269116.2
26	Rayagada	MANTROJHOLLA-IV	Running	MANTROJHOLLA-IV	K-20, P-116		83	27	58.92	19	12	55.29	12140.58	747859.7
27	Rayagada	KASILI-I	Running	KASILI-I	K-30, P-122		83	27	33.14	19	12	19.39	12140.58	977316.7
28	Rayagada	GOGONDA-I	Running	GOGONDA-I	K-12,P-19		83	28	25.47	19	11	43.51	8093.72	254952.2
29	Rayagada	MANTROJHOLLA-VI	Running	MANTROJHOLLA-VI	K,20,P-112		83	26	56.10	19	13	4.37	20234.3	864004.6
30	Rayagada	BILLESU	Running	BILLESU	K-70,P-40		83	23	34.02	19	00	26.83	12140.58	518402.8
31	Rayagada	MANTROJHOLLA-V	Running	MANTROJHOLLA-V	K-20, P-122		83	27	54.1	19	12	50.9	12140.58	900831
32	Rayagada	MANTROJHOLLA	Running	MANTROJHOLLA	K-20, P-118		83	28	02.62	19	12	39.55	20234.3	1487221
33	Rayagada	MANTROJHOLLA-III	Running	MANTROJHOLLA-III	K-30, P-119		83	27	56.32	19	12	40.41	12140.58	407923.5
34	Rayagada	KASILI-II	Running	KASILI-II	K-30, P-188		83	27	29.16	19	12	3.65	12140.58	739361.3
35	Rayagada	GOGONDA-III	Running	GOGONDA-III	K-12, P-118		83	28	29.86	19	11	38.55	24281.16	509904.4
36	Rayagada	KULI	Running	KULI	K-58,P-18		83	28	6.51	19	12	42.40	16187.44	691203.7
37	Rayagada	MANTROJHOLLA-VII	Running	MANTROJHOLLA-VII	K-20, P-102		83	28	.70	19	12	47.48	20234.3	637380.5
38	Rayagada	RAJPUR	Running	RAJPUR	K-8, P-1		83	25	1.76	19	04	17.27	20234.3	1812993
39	Rayagada	DUMAGUDA	Running	DUMAGUDA	K-27,P-20		83	26	5.11	19	120	29.55	20234.3	1133121
40	Rayagada	KASILI-IV	Running	KASILI-IV	K-30,P-231		83	27	83.943	19	12	29.037	12140.58	552396.4
41	Rayagada	GOGONDA-II	Running	GOGONDA-II	K-12, P-119		83	28	39.796	19	11	42.260	16187.44	509904.4
42	Rayagada	KASILI	Running	KASILI	K-30, P-188		83	27	83.94	19	12	29.037	8093.72	169968.1

								3						
43	Rayagada	GUMMA-II	Running	GUMMA-II	K-18, P-107	83	17	30.0	19	11	55.7	20234.3	849840.6
44	Rayagada	KULI-I	Running	KULI-I	K-58,P-18	83	27.	58.8	19	12	30.6	80937.2	2549522
45	Rayagada	DUMGUDA	LOI	DUMAGUDA	K-27, P-20	83	26	5.11	19	120	29.55	20234.3	1133121
46	Rayagada	KASILI	LOI	KASILI-IV	K-30,P-231	83	27	83.94	19	12	29.037	12140.5	552392.8
47	Rayagada	GOGONDA	LOI	GOGONDA-II	K-12,P-119	83	28	39.79	19	11	42.260	16187.4	509903.1
48	Rayagada	KASILI	LOI	KASILI	K-30,P-188	83	27	83.94	19	12	29.037	8093.7	169967.7
49	Rayagada	GUMMA	LOI	GUMMA-II	K-18, P-107	83	17	30.0	19	11	55.7	20234.3	849840.6
50	Rayagada	Balumati	New	Balumati Stone Quarry	K-17,.P-88	83	27	38.29	19	05	48.85	45855	641970
51	Gunpur	Srirampur	New	Srirampur SQ	K.28, p-.282,Ac.5.25	83	27	58.8	19	12	30.6	21245.99	178466.3
52	Gunpur	Regeda	New	Regeda SQ	K.-130, p-.798,Ac.4.00	83	25	34.52	19	04	23.47	16187.40	169967.7
53	Gunpur	Sourapradhaniguda	New	Sourapradhaniguda SQ	K-.35, P-.40, Ac.3.26	83	25	34.52	19	04	23.47	13192.73	73879.29
54	Gunpur	Jaltar	New	Jaltar SQ	Khata no.771, plotno.435, Ac.9.00	83	27	03.12	19	00	48.72	36421.65	458912.8
55	Gunpur	Narsinghamunda	New	Narsinghamunda SQ	Khata no.23, plotno.52,53&54.	83	25	22.3	19	12	53.5	6645.25	93033.5
56	Gunpur	Gunupur-I	Running	Gunupur-I SQ	Khata-330,plotno-1522,Ac.11.00	83	49	58.7	19	05	19.05	44515.46	623216.4
57	Gunpur	Gunupur-II	Running	Gunupur-II SQ	K-330,plotno-1522, Ac.10.10	83	48	47.8 E	19	05	54.9	40873.24	572225.4
58	Gunpur	Chakrabhata	Running	Chakrabhata SQ	Khata-07,plotno-33 Ac.10.00	83	46	16.1	19	05	50.01	40468.6	566560.4
59	Gunpur	Loba	Running	Loba SQ	Khata-105,plotno-100,Ac.4.39	83	51	12.5	19	11	19.50	17765.69	248719.7
60	Kalyansinghpur	Belakana	New	Belakana S Q 9.58	K. NO 30 P NO 393	83	21	51	19	22	57	97003.148	3395110
61	K.singhpur	Belakana	New	Belakana S Q	K. No 30 P No 287	83	21	19	19	22	52	16252.22	568827.7
62	K.singhpur	Belakana	New	Belakana S Q	K No 30 P No- 405	83	21	52	19	22	54	185548.37	6494193
63	K.singhpur	Belakana	New	Belakana S Q	K No 30 P No 188	83	22	0	19	23	36	259929.59	9097536
64	K.singhpur	Belakana	New	Belakana S Q	K No 30 P No 225	83	21	48	19	23	23	76283.24	2669913
65	K.singhpur	Belakana	New	Belakana S Q	K No 30 P No 271	83	21	18	19	23	15	544706.87	19064740
66	K.singhpur	Belakana	New	Belakana S Q	K No 30 P No 327	83	21	43	19	23	21	103478.12	3621734

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 pur	Kandakara	New	Kandakara S Q	K No 11 P No -91	83	17	12	19	23	28	142975.44	6004968
75	Kalyansingh pur	Kandakara	New	Kandakara S Q	K No 11 P No -115	83	17	27	19	23	32	161874	6798708
76	Kalyansingh pur	Kandakara	New	Kandakara S Q	K No 11 P No -119	83	17	27	19	23	26	36624.05	1538210
77	Kalyansingh pur	Kusumsila	New	Kusumsila SQ	K No 30 P No -10	83	16	52	19	27	26	36624.05	1538210
78	Kalyansingh pur	Kalyansinghpu r	New	K. Singhpur S Q	K No -109 P No - 2,5,61,2/800,2/801, 2/802,1/804,362/82 1	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 SQ	K-.198 198 P- .201	83	2	43.1	19	20	5.5	4050	17010
81	Kashipur	Naua gaon	New	Naua gaon SQ	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	Mundagaon	New	Mundagaon-I SQ	K-. 290 Plot No.1166	83	03	45.2	19	08	41.0	32643	137100.6
84	Kashipur	Naktiguda	New	Naktiguda SQ	K 147 , Plot No.73	83	05	24.8	19	09	14.1	38475	161595
85	Kashipur	Anajore	New	Anajore SQ	K-. 143 , Plot No1888	83	06	41.8	19	08	13.0	28309	118897.8
86	Kashipur	Kaliapada	New	Kaliapada SQ	5.75 AC	83	07	43.6	19	10	11.8	22541.48	110453.3
87	Kashipur	Sargiguda	Running	Sargiguda SQ	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 SQ	K-.290 P-.1167	83	03	45.4	19	08	41.6	5670	19845
89	muniguda	Kantrabali	Running	Kantrabali – II SQ	K.- 114. P. - 790	83^0	33'	58.4" E	19^0	39'	39.4" N	80000 Sq. M	168000
90	muniguda	Bada Manjurukupa	Running	Bada Manjurukupa Stone Quarry	K. No- 17, Pl. No. 54	83^0	27'	12.70 " E	19^0	45'	58.80" N	18840 Sq. M.	26376

91	muniguda	Ambadola	Running	Ambadola Stone Quarry	K. No. 186, Pl. No. 668	83^0	28'	59.40 " E	19^0	49'	29.20" N	110480 Sq. M	386680
92	muniguda	Banganagan	LOI	Bnaganagan stone querry	Khata no-25, Plot no-243	83	32	55.44	19	44	15.07	127200	445200
93	muniguda	Katubadi	New	Katubadi stone quarry	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 Munda	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	LOI	Kantrabali-I SQ	Khata no 114 plot no 631	83	32	29.9	19	39	32	46201	32340.7
105	Ramnaguda	Tumbakona	Running	Tumbakona SQ	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-II Stone Quarry	Khata No.-16, plot no-9	83	49	43	19	15	30.2	35410	173509
107	Padmapur	Akhusing	Running	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 S Q	Khata No.-66, plot no-312/ 989	83	49	26.47	19	16	09.27	4000	47600

110	Gudari	Balipanga	Running	Karasing SQ	K. No- 14, Pl. No. 53	83	49	44.86 E	19	20	3.23 N	18200	165620

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 Cuttack	Dhuanbadi	Running	Dhuanbadi Stone Quarry	Khata-130, plotno-58, Ac.4.60.00	83	35	53	19	21	12.5	18615.5	104246.8
112	Bissam Cuttack	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	Telengasarthe li	Running	Telengasartheli 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

29/11/2019

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

29/11/

Collector -cum-Chairperson,
DEIAA, Rayagada

Contd...

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 Hillock) 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)
							Degree	Minute	Second	Degree	Minute	Second		
	1	2	3	4	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	27.69	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

132	16	Kolnara	Keutaguda	New	Keutaguda MQ	K No.-18, p no-7	83	22	19.40	19	18	36.13	8093.71	55575
133	17	Kolnara	Hazaridang	New	Hazaridang-VIII SQ	K No.-06, p no-84	83	30	01.49	19	15	00.93	12140.56	88717
134	18	Kolnara	Guakona	New	Guakona-V SQ	K No-27,Pno-190/1	83	27	30	19	12	30	8093.71	567292
135	19	Kashipur	Patiasiltunda	New	Patiasiltunda MQ	K No-106,Pno-559	83	09	37.91	19	07	39.11	40460	347434
136	20	Kashipur	Adatakiri	New	Adatakiri MQ	K No-55,Pno-50	83	03	33.12	19	29	31.76	12140	76938
137	21	Kashipur	Kashipur	New	Kashipur MQ	K No-1446,Pno-664	83	05	54.70	19	20	40.03	24280	169936
138	22	Kashipur	Nuagaon	New	Nuagaon MQ	K No-72,Pno-116	83	01	27.75	19	17	52.30	26300	279724
139	23	Gudari	Silmi	New	Silmi MQ	K No-20,Pno-01	83	47	58.81	19	22	50.77	32375	152272

Approved

14.8.2020

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

Approved

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

Approved

14/8/2020

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

Approved

14/8/20

Collector -cum-
Chairperson, DEIAA, Rayagada