Environment Management Plan
For
Budhabalanga River Sand Bed-I
In Village: Demphouda,Belanpura, Madhunanda
Tahasil: Betnoti, Mayurbhanj, Odisha
B2 Category Project

Applied By

The Tahasildar Betnoti

Dist-Mayurbhanj

Lease Details

Village	Tahasil	District	Khata No.	Plot No.	Kissam	Area in Acres.
Demphouda	Betnoti	Mayurbhanj	200	1/1	Nadi	6.35
Belanpura	Betnoti	Mayurbhanj	160	711/1	Nadi	2.00
Madhunanda	Betnoti	Mayurbhanj	95	1/1	Nadi	3.98
						Total -12.33 Ac or 4.989 Ha.

Prepared By

Mr. Pravata Kumar Sahoo (RQP)

Geoimage System Private Ltd.

Plot No-L3/139

Acharya Vihar

Bhubaneswar-751013

ENVIRONMENTAL MANAGEMENT PLAN FOR BUDHABALANGA RIVER SAND BED –I AT DEMPHOUDA,BELANPURA & MADHUNANDA IN BETNOTI TAHASIL OF MAYURBHANJ DISTRICT.

1. Environmental Management Plan (EMP) consists of a set of impact mitigation, management monitoring waste minimization and institutional measures to be taken during implementation and operation of the project to eliminate the adverse environmental impacts or to reduce them to the acceptable level. This Environmental Management plan addresses, the component of environment, which are likely to be affected by the different operation in the Sand Bed Quarrying/ Mining .

2. The objectives of EMP are:-

- Overall conservation of environment.
- Minimization of waste generation and pollution.
- Judicious use of natural resources and water.
- Safety, welfare and good health of the work force and populace.
- Ensure effective operation of all control measures.
- Vigilance against probable disasters and accidents.
- Monitoring of cumulative and long term impacts.
- Ensure effective operation of all control measures.

3. **The purpose of an EMP is to:**

(i) Assists proponent in the preparation of an effective and user friendly activity chart for environment management.

(ii) Ensure that the commitments made as part of the project's life are implemented throughout the project period.

(iii) Ensure that environment management details is captured and documented at all stages of a project.

4. Baseline information:

The Budhabalanga River Sand Bed-I is situated in Demphouda,Belanpura & Madhunanda village of Betnoti Tahasil Mayurbhanj District. The extend of areas of leases are 4.989 Ha. The leased out land is non forest Government category. The Budhabalanga River Sand Bed-I Lease area at Demphouda,Belanpura & Madhunanda is bounded between the Latitudes 21˚ 38' 01.9"N to 21˚ 38' 08.5"N and Longitude 86˚51' 00.0"E to 86˚ 51'20. 5''N in Toposheet no. F45O4 covering 4.989 Ha. (Ref Fig. No. 1 & 2).

Topographically the lease area is the bed of Budhabalanga river and at Demphouda,Belanpura & Madhunanda village. The nearest National Highway no: 18 is passes at a distance of 5.8 km from the quarry area. The highest RL of the quarry area is 18 mRL . The land of quarry areas are 4.989 ha. and non forest Govt. land under Nadi Kisam . There is no mining lease exists within 500 meters other than this leases. No ecologically sensitive area exists within 5 kms from the lease area. The district headquarter Baripada situated at a distance of 38 kms while the state headquarter Bhubaneswar at 240 kms from the sand bed site.

(i) Land Use Pattern

Proposed Quarrying of sand is only utilise non forest land of Nadi category . While mining proper safety barrier and distance of quarry from water course will be maintained. The landscape after mining will be reclaimed and plantation will be done all around.

Particulars	**Present land use (Ha.)**	**At the end of 5 years (Ha.)**
Area under excavation	---	3.039
Dump Area	---	--
Safety zone	---	1.047
Unused	---	0.903
Total		**4.989**

(ii) Quality of air, ambient noise level and water

The quality of air could be said quite clean and natural, free from any harmful gases arising out of any industrial establishment/ complex including mining ventures. The area in and around the project could be said free from any nuisance of repetitive nature such as noise. Thus, it is quite calm. The noise level is also not much high.

(iii) Water regime

The average annual rainfall in the area is more than 1500 mm per year. The area is abundant source of surface and ground water.

(iv) Flora and fauna

There are few shrubs, bushes & few trees Near the lease area**.** No Fauna exist in the lease areas.

(v) Climatic conditions

The weather is hot through the months of March to July – the average summer maximum is 40 °C (104 °F), and the average minimum is 23 °C (73 °F). From November to February, the average maximum temperature is 30 °C (86 °F), the average minimum is 15 °C (59 °F), and the climate is extremely dry. Cold northerly winds are responsible for a mild chill in January.

(vi) Human settlements

Baripada is the nearest town with population around 4,500. The population around 39.0 kms of the mines will be around 75,000.

(vii) Public buildings, places of worship and monuments

No National Monument, place of Worship, Sanctuary, National Park, exist within 5 km periphery of the area.

(viii) Solid waste Management:

In Sand quarry operation no solid waste expected to be generated.

5. Socio-economic Impact:

Positive impacts:

Employment:

Employment will be created during planning and preparation, construction and operational phases of the project. Employment opportunities created by lessee will provide a sustainable and safe working environment for women.

Community Skills Development:

The employees will benefit from the training programmers that will be instituted by leases to enable the community labour force to work in the different areas of project operations. This training will increase the number of technicians, electricians, and mechanics, among others, that will not only benefit leases but also the community at large during and after the project life.

Improved Standard of Living:

Employment opportunities created by the projects will increase income and therefore improve the overall standards of living in the area.

Community Organizational Capacity Development:

Through engagement of community members in development structures such as Community Development Committees, the community organizational capacity will be developed.

Improved Water Supply:

Supply of safe water for the community by leases will improve health standards and living conditions in the villages.

Economic Exposure and Development:

Running of these projects will make infrastructure and services available to the people. This will expose and introduce the local population to factors of economic development.

Adverse Social Impact

Price Inflation:

Increase in purchasing power of the community members through higher incomes from the mining, compounded by population increase and low agricultural productivity as a result of project will lead to inflation in the cost of goods and services, much to the detriment of the local population especially the poor and vulnerable.

Livelihood change

Due to the labour intensity of the mining, the project will attract the more able bodied persons from the community which in turn will lead to low labour availability in other sectors of the economy including agricultural, education and health skilled workers. Local employment opportunities will be created by the project. This impact will not be significant due to low level of education and skills in the area which will result in sourcing skilled workforce from outside the immediate area. But the magnitude of this impact will be high due to high number of dependants in a household.

Historical monuments etc.

There is no historical monument with in 10 km the lease area. So, there will be no impact on the historical monument due to proposed quarry activity in the area

6. PROJECT ACTIVITY

As per the Approved Mining Plan, size of the Lease area is 12.33 acres or 4.989 Ha. with geological reserve of 36,021 cum. (Ref. Fig 3) and Mineable reserve of 30,397 cum of river sand which is 80% replenish able with 4 years of replenish able resources total mineable reserve would be 97,268. Total Mineable Reserve 1,27,665 Magnitude of the proposed operation is to produce at average excavation of 1,13,400 cu .m in 5 years with 27,000cum in first year of production of sand which will be further used in construction of road & building. The mining operation shall be carried out by manual method to achieve the production level. The maximum depth will be restricted to 1m. The mining operation shall be carried out by manual method to achieve the production level. The proposed development.

Year of Plan	Surface Area (m2)	Average thickness (m)	River Sand (m^3)
1st	27,000	1	27,000
2nd	21,600	1	21,600
3rd	21,600	1	21,600
4th	21,600	1	21,600
5th	21,600	1	21,600
Total		**Grand Total**	**1,13,400**

The proposed method of mining will be opencast and manual however the transportation will be done through dumper and tractor.

The maximum production per year will be 27,000 cum per annum (Fig . No. 4). The depth of mining will be 1 meter, above water level. No waste or over burden will be generated. A total of 45 person will be required for the mining operation including 2 statutory and supervisory level official.

7. ENVIRONMENTAL MANAGEMENT PLAN

(i) AIR ENVIRONMENT MANAGEMENT:-

The air Pollution in black trap mining occurs because of activities likes, Quarrying, loading unloading, crossing Transportation etc. Air Pollution cause by Quarrying activity is mainly SPM and vehicular emission.

Following mitigation measure is taken to minimize SPM generation.

1. Sparkling of water on haul road.
2. To control the emission of harmful gasses regular maintenance of equipment will be carried out on regular basis.
3. Proper mitigation measures like water sprinkling will be adopted to control dust generation on the quarry site.
4. Plantation will be carried out on approach roads barrio zone of the lease.
5. It is being ensured that all transportation vehicles will carry a valid PUC certificate.

During the course of mining no-toxic substance shall be released into the atmosphere being potential threat to health of human being. Proper maintenance of engines will be done to improve combustion process and brings reduction in pollution.

(ii) CONTROL OF DUST POLLUTION-

The main pollutant in air is PM10, which is generated due to various mining activities. However to reduce the impact of dust pollution the following steps should be taken during various mining activities.

a) During loading operation

(i) Care to reduce dust emission during sand mining & loading operations.
(ii) Avoid overloading of trucks and consequent spillage on the roads.

b) During Transport operation

(i) All the transport roads including the main ramp be kept wide, levelled, compacted and properly maintained and watered regularly during the shift operation to prevent generation of dust due to movement of dumpers, and other vehicles.
(ii) Sand carrying trucks shall be effectively covered by Tarpaulin to avoid escape of fines to atmosphere.
(iii) Regular Compaction and grading of haul roads to clear accumulation of loose material.
(iv) Air quality shall be regularly monitored both in the core zone and the buffer zone.

c) Plantation work to be carried out

In order to reduce air pollution in the surroundings, green belt will be developed around mine approach road & barrier zone.

d) Monitoring of air pollution

Periodic air quality survey will be carried out to monitor the changes consequent upon mining activities as per the norms of Sate Pollution Control Board.

8. NOISE AND VIBRATION ENVIRONMENT

The ambient noise level monitoring carried out in and around the mine lease area / cluster to assess the ambient noise levels are well within the stipulated limits of MoEF & CC

Noise pollution due to excavation & transportation will cause some problem to the inhabitants of this area if there is human settlement in close proximity to the link roads in the lease area. Effective steps should be taken to keep the noise level well below the DGMS prescribed limit of 85 dBA.

Noise Abatement and Control

(i) All the machineries including transport vehicles will be properly maintained to minimize generation of noise.
(ii) Dense plantation in mining area will also reduce propagation of noise outside the core zone
(iii) Periodical monitoring of noise will be done to adopt corrective actions wherever needed
(iv) Plantation will be taken up along the approach roads. The plantation minimizes propagation of noise and also arrests dust
(v) PPE like ear plug, hand gloves, helmets will be provided to workers for noisy works.

Vibration Abatement (If blasting is done)

No drilling or blasting require for sand mining

9. WATER MANAGEMENT:

There will be no waste water generation from the sand mining operations.

Surface Water Management

There is no chance of surface water pollution. The Quarry will be done away from water course on the river bed only.

Ground Water Management

1. Depth of excavation /mining shall be restricted to above water level or 3 m whichever is less.
2. Necessary arrangement shall be made at the stockpiles to prevent silt and sediment flowing in water
3. No In stream mining will be done.
4. No effluent will be generated due to mining activities.

Water Conservation

The project do not consume any process water except for drinking, dust suppression and plantation. Plantation is proposed, which will increase the water holding capacity and help in recharging of ground water. Artificial rainwater harvesting is proposed for the present project.

10. SOLID WASTE AND TOP SOIL MANAGEMENT

Waste Management
In the sand mining no solid waste to be generated.

Top Soil Management
No top soil to be generated

11. GREEN BELT DEVELOPMENT

The proposed green belt shall be designed to control PM10, gaseous pollutants, noise, surface run off and soil erosion etc. Suitable local plant species shall be planted.

Plantation Program

Under the afforestation plan, plantation shall be carried out with in barrior zone & nearby villages and connecting roads , school and the areas allocated by the Panchayat/State authorities. Native plants like Neem, Peepal, Khejri and other local species will be planted.

Plant for Afforestation

Year	Saplings	Species	Place of Plantation
I	50	Neem, Khejari, Imli, Bel, Ashok, Amaltas, Babool and Mango etc. as per soil condition and suggestion of forest official	Nearby area of the School, at the Dump, at the govt. waste land provided by the Govt., at Own Private Land and nearby State Highway road
II	50		
III	50		
IV	50		
V	50		

List of Species for Greenbelt Development

S. No.	Scientific Name	Common Name	Type	Effective in Control
1	*Azadirachta indica*	Neem	Tree	Dust, air pollution, noise pollution
2	*Prosopis cineraria*	Khejari	Tree	Air Pollution
3	*Tarmarindus indica*	Imli	Tree	Air Pollution
4	*Aegle marmelos*	Bel	Tree	Air Pollution
5	*Polyalthia langifolia*	Ashok	Tree	Dust, Air Pollution
6	*Cassia Fistua*	Amalthus	Tree	Dust
7	*Acacia nilotica*	Babool	Tree	Air Pollution
8	*Mangifera induca*	Mango	Tree	Dust, air pollution, noise pollution
9	*Tectona grandish*	Teak	Tree	Dust, air pollution, noise pollution
10	*Sysgium cumini*	Jamun	Tree	Dust, air pollution, noise pollution

Source: Guidelines for Greenbelt Development, CPCB, March, 2000.

12. SOCIO-ECONOMIC ENVIRONMENT

Management Plan for Socio-Economic Environment

(i) In general, socio-economic environment will have positive impact due to the mining project in the area.
(ii) The deployed laborers will be from nearby villages only as these people are mainly dependent upon such mining activities.

13. OCCUPATIONAL HEALTH AND SAFETY

Occupational Health and Safety are important. Periodic assessment of it will be useful. Identifying workplace hazards, assessing risks to employee health and safety, are important. Health and Safety points are also important in many of the environmental aspects of the workplace

Occupational Health and Safety works

(i) The collection of sample of minor minerals from the quarry to analyse that it does not cause any occupational ill effects.
(ii) Except dust generation there is no source which can show a probability for health related diseases and proper dust suppression will control dust generation and dispersion.
(iii) Dust masks be provided to the workers working in the dust prone areas as additional personal protective equipment.

(iv) Awareness program be conducted about likely occupational health hazards so as to have preventive action in place.
(v) Any workers health related problem be properly addressed.
(vii Periodical medical checkup be conducted.
(vii) Promote occupational health and safety within workers in mine and develop safer and healthier ways of working;
(viii) Help supervise the investigation of accidents and unsafe working conditions, study possible causes and recommend remedial action;
(ix) Develop and implement training sessions for management, supervisors and workers on health and safety practices and legislation;
(x) Coordinate emergency procedures, mine rescues, fire fighting and first aid crews;

Budget for Occupational Health and Safety of the workers (Lakhs)

Items	**Capital Cost**	**Recurring cost**
Drinking water facility	--	Rs. 20000.00
Shelter and sanitation facility	--	Rs. 20000.00
Health Facility and first aid kit	--	Rs. 20000.00
Fuel for cooking	--	Rs. 10000.00
Total		Rs. 70000.00

14. COST OF EMP MEASURES FOR EACH LEASE

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures

Budgetary measures for EMP

Proposed Action Plan	**Expenses per Year (in Rs.)**
	Recurring
Pollution Control Dust Suppression	50000
Pollution Monitoring i) Air pollution ii) Water pollution	50000
3.Green Belt	10000
1. Reclamation of mined out area	5000
2. Haul road repair	10000
Miscellaneous	50000
Total	**1,75,000**

15. ENVIRONMENT MONITORING PLAN

15.1 INTRODUCTION

Regular monitoring of environmental parameters is of immense importance to assess the status of environment during project operation. The knowledge of baseline conditions comes through monitoring of environmental parameters; the monitoring program will serve as an indicator for environmental conditions due to operation of the project. Monitoring is an important tool for the management, environmentalist and policy maker to make changes in pollution control equipments, environmental policy to save environment. It is decision making tool for the state of environment carried out through periodic monitoring. Further, impact assessment study is carried over short period of time and the data cannot bring out all variations induced by the natural or human activities. Therefore, regular monitoring program of the environmental parameters is essential to take into account the changes in the environmental quality over the period of time to comply environmental conditions necessary to save environment.

15.2 MONITORING OBJECTIVE

Monitoring will conform to commitments and compliances. This may take the form of direct measurement and recording of quantitative information, such as amount and concentrations of discharges. The objectives of the monitoring are:-

- Very effectiveness of planning decisions;
- Measure effectiveness of operational procedures;
- Conform statutory and corporate compliance; and
- Identify unexpected changes.

15.3ENVIRONMENTAL MONITORING CELL SEPARATELY FOR EACH AREA

A centralized Environmental Monitoring Cell will be established for monitoring of important and crucial environmental parameters which are of immense importance to assess the status of environment during mine operation. With the knowledge of initial parameters, deviations in environmental conditions due to operation of the mine will be assessed and mitigation steps will be taken to safeguard the environment. The routine monitoring program will be implemented under the project monitoring as per CPCB & MoEF & CC guidelines. Officer not below the rank of General Manager will be responsible of Environmental Management Cell and execution of environmental monitoring program.

Hierarchy of Environmental Management Cell

In order to maintain the environmental quality within the stipulated standard, regular monitoring of various environmental parameters will be necessary. Environmental Management Cell under Senior Officer (not below the rank of General Manager) will be constituted for regular monitoring, compliances, supervision and hearing of complain and reporting.

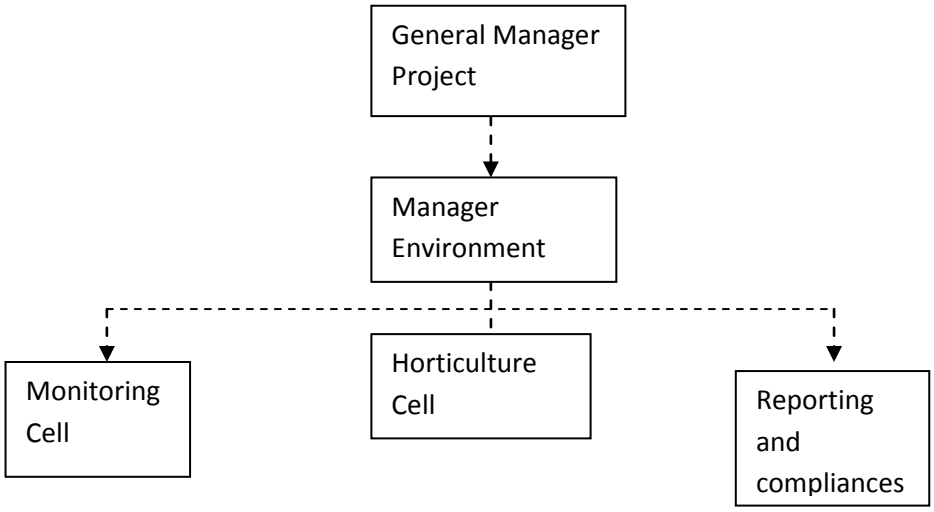


Fig: *Hierarchical Structure of Environmental Cell*

The core responsibilities of the Environmental Monitoring Cell will be:-

- The organization and interpretation of the environmental monitoring data to establish a record of change associated with the implementation of a project or the operation of an organization.

- The process of verification that all or selected parameters measured by Environmental Monitoring Program are in compliance with regulatory requirements, internal policies and standards, and established environmental quality performance limits.

- Assessment of the effective environmental management system, practices and procedures:
- The environmental monitoring and audit work will be carried out by qualified personnel.

- A summary of non-compliance of the environmental quality performance limits.
- To implement and monitor the control and protective measures based on the EMP.

- To coordinate the environment related activities to the top management within as well as with outside concerned agencies.

- To provide of health check up of workers and the people living in nearby villages.

- To develop greenbelt in the nearby villages, schools, Govt. offices and transportation routes.

15.4 ENVIRONMENTAL PARAMETER MONITORING

Environmental monitoring schedules will be prepared covering various phases of project advancement, such as Mining and regular operational phase. Environmental Monitoring Program will be conducted once in season except monsoon.

Table: Environmental Parameter and Frequency

S.No.	Potential Impact	Parameters For Monitoring	Frequency of Monitoring	Location Ref. Fig. No. 6
1	Air Emission	PM10, PM2.5, SO2, NOX & CO	As per CPCB / MoEF & CC requirement i.e. 24 hourly monitoring, twice in a week for one month in each season except monsoon season.	Two locations in the core mining area (8 hourly monitoring) and four in buffer area.
2	Noise	Spot Noise level recording Leq (day), Leq (night), Leq (dn)	Periodic / As per CPCB norms i.e. Once in season (1-hourly)	Two locations in the core mining area and four in buffer area
3	Surface Water Quality	As per drinking water standards	Once in a season except monsoon.	Two locations in the core mining area and four in buffer area.
4	Ground Water Quality	As per drinking water standards	Once in a season except monsoon.	Two locations in buffer area.
5	Soil Quality	Analyzed as CPCB method	Once in a season except monsoon.	Two locations in core and two in the buffer area.
6	Health	Total health parameters	Initial Medical Examination (IME) and Periodic Medical Examination – Once in a five year as per Mines Rules, 1955.	All employees

Ambient air quality monitoring

Workspace Monitoring

The concentration of air born pollutants in the workspace / work zone environment will be monitored periodically. If concentrations higher than threshold limit values

will be observed, the source of fugitive emissions will be identified and necessary measures will be taken as detailed in EMP.

The ground level concentrations of PM10, PM 2.5, SO2, NOx and CO in the ambient air will be monitored at regular intervals except monsoon. Monitoring locations will be decided on the meteorology of the area, topography potential of receptors in the core and buffer area locations. Any abnormal rise will be investigated to identify the causes. Greenbelt will be developed for minimizing dust propagation.

Monitoring of water quality

Monitoring of Ground Water: The monitoring of groundwater is the most important tool to find out the depletion in level of water table. Water table will be monitored at regular interval to check the behavior pattern of the water table. It is suggested to collect water samples and analyze. Records of analysis will be maintained.

Monitoring of Surface Water: Samples will be collected from well-mixed section of the river (main stream) and will be analyzed. There are two locations to collect the samples from the surface water. The objective is to collect the water samples in upstream and down-stream of the river and analyzed for physical, chemical and biological parameters to study the seasonal variation of water quality except monsoon.

Monitoring noise levels

Potential receptors of Noise levels in the core and buffer areas are identified based on the present noise levels and proposed increment. Noise levels in the work zone environment shall be monitored. The frequency will be once in three months (one season) in the work zone. Noise monitoring will be conducted in three seasons except monsoon with monitoring frequency once in a season carried on hourly basis for 24-h representing site, human settlements, close to high ways, commercial and residential areas and for the industrial area (if any). Similarly, ambient noise levels near habitations will also be monitored once in three months. Audiometric tests will be conducted periodically for the employees working close to the high noise sources.

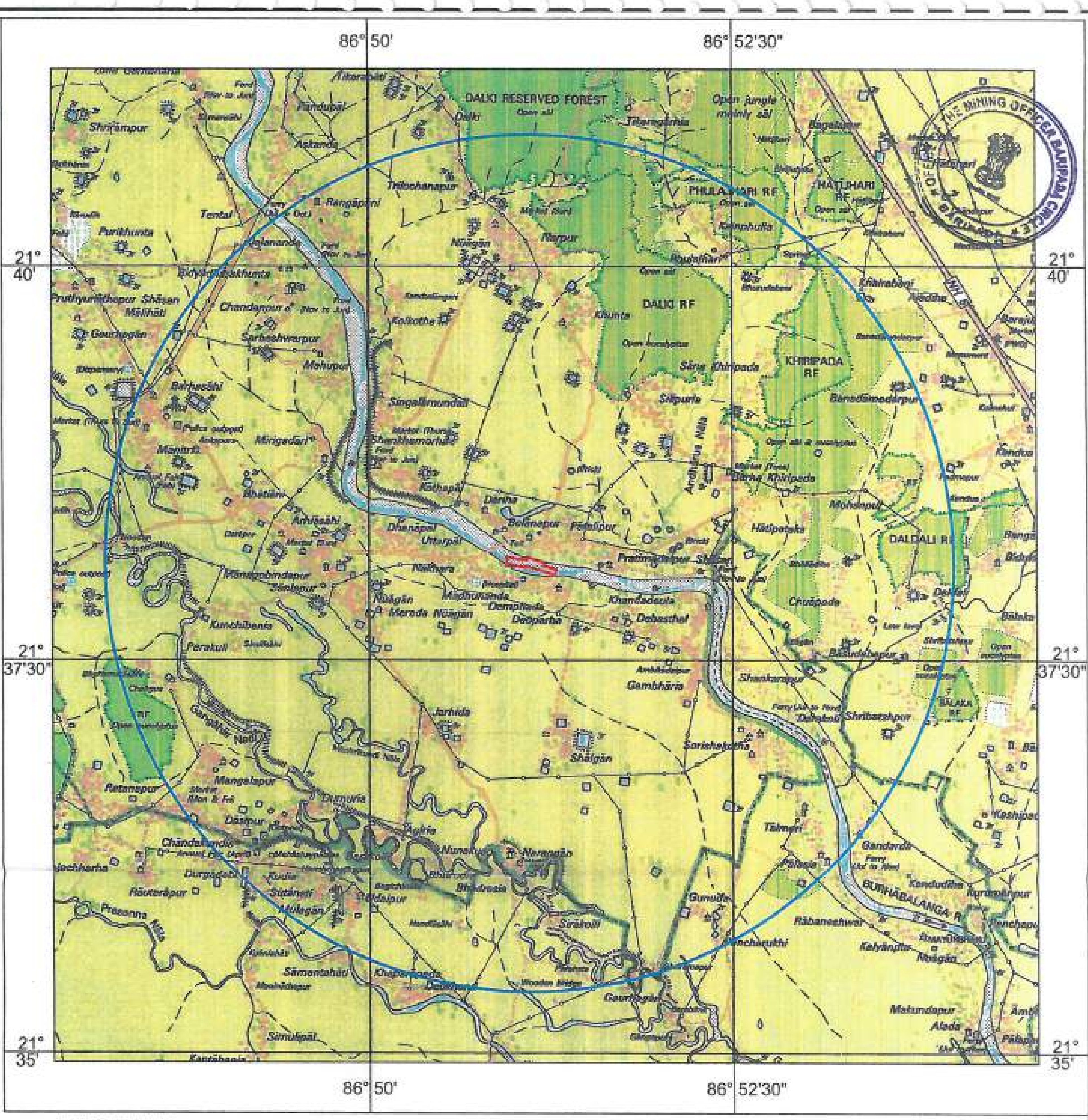
Reporting schedules of the reporting data

It is proposed that voluntary reporting of environmental performance with reference to the EMP will be undertaken.

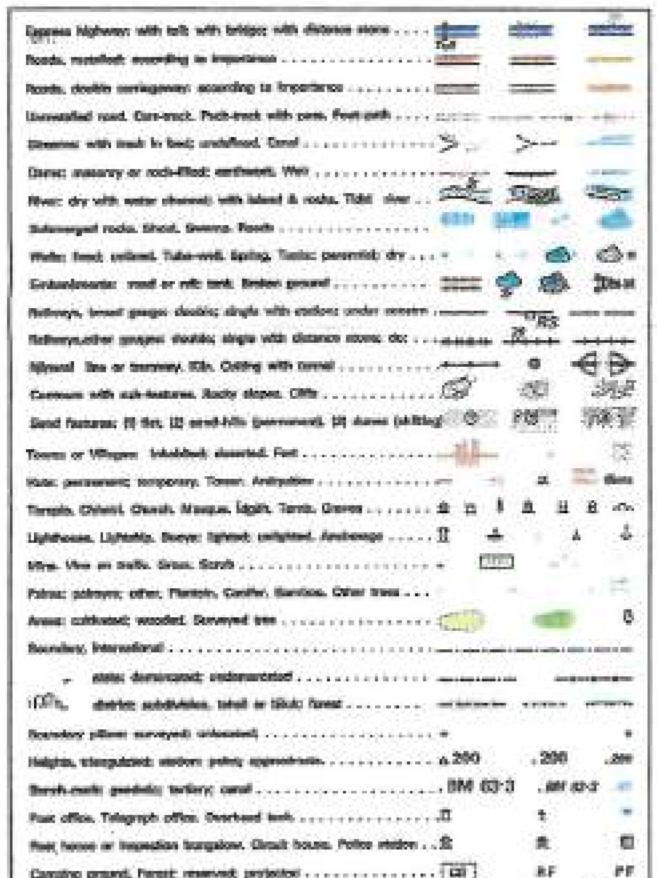
The Environmental Monitoring Cell will co-ordinate all monitoring programs at site and data thus generated will be regularly furnished to the State regulatory agencies/ State Pollution Control Board at the frequency of six month. The Environmental audit reports will be prepared for the entire year of operations and will be regularly submitted to regulatory authorities.

16 SUMMARY

As per above discussion there is no major impact on the environment due to mining except fugitive emission in the form of dust generated during handling and loading of mineral. The adequate preventive measures will be adopted to contain the various pollutants within permissible limits. Plantation development will be carried out in the mine premises, along the approach roads, around Govt. buildings, schools approx 50 trees per year. It will prove an effective pollution mitigate technique, and help avoid soil erosion during monsoon season. Employment opportunities will be provided to the locals as extraction of minerals from the mine site is an important prevailing occupation for them for their livelihood. A budget of Rs. 0.70 Lakhs for Occupational Health and Safety and budget of Rs. 1.75 Lakhs for EMP are proposed for each lease.



LEGEND



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LEASE AREA

5 KM RADIUS BOUNDARY

REFERENCE TOPOSHEET NO 73 K/14

PLATE-1

BUDHABALANGA RIVER SAND BED - I

OVER AN AREA 12.33 ACRES OR 4.989 HECTARES

IN VILLAGE DEMPHOUDA, BELANPURA & MADHUNANDA OF BETNOTI TAHASIL

OF MAYURBHANJ DISTRICT,ODISHA.

In favour of
Tahasildar, Betnoti,Mayurbhanj
Govt. of Odisha.

LOCATION PLAN

SCALE-1:50,000

THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE

APPROVED
23.11.2021
Mining Officer
Baripada Circle, Baripada

P.K. SAHOO
RQP/OD/025/2015

ଥାନା : ବଇଶିଙ୍ଗା

ଥାନା ନଂ :

ତହସିଲ : ବେତନତୀ

ଜିଲ୍ଲା : ମୟୂରଭଞ୍ଜ

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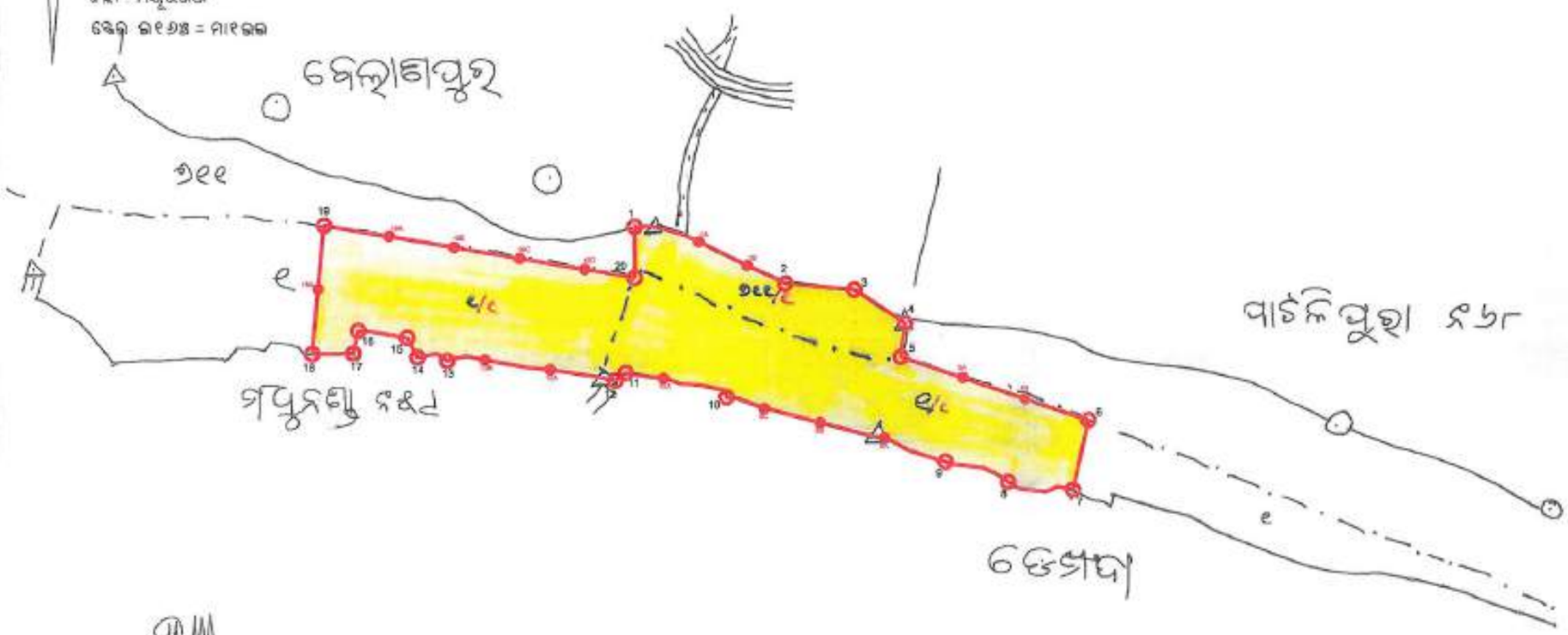

Revenue Inspector
Patalipura

CO-ORDINATE OF BOUNDARY PILLARS

PILLAR NO	LATITUDE	LONGITUDE
1	21°38'08.5"	86°51'08.2"
2	21°38'07.1"	86°51'12.3"
3	21°38'06.9"	86°51'14.1"
4	21°38'06.1"	86°51'15.5"
5	21°38'05.2"	86°51'15.4"
6	21°38'03.7"	86°51'20.5"
7	21°38'01.9"	86°51'20.0"
8	21°38'02.1"	86°51'18.2"
9	21°38'02.7"	86°51'16.6"
10	21°38'04.2"	86°51'10.9"
11	21°38'04.9"	86°51'08.1"
12	21°38'04.7"	86°51'07.9"
13	21°38'05.2"	86°51'03.3"
14	21°38'05.3"	86°51'02.5"
15	21°38'05.8"	86°51'02.3"
16	21°38'05.9"	86°51'01.0"
17	21°38'05.3"	86°51'00.9"
18	21°38'05.3"	86°51'00.0"
19	21°38'08.5"	86°51'00.1"
20	21°38'07.6"	86°51'08.0"

APPROVED
20.11.2021
Mining Officer
Baripada Circle, Baripada

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LEASE AREA

PLOT WITH NO.

PLATE-II

BUDHABALANGA RIVER SAND BED - I

OVER AN AREA 12.33 ACRES OR 4.989 HECTARES

IN VILLAGE DEMPHOUDA, BELANPURA & MADHUNANDA OF BETNOTI TAHASIL OF MAYURBHANJ DISTRICT,ODISHA.

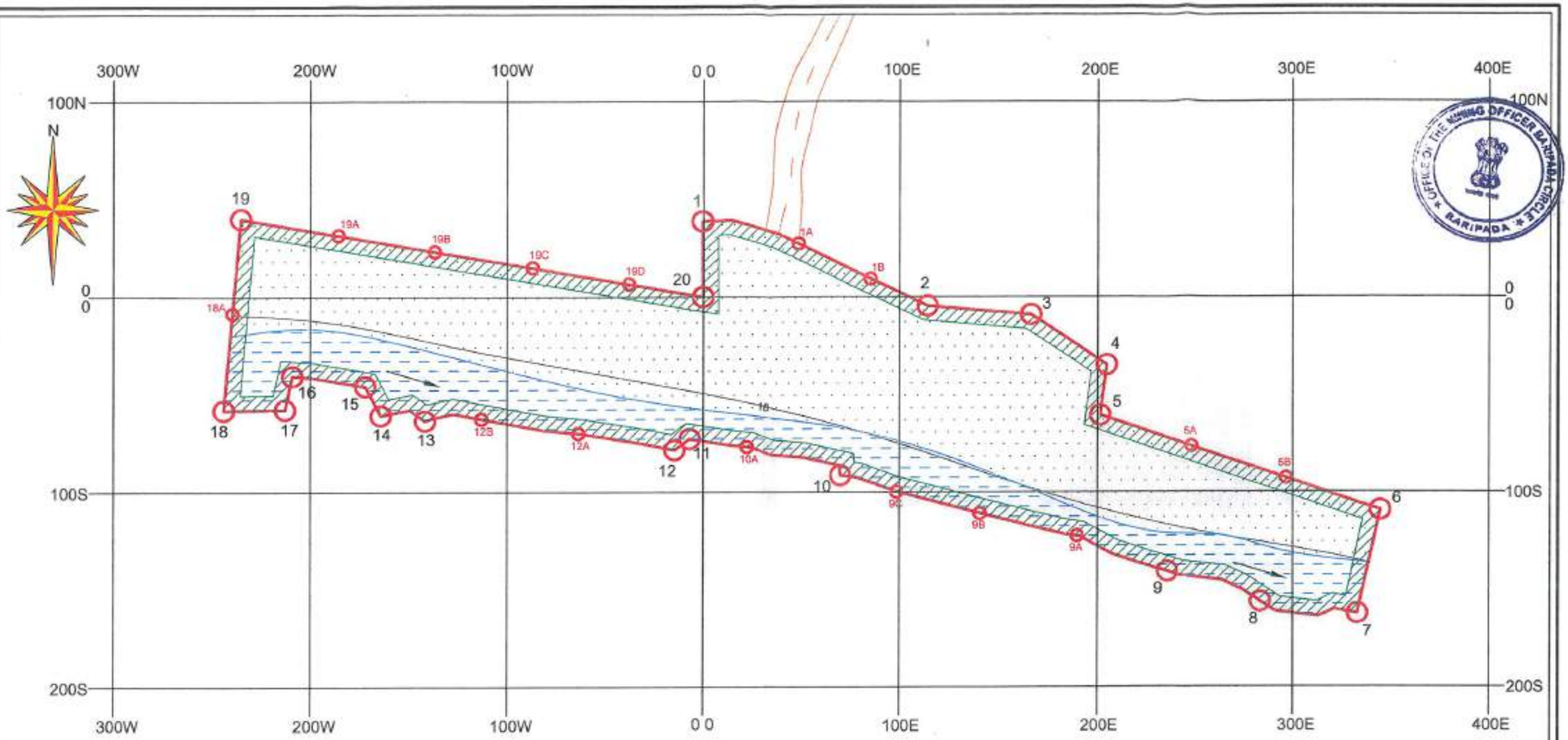
In favour of
Tahasildar, Betnoti,Mayurbhanj
Govt. of Odisha.

LEASE PLAN

SCALE-16"=1MILE

THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE

P.K. SAHOO
RQP/ODI/025/2015



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- CONTOUR (18)
- SAND
- WATER WITH FLOW DIRECTION
- ROAD
- SAFETY ZONE

APPROVED
13.11.2021
Mining Officer
Baripada Circle, Baripada

PLATE-IV

BUDHABALANGA RIVER SAND BED - I

OVER AN AREA 12.33 ACRES OR 4.989 HECTARES
IN VILLAGE DEMPHOUDA, BELANPURA & MADHUNANDA OF BETNOTI TAHASIL OF MAYURBHANJ DISTRICT,ODISHA.

In favour of
Tahasildar, Betnoti,Mayurbhanj
Govt. of Odisha.

GEOLOGICAL PLAN

SCALE-1:2000

THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE

P.K. SAHOO
RQP/OD/025/2015

300W 200W 100W 0 0 100E 200E 300E 400E

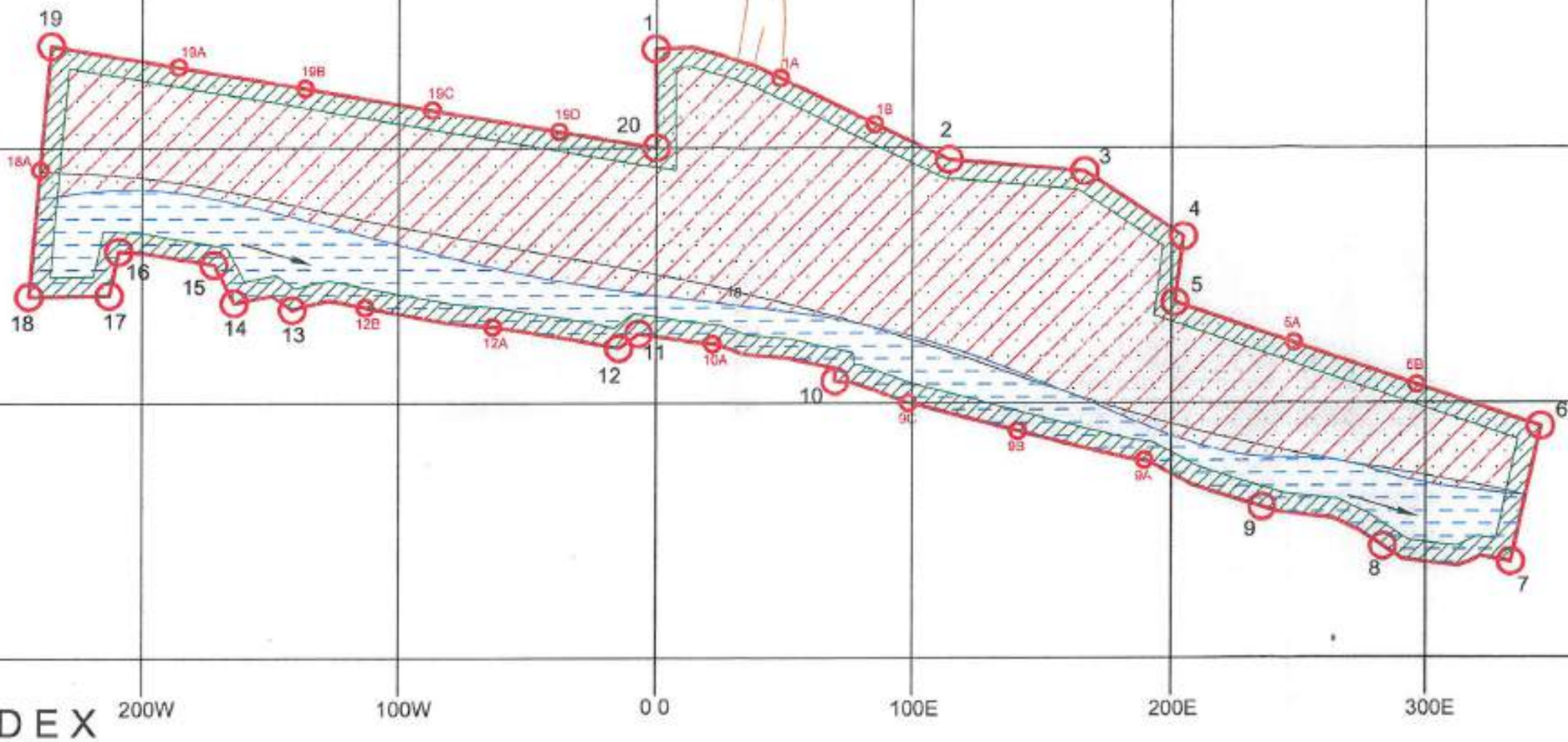
100N

100S

200S

0 0

N



OFFICE OF THE MINING OFFICER BARIPADA CIRCLE * BARIPADA *

INDEX

- LEASE AREA
- CONTOUR (18)
- SAND
- PROPOSED QUARRY
- WATER WITH FLOW DIRECTION
- ROAD
- SAFETY ZONE

APPROVED
23.11.2021
Mining Officer
Baripada Circle, Baripada

PLATE-V

BUDHABALANGA RIVER SAND BED - I

OVER AN AREA 12.33 ACRES OR 4.989 HECTARES
IN VILLAGE DEMPHOUDA, BELANPURA & MADHUNANDA OF BETNOTI TAHASIL OF MAYURBHANJ DISTRICT,ODISHA.

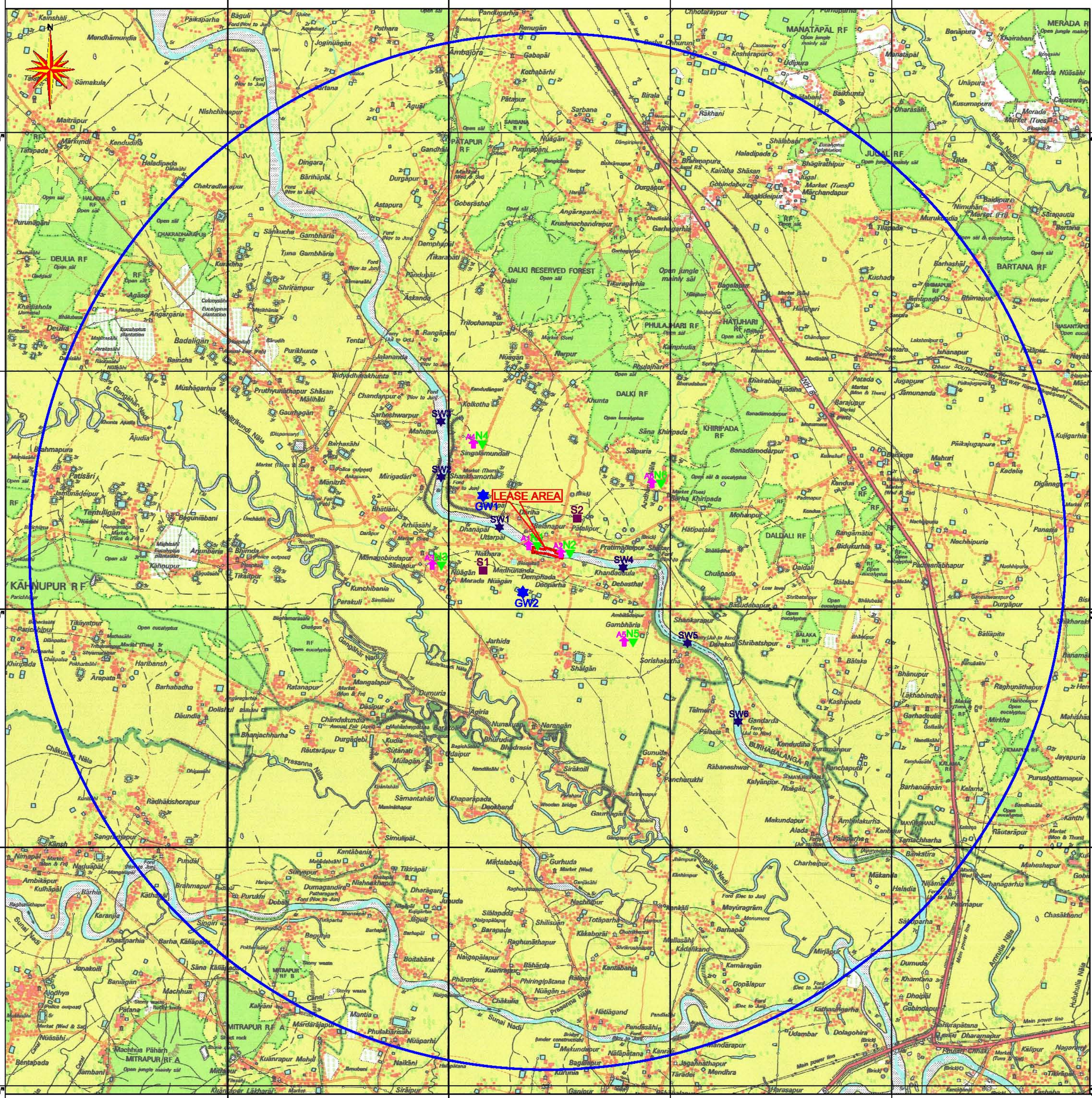
In favour of
Tahasildar, Betnoti,Mayurbhanj
Govt. of Odisha.

DEVELOPMENT PLAN

SCALE-1:2000

THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE

P.K. SAHOO
RQP/OD/025/2015



LEGEND

Expressway highway: with toll; with bridge; with distance stone
Roads, metalled: according to importance
Roads, double carriageway: according to importance
Unmetalled road. Cart-track. Pack-track with pass. Foot-path
Streams: with track in bed; undefined. Canal
Dams: masonry or rock-filled; earthwork. Weir
River: dry with water channel; with island & rocks. Tidal river
Submerged rocks. Shoal. Swamp. Reeds
Wells: lined; unlined. Tube-well. Spring. Tanks: perennial; dry
Embankments: road or rail; tank. Broken ground
Railways, broad gauge: double; single with station; under constrn
Railways,other gauges: double; single with distance stone; do;
Mineral line or tramway. Kiln. Cutting with tunnel
Contours with sub-features. Rocky slopes. Cliffs
Sand features: (1) flat. (2) sand-hills (permanent). (3) dunes (shifting)
Towns or Villages: inhabited; deserted. Fort
Huts: permanent; temporary. Tower. Antiquities
Temple. Chhatri. Church. Mosque. Idgah. Tomb. Graves
Lighthouse. Lightship. Buoys: lighted; unlighted. Anchorage
Mine. Vine on trellis. Grass. Scrub
Palms: palmyra; other. Plantain. Conifer. Bamboo. Other trees
Areas: cultivated; wooded. Surveyed tree
Boundary, international
" state: demarcated; undemarcated
" district; subdivision, tahsil or taluk; forest
Boundary pillars: surveyed; unlocated:
Heights, triangulated: station; point; approximate. △ 200 . 200 .200
Bench-mark: geodetic; tertiary; canal . . . BM 63·3 .BM 63-3
Post office. Telegraph office. Overhead tank.
Rest house or Inspection bungalow. Circuit house. Police station
Camping ground. Forest: reserved; protected . . . CG RF PF
Spaced names: administrative; locality or tribal . . . KIKRI NAGA
Hospital. Dispensary. Veterinary Hospital / Dispensary
Aerodrome. Helipad. Tourist site
Power line: with pylons surveyed; with poles unsurveyed

INDEX

LEASE AREA

10 KM RADIUS BOUNDARY

SAMPLE MONITORING STATIONS

AIR MONITORING STATIONS

NOISE MONITORING STATIONS

GROUND WATER MONITORING STATIONS

SOIL SAMPLE MONITORING STATIONS

SURFACE WATER MONITORING STATIONS

REFERENCE TOPOSHEET NO 73 K/14

BUDHABALANGA RIVER SAND BED - I

OVER AN AREA 12.33 ACRES OR 4.989 HECTARES

IN VILLAGE DEMPHOUDA, BELANPURA & MADHUNANDA OF BETNOTI TAHASIL OF MAYURBHANJ DISTRICT,ODISHA.

In favour of
Tahasildar, Betnoti,Mayurbhanj
Govt. of Odisha.

SAMPLE LOCATION PLAN

SCALE-1:50,000

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

(FOR PLANNING & EXPLOITING OF MINOR MINERAL RESOURCES)

As per Notification No. S.O. 3611(E) New Delhi
dated 25th July 2018 of
Ministry of Environment, Forest & Climate Change
(MoEF & CC)

(Prepared by DEIAA, Mayurbhanj, Odisha)

CONTENT

PREAMBLE

Odisha is the major mineral reach in India. Mayurbhanj is a unique district in Odisha lies on the northern most part of the state with varied mineral resources. In pursuance of the order of Hon'ble Supreme Court Petition (C) No. 19628-19629 of 2009, dated 27th Feb. 2012 in the matter of Deepak Kumar Vs State of Haryana and others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of Mining Lease. And also in view of the Hon'ble National Green Tribunal, order dated the 13th Jan. 2015 the matter regarding Sand, Brick earth, & burrowed earth cutting for Road Construction has to take prior E.C. for Mining Lease area more or less than 5 hectares also suggested making a policy on E.C for minor minerals lease in cluster. As per MOEF & CC Notification S.O.-1533(E) dated 14th Sept. 2006 and subsequent MoEF & CC Notification S.O. 141(E) dated 15th Jan. 2016, District Environment Impact Assessment Authority (DEIAA) & District level Expert Appraisal Committee (DEAC) has been formed for Category –B2 Minor Minerals having area less than or equal to 5 ha. 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 river sand mining has been prepared in accordance with Clause II of Appendix X of the notification.

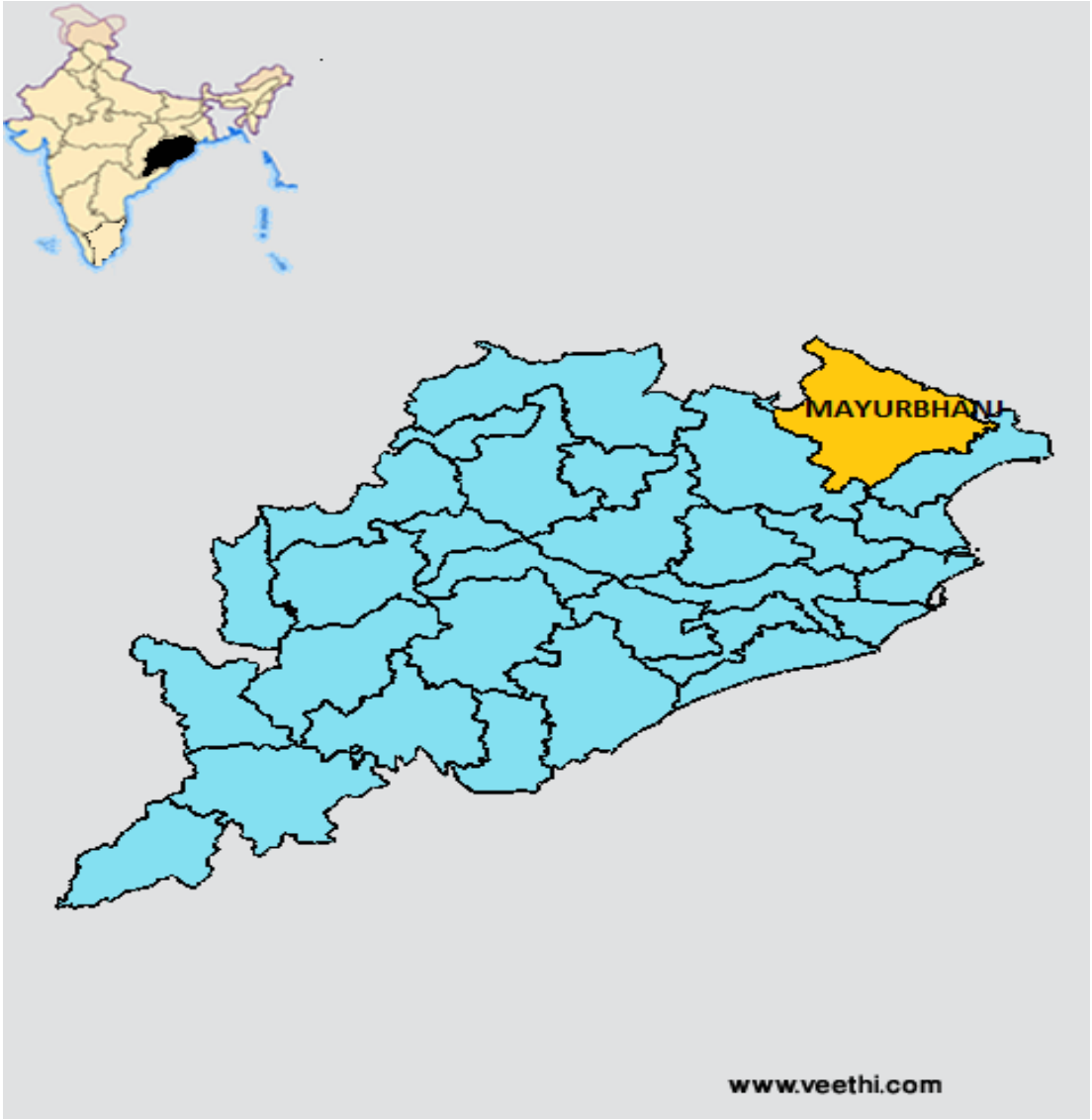
Keeping in view of the prior information of Odisha Minor Mineral Concession Rule 2004, (OMMCR -2004) the mining operation for minor mineral were carried out in unscientific manner. Identifying this fact in exercise of power, Conferred by Section 15 by Mines and Minerals (Development and Regulation) Act 1957 as amended in 2015 and all other powers enabling it in that behalf, the Mining & Geology Department, Govt. of Odisha framed the aforementioned rule. Further, this report will act as a compendium of available mineral resources, geological set up, environmental and ecological set up of the district and based on data of various departments like Revenue, Water Resources, Forest, Geology and Mining in the district as well as statistical data uploaded by various state Government departments for preparation for district survey report.

1. INTRODUCTION

Mayurbhanj at a Glance:

1.1 Location and Geographical Area:

Mayurbhanj district is the largest among the thirty districts of Odisha and Baripada is the District head quarter, spreading over an area of 10,418 sq.km lies between latitudes 21° 17′ North and 22° 34′ North and longitudes 85°40′ East and 87°10′ East. It is bounded on the north by the Singhbhum district of Jharkhand and Midnapore district of West Bengal, on the south by the districts of Mayurbhanj and Keonjhar, on the east by the Midnapore and Mayurbhanj districts and on the west by the districts of Keonjhar and Singhbhum. Mayurbhanj occupies a unique position being endowed with lush green vegetation, different fauna & flora and rich cultural heritage. The district has a rich mineral base and is home to the Similipal Biosphere. Iron-ore (hematite), vanadiferous and titaniferous magnetic, chaina clay, galena (lead ore), Kyanite, asbestos, steatite (soap stone) and quartzite constitute the principal mineral resources of Mayurbhanj district, of these the iron-ore deposits of Gorumahisani, Badampahar and Suleipat, which have been exploited for a period of about half a century, deserve special mention.



1.2 Administrative Units:-

Baripada is the administrative headquarter of Mayurbhanj district. It is located at a distance of 263 km from Bhubaneswar, state capital of Odisha. In order of size, the district is the largest among the thirty districts of Odisha. It has 3980 villages (including 178 uninhabited villages) covering 26 Blocks, 26 Tahasils and 4 Sub-Divisions. The district is divided into 4 Sub-Divisions namely 1) Sadar Sub-Division Baripada, 2) Kaptipada Sub-Division Udala, 3) Bamanghaty Sub-Division, Rairangpur, 4) Panchapir Sub-Division, Karanjia which are given below:-

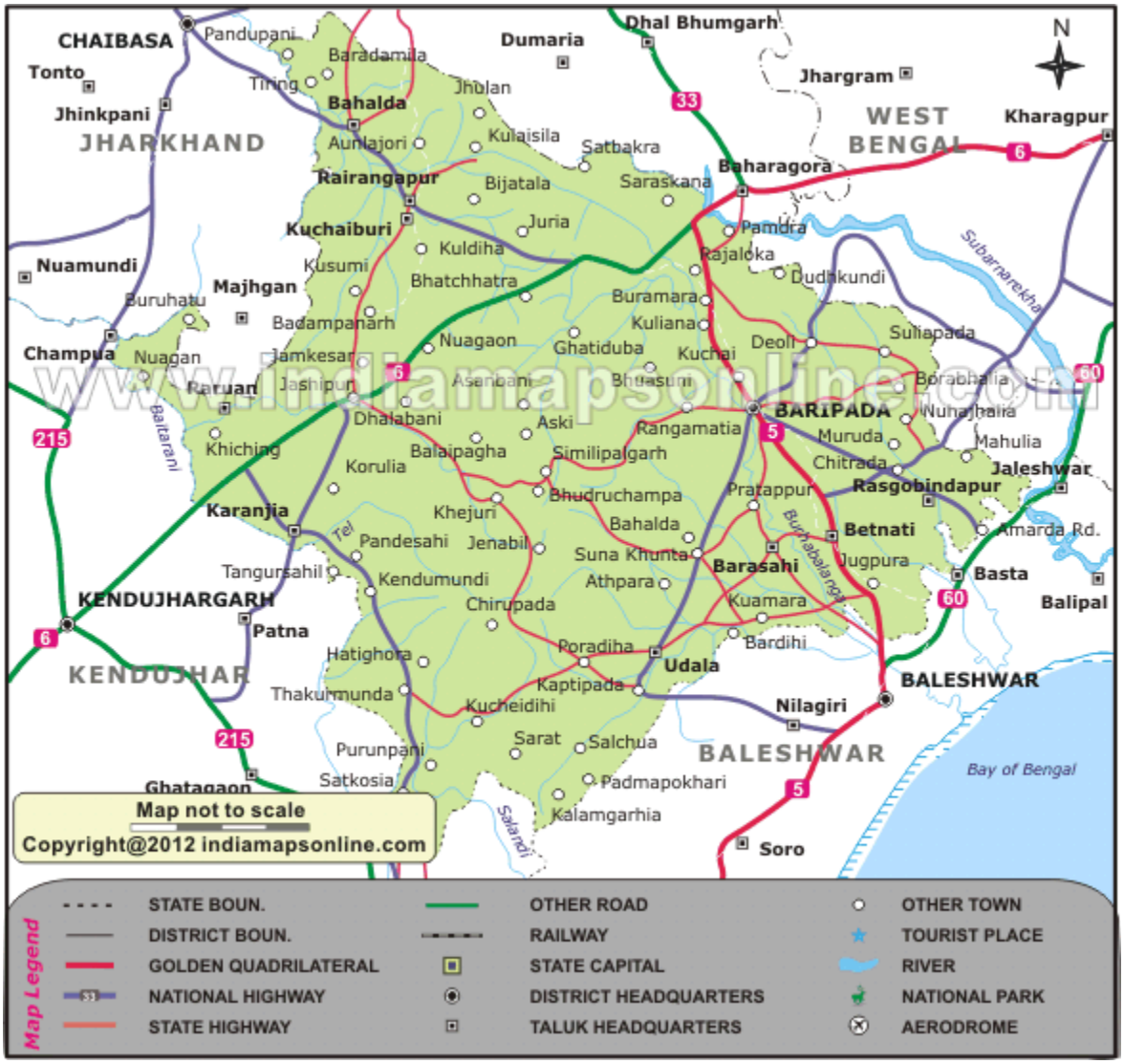
Sl No	Name of the Block/Tehsil	Name of the Sub-Division with Head quarter
1	Baripada	Sadar Sub-Division, Baripada
2	Samakhunta	
3	Kuliana	
4	Bangriposi	
5	Saraskana	
6	Suliapada	
7	Betnoti	
8	Badsahi	
9	Rasgovindpur	
10	Moroda	
11	Udala	Kaptipada Sub-Division, Udala
12	Kaptipada	
13	Khunta	
14	Gapabandhu Nagar	
15	Rairangpur	Bamanghaty Sub-Division, Rairangpur
16	Bisoi	
17	Bijatala	
18	Kusumi	
19	Bahalda	
20	Tiring	Bamanghaty Sub-Division, Rairangpur
21	Jamda	
22	Karanjia	Panchpir Sub-Division, Karanjia
23	Jashipur	
24	Sukruli	
25	Thakurmunda	
26	Raruan	

The population of the district 25,19,738 according to the 2011 Census. The district accounts for 6.69% of the state's territory and about 6% of state's population. The density of population of the district is 242 per square km as against 270 per square km of the state. As per 2011 census, the population of Scheduled Caste is 1,84,682 (7.30%), that of Scheduled Tribe is 14,79,576 (58.7%). The literacy percentage of the district covers 63.2 against 72.9 of the state.

1.3 Connectivity facilities:-

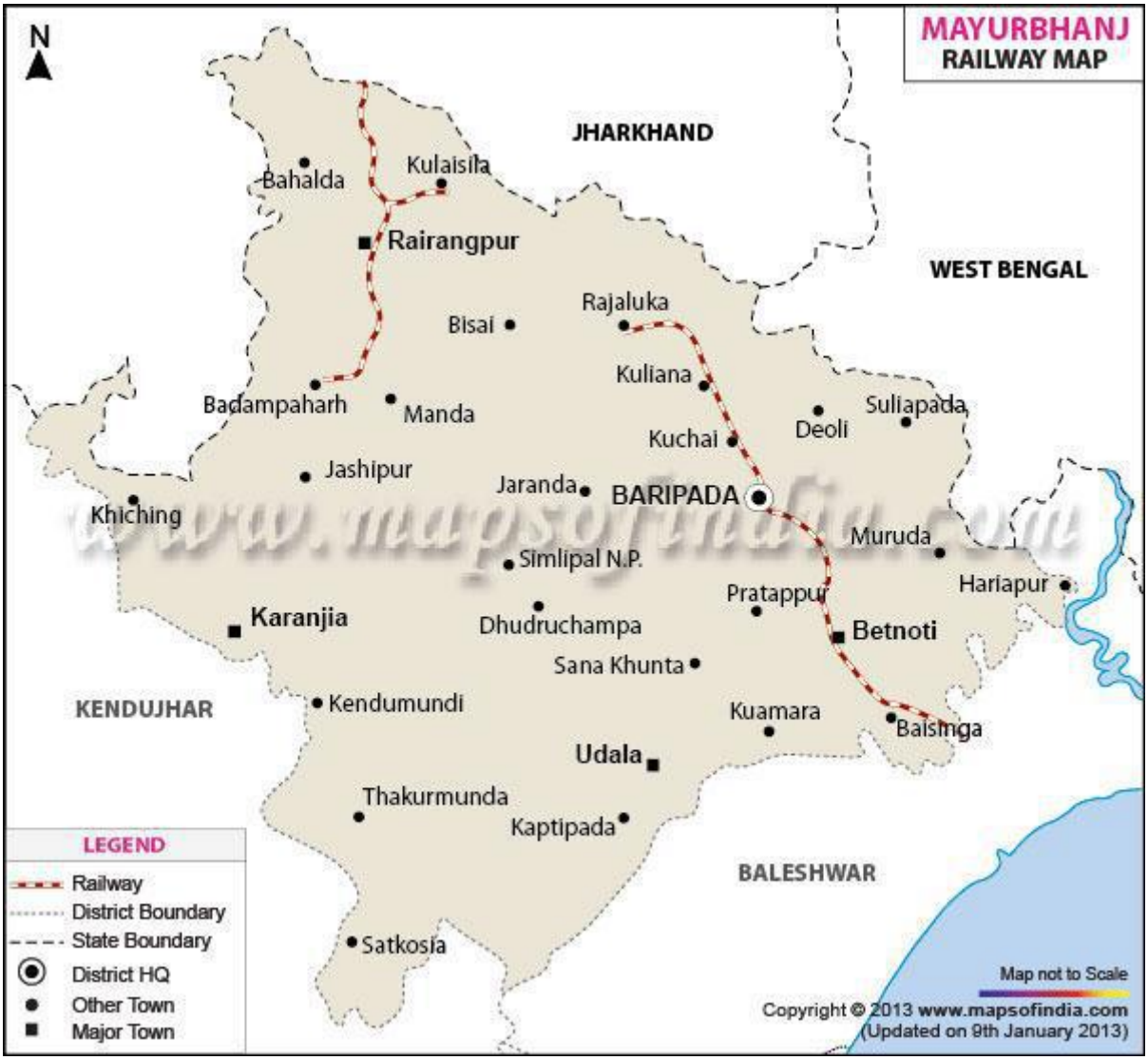
Road Network

The district is well served by a network of good roads and has been called the motorists paradise. The chief roads emanating from Mayurbhanj town are NH-18 and NH-49 passes the district. Baripada is 60 Kms from Mayurbhanj, 103 Kms from Kharagpur, 163 Kms from Jamshedpur, 231 Kms from Cuttack, 255 Kms from Bhubaneswar and 368 Kms from Rourkela. It is also connected with other cities such as Sambalpur, Puri, Bolangir, Bhadrak, Jhargram, Angul, Ranchi and Kolkata via Odisha State Road Transport Corporation and some private travel services.



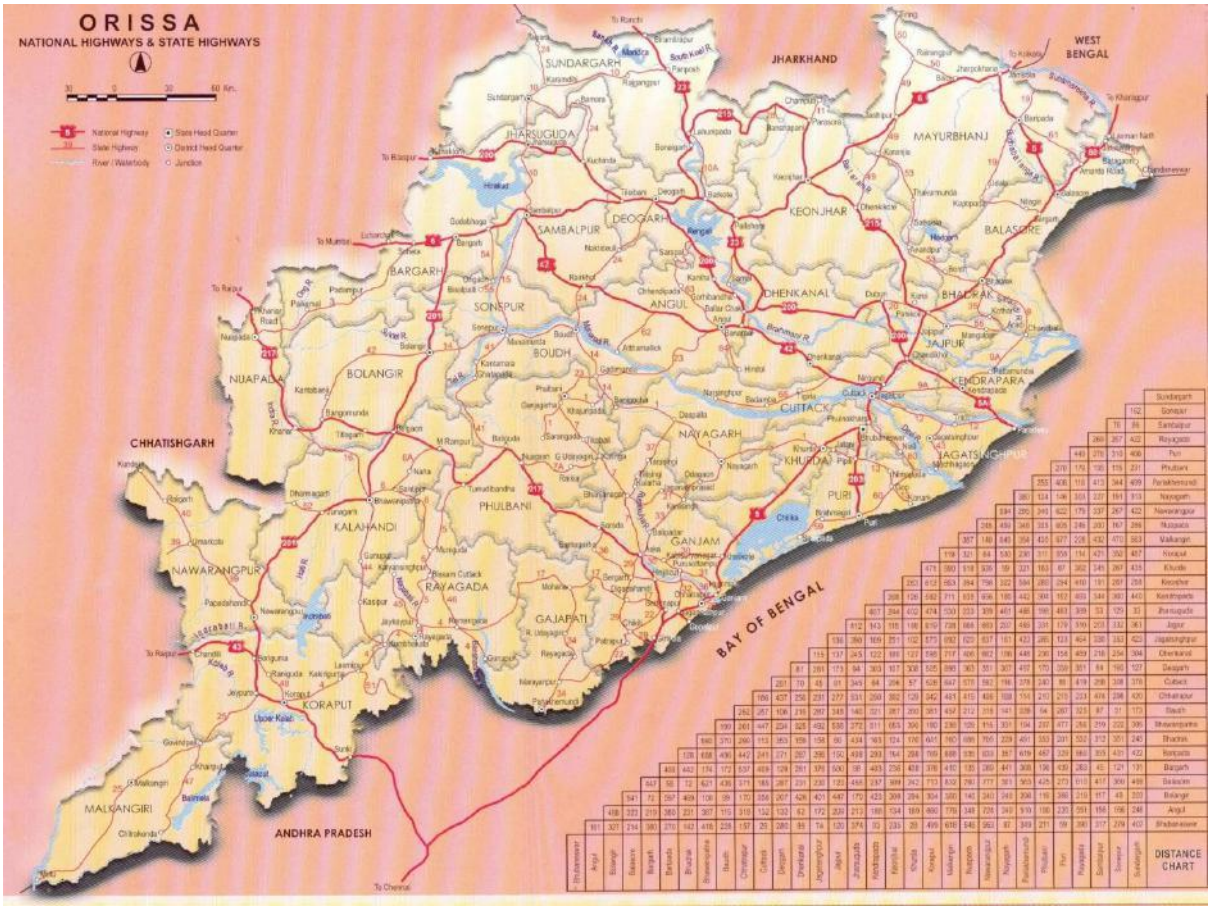
Rail Network

Mayurbhanj district is well connected by rail link to different places, the city of Baripada is well connected to many places in India like Mayurbhanj, Bhubaneswar, Kolkata, Jamshedpur and Cuttack,



Air Network

At present, Mayurbhanj has no connection by airway. The site selection for aerodrome is presently under process. Nearest aerodrome is Dum Dum Airport (International Airport) Kolkata, roughly 195 Kms from Baripada. The other nearest airport to Baripada is Biju Patnaik Airport, Bhubaneshwar, 207 Kms from Baripada.



2. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT:

Mayurbhanj district is land features of both plain and hilly region. Most of the mineralized area coming under safety zone eco-sensitive zone, mining activity only confined out of safety zone of eco-sensitive zone. The mining activity in the district is not only restricted to minor minerals i.e. of sand, stone, granite and brick clays. Altogether there are leases of Iron-ore (hematite), vanadiferous and titaniferous magnetic, chaina clay, galena (lead ore), Kyanite, asbestos, steatite (soap stone) and quartzite constitute the principal mineral resources of Mayurbhanj district, of these the iron-ore deposits of Gorumahisani, Badampahar and Suleipat, which have been exploited for a period of about half a century. Stone, granite and sand which has been granted to the district is regulated as per minerals concession rules of Odisha. There is no lease of major mineral in the district. At present Leases of stone, sand and bricks making units are operational in the district. Stone chips, granite stones, ordinary sand constitute the principal mining activity of Bangirposi, Badasahi, Kaptipada, Kuliana area etc. of Mayurbhanj district. Out of these huge granite stones

deposits are available near Badasahi, Kaptipada, Kuliana area and major potential sand in G.B Nagar, Morda & Kaptipada area of the district, which have been provides tremendous scope for development of few more industries based on this resources.

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

3.1 List of Mines is operation in the district:

Attached as **Annexure- A**

3.2 List of Mines is not operation in the district:

Attached as **Annexure- A**

4.0 DETAIL OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS:

Sl. No.	Name of the Tahasil	2016-17	2017-18	2018-19	Total Amount (Rs.)
1	Baripada	1422000	1750755	1690360	**4863115**
2	Samakhunta	0	716850	729525	**1446375**
3	Kuliana	1210950	1266900	1307560	**3785410**
4	Bangriposi	103837	114599	415161	**633597**
5	Saraskana	120000	1965000	3984000	**6069000**
6	Suliapada	0	493830	493830	**987660**
7	Betnoti	353220	286020	311640	**950880**
8	Badsahi	2552040	7213519	8423062	**18188621**
9	Rasagovindpur	1115942	1147507	1034686	**3298135**
10	Morada	1134050	1929745	2316122	**5379917**
11	Udala	855581	1263983	2488855	**4608419**
12	Kaptipada	2395160	2339100	2408540	**7142800**
13	Khunta	0	0	0	**0**
14	G.B Nagar	3675224	3113182	3185832	**9974238**
15	Rairangpur	228800	811109	1463127	**2503036**
16	Bisoi	0	0	0	**0**
17	Bijatala	0	0	0	**0**
18	Kusumi	345900	512100	539400	**1397400**
19	Bahalda	290550	324400	334950	**949900**
20	Tiring	0	521612	591612	**1113224**
21	Jamda	272000	304400	918455	**1494855**
22	Karanjia	3071372	3088130	1095130	**7254632**

23	Jashipur	0	0	0	**0**
24	Sukruli	938378	2456861	2950829	**6346068**
25	Thakurmunda	60480	65520	70560	**196560**
26	Raruan	23555	315521	1087664	**1426740**
Grand Total		**20169039**	**32000643**	**37840900**	**90010582**

5.0 DETAILS OF PRODUCTION SAND OR BAJRI OR MINOR MINERAL IN LAST THREE YEARS:

Details of Production in Cum:

Sl. No.	Name of the Tahasil	2016-17	2017-18	2018-19	Total in Cum.
1	Baripada	16845	25500	26626	**68971**
2	Samakhunta	0	5050	5150	**10200**
3	Kuliana	14470	14715	14924	**44109**
4	Bangriposi	3000	3250	28278	**34528**
5	Saraskana	4000	7000	7200	**18200**
6	Suliapada	0	930	930	**1860**
7	Betnoti	6410	10810	11420	**28640**
8	Badsahi	17777	26400	34165	**78342**
9	Rasagovindpur	19269	19545	19878	**58692**
10	Morada	26275	35407	36607	**98289**
11	Udala	19430	27356.80	45559	**92345.80**
12	Kaptipada	40841	41340	42439	**124620**
13	Khunta	0	0	0	**0**
14	G.B Nagar	55095	57530	59280	**171905**
15	Rairangpur	4400	10441	18509	**33350**
16	Bisoi	0	0	0	**0**
17	Bijatala	0	0	0	**0**
18	Kusumi	10100	10500	11000	**31600**
19	Bahalda	7450	8960	9250	**25660**
20	Tiring	0	14903.20	16903.20	**31806.40**
21	Jamda	864	6808	8849	**16521**
22	Karanjia	24860	24860	13860	**63580**
23	Jashipur	0	0	0	**0**
24	Sukruli	21252	20552	25560.50	**67364.50**
25	Thakurmunda	1440	1560	2280	**5280**
26	Raruan	1587	16067.537	18795.739	**36450.276**
Grand Total		**295365**	**389485.537**	**457463.439**	**1142313.976**

6.0 PROCESS OF DEPOSITION OF SAND OR BAJRI OR MINOR MINERAL IN LAST THREE YEARS:

Sl. No.	Name of the River	Financial Year	Process of Deposition of Sediments	Volume of Sand deposited in last three years
1	Budhabalanga	2016-17	moderate	1,38,755
		2017-18	---do---	1,85,568
		2018-19	---do---	2,71,041
Total Volume of Sand in three years				**5,95,364**
2	Subarnarekha	2016-17	moderate	90,000
		2017-18	---do---	1,12,500
		2018-19	---do---	1,17,000
Total Volume of Sand in three years				**3,19,500**
3	Jambhira	2016-17	moderate	1,02,474
		2017-18	---do---	1,25,734
		2018-19	---do---	1,29,183
Total Volume of Sand in three years				**3,57,391**
4	Sona	2016-17	moderate	2,59,573
		2017-18	---do---	2,84,008
		2018-19	---do---	2,31,375
Total Volume of Sand in three years				**7,74,956**
5	Khadkhai	2016-17	moderate	17,752
		2017-18	---do---	77,184
		2018-19	---do---	1,00,489
Total Volume of Sand in three years				**1,95,425**
6	Khairibandhan	2016-17	Slow	14,448
		2017-18	---do---	16,325
		2018-19	---do---	15,781
Total Volume of Sand in three years				**46,554**
7	Deo	2016-17	Slow	----
		2017-18	---do---	----
		2018-19	---do---	----
Total Volume of Sand in three years				
8	Katra	2016-17	Slow	7,500
		2017-18	---do---	8,125
		2018-19	---do---	6,325
Total Volume of Sand in three years				**21,950**
9	Gangahar	2016-17	Slow	1,243
		2017-18	---do---	1,008
		2018-19	---do---	1,185
Total Volume of Sand in three years				**3,436**
10	Baitarani	2016-17	moderate	55,935
		2017-18	---do---	55,935

		2018-19	---do---	31,185
Total Volume of Sand in three years				**1,43,055**
11	Tel	2016-17	Slow	8,087
		2017-18	---do---	9,245
		2018-19	---do---	8,634
Total Volume of Sand in three years				**25,966**
12	Kantamauli	2016-17	Slow	1,869
		2017-18	---do---	2,051
		2018-19	---do---	1,645
Total Volume of Sand in three years				**5,565**
13	Sim	2016-17	Slow	7,897
		2017-18	---do---	6952
		2018-19	---do---	8245
Total Volume of Sand in three years				**23,094**
14	Kangira	2016-17	Slow	36,150
		2017-18	---do---	35,468
		2018-19	---do---	37,006
Total Volume of Sand in three years				**1,08,624**
15	Balijori	2016-17	Slow	----
		2017-18	---do---	----
		2018-19	---do---	----
Total Volume of Sand in three years				----
16	Kantakhaira	2016-17	Slow	21,326
		2017-18	---do---	20,547
		2018-19	---do---	21,389
Total Volume of Sand in three years				**63,262**
17	Kanhu	2016-17	Slow	15,084
		2017-18	---do---	15,318
		2018-19	---do---	19,910
Total Volume of Sand in three years				**50,312**
18	Balisudura	2016-17	Slow	7,500
		2017-18	---do---	6,764
		2018-19	---do---	7,681
Total Volume of Sand in three years				**21,945**
Grand Total				

7.0 GENERAL PROFILE OF THE DISTRICT:

7.1 Demography:

Census - 2011	
Geographical Area	10,418 Sq. Km.
Total population	25,19,738
Male Population	12,56,213
Female Population	12,63,525
Male Literacy	794,171
Female Literacy	575,226
SC Male	92,127
SC Female	92,555
ST Male	730,487
ST Female	749,089
OBC	855,480
Illiterate Male	462,042
Illiterate Female	688,299

7.2 Climate:

The climate in Mayurbhanj is warm and temperate. In winter, there is much less rainfall in Mayurbhanj than in summer. The general climate of the district is characterized by oppressive heat in summer, severe cold in winter with high humidity throughout the year. The rainfall distribution is equal during the monsoon period. The period from June to October is the rainy season and the district experiences it from the southwest monsoon. May is the hottest month when the mean daily maximum temperature rises up to 47° Celsius. The Köppen-Geiger climate classification is Cwa & as per they the average temperature in Mayurbhanj is 24.7 °C. The temperature in May averages 32.3 °C. January has the lowest average temperature of the year, it is 16.5 °C. There is a difference of 321 mm of precipitation between the driest and wettest months. During the year, the average temperatures vary by 15.8 °C., when the mean daily minimum temperature dips to 4º Celsius. The higher reaches of the Similipal experiences frosting during the peak of winter.

Source: Indian Meteorological Department

8.0 LAND UTILIZATION PATTERN IN THE DISTRICT

8.1 Forest and non forest land

The forest of Mayurbhanj district is full variety of medicinal plants, Kendu leaves, Bamboo, Sal, Teak, other timber species and a wide range of carnivorous & herbivorous wild animals. The district has one Wildlife Sanctuaries known as the Similipal Wildlife Sanctuary situated at the heart of the district, which hosts all type of wildlife even tigers. The area of the sanctuary is 26, 886.23 hectares. And two kilometer safety zone of eco-sensitive zone of Kuldiha Wildlife Sanctuary are coming in Mayurbhanj district. In these sanctuary areas the principal animals that are found are Elephant, Bear, Nilgai, Sambhar, Peacock, Wild Boar and Deer, together with variety of snakes and birds.

District-wise Forest Cover Area in Odisha (Area in Km^2)

2017 Assessment								
District	**Geographical Area Km^2**	**Very Dense Forest**	**Moder-ate. Dense Forest**	**Open Forest**	**Total**	**Percent of GA**	**Change**	**Scrub**
Angul	6375	371	1380	1004	2755	43.22	43	84
Bolangir	6575	70	224	837	1131	17.2	151	142
Balasore	3806	23	127	234	380	9.98	30	48
Bargarh	5837	176	371	484	1031	17.66	88	47
Bouda	3098	263	546	480	1289	41.61	27	57
Bhadrak	2505	0	9	66	75	2.99	2	0
Cuttack	3932	53	226	517	796	20.24	11	68
Deogarh	2940	191	667	614	1472	50.07	-3	14
Dhenkanal	4452	174	418	825	1417	31.83	9	82
Gajapati	4325	84	1490	946	2520	58.27	12	262
Ganjam	8206	164	1075	864	2103	25.63	15	655
Jagatsinghpur	1668	0	5	131	136	8.15	6	0
Jajpur	2899	6	72	225	303	10.45	3	50
Jharsugada	2114	3	140	179	322	15.23	9	36
Kalahandi	7920	362	729	1327	2418	30.53	36	362
Kandhamal	8021	661	2588	2143	5392	67.22	16	380
Kendrapada	2644	84	88	133	305	11.54	14	2
Keonjhar	8303	289	1404	1519	3212	38.68	4	55

Khorda	2813	21	186	250	457	16.25	0	92
Koraput	8807	94	740	1255	2089	23.72	120	944
Malkangiri	5791	158	709	1475	2342	40.44	20	45
Mayurbhanj	**10418**	**1335**	**1718**	**1027**	**4080**	**39.16**	**42**	**34**
Nabarangpur	5291	168	428	507	1103	20.85	8	47
Nayagarh	3890	189	965	556	1710	43.96	28	173
Nuapada	3852	86	482	705	1273	33.05	33	109
Puri	3479	0	54	160	214	6.15	8	11
Rayagada	7073	422	853	1851	3126	44.2	7	349
Sambalpur	6624	499	1675	1106	3280	49.52	13	40
Subarnapur	2337	2	187	161	350	14.98	26	29
Sundargarh	9712	1019	1814	1431	4264	43.9	107	89
Grand Total	**155707**	**6967**	**21730**	**23008**	**51345**	**32.98**	**885**	**4306**

(Source: India state of forest report 2017-Odisha)

The major portion of the district is covered by forest (39.16 % of TGA) and has scattered settlement pattern. The forest is full of variety of medicinal plants. The district has considerable flat land, which provide suitable site for agricultural use. The hilly areas are mostly under forest with patches of cultivation on scarp areas. Major crops grown in the district are rice and pulses. Only 14.82 percent area of agricultural use are net irrigated and major source of irrigations are well and tube wells.

Source: Fertilizer and Agriculture Statistics, Eastern Region

Tahasil	Forest Area	Misc Tree	Permanent Pasture	Cultivated waste	Non Agricultural uses	Barren land	Current Fallow	Other Fallow	Net area sown
Bahalda	964	471	1397	1262	2590	1900	875	944	14031
Bangiriposi	3712	281	1037	1688	3046	684	2054	922	16951
Baripada	216	6733	128	1628	1376	8	2752	2156	4219
Badasahi	288	1807	1194	1874	3840	24	3378	2110	17630
Betnoti	2271	911	1198	1728	3227	21	1915	578	17022
Bijatala	2841	224	681	3100	1792	1636	1214	600	11228
Bisoi	3116	471	757	2508	2193	459	2298	1643	15860
G.B.Nagar	191	116	683	582	1147	590	643	1209	10960
Jamda	408	100	1650	434	2060	785	840	1149	13608
Jashipur	8932	141	1389	2655	3637	400	3873	2634	17754
Kaptipada	8745	387	3292	5596	4123	2165	3123	4930	19932
Karanjia	1644	838	1444	2441	3065	462	3493	1362	16690
Khunta	400	2260	314	672	2061	21	1332	2213	12879

Kuliana	1749	1626	2222	1902	2529	608	4919	1504	11108
Kusumi	1434	32	2320	2679	2337	587	1086	1682	18032
Morada	993	4127	513	4340	1941	61	1909	3633	10179
Rairangpur	2260	107	1759	1373	2027	504	1276	631	9713
Raruan	1210	171	890	1120	1899	503	1609	1020	12818
Rasgovindpur	288	2145	665	1091	2774	142	2002	1537	10054
Shamakhunta	1354	764	1378	2472	1859	334	1861	941	6695
Saraskana	3464	275	689	2658	4042	115	1864	1837	15384
Sukruli	412	211	734	1295	1271	502	1286	1294	10352
Suliapada	2937	5535	97	2262	2148	86	1589	2906	8971
Thakurmunda	10885	96	1530	1438	2034	795	5317	2670	17681

8.2 Agriculture Land:

Mayurbhanj is surrounded by no of forest areas as well as Rocky Mountains. People used to cultivate Paddy in most parts of the hill slopes and in plain lands. Most of the cultivators grow short duration local paddy in the un-bonded upland during Kharif season. The crop suffers moisture stress at different stages due to inadequate rainfall. The primary objective of Agriculture Department is increase of production as well as productivity of major crops like paddy, groundnut, mustard, Mung, Biri & vegetables which is widely covered in this District in both Khariff & Rabi season. Another key objective is the all round development of the farming community of the District. The Deputy Director of Agriculture is the head of office so far as agriculture is concerned & he is the Principal Agriculture Officer of the District. Under him there are 5 District Agriculture Officers & the block under them. As already pointed out, that agriculture is the main livelihood of the people in Mayurbhanj District. It is therefore also designated as the food bowl of Odisha. Rice is the principal crop grown in this district, followed by other cereals, pulses, oilseeds, vegetables, spices and sugarcane. The agricultural statistics for the district is shown in subsequent tables below:

Table – 3.6a: Crop Coverage Area of Mayurbhanj District, Odisha

Crop	Khariff		Rabi		Annual	TOTAL	
	Area (ha)	(% of Cropped Area	Area (ha)	% of Cropped Area	Area (ha)	Gross Cropped Area (ha)	% of Gross Cropped Area
Rice	301.37	82.353%	3.80	4.015%	---	305.17	62.051%
Cereals	9.99	2.730%	2.17	2.293%	---	12.16	2.472%
Pulses	32.37	8.846%	36.20	38.255%	---	68.57	13.943%
Oilseeds	5.92	1.617%	28.30	29.906%	---	34.22	6.958%
Vegetables	12.39	3.386%	21.74	22.974%	---	34.13	6.940%
Fibres	2.43	0.664%			---	2.43	0.494%
Spices	1.48	0.404%	2.42	2.557%	---	3.90	0.792%
Sugarcane	---	---	00	---	---	00	---
Tobacco	---	---	00	---	---	00	---
Fruits	---	---	---	---	---	31.23	6.350%
TOTAL	**365.95**	**100.00%**	**94.63**	**100.00%**	**---**	**491.81**	**100.00%**

8.3 Horticulture Land:

The primary objective of Horticulture Department is increase of production as well as productivity of major fruits like Mango, Guava, Citrus etc., which is widely covered in this District. Another key objective is the all round development of the farming community of the District. The Deputy Director of Horticulture is the head of office.

9.0 PHYSIOGRAPHY OF THE DISTRICT:

Mayurbhanj district presents diverse physiographic features; Physiographically the study area can be divided into 3 categories. The first physiographic unit of the district is high mountain ranges, Similipal Complex being at its central part (Figure 1). The mountain ranges comprise mainly of highland plateau and valleys with intrusive

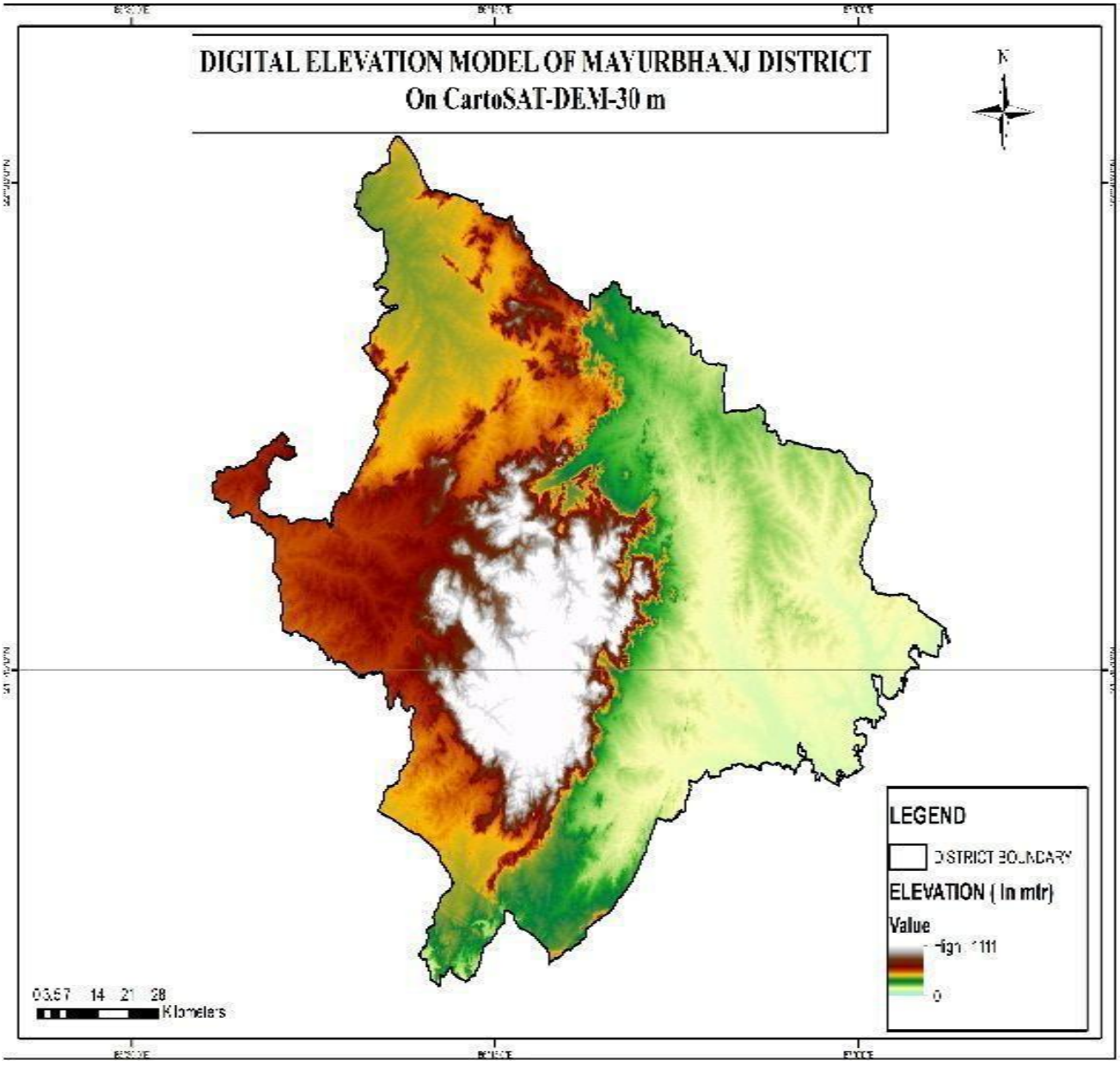
running through them. The second physiographic unit is Tertiary Plain occurring in the eastern part of the district. The third physiographic unit is Alluvial Plain which lies partly in Rasgobindpur, Morada, Samakhunta, Betnoti, Baripada, Badasahi and Suliapada blocks. The highest elevation about 1500m near similipal hill of the district, due to scarp landforms some waterfalls are observed in the district. The general slope of the district is from north to south. Geologically the area is

comprised with Archean granites and gneisses. Geomorphologically the district is divided into 3 units:

i) The denudational hills with moderate to high slope occurring in the western part of the district.

ii) Dissected pediments having gentle slope.

iii) Pediplain having slope between 0^{o} to 5^{o}.



RAINFALL OF THE DISTRICT AND CLIMATE CONDITION

10.1 Month wise rainfall:

The driest month is November, with 3 mm of rain. There is on average 0 mm of precipitation in December. In July, the precipitation reaches its peak, with an average of 324 mm. May is the warmest month of the year. The temperature in May averages 32.3 °C. January has the lowest average temperature of the year. It is 16.5 °C.

Year		2016	2017	2018	Average
Sl. No.	Month	(mm)	(mm)	(mm)	(mm)
1	Jan	9.23	2.71	0.00	3.98
2	Feb	52.61	0.00	0.04	17.55
3	Mar	12.29	44.87	0.72	19.29
4	Apr	22.38	23.36	172.10	72.61
5	May	118.73	139.31	125.30	127.78
6	Jun	195.46	169.39	208.83	191.22
7	Jul	245.28	385.31	300.05	310.21
8	Aug	351.25	291.03	371.30	337.86
9	Sep	285.27	170.11	285.17	246.85
10	Oct	85.39	189.09	154.08	142.85
11	Nov	12.10	34.79	0.00	15.63
12	Dec	0.00	1.80	36.69	12.83
Total		**1389.99**	**1451.77**	**1654.28**	**1498.68**

Source: Indian Meteorological Department

The Indian Meteorological Department, Bhubaneswar, vide letter No. BBS/RMC/CS-312, dated 18th January, 2016 has provided the period of Rainy Season viz. Normal dates of Onset and Withdrawal of South West Monsoon over India as state-wise. The duration for the period is 10th June to 15th October.

11.0 GEOLOGY AND MINERAL WEALTH OF THE DISTRICT:

11.1 Geology

Mayurbhanj is a unique district in Odisha with rich and varied geology. The major rock types encountered in the district are Granite Gneiss, Quartzite, Orthoquartzite, Arkose, Shale, Phyllite, Gabbro, Px-granite. The geology of the district is constituted by the Similipal complex at its central part belonging the Archaean age, unconformably lying over Singhbhum Granite and Banded Iron Formation (BIF). It

consists of three alternate bands of volcano sedimentary units uniquely disposed in a ring like circular pattern formed under sub-marine conditions. The sedimentary of Similipal mostly comprise of orthoquartzite, Arkoses and minor band of ferruginous shale and phyllite. The quartzites are devoid of any volcanic materials within it and exhibit well-preserved cross-bedding and palaeo-current structures indicating shallow water sub-marine origin. Important mineral resources include iron, copper, itanium, vanadium, chinaclay, nickel, kyanite, quartz, talc, steatite, soapstone and bauxite. Natural Emerald, green Beryl and opaque Beryl are reported to occur around Jaraguda, Pokharidiha, Bahadurpur,

11.2 Geomorphology:

Geomorphological features of Mayurbhanj district are mainly attributed to Similipal Complex being at its central part. The mountain ranges comprise mainly of highland plateau and valleys with intrusive running through them. The second physiographic unit is Tertiary Plain occurring in the eastern part of the district. The third physiographic unit is Alluvial Plain .The drainage density is observed to be fairly moderate and drainage pattern is dendritic in nature. It consists of three alternate bands of volcano sedimentary units uniquely disposed in a ring like circular pattern formed under sub- marine conditions. Baripada Beds outcrops of tertiary formation occur around Baripada town. These comprise stratified clay and sand with marly clay or limestone interbands. The alluvial plains owe their origin due to various fluviatile actions of major rivers. The details of the geomorphic unit as identified are as below:

11.3 Stratigraphy:

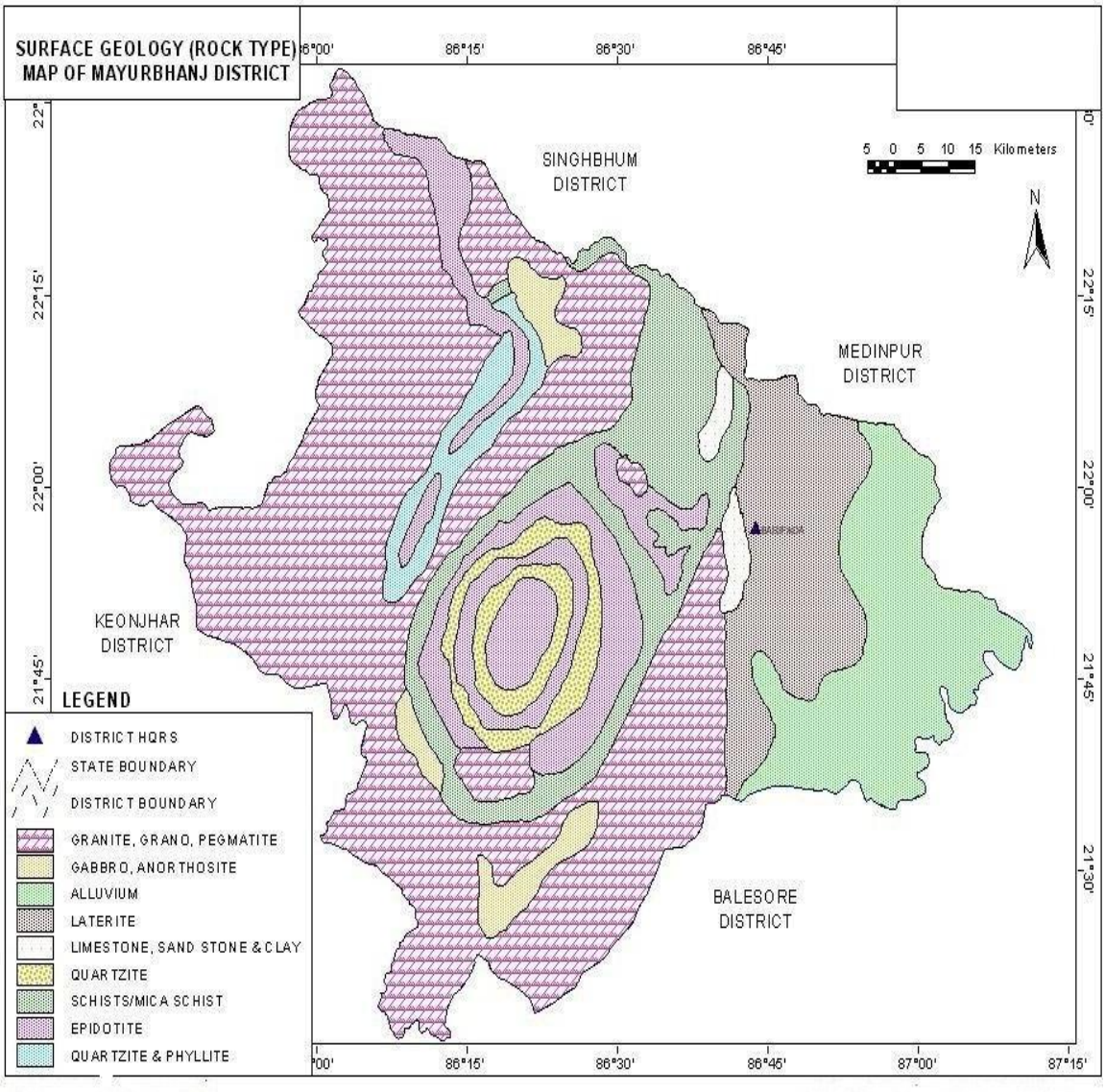
The study area comprises the following distinct geomorphic units:

i) Younger alluvial plain
ii) Older alluvial plain
iii) Lateritic upload

Geological Age	Geological Formation / Group
Quaternany	: Recent Alluvium, Clays, silt, Sand, Gravel
Tertiary	: Older Alluvium, Laterite, Baripada Beds.
Mesozoic/ Palaeozoic	: Volcanics / Epidiorite
Precambrian	: Slate/ Phyllite/ Schist / Gneiss
Archean	: Granite/ Granite Gneiss

11.4 Mineral Resources:

The earliest known geological survey in Mayurbhanj dates back to 1903, when P.N. Bose brought to light the extensive iron-ore deposits of high quantity on the Gorumahisani and Suleipat hills in Bamanghaty Sub-Division. These deposits were considered to be almost inexhaustible and were pronounced to be of excellent quality, perhaps second to none in the whole of Asia by the famous American and English experts like M/s Perin, Weld and Colonel Staddart, who visited these deposits during 1905-06. This discovery was a momentous one as the steel plant of the Tata Iron & Steel Co. at Jamshedpur was entirely based on the exploitation of these deposits. By 1915, important discoveries of Steatite near Lulung and placer gold from the sands of Subarnarekha, Kharkhai and Barhai rivers had been made. The placer gold deposits were being worked by M/s J.B. Bettie of Calcutta, Mr. V.G. Piggot of Ghatsila and the Mayurbhanj Prospecting Concession Syndicate.



Gold: The mid-Archaean Gorumahisani-Badampahar schist belt composed of basic ultrabasic, volcanic rocks and volcanogenic sediments. This belt has been prognosticated as a rift-type of volcanic dominated one and is highly potential for economic grade gold mineralization. Likely targets include: a) auriferous quartz veins close to the contact of sulphide chert volcanics, b) sheared and sulphidised Fe-rich tholeiite with anomalous copper, c) epigenetic vein type of mineralization and BIF volcanic association, and d) sulphidic conglomerate resting over the basic volcanics. Placer gold occurrences are known from rivers and stream of Mayurbhanj district. An area of about 5 square kilometers of alluvium at the headwaters of Sapgora and Borai rivers near Kudersai was indicated as promising.

Iron: Bose discovered iron ore deposits in Gorumahisani and Badampahar in the eastwhile princely state of Mayurbhanj (now Mayurbhanj District). Gorumahisani deposits were investigated by Perin & Weld (1905). Gorumahisani- Badampahar-Suleipat deposits are associated with banded hematite / magnetite grunerite and BHJ.

Gorumahisani – Badampahar- Suleipat (Broad geological sequence)

Laterite & Alluvium
Newer Dolerite
Gabhro-Anorthosite Granite
---Unconformity---
Ultramafic dyke
Singhbhum Granite
Banded magnetite/ Martite quartzite with Fe-Ores
Quartzite
Basal Conglomerate
----Unconformity----
Older metamorphic

Vanadium Ores & Titanium*:* Vanadium is an important alloying element. Magnetite associated with gabbro- anorthosite suite of rocks contains vanadium and titanium. Deposits of vanadium-magnetite occur in association with gabbro-Anorthosite suite of rocks in the precambrian metamorphites. Vanadium bearing magnetite belts are :-

(a) Rairangpur – Bisoi belt (Kumardubi, Betjharan Amdabeda)
(b) Bisoi – Joshipur belt (Mayurbeka, Kesham, Sialnoi)
(c) Baripada – Podadiha belt (Andipur, Bahalda)

Pyrophyllite: is mainly used as a high grade ceramic product, electric insulator and refractory material. The comp. is $Al_2O_34SiO_2$ H_20. It is formed as an alteration product of feldspar. Pyrophyllite occurrences are reported at Kankrani, Jashipur, Gorumahisani, Bangriposhi and Manada in Mayurbhanj dist. Ichinda, Khairakocha, Jamukunda, Nakulkocha, Kapadiha, Dunguridiha, Maheshpur, Kashidiha, Sagragora and Pokpoka. Dimension stone of the district are granite, granite-gneiss, migmatites,

syenite, gabbro, anorthosite, charnockite, leptynite, pyroxene granulite, dolerite, pyroxinite and dunite etc.

Bauxite: In Similipal complex (Mayurbhanj) aluminous laterite/ Bauxite are observed around 1000 m AMSL. The spongy aluminous laterite/bauxite occurs as sheets and boulders occupying the flat-topped hills made up of metavolcanics. Both ultramafics and metavolcanics are lateritised giving rise to nickeliferous laterite and aluminous laterite respectively.

China Clay: is clay like material approximating the mineral Kaolinite (Al_2O3, $2SIO_2$, $2H_2O$). China clay is found to occur in a long belt stretching from Singhbhum to Mayurbhanj. Badampahar-Joshipur- Karanjia – Ramachandrapur belt is the most important china-clay producing area of the state. The important deposits in Mayurbhanj district are found near Joshipur, Chanchbani, Dumuria, Jamda, Kodadiha, Jamkeswar and Thakurmunda. China clay has many industrial applications as filler in paper, textile, rubber, in the manufacture of potteries, ceramics, sanitary wares, glazed tiles, white cement, insecticides, paints, cosmetics, refractory bricks etc. Soap stone and Steatite Asbestos is mined from Mayurbhanj area.

Talc, steatite and soapstone: Important localities of these deposits in Mayurbhanj dist are Tiring, Kendumundi and Kharidamak.

Kyanite: Kyanite deposits of refractory grade occur in Panijia area of Mayurbhanj dist, where it is associated with dumortierite bearing rocks, qtz-veins, quartz-mica-schists and talc-tremolite-schist. Other kyanite occurrence include Purnapani & Similipal.

Quartz & Quartzite: Quartz and silica sand are mostly used in glass foundry, ferrosilicon alloy, ceramic industry, abrasive, paint, rubber, textile industries. Transparent varieties of quartz such as rock crystal, amethyst, citrine, Rosequartz and smoky quartz are used as semi-precious gemstone. Quartz is a piezoelectric material and is used in radio circuit, Radars and ultra-sonic devices. Quartzite is a

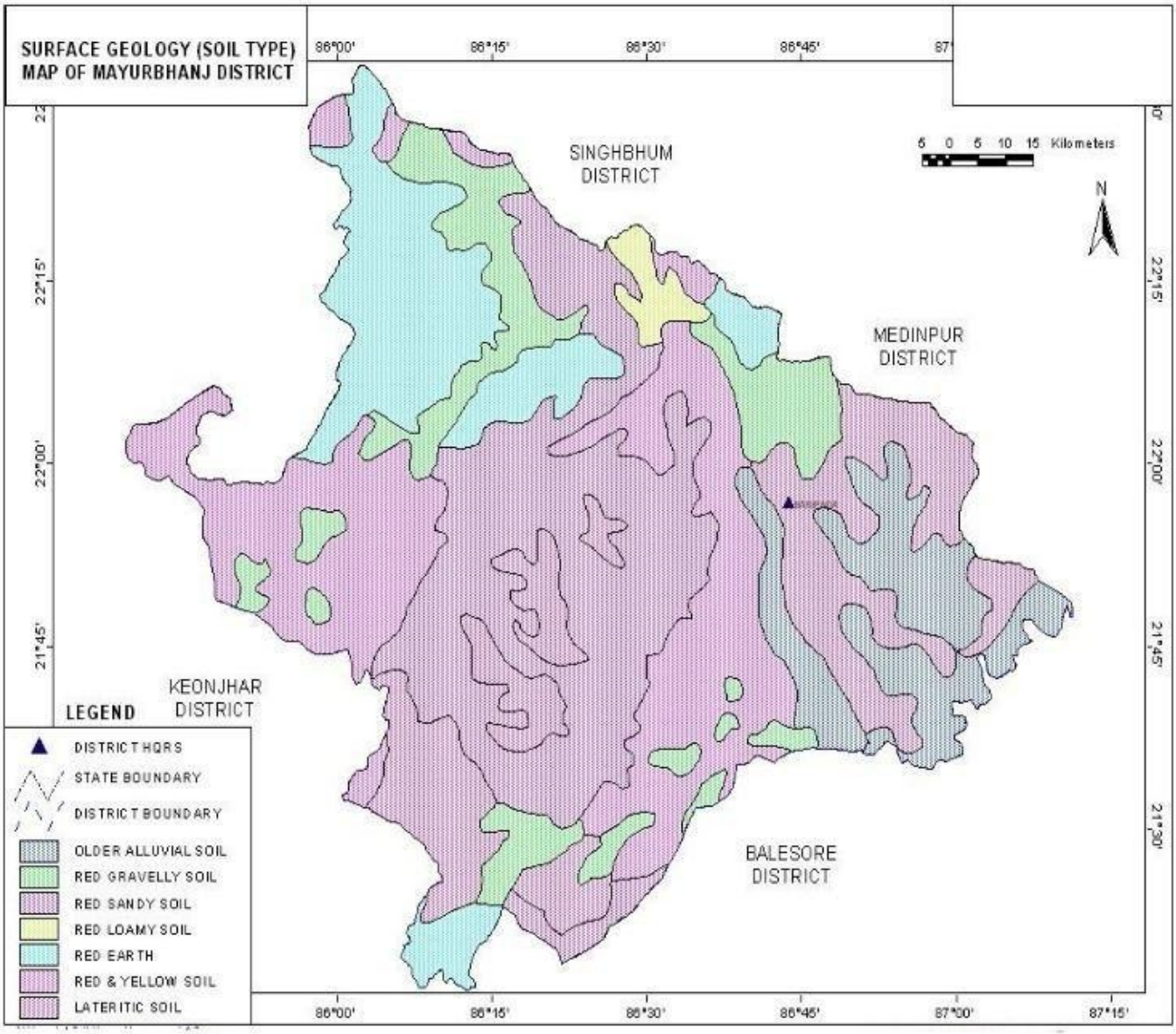
monomineralic rock constituted predominantly of quartz. There are 6 mining leases for quartz and quartzite in Mayurbhanj dist.

High Magnesia rock: are found in Notapahar, Thakurmunda, Amjori and Badampahar of Mayurbhanj Dist.

Nickel: Nickel is concentrated within chemically weathered ultramafic rocks and found in the laterite and soil capping in Similipal area. The mineral occurs in silicate form i.e. garnierite. The important patches of prospective ore zones are: Gurguria and Nawana.

11.5 Soil:

The district comprises chiefly of lateritic, sandy loam and clayey loam type of soil (Figure 3). Laterite soil is mostly marked in the area occupied by crystalline rocks. The low lying valley fields are covered with clayey loam type of soil.



a) DISTRICT WISE DETAILS OF RIVER OR STREAM AND OTHER SAND SOURCE:

Attached as Annexure-A.

b) DISTRICT WISE AVAILABILITY OF SAND OR GRAVEL OR AGGREGATE RESTORES:

Geological resource (in cum)	Mineable resource(in cum)
4322607.24	283292.55

DRAINAGE SYSTEM WITH DESCRIPTION OF MAIN RIVERS:

The district has considerable flat land, which provide suitable site for agricultural use. The hilly areas are mostly under forest with patches of cultivation on scarp areas. Major rivers flowing in the district are Budhabalanga, Subernarekha, Jambhira, Sona, Khadkhai, Deo, Katra, Khairibandhan & Baitarani. Major crops grown in the district are rice only. 14.82 percent area of agricultural use are net irrigated and major source of irrigations are well and tube-wells.

Sl. No.	Name of the River	Area drained (Sq.Km.)	% Area drained in the District
1	Budhabalanga	2143	21%
2	Subernarekha	265	0.25%
3	Jambhira	1377	13%
4	Sona	1062	10%
5	Khadkhai	1131	10.8%
6	Khairibandhan	1014	0.09%
7	Deo	473	0.04%
8	Katra	352	0.03%
9	Gangahar	594	0.057%
10	Baitarani	260	24.6%
11	Tel	96	0.009%
12	Kantamauli	82	0.007%
13	Sim	165	0.015%
14	Jhagada	30	0.002%
15	Balijori	56	0.005%
16	Kantakhaira	186	0.017%
17	Kanhu	383	0.036%
18	Balisudura	170	0.016%

Salient Features of Important Rivers and Streams:

The Budhabalanga River (also called Balanga River) flows through the districts of Mayurbhanj & Balasore and finally reached Bay of Bengal. The Budhabalanga, rises from Similipal hills and plunges through Barehipani Falls, the second-highest waterfall in India, located in Similipal National Park. It then flows in a northerly direction up to the village Karanjiapal in Bangiriposi police-station. Thereafter, it turns to the north-east and flows along the railway track up to the village Jhankapahadi. There it changes its course to the south and meets the Katra nala. The other tributaries are the Palpala and the Chipat both of which are hill streams rising from the Similipal hills. Then the river passes through Baripada. It later flows through Balasore district and into the Bay of Bengal. The Budhabalanga is about 175 kilometres (109 mi) long and has a total catchment area of 4,840 square kilometres (1,870 sq mi). Its major tributaries are the Sona, Gangahar, and the Katra. Burhabalang and its tributaries, viz. Sona Nadi, Amrutia Nadi, Gangahar Nadi drain almost round the year in the present area. Sona Nadi receives the watery effluent load through a nalah (Sankh nalah) from the Balgopalpur Industrial Estate and flows from west to east. Amrutia Nadi flows from NNW to SSE and carries the waste water load of East Coast. Subarnrekha originate from Nagri of Jharkhand and then enter into Mayurbhanj district, very less portion of the river flows within Mayurbhanj district, Major portion of Subarnarekha River passes in the Balasore district. Another river Jambhira runs in Mayurbhanj district then enters into Balasore district and Renamed as river Jalaka flows into Bay of Bengal. Other small rivers run in this district like River Khadkhai originates from Tunhgru R.F. and plunges through Suleipat Dam (Khadkhai Reserviour). It then runs towards Rairangpur, Bahalda, Tiringi area of western direction of Mayurbhanj district and finally reached at River Subarnarekha. River Deo rises from Similipal R.F. and runs towards western part of the district and flows through Karanjia area and then joins with Baitarani River. River Khairabandhan originates from Similipal R.F. and flows towards western part of the Mayurbhanj district through Jashipur, Raruan, Sukruli area of district and then joins with River Baitarani This river maintains a sluggish flow in the pre-monsoon period, but swells menacingly with the onset of monsoon often flooding large tracts. Another small tributary named as Kanhu starts from River Khadkhai and branched into

Jalapa, Ghagera nala meets at Jharbeda area of Mayurbhanj District.

1	2	3	4	5
Sl. No.	Name of the River or Stream	Total Length in District (in Km.)	Place of Origin	Altitude at Origin
1	Budhabalanga	161	Similipal Hill	940 mrl.
2	Subarnarekha	4	Nagri, Jharkhanda	610 mrl.
3	Jambhira	64	Chandra R.F. Mayurbhanj	60 mrl.
4	Sona	70	Jaymal Hill, Dugdha Mayurbhanj.	340 mrl.
5	Khadkhai	75	Tunhgru R.F.	500 mrl.
6	Khairibandhan	65	Similipal R.F.	800 mrl.
7	Deo	65	Similipal R.F.	930 mrl.
8	Katra	55	Jari R.F.	700 mrl.
9	Gangahar	55	Similipal R.F.	740 mrl.
10	Baitarani	48	Gonasika, Guptaganga Hills	900 mrl.
11	Tel	20	Similipal R.F.	940 mrl.
12	Kantamauli	25	Similipal R.F.	360 mrl.
13	Sim	85	Similipal R.F.	900 mrl.
14	Jhagada	15	Jhagada R.F.	430 mrl.
15	Balijori	22	Similipal R.F.	520 mrl.
16	Kantakhaira	36	Similipal R.F.	420 mrl.
17	Kanhu	42	Similipal R.F.	400 mrl.
18	Balisudura	15	Similipal R.F.	450 mrl.

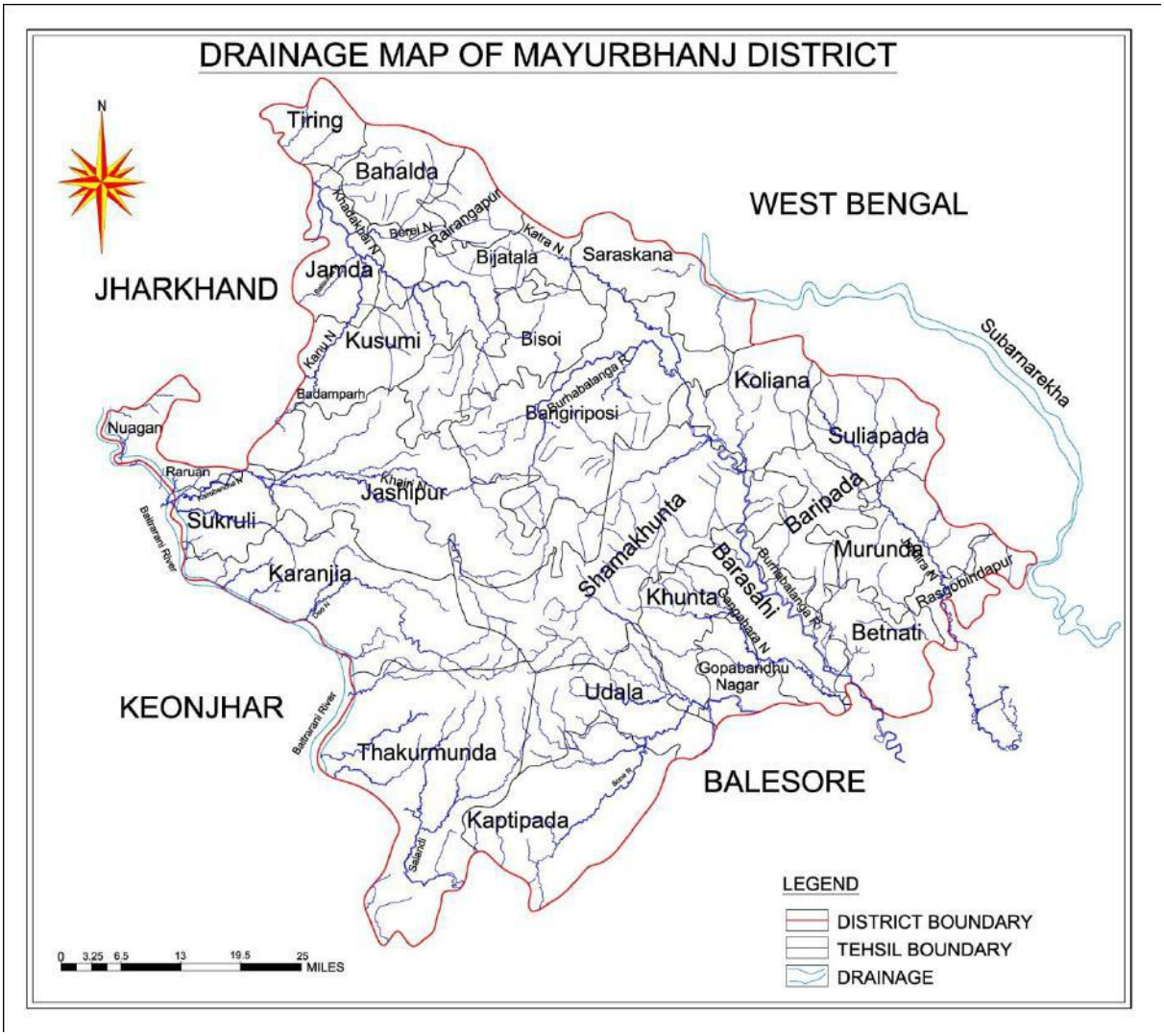
6	7	8	9	10
Portion of River or Stream Recommended for Mineral Concession	Length of area Recommended for Mineral Concession (in Km.)	Average width of area Recommended for Mineral Concession (in meter)	Area Recommended for Mineral Concession (in Sq. meter.)	Mineable mineral potential (in cubic meter) (60%of total mineral potential)
Details enclosed in Annexure-A				

Mineral Potential				
Name of the River or Stream	**Boulder (Cum)**	**Bajri (Cum)**	**Sand (Cum)**	**Total Sand Mineable Mineral Potential (Cum)**
Budhabalanga	---	---	1025276.93	711528.37
Subarnarekha	---	---	174027	146194
Jambhira	---	---	492385	280183
Sona	---	---	968298	593213
Khadkhai	---	---	343880.18	233127
Khairibandhan	---	---	65895.5	33107.5
Deo	---	---	42000	27410
Katra	---	---	35304	37020
Gangahar	---	---	---	---
Baitarani	---	---	420977	358200
Tel	---	---	29,206	17,973
Kantamauli	---	---	---	---
Sim	---	---	6,000	3,510
Jhagada	---	---	---	---
Balijori	---	---	---	---
Kantakhaira	---	---	71,644	45,658
Kanhu	---	---	461873	225311
Balisudura	---	---	28,167	15,451
Baunsanali nala	---	---	7,875	2,582
Kangira	---	---	148979.63	106965.68
Bankbahal Nala	---	---	8119	5859

Annual Deposition				
Name of the River or Stream	**Boulder (Cum)**	**Bajri (Cum)**	**Sand (Cum)**	**Total Mineable Mineral Potential (Cum)**
Budhabalanga	---	---	615166.15	369099.69
Subarnarekha	---	---	104416.2	62649.72
Jambhira	---	---	295431	177258.6
Sona	---	---	580978.8	348587.28
Khadkhai	---	---	206328.10	123796.86

Khairibandhan	---	---	39537	23722
Deo	---	---	25200	15120
Katra	---	---	21182.4	12709.44
Gangahar	---	---	1,145.33	687.20
Baitarani	---	---	252586.2	151551.72
Tel	---	---	17523.6	10514.16
Kantamauli	---	---	1,855	1,113
Sim	---	---	3600	2160
Jhagada	---	---	----	-----
Balijori	---	---	----	----
Kantakhaira	---	---	42986	25791.84
Kanhu	---	---	277123.8	166274.28
Balisudura	---	---	16900.2	10140.12
Baunsanali nala			4725	2835
Kangira			89387.78	53632.66
Bankbahal Nala			4871	4383

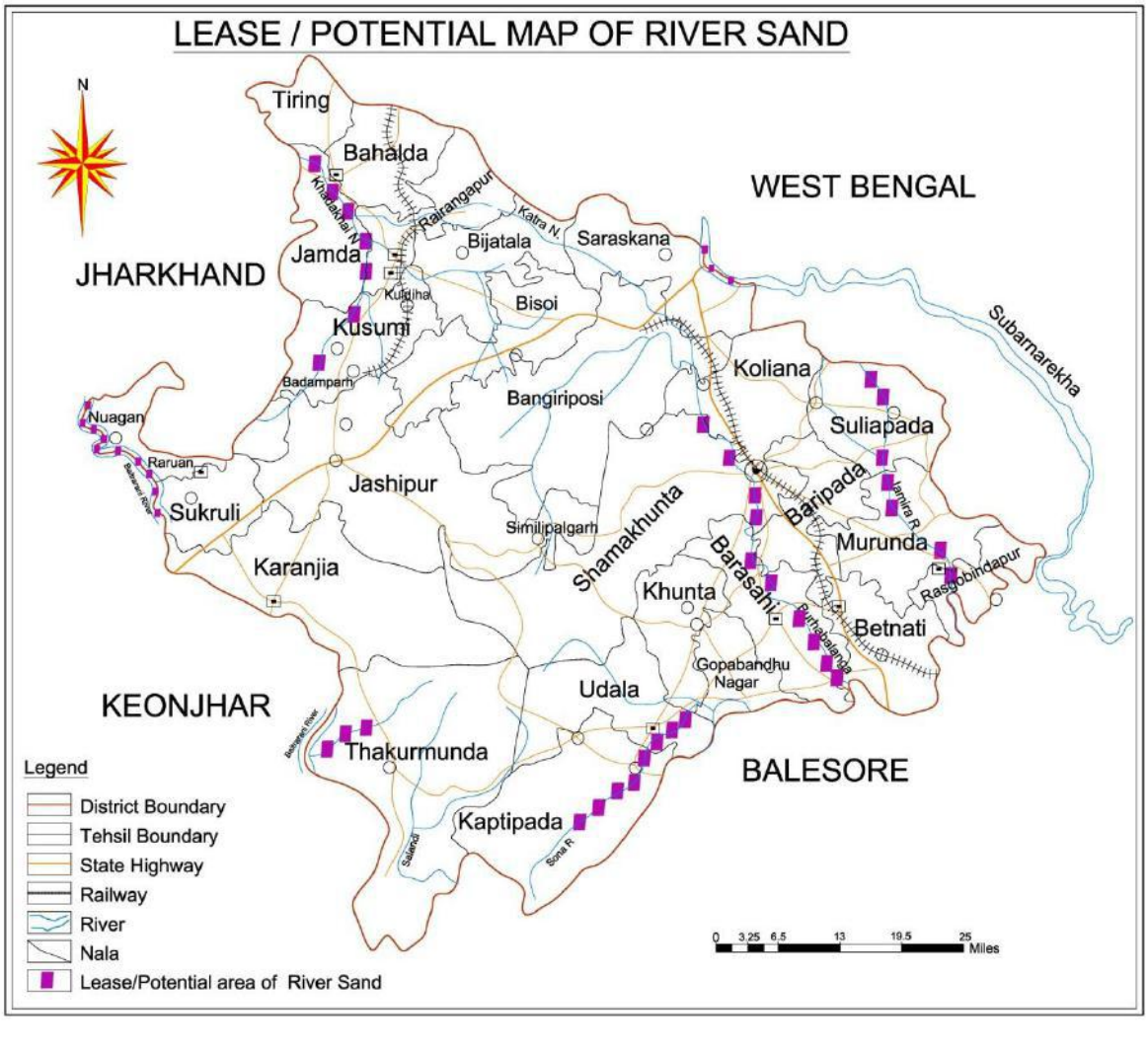
Drainage pattern map of Mayurbhanj District



CONCLUSION:

Since it is an interim report, to meet the requirement of minerals in the present scenario, it is proposed to identify such potential areas at certain interval and get the data bank of DSR to be updated. The insitu mining activity in any area is on one hand bring revenue and employment (Direct and indirect) and on other hand if not done properly potential pollution and ecological imbalance increases, the ability of the ecosystem can also be reduced. Particulate matter transported by the wind as a result of excavations, blasting, transportation of materials, heavy equipments used raise these particulate levels; and Gas emissions from the combustion of fuels in stationary and mobile sources, explosions, and mineral processing. All these activities indirectly affected the biodiversity of area. Larger potential and smaller areas have been identified in Mayurbhanj district on the basis of geological study carried out during field observation, which can be considered for mining concession after all the parameters for statutory clearances are verified by consulting with concerned authorities.

Plate-I


LEASE / POTENTIAL MAP OF RIVER SAND
N
Tiring
Bahalda
Rairangpur
Katra N.
Khadakhai N.
Jamda
Bijatala
Saraskana
WEST BENGAL
JHARKHAND
Kuldiha
Bisoi
Kusumi
Subarnarekha
Badamparh
Koliana
Bangiriposi
Nuagan
Suliapada
Raruan
Jashipur
Banjipada
Sukruli
Similipalgarh
Murunda
Shamakhunta
Karanjia
Barasahi
Khunta
Rasgobindapur
Betnati
Gopabandhu Nagar
KEONJHAR
Udala
Thakurmunda
BALESORE
Kaptipada
Legend
District Boundary
Tehsil Boundary
State Highway
Railway
River
Nala
Lease/Potential area of River Sand
0 3.25 6.5 13 19.5 25
Miles

The District Survey Report for Sand Mining (Minor Mineral) in respect of Mayurbhanj District prepared in accordance with Appendix-X, Para -7 (iii) (a) of S.O. 3611 (E) Dt. 25.07.2018 of Ministry of Environment, Forest and Climate Change, New Delhi is approved for final publication in the district website.

25/12/19

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28/12/2019

Sri S.Mallick, I.F.S,
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28/12/19

Sri Dibyajyoti Parida, I.A.S
SDM, Sadar-cum -Member Secretary
DEIAA, Mayurbhanj

28/12/19

Sri Vineet Bhardwaj, IAS
Collector & DM-cum- Chairman, DEIAA
Mayurbhanj (Odisha)

LIST OF MINING LEASE WITH LOCATION, AREA AND PERIOD OF VALIDITY ANNEXURE-A

Name of the Tahasil	Sl No	Name of river or stream	Portion of the river or stream recommended for Mineral Concession with GPS Co-Ordinate, Village, Khata No, Plot No. & Kisam	Length of Area recommended for Mineral Concession (in Km)	Average width of Area recommended for Mineral Concession (in meter)	Length of Area recommended for Mineral Concession (in sq. meter/Ha.)	Mineable Mineral potential in Metric tones (60% of total Minerals/ Potential)	Geological mineral potential in Metric tones/Cums	Name of the Lessee with address	Period of Lease		Status of Working or Non working/ Temp permit working for despatch
										From	To	
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
Baripada	1	Budha Balanga	21˚4'53.9" N to 21 55'35.7" N and 86˚43'0.9" E to 86˚43'35.8" E Vill-Baripada Town, Unit No-7, Khata No-242, Plot No-103/1,621,624,625,628,311,312,313,314,315,316 & 13/1, Kisam-Nadi	1320 m	106 m	15.88 Ha	15000 Cum.	31588.4 Cum	Jay Praksh Khandelwalla, S/o-Narayanlal Khandelwalla,Baripada, Unit No-6	2015-16	2019-20	Working
Baripada	2	Budha Balanga	21˚51'34.3" TO 21˚51'53.8"N and 86˚42'41.9" to 86˚42'48.8"E ,Vill-Jamdapal, Khata No -152, Plot No-655/1, Kisam-Nadi	952 M	952 M	5.26 Ha	35003 Cum.	52600 Cum.	Pradosh Das, S/o-Prasanna Kr.Das,Baripada,W.No-7	2017-18	2021-22	Working
Baripada	3	Budha Balanga	21˚50'08.6" to 21˚50'32.4"N and 86˚42'36.1" to 86˚42'55.9"N, Vill-Balipal, Khata No-114, Plot No-24/1, Kisam-Nadi	910 M	50 M	5.28 Ha	7500 Cum.	8919 Cum	Dhirendra Mohan Panda S/0-Narendra Mohan Panda, Baripada,W.No-14	2015-16	2019-20	Non working
Samakhunta	4	Budha Balanga	GPS- -Latitude-21°52'17.7"N to 21°52' 49.9"N Longitude:86°42'55.2"E to 86°43' 05.3"E Village-Bajratundi , Khata No.- 177, Plot No.- 1110/01, Area:5.67, Kisam-Nadi	7.5 km.	120 m	5.67 Ha	7080.59	8660.92	Laxminarayan Giri, S/o- Purusottam Giri, At:Sungodia ,W.No.14, PO/PS: Baripada , Dist: Mayurbhanj, PIN:757001 Mobile No. 9437320509	2017-18	2021-22	working
Samakhunta	5	Budha Balanga	GPS-Latitude-21°53'39"N to 21°54' 5"N, Longitude:86°42'56.8"E to 86°43' 10.7"E , Village-Mahulia, Khata No.-251, Plot No.- 414,432 & 458/1, Area:-5.50ha, Kisam-Nadi	3 km.	140 m	5.50 Ha	2242.48	2874.61	Prodash Das S/o.Prasanna Das At:Deulasahi WardNo.07 PO/PS: Baripada Dist: Mayurbhanj Mobile:876320885	2017-18	2017-18	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Samakhunta	6	Budha Balanga	GPS- -Latitude-21°53'21.1"N to 21°53' 43.06"N Longitude:86°43'23.06"E to 86°43' 39.09"E , Village:Pundura , Khata No.- 68 , Plot No.- 2/1 , Area: 5.47, Kisam-Nadi	-	-	5.47 Ha	-	-	-		-	Non Working
Samakhunta	7	Budha Balanga	GPS-Latitude-21°56'43.5"N to 21°56' 37.3"N Longitude:86°42'00.9"E to 86°42' 14.8"E, Village-Suniapal , Khata No.-74, Plot No.- 319 & 322 Area:- 5.65, Kisam-Nadi	-	-	5.65 Ha	-	-	-	-	-	Non Working
Samakhunta	8	Budha Balanga	GPS-Latitude-21°57'05"N to 21°57' 54"N Longitude:86°40'47"E to 86°40' 53"E , Village-Inkidapal Khata No.- 69, Plot No.- 412/1 Area:-5.00, Kisam-Nadi	-	-	5.00 Ha	-	-	-	-	-	Non Working
Kuliana	9	Budhabalanga	GPS- Latitude 21° 57'33.7"N to 21° 57'43.7"N Longitude- 86° 42'14.9"E to 86° 42'03.6"E Village- Tumuda, Khata No.-52 , Plot No.- 225 & 87, Kisam-Nadi	0.406 km	181mtr	5.061 Ha	43120 cum	46640 cum	Jayanta Kumar Sikhar, At-Ambikasahi, Ward.No-1, Po- Baripada, Dist-Mayurbhanj	2015-16	2019-20	Working
Kuliana	10	Budhabalanga	GPS- Latitued 21° 58'26.9"N to 21° 58'41.1"N Longitude- 86° 41'19.8"E to 86° 41'27.8"E Village- Padhiaripur, Khata No.- 80 , Plot No.-126 Kisam-Nadi	0.37 km	154 mtr	5.745 Ha	11162 cum	72796 cum	Ramakrushna See, At-Chhancha,ward No-25, Po-Takatpur, Dist-Mayurbhanj	2016-17	2020-21	Working
Kuliana	11	Budhabalanga	GPS- Latitued Block A- 22° 01'11.2"N to 22° 01'34"N Block B-22° 02'9.52"N to 22° 02'3"N Longitude- Block A- 86° 38'4.9"E to 86° 38'54.5"E Block -B 86° 38'1.9"E to 86° 38'2"E, Village- Goudrama & Kathapal, Khata No.- 94 & 28, Plot No.-223 & 04, Kisam-Nadi	1.086 km	152 Mtr	9.145 Ha	62538.3 cum	80712.0 cum	Bhuban Mohan Dutta, At- Darkholi, Po- Aniapal, Ps- Kuliana Dist- Mayurbhanj	2015-16	2019-20	Non-working
Kuliana	12	Budhabalanga	GPS- Latitued 21° 59'41.8"N to 21° 59'49.5"N Longitude- 86° 39'15.8"E to 86° 39'26.8"E Village- Mangrajia, Khata No.-38, Plot No.-43, Kisam-Nadi	0.386 km	31.98 mtr	1.238 Ha	9935 cum	12380 cum	M/s Ratna DD Builders	2017-18	2019-20	Non-working

1	2	3	4	5	6	7	8	9	10	11	12	13
Kuliana	13	Budhabalanga	GPS- Latitued 21 57'34.0"N to 21 57'41.5"N Longitude- 86 41'8.4"E to 86 41'24.0"E Village- Manishmundia, Khata No.-39, Plot No.-169/1,Kisam-Nadi	0.445km	112.15mtr	5.00 Ha	72742 cum	84480 cum	M/s DD Builders Ltd.	2018-19	2022-23	Non-working
Bangriposi	14	Katra River	Gps-22 10 31.7"to 22 06" 54.3" North, 86 38"32.5" to 86 38" 46.5" East Village.- Taltikiri & Chandanpur, Khata No:- 117 & 216 Plot No- 730,731 & 549 Kisam- Nadi	0.462 km	138 m	5.00 Ha	17300 Cum	20940 Cum	1.Pravat Kumar Patra At/ po- Bangriposi, Dist- Mayurbhanj. 2. Narasingha Sethy At- Gosanipal Ps.- Bangriposi Dist.- Mayurbhanj	2015-16	2019-20	Working
Bangriposi	15	Budhabalanga River	Gps- 22 06"4.3:N to 22 06" 15.2"N, 86 37" 6.3"E to 86 37"15.2 E Village.- Panasdiha, Mahulisol, Asana & Sunamuhi, Khata No:-35,82,347 & 23 , Plot No.- 35/1, 2804 & 141/160 Kisam- Nadi	0.462 km	188 m	5.00 Ha	25028 Cum	31153 Cum	1.Pravat Kumar Patra At/ po- Bangriposi, Dist- Mayurbhanj. 2. Narasingha Sethy At- Gosanipal Ps.- Bangriposi Dist.- Mayurbhanj 3. Alok Kumar Sikhar At/Po- Kalabadia Ps.- Bangriposi Dist- Mayurbhanj	2018-19	2022-23	Working
Saraskana	16	Subarnarekha	GPS-Lat 22'13'15"N to 22'13'42"N Longi 86'40'25"E to 86'41'10"E ,Village- Jamunapal & Kumbhirmundi , Khata:44 & 15, Plot No.1 & 1, Kisam- Nadi & Nadi	0.38 Km	168 mtr	63840 sq.mtr	78675 cum	97500 cum	Sri Bikash Kumar Agrawal, At-N-2/1698, Nayapalli, BBSR, Dist: Khordha, Odisha	2015-16	2019-20	Working
Saraskana	17	Subarnarekha	GPS- Lat 22'13'43.9"N to 22'13'58.5"N Longi 86'40'20.5" E to 86'40'29.9"E, Village- Sirsha, Khata:450, Plot No.2301/ 2327 , Kisam- Nadi	0.4Km	196 mtr	78400 sq.mtr	67519 cum	76527 cum	Sri Krupasindhu Singh, At/Po-Madhuban, Ps- Baripada, Dist Mayurbhanj, Odisha	2016-17	2020-21	Working
Saraskana	18	Katra	GPS- Lat 22'08'52.9"N to 22'09'22.9"N to 86'35'7.6"E to 86'36'11.3"E Village- Belboria, Khata No:- 291, Plot No-01 , Kisam- Nadi	0.66 Km	76 mtr.	50160 sq.mtr	19720 cum	14364 cum	Not leased out	-	-	Non Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Suliapada	19	Jambhira	GPS- Latitiude from 21◦ 57 ' 25.9" to 21◦ 57 ' 58.8" N & Longitude from 86◦ 54 ' 12.3" to 86◦ 54 ' 40.7" E 1. Village- Kostha, Khata No.- 266, Plot No.- 448, 260, 275, 449, 454, 455, 459, 460, 461,1234,1235 & 1236, Kisam-Nadi 2. Village- Dhatika, Khata No.- 148, Plot no.- 1069, 1070, 1077, 1079, 1083 & 1084, Kisam- Nadi 3. Village - Badada, khata No. - 104, Plot No.- 294, 295, 296 & 297 Kisam - Nadi, Plot No.- 298 & 308, Kisam - Balichara	Bed-I 128 M Bed-II 64 M.	Bed-I 18 M Bed-II 125 M.	6.96 Ha	4650 Cums	5520 Cums	Smt. Jhunurani Ghose At/Po- Rasgovindpur, Dist- Mayurbhanj, Odisha	2015-16	2019-20	Working
Suliapada	20	Jambhira	1. Village - Gouduniduva, Khata No.- 78, Plot No.- 477, 478, 479, 481, 482, 484, 535 & 540 , Kisam- Nadi 2. Village- Kadakotha, khata No.- 182 , Plot No.-425, 426, 1592 & 1593, Kisam - Nadi 3. Village- Jambhirapal, khata No.-205 , Plot No.- 339,645,646,647,648,1124 & 1125, Kisam- Nadi	-	-	-	-	-	-	-	-	Non Working
Betnoti	21	Budhabalang River	GPS- (Latitude), A-21 38' 08.29" N B-21 38' 07.48" N C-21 38' 05.53" N D-21 38' 04.65" N E-21 38' 03.78" N F-21 38' 05.41" N (Longitude), A-86 51' 02.10" E B-86 51' 07.91" E C- 86 51' 16.25" E D-86 51' 24.29" E E-86 51' 24.17" E F-86 51' 01.45" E VILLAGE- Belanpur, Madhunanda & Demphouda KHATA NO -160,95 & 200 PLOT NO-711,1 & 1 respectively, KISAM- Nadi	0.650 Kms.	80 Mtrs.	5.01 Ha.	9648 Cum	26455 Cum	Shri Jagannath Sahu At-Demphouda Po-Patalipura P.S-Baisinga Dist-Mayurbhanj	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Betnoti	22	Budhabalang River	GPS- (Latitude), A-21 37' 54.2" N to 21 38' 2.1" N (Longitude), A-86 51' 33.8" E to 86 52' 19.00" N VILLAGE- Pratimadeipur & Patalipura KHATA NO-121 & 175 PLOT NO-177/1 & 491/1 KISAM- Nadi	0.570 Kms.	45 Mtrs.	5.01 Ha.	12482 Cum	26425 Cum	Shri Jagannath Dalei At-Pratimadeipur Po-Patalipura PS-Baisinga Dist-Mayurbhanj	2015-16	2019-20	Working
Betnoti	23	Budhabalang River	GPS- (Latitude), A-21 38' 28" N to 21 38' 47" N (Longitude), A-86 49' 55" E to 86 50' 6.6" N VILLAGE- Sankhamode KHATA NO-63 PLOT NO-1/1 & 275 KISAM- Nadi	0.600 Kms.	80 Mtrs.	5.01 Ha.	15933 Cum	28777 Cum	Shri Raghunath Dash At-Kathapal Po-Patalipura PS-Baisinga Dist-Mayurbhanj	2015-16	2019-20	Working
Betnoti	24	Baunsha Nali River	GPS- (Latitude), A-21 41' 1.8" N to 21 41' 56.3" N (Longitude), A-86 58' 49.1" E to 86 59' 34.9" E VILLAGE- Madhukhunta, Anla & Rangada KHATA NO-148, 187 & 257 PLOT NO- 1,7,349,232,372,206,728,209,210,208/776,145/800,65/807 & 118/810 KISAM- Nadi	3.780 Kms.	55 Mtrs.	5.00 Ha.	1306 Cum	4014 Cum	Shri Biranchi Narayn Pradhan At-Agargahiya Po-Hatiadiha PS-Rupsa Dist-Balasore	2017-18	2021-22	Non Working
Betnoti	25	Baunsha Nali River	GPS- (Latitude), A-21 42' 40.5" N to 21 43' 31.5" N (Longitude), A-86 55' 18.5" E to 86 55' 53.7" E VILLAGE- Merda, Unapura & Benapura KHATA NO-131, 122 & 284 PLOT NO-471, 523, 601, 612, 618, 567, 326, 1373, 1355, 1350, 1380, 1348, 1346, 1442, 1230 & 1379 KISAM- Nadi	3.490 Kms.	75 Mtrs.	5.00 Ha.	1276 Cum	3861 Cum	Smt. Mousumi Ghosh At/Po-Betnoti Ps-Betnoti Dist-Mayurbhanj	2017-18	2021-22	Non Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Badasahi	26	Budhabalanga	GPS- Lati- 21°44'27.2"N to 21°45'23.5"N Long- 86°45'53.1"E to 86°46'15.8"E Vill- Belpal Khata No. 287 Plot No. 50/1/2 & 1548 Kisam- Nadi	1.65 KM	72 mtr.	11.51 Ha	65,000 cum.	1,15,000 cum.	SUSANTA KUMAR NAYAK AT- BELPAL PO- KHUNTAPAL DIST- MAYURBHANJ	2015-16	2019-20	Working
Badasahi	27	Budhabalanga	GPS- Lati- 22°48'7" to 212°48'20"N Long- 86°43'34.4" to 86°43'54.8"E Vill- Pratappur Khata No.- 327 Plot No- 118 Kisam- Nadi	0.78 KM	66 mtr.	6.82 Ha	43,663 cum.	47'115 cum.	TARANISEN SINGH AT/PO- TULASICHOURA, BARIPADA DIST- MAYURBHANJ	2015-16	2019-20	Working
Badasahi	28	Budhabalanga	GPS- Lati- 21°46'00" N to 21°47'30"N Long- 86°43'30" E to 86°45'00"E Vill- Sakua Khata No.- 230 Plot No. - 1344 Kisam- Nadi	0.785 KM	82 mtr.	6.21 Ha	32,764 cum.	52,145 cum.	SANJAY KUMAR BARIK AT/PO- SAKUA DIST- MAYURBHANJ	2015-16	2019-20	Working
Badasahi	29	Budhabalanga	GPS- Vill- Bathudibandh Khata No.- 191 Plot No.-1043 Kisam- Nadi	-	-	6.453 Ha	-	-	-	-	-	Non-Working
Badasahi	30	Budhabalanga	GPS- Lati- 21°45'15.5" N to 21°45'40.2"N Long- 86°44'13.6" E to 86°44'33.1"E Vill- Arapata Khata No.- 361 Plot No.- 554 Kisam- Nadi	0.950 KM	88 mtr.	5.261 Ha	29,792 cum.	35,669 cum.	PRADEEP KUMAR BINDHANI AT- DAHISAHI PO- RAGHUPUR DIST- MAYURBHANJ	2016-17	2020-21	Working
Badasahi	31	Budhabalanga	GPS- Lati- 21°50'31.5" N to 21°50'54.3"N Long- 86°43'6.2" E to 86°43'30.7"E Vill- Uthaninuagan Khata No.- 378 Plot No.- 2203/1 Kisam - Nadi	1.134 KM	62 mtr.	5.06 Ha	21,196 cum.	28,800 cum.	AMANI BEHERA AT/PO- UTHANINUAGAN DIST- MAYURBHANJ	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Badasahi	32	Budhabalanga	GPS- Lati- 21°43'33.2'' N to 21°43'28.9''N Long- 86°46'26.1'' E to 86°46'41.2''E Vill- Baguli Khata No.- 224 Plot No.- 1635/1 Kisam- Nadi	0.515 KM	128 mtr.	5.06 Ha	53,667 cum.	64,597 cum.	SUSANTA KUMAR NAYAK AT/PO- BELPAL DIST- MAYURBHANJ	2015-16	2019-20	Working
Badasahi	33	Budhabalanga	GPS- Lati- 21°42'17.5'' N to 21°42'319''N Long- 86°47'58.9'' E to 86°48'5.7''E Vill- Dingira Khata No.-13 Plot No.- 844 & 862 Kisam- Nadi	0.4 KM	173 mtr.	6.52 Ha	7,095 cum.	8,773 cum.	PRADEEP KUMAR BINDHANI AT- DAHISAHI PO- RAGHUPUR DIST- MAYURBHANJ	2016-17	2020-21	Working
Badasahi	34	Budhabalanga	GPS- Vill- Brahmapura Khata No.- 147 Plot No.- 206/467 Kisam- Nadi	-	-	6.429 Ha	-	-	-	-	-	Non-Working
Badasahi	35	Budhabalanga	GPS- Vill- Asukand Khata No.- 126 Plot No.- 1 Kisam- Nadi	0.4 KM	200 mtr.	6.11 Ha	-	-	-	-	-	Non-Working
Badasahi	36	Budhabalanga	GPS- Lati- 21°39'12.9'' N to 21°39'402''N Long- 86°49'48.2'' E to 86°49'57.9''E Vill- Mahupura Khata No. -175 Plot No.- 253 Kisam- Nadi	0.9 KM	81 mtr.	5.553 Ha	36,927 cum.	45,410 cum.	KRUPASINDHU SINGH AT/PO-MADHUBAN, BARIPADA DIST- MAYURBHANJ	2016-17	2020-21	Working
Badasahi	37	Budhabalanga	GPS- Lati- 21°41'30'' N to 21°41'42.5''N Long- 86°48'28.8'' E to 86°48'51.2''E Vill- Tunagambharia Khata No.- 228 Plot No.- 746 Kisam- Nadi	0.6 KM	175 mtr.	7.405 Ha	92,010 cum.	1,13,307 cum.	AMIR KUMAR NAYAK AT/PO-BELPAL DIST- MAYURBHANJ	2016-17	2020-21	Non-Working
Rasgovindapur	38	Jambhira	N21°47' 30'' TO 21° 47' 30'' TO 21 & E 87° 57' 30'' TO 87° 57'00'', Village- Bachhuripal, Khata No -203, Plot No -416/1,416/3 & 420/1248/1	1.38 Km	46 Mtr	5.00 Ha	30150 Cum	34450 Cum	Dipali Raj, At- Nuasahi, Dist. Balasore	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Rasgovindapur	39	Jambhira	LATITUDE 21°46'26.9"TO 21°46'1"N LONGITUDE 87° 01' 47.5" TO 87° 02' 1.4E, Village -Ramchandrapur, Khata-120, Plot-1, 589/682/1, Village-Bhedisahi, Khata No -139, Plot No -647/1	1.7 Km	37 Mtr	5.00 Ha	15985 Cum	20695 Cum	Manoj Ghosh , At/PO/PS- Rasgobindapur	2015-16	2019-20	Working
Rasgovindapur	40	Jambhira	21° 45' 24.4" N TO 21° 46' 13.4" N & 87°01' 38.4" E TO 87° 02' 14.9"EVillage- Dohilipura, Khata-53, Plot-273,117/336,320/331,321/339, Village-Padmatalia, Khata No -59, Plot No -289/1, Village- Pinguli, Khata No- 88, Plot No -2	1.58 Km	42 Mtr	5.00 Ha	15000 Cum.	25000 Cum	Pranakrushna Chand, At- Bainchanuagan, PS- Rasgobindapur	2015-16	2020-21	Working
Rasgovindapur	41	Jambhira	Village-Pinguli, Khata No -88, Plot-189/690 & 448, Village- Patharchatia, Khata No -173, Plot No -666	2.5 Km	27 Mtr	5.0 Ha	41526 Cum	74970 Cum	Pranakrushna Chand, At- Bainchanuagan, PS- Rasgobindapur	2015-16	2019-20	Working
Rasgovindapur	42	Jambhira	21° 43' 6.4" TO 21° 43' 45.4" N & 87° 1' 41"TO 87° 2' 19.3" E, Village-Badampur, Khata No -452, Plot No -2224/1 & 2385	1.8 Km	30 mtr	5.00 Ha	12708 Cum	28603 Cum	Narottam Giri	2015-16	2019-20	Working
Rasgovindapur	43	Jambhira	21° 41' 37.3" N TO 21° 41' 40.5" N & 87° 01' 53.7" E TO 87° 01 55.3" E, Village-Ektali, Khata No -127, Plot No -440,441,520/636 & 622, Village-Satasgodia, Khata No -168, Plot No-290,296,469,571,578,608,592/609 & 581/620, Village- Manikpur, Khata No -161, Plot No -540 & 542, Village-Handidhua, Khata No - 78, Plot No -251/1	2.7 Km	15 Mtr	5.00 Ha	9372 Cum	74970 Cum	Pranakrushna Chand, At- Bainchanuagan, PS- Rasgobindapur	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Rasgovindapur	44	Jambhira	21° 40' 49.8" TO 21° 41' 32.2"N & 87° 1' 58.6" TO 87° 2' 33.4" E, Village-Handidhua, Khata-78, Plot- 251/1, Village-Paiksahi, Khata-217, Plot-421, Village-Muruda, Khata- 206, Plot - 250/1	1.8 Km	27 Mtr	5.00 Ha	18547 Cum	34738 Cum	Pramila Kumari Nayak, W/O Late Gadadhar Nayak, At/Po- Paiksahi, PS-Rasgobindapur	2015-16	2019-20	Working
Moroda	45	Jambhira	GPS-Latitude-21°56'54.6"N to 21° 57'26.2"N Longitude-86°54'57.1"E to 86°55'22.4"E Village-Kaduani, Khata No.-184 Plot No.-653/1,667&525 Kisam-Nadi	0.81 Km	32 Mtr	5.00 Ha	14892 Cum	21667 Cum	Rama Krushna Si, S/O -Pradeep Ku.Si At -Chhancha W.No -25 ,Baripada, Dist-Mayurbhanj	2015-16	2019-20	Non working
Moroda	46	Jambhira	GPS-Latitude-22°57'30"N to 22° 55'00"N Longitude-86°55'00"E to 85°57'30"E Village-Baunskantia,Gadia & Kendudiha Khata No.-184,162,&71, Plot No.-811/1048/1,931/1&1/463/1 & 1/465/1, Kisam-Nadi	0.4 Km	110 Mtr	5.00 Ha	24150 Cum	30750 Cum	Smt.Dipali Raj W/O -Bhaskar ku. Raj At -Nuasahi Po -Balia Dist -Balasore	2015-16	2019-20	Working
Moroda	47	Jambhira	GPS-Latitude-21°53'36.9"N to 21° 53'55.1"N Longitude-86°55'53.3"E to 86°56'2.1"E Village-Badfera,Ranipal& Paramananda Khata No.-143,107&111, Plot No.-328,328/890/1,570 & 51/1 Kisam-Nadi	0.54 Km	106 Mtr	5.00 Ha	11250 Cum	22282 Cum	Laxmi Narayan Giri S/O-Purusottam Giri At -Sungadia, Ward No-14' Po -Baripada Dist -Mayrbhanj	2015-16	2019-20	Working
Moroda	48	Jambhira	GPS- Latitude-21°52'36.6"N to 21° 52'53"N Longitude-86°56'19.5"E to 86°56'47.4"E, Village-Gholmuhan & Khuntapal , Khata No.-172 & 242, Plot No.-124/1 & 860/1, Kisam- Nadi	0.53 Km	90 Mtr	5.00 Ha	19891 Cum	35000 Cum	Prodash Ku. Das S/O-Prashanna ku. Das At-Deulasahi W.NO.9 PO-Baripada Dist-Mayurbhanj	2015-16	2019-20	Non Working
Moroda	49	Jambhira	GPS-Latitude-21°51'30"N to 21° 52'30"N Longitude-86°56'00"E to 86°57'30"E Village-Gandaguhali & Pariakuli Khata No.-123&170 Plot No.-221/1&14/1 Kisam-Nadi	0.58 Km	96 mtr	5.00 Ha	19960 Cum	31150 Cum	Smt.Dipali Raj W/O -Bhaskar ku. Raj At -Nuasahi Po -Balia Dist -Balasore	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Moroda	50	Jambhira	GPS-Latitude-21°51'11.1"N to 21° 51'36.8"N, Longitude-86°57'26.2"E to 86°57'51.9"E, Village-Rukuni,Pariakuli,Chitrada&Silda, Khata No.-125,170,422 & 429, Plot No.-471/548,765,496,544 & 1756/2910/1 Kisam-Nadi	1.2 Km	26 Mtr	5.00 Ha	10532 Cum	16810 Cum	Smt.Dipali Raj W/O -Bhaskar ku. Raj At -Nuasahi Po -Balia Dist -Balasore	2015-16	2019-20	Working
Moroda	51	Jambhira	GPS-Latitude-21°47'30"N to 21° 50'00"N Longitude-87°57'30"E to 86°57'00"E , Village-Bainchdiha samil Barkanda & Morada Khata No.-102 & 471 Plot No.-1/1,1880 &1881 Kisam- Nadi	0.6 Km	93 Mtr	5.00 Ha	31570 Cum	35780 Cum	Smt.Dipali Raj W/O -Bhaskar ku. Raj At -Nuasahi Po -Balia Dist -Balasore	2015-16	2019-20	Working
Moroda	52	Jambhira	GPS- Village-Badmundhabani Khata No.-208 Plot No.-1002 , Kisam- Nadi	-	-	5.00 Ha	-	-	New sources	-	-	Non working
Udala	53	Sono River	GPS-21 35' 51.6" to 21 36' 9.0"N and 86 37' 41.3" to 86 38'3.9"E Village-Dhulinda, Khata No.-231, Plot No.- 1/1 ,Area-Ac.2.56, Kisam-Nadi, 2. GPS-Village-Bairatpur, Khata No.-354, Plot No.-1, Area-Ac.9.94, Kisam-Nadi	0.8	60	5.00 Ha. (Ac.12.50dec)	34632 Cum	42630 Cum	Ajay Kumar Behera, S/o-Krushna Chandra Behera of Vill-Manandi,Udala , Mayurbhanj	2015-16	2019-20	Working
Udala	54	Sono River	GPS-21 33' 37.2" to 21 33' 44.2"N and 86 34' 35.3" to 86 35' 1.9 " E Village-Jirida, Khata No.-168, Plot No.-840/1 ,Area-Ac.1.30, Kisam-Nadi, & Plot No - 480/1, Area-Ac.11.20, Kissam-Nadi	1.46	180	5.00 Ha. (Ac.12.50dec)	8220 Cum	19742 Cum	Abhisek Singh S/o-Bhupendra Singh, At-Baripada, W.No.9	2015-16	2019-20	Working
Udala	55	Sono River	GPS- 21 32' 57.5" to 21 33' 13.0"N and 86 33' 20.4" to 86 33' 38.4"E ,Village-Bhimtali, Khata No.-68, Plot No.-120/1, Area-Ac.11.40, Kisam-Nadi & Khata no.- 69, Plot No.-117, Area- Ac.1.10, Kisam- Gochar	0.76	60	5.00 Ha. (Ac.12.50dec)	28210 Cum	36160 Cum	Gourishankar Pradhan, Of vill-Mendhakai, Udala, Mayurbhanj	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Udala	56	Sono River	GPS-21 33' 45.9"to 21 34' 14.8" N and 86 35' 48.9" to 86 36' 5.9"E, Village-Raidandia, Khata No-209, Plot No-1299/1580, Area-Ac.1.33, Kissam-Nadi & Plot No- 1299/1588, Area-Ac.11.77, Kisam- Nadi	1.08	50	5.00 Ha. (Ac.12.50dec)	13321 Cum	19561 Cum	Sukanti Das of Vill-Raidandia,Udala, Mayurbhanj	2015-16	2019-20	Working
Udala	57	Sono River	GPS-21 34' 20.08" to 22 34' 22.9"N and 86 39' 18.8" to 86 39' 57.7"E, Vill-Athna gan, Khata No.- 214, Plot No-474/1, Area-Ac.12.50, Kisam-Nadi	0.8	50	5.00 Ha. (Ac.12.50dec)	12960 Cum	14360 Cum	Gourishankar Pradhan, Of vill-Mendhakai, Udala, Mayurbhanj	2015-16	2019-20	Working
Udala	58	Sono River	GPS-21 34' 9.1"to 21 34' 15.7" N to 86 39' 1.4" to 86 39' 43"E, Vill-Uttarapal, Khata No -27, Plot No - 23, Area-Ac.2.10, Kisam-Nadi, Plot No.-83, Area- Ac.7.38, Kisam-Nadi & Khata No - 29, Plot No - 81, Area-Ac. 3.02, Kisam-Gochar	0.72	80	5.00 Ha. (Ac.12.50dec)	8112 Cum	10876 Cum	Gourishankar Pradhan, Of vill-Mendhakai, Udala, Mayurbhanj	2015-16	2019-20	Working
Udala	59	Sono River	GPS-21 32' 59.9" to 21 33' 12.8"N and 86 32' 48.5" to 86 33' 6.8"E, Vill-Jalda, Khata No.- 428, Plot No.-847/1, Area-Ac.11.00, Kisam-Nadi, ,Plot No.-871/1, Area- Ac.1.50, Kisam-Nadi	0.72	80	5.00 Ha. (Ac.12.50dec)	11636 Cum	16296 Cum	Abhisek Singh S/o-Bhupendra Singh, At-Baripada, W.No.9	2015-16	2019-20	Working
Udala	60	Sono River	GPS-21 12' 48.2" to 21 13' 10.4" N and 86 6' 55.7" to 86 7' 9.9"E, Vill-Kainsari, Khata No.- 441, Plot No.-2611/1, Area- Ac.4.73, Kisam-Nadi, ,Plot No.- 1914/2613, Area-Ac.7.77, Kisam-Nadi	1.2	40	5.00 Ha. (Ac.12.50dec)	21620 Cum	29950 Cum	S.K. Ahammad Ali, Of Mendhakhai,Udala, Mayurbhanj	2015-16	2019-20	Working
Udala	61	Sono River	GPS-21 34' 09.1" to 21 15.7" N and 86 39' 1.4" to 86 39' 43"E, Vill-Kainthaora, Khata No.37, Plot No.-50, Area-Ac.0.48, Kisam-Nadi, ,Plot No.- 92, Area- Ac.7.71, Kisam-Nadi, Plot No.-87, Area- Ac.2.74, Kisam-Gochar, Plot No-474/2, Area- Ac.1.97, Kissam-Nadi	0.86	40	5.00 Ha. (ac.12.50dec)	7699 Cum	9016 Cum	Gourishankar Pradhan, Of vill-Mendhakai, Udala, Mayurbhanj	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Kaptipada	62	Sono River	GPS- Latitude 21 °32'06"N to 21 °32'25.6"N Longitude 86°32'35.7"E to 86°32'39.2"E Village- Sanbisol, Khata No.-468 Plot No.- 1 & 790/1 Kisam- Nadi	620 meter	132 Meter	5.06 Ha	56184 m^3	68205m^3	Narasingha Kar, S/o- Purna Chandra Kar of Sanbisol P.S- Kaptipada Dist. - mayurbhanj.	2015-16	2019-20	Working
Kaptipada	63	Sono River	GPS- Latitude 21 °29'45.2"N to 21 °29'57.5"N Longitude 86°31'29.3"E to 86°31'40.4"E Village- Sudsudia, Khata No.-497 Plot No.- 995/1, Kisam- Nadi	420 Meter	113 Meter	5.00 Ha	16867m^3	20577m^3	Sri Ghanashyam Bindhani S/O - Chintamani Bindhani of Sudsudia P.S. Kaptipada Dist. mayurbahnj	2016-17	2020-21	Working
Kaptipada	64	Sono River	GPS- Latitude 21 °31'2.5"N to 21 °31'18.9"N Longitude 86°32'21.7"E to 86°32'30.4"E Village- Janakpur & Kaptipada Khata No.- 182 & 850 Plot No.- 555/1 & 1349/1 Kisam- Nadi	540 Meter	43 Meter	5.00 Ha	11,179m^3	14,324m^3	Sri Gopal Mohanty, S/o Manibhadra Mohanty of Dunduria P.S Kaptipada Dist. Mayurbhanj	2016-17	2020-21	Working
Kaptipada	65	Sono River	GPS- Latitude 21 °30'30.8"N to 21 °30'51.1"N Longitude 86°32'6"E to 86°32'3"E Village- Kaptipada-Beldiha, Khata No. - 850 & 408 Plot No.- 1973/1, 2613/1 & 313/1, Kisam- Nadi	680 Meter	130 Meter	5.00 Ha	7000m^3	9000m^3	Sri Gouri Shankar Pradhan S/O- Brundaban Pradhan of Udala W.No. 9 P.S. Udala Dist . Mayurbhanj.	2016-17	2020-21	Working
Kaptipada	66	Sono River	GPS- Latitude 21 °32'06"N to 21 °32'25.6"N Longitude 86°32'35.7"E to 86°32'39.2"E Village- Sanbisol , Khata No.-468 Plot No.- 1 & 790/1 Kisam- Nadi	840 Meter	73 Meter	5.05 Ha	10,240 m^3	17,287 m^3	Dhirendra Nath Padhi, S/o Padmalochan Padhi Of Mojuldiha P.S. Kaptipada Dist. Mayurbhanj	2014-15	2019-20	Working
Kaptipada	67	Sono River	GPS- Latitude 21 °33'34.3"N to 21 °33'44.2"N Longitude 86°34'32.5"E to 86°34'44.6"E Village- Badbisol Khata No.- 871 Plot No.- 3024/1 Kisam- Nadi	580 Meter	80 Meter	5.00 Ha	7437 m^3	7664 m^3	Sri Anadi Charan Jena, S/o - Banshidhar Jena of Dugudha P.S Udala Dist. Mayurbhanj	2016-17	2020-21	Non Working
GB Nagar	68	Sono River	Debagan sand bed Mouza - Debagan, Khata No - 693, Plot No - 3068, Kissam - Nadi 21° 35' 28.1" to 21° 36' 17.8" N 86° 41' 36" to 86° 42' 2.50" E	2.32 km	89 m	50.58 Ha	97000 Cum	204690 Cum	Bhagirathi Nayak, Village - Debagan	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
GB Nagar	69	Sono River	Nuagan Parichhipur sand bed Mouza - Nuagan, Khata No - 50, Plot - 156/1 , Area - 4.12 Acres, 21° 36' 08.5" to 21° 36' 43" N 85° 41' 32" to 85° 41' 2.55" E	0.42 km	130 m	5.35 Ha	31800 Cum	37875 Cum	Shakuntala Das, Village - Nuagan	2015 - 16	2019 - 20	Working
			Mouza - Parichhipur, Khata No - 64, Plot No - 169/1, Area - 9.10 Acres	-	-		-	-	-	-	-	
GB Nagar	70	Sono River	Chheliabeda sand bed, Mouza - Chheliabeda, Khata No - 44, Plot No - 83, Area - 7.00 Ac 21° 36' 05.2" to 21° 36' 17.5"N 86°39 38.5"to 86° 40' 57.3" E	0.87 km	60 m	5.11 Ha	10530 Cum	25984 Cum	Pradipta Kishore Raj, Village - Jaypur, Ps.- Udala	2015-16	2019-20	Working
			Chheliabeda, Mouza - Srinathpur, Khata No - 42, Plot No - 174, Area - 4.64 Ac	-	-		-	-	-	-	-	
			Chheliabeda, Mouza - Baradihi Khata No - 330, Plot No - 489/1, Area - 1.00 Ac	-	-		-	-	-	-	-	
GB Nagar	71	Sono River	Jayapur - Parichhipur sand bed, Mouza - Jayapura, Khata No - 332, Plot No - 2053/1, Area - 5.44 Ac 21° 36' 27.8" to 21° 36' 32.4"N 86°40' 49.3"to 86° 40' 50.2" E	0.33 km	165 m	5.43 Ha	44000 cum	48888 cum	R.N. Das, s/o- Baishnaba Charan Das, Village - Kalyani, Balasore	2015-16	2019-20	Working
			Jayapur - Parichhipur, Mouza - Parichhipur, Khata No - 64, Plot No - 1/1, Area- 8.04 Ac	-	-		-	-	-	-	-	
GB Nagar	72	Sono River	Jayapur - Baradihi sand bed, Mouza - Jayapur, Khata No - 332, Plot No - 2053/1, Area - Ac 5.90, 21° 36' 19.7" to 21° 36' 24.2"N 86°40' 07.1"to 86° 40' 28.2" E	0.72 km	72 m	5.11 Ha	25560 cum	31759 cum	Raghunath Das, s/o- Baishnaba Charan Das Village - Kalyani, Balasore	2015-16	2019-20	Working
			Jayapur - Baradihi, Mouza - Baradihi, Khata No - 330, Plot No- 562, Area- 6.75 Ac	-	-		-	-	-	-	-	
GB Nagar	73	Sono River	Debagan - Parichhipur sand bed, Mouza - Parichhipur, Khata No - 64, Plot No - 176, 177 & 185 Kissam - Nadi, 21° 36' 16.50" to 21° 36' 31.00"N 86°41' 36.50"to 86° 41' 52.80" E	0.515 km	115 m	5.88 Ha	21040 cum	117600 cum	Soumyadeep Chakraborty, Village - Khaparapal, Bls	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
GB Nagar	74	Sono River	Dighi Sand bed, Mouza - Dighi, Khata No - 266, Plot No - 1127, Kissam - Nadi, 21° 36' 9.8" to 21° 36' 21.9"N 86°39' 40.0" to 86° 39" 45.9" E	1.180 km	67 m	7.83 Ha	54000 cum	92920 cum	Sukanta Ku Bindhani, Village - Dighi	2015-16	2019-20	Working
GB Nagar	75	Sono River	Nath ghat sand bed , Mouza - Sainkula, Khata No -1162 , Plot No. 1755 & 2040 21° 35' 52.5" to 21° 36' 5.9"N 86°41' 42.5"to 86° 41' 58.8" E	0.48 km	105 m	5.01 Ha	30000 cum	40284 cum	-	2016-17	2020-21	Non working
GB Nagar	76	Sono River	Sainkula Kantisahi sand bed Mouza - Sainkula, Khata No -1162 , Plot No- 2049, 21° 35' 52.5" to 21° 36' 5.9"N 86°41' 42.5"to 86° 41' 58.8" E Mouza - Kantisahi, Khata No -178 , Plot No.- 366	0.63	80 m	5.01 Ha	23966	32650	-	2016-17	2020-21	Non working
GB Nagar	77	Sono River	Srinathpur-Sartikpur Sandbed Mouza - Srinathpur Khata No - 42, Plot No - 134/1, Ac. 0.53 Mouza - Sartikpur, Khata No - 46, Plot No - 166/1 Ac. 3.02 Mouza - Keshpur, Khata No - 219, Plot No - 383/1 Ac. 3.60 Mouza - Goda, Khata No - 232, Plot No - 1/1 Ac. 2.00 , Plot No.- 173/1, Ac. 3.20	0.895 km	0.056 m	5.00 Ha	-	-	-	-	-	Non Working
GB Nagar	78	Sono River	Sainkula-Manicha Sand Bed, Mouza-Sainkula, Khata No -1162, Plot No - 1755, Ac 19.00 (out of Ac 58.70)	1.0 Km	0.076 m	7.69 Ha	-	-	-	-	-	Non Working
Rairangpur	79	Kanhu River	LAT 22◦13'28.4" TO 22◦14'1.4" N LON 86◦7'00" TO 86◦7'17.3" E MOUZA - NEUNTI K. NO-112 P. NO- 1 KISAM- River	1.16 Km	132 Meter	12.99 Ha	54095 Cum	129904 Cum	Ditikrushna Mandal, Rairangpur Neunti Sandbed	2015-2016	2019-2020	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Rairangpur	80	Kanhu River	LAT 22◦15'6.12" TO 22◦15'6.56" N LON 86◦30'35" TO 86◦7'30.58" E Mouza- Champrei K. NO- 106 P. NO.- 1 KISAM-River	1.88 Km	60 Mtr	11.0153 Ha	66532 Cum	110155 Cum	Tapas Das, Rairangpur Champrei Sandbed	2015-2016	2019-2020	Working
Rairangpur	81	Khadakhai River	LAT 22◦16'26.3" TO 22◦16'58.2" N LON 86◦9'7.12" TO 86◦8'32.8" E, Mouza- Ranipal, K. NO-58, P. NO- 1, 537 & 567 , KISAM-River Sijukala, K. NO- 131, P. NO-446, KISAM-River, Mouza- Chiteibadi, K. No.- 47, P. No-1 KISAM-River, Vill- HALDA, K. NO- 155 P. NO- 1, KISAM-River	1.24 Km	60 Mtr	9.1 Ha	21630 Cum	27821 Cum	Anurag Gupta, Rairangpur Ranipal Sandbed	2016-2017	2020-2021	Working
Rairangpur	82	Khadakhai River	LAT 22◦15'28.9" TO 22◦15'26.4" N LON 86◦4'47.3" TO 86◦9'57.4" E Vill - Rautkhamar, K. No. -110 P. No-11 & 116, Vill- BHANJASARA K. No- 75 P. No.- 61 Kisam- River	0.42 Km	112 Mtr	5.01 Ha	7223 Cum	7732 Cum	Anurag Gupta, Rairangpur Rautkhamar Sandbed	2016-2017	2020-2021	Working
Rairangpur	83	Khadakhai River	Vill- Rohinikudar, Khata No -34, Plot No- 211, Area - Ac 5.80 dec, Village- Adipur, Khata No - 47, Plot No- 9, Area - Ac 6.58 dec	-	-	5.01 Ha	-	-	-	-	-	Non Working
Bijatala	84	Bankabhol Nala	Area- 5.058571 Ha, Ac. 12.50 dec. Vill- Bharandia, Khata No- 95, Plot No.- 1001, Kisam- Nadi & village- Chhanpal, Khata No. - 120 , Plot No. - 243, Kisam- nadi	0.63 Km	102 Mtr	5.01 Ha	5859 Cum	8119 Cum	-	-	-	Non Working
Kusumi	85	Kanhu River	GPS- Latitude(22° 06' 30.5'' to 22° 07' 40.5'' N) Longitude (86°02'34.2'' to 86° 03' 6'' E) Village- Bankand/Basila , Khata No.-99 & 235 Plot No.- 1/1680 & 747 , 1776/1 , Kisam-Nadi	1.76 Km	40 Mtr	6.5471 Ha	21084 Cum	65470 Cum	Ratan Chandra Hansdah S/o- Dukhu Hansdah , Vill- Gobindpur, P.o- Padiha, Ps- Badampahar, Pin- 757047	2015-16	2019-20	working
Kusumi	86	Kanhu River	GPS- Latitude(22° 10' 22'' to 22° 10' 42.5'' N) Longitude (86° 05' 26'' to 86° 05' 31.8'' E) Village- Uparbeda/Rangamatia, Khata No.- 697 & 108 , Plot No.- 3161 & 1141/1 Kisam-Nadi	0.75 Km	123 Mtr	5.22 Ha	21800 Cum	48678 Cum	Rudra Narayan Barik S/o- Late Paramananda Barik, At- Saraspada, P.o- Aharbandh, Ps- Badampahar, Pin- 757050	2015-16	2019-20	working

1	2	3	4	5	6	7	8	9	10	11	12	13
Kusumi	87	Kanhu River	GPS- Latitude(22° 06' 13.7'' to 22° 06' 29.29'' N) Longitude (86°02' 18.7'' to 86° 02' 56.5'' E) Village- Kathabaria, Khata No.-221 Plot No.- 911 & 1059 Kisam-Nadi	1.2 Km	93 Mtr	5.277 Ha	23609 Cum	48172 Cum	Ugrosen Sahu S/o- late Shiba Charan sahu. Village- Dalki, P.o- Padhia, Ps- Badampahar, Pin- 757047	2015-16	2019-20	working
Kusumi	88	Khadkhai	Khata No.- 126, Plot No.- 45 & 895, Kisam- Nadi	511 mtr 0.511 km	150 mtr	5.00 Ha.	-	-	-	-	-	Non Working
Bahalda	89	Khadakhai River	Latitude:-22°22?' 48.08"to 22°23' ? 18.3"N Long. 86° 03 ' 39.8" to 18° 03' 57.7 "E , Vill - Bahalda, Khata No-587, Plot No -1, Kisam- Nadi	0.11	209	11 Ha	23160 Cum	64216 Cum	Runurani Mandal, At- Pandhada , PO- Bhagabandh, PS- Tiring	2015-16	2019-20	Working
Bahalda	90	Khadakhai River	Latt. 22 ° 20' 55.4" to 22° 21?' 19.9" N Long. 86°04' ?59.6"to 86° 05' 4.2"E, Vill- Tentala & Kadamdiha Khata No - 216, Plot No -483/1, Kisam- Nadi & Khata No.99 ,Plot No-455/1, Kisam- Nadi	0.0546	237.5	5.463 Ha	7165 Cum	24155 Cum	Ditikrishna Mandal, At- Ichinda W.No.14, Rairangpur	2016-17	2020-21	Working
Bahalda	91	Khadakhai River	Latt. 22°19'34.5"to 22°20'10.20" Long. 86° 05'23.8"to 86°05'55.0"E, Vill- Basingi, Khata No -457, Plot No - 2899, Kisam- Nadi	0.0894	230	8.943 Ha	70263 cum	89399.98 Cum	Ditikrishna Mandal, At- Ichinda, W.No.14, Rairangpur	2015-16	2019-20	Working
Tiring	92	Khadakhai River	GPS- Latitude- 22° 27' 30.9" N to 22 27' 41.9" N Longitude- 85° 57' 55.1" E to 85° 58' 16.9" E Village- Rambeda , Khata No.- 52 Plot No.- 989 , Kisam- Nadi	0.07	10.05	5.26 Ha	28801 Cum	37233 Cum	Sri Narsing Majhi At- Randisahi P.s.- Tiring Dist- Mayurbhanj, Odisha	2015-16	2019-20	Working
Tiring	93	Khadakhai River	GPS- Latitude- 22° 23' 51.82" N to 22° 24' 07.33" N Longitude- 86° 3' 02.01" E to 86° 3' 22.16" E Village- Bhagabandi, Khata No.- 119 Plot No.- 557 & 558, Kisam- Nadi	0.09	15	5.63 Ha	9528 cum	12967.2 cum	Sri Jagadish Sahu At- Dolajadi P.s.- Tiring Dist- Mayurbhanj, Odisha	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Tiring	94	Khadakhai River	GPS- Latitude- 22° 24' 53.12" N to 22° 25' 15.10" N Longitude- 86° 00' 59.79" E to 86° 01' 09.58" E Village- Dhabadhabani, Khata No.- 579 Plot No.- 102/1 & 657/1 Kisam- Nadi	0.076	16	5.42 Ha	15435 Cum	17150 Cum	Sri Padmacharan Sahu At- Janghia Po- Baddalima P.s.- Tiring Dist- Mayurbhanj, Odisha	2015-16	2019-20	Working
Tiring	95	Khadakhai River	GPS- Latitude- Longitude- Village- Bijaybasa, Khata No.- 42 Plot No.- 1 , Kisam- Nadi	0.87	60.35	5.00 Ha	-	-	-	-	-	Non Working
Tiring	96	Khadakhai River	GPS- Latitude- Longitude- Village- Badnarayani , Khata No.- 93 Plot No.- 1006, Kisam- Nadi	0.8	66.38	5.00 Ha	-	-	-	-	-	Non Working
Tiring	97	Khadakhai River	GPS- Latitude- Longitude- Village- Maghua, Khata No.-180 Plot No.- 1132, Kisam- Nadi	0.79	68.4	5.00 Ha	-	-	-	-	-	Non Working
Jamda	98	Kanhu river	Lat-22°16'12.2"N to 22°16'37.8"N Long.-86°07'41.2"E to 86°08'2.8"E , Vill-Laxmiposi, Khata No.-85, Plot. No.-689/1 &1409/1, Kisam-Nadi	1.150 KM	50 m.	5.00 Ha	25949 Cum	36019 Cum	Styabrata Mandal At-Ichinda, Po/Ps-Rairangpur, Dist.-Mayurbhanj	2016-17	2020-21	Working
Jamda	99	Khadkhai river	Lat-22°22'54.3"N to 22°23'6.04"N Long.-86°03'36.09"E to 86°03'46.02"E , Vill-Baddundu, Kh. No.-310, P. No.1106/1, Kisam-Nadi	0.440 KM.	142 m.	5.00 Ha	13356 Cum	21311 Cum	Chandra Sekhar Yadav, At/po-Bahalda, Dist.-Mayurbhanj	2016-17	2020-21	Working
Jamda	100	Khadkhai river	Lat-22°23'6.3"N to 22°23'37.16.04"N Long.-86°03'43.09"E to 86°03'52.07"E, Vill-Baddundu, Khata. No.-310, Plot. No.-1106/2, Kisam-Nadi	0.340 KM.	160 m.	5.00 Ha	19819 Cum	23737 Cum	Chandra Sekhar Yadav, At/po-Bahalda, Dist.-Mayurbhanj	2016-17	2020-21	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Jamda	101	Khadkhai river	Lat-22°18'50.3"N to 22°19'12.2"E Long.-86°06'17.1"E to 86°06'30.6"E , Vill-Ghumal, Khata. No.-152, Plot No.-1832 & 1832/1, Kisam-Nadi	0.780 KM.	70 m.	5.00 Ha	16675 Cum	18158 Cum	Styabrata Mandal At-Ichinda, Po/Ps-Rairangpur, Dist.-Mayurbhanj	2016-17	2020-21	Working
Jamda	102	Kanhu river	Lat-22°11'11.6"N to 22°11'40.2"N Long.-86°06'13.6'E to 86°06'29.4"E , Vill-Hensda, Khata. No.-95, Plot No. - 792/1, Kisam-Nadi	0.530 KM.	45 m.	5.00 Ha	6383 Cum	21656 Cum	Ms Billin Trades(Pro-Tanmaynath Das, Taraknath Das), At/po-Bahalda, Dist. Mayurbhanj	2018-19	2022-23	Working
Jamda	103	Balisundura river	Lat-22°18'19.9"N to 22°18'50.6"N Long.-86°02'55.2"E to 86°03'31.2"E , Vill-Bhagabeda, Khata No.-177, Plot No - 1 & 216/1399/1, Kisam-Nadi	1.530 KM.	20m.	5.00 Ha	15451 Cum	28167 Cum	Ms Billin Trades(Pro-Tanmaynath Das, Taraknath Das), At/po-Bahalda, Dist. Mayurbhanj	2018-19	2022-23	Working
Karanjia	104	Baitarani	21 50' 18.42" to 21 50' 35.86" N 85 48' 32.36" to 85 48' 37.89 " E, Vill-Birajadunathpur Sashan Khata.No - 61, Plot No - 627/1, Kissam-River	0.12 km	38 m	5.6680 Ha	22800 m3	22800 m3	Md. Nasir At-Chadheibhol Po-Ghosda P.S-Karanjia	2015-16	2019-20	Working
Karanjia	105	Baitarani	21 48' 23.05" to 21 48' 45.01' N 85 48' 56.08" to 85 49' 12.02" E, Mahadevdeuli-I, Khata No -125, Plot No - 922/1, Kissam-River	0.264	77.5	8.5020 Ha	55000 m3	55000 m3	Md. Nasir, At-Chadheibhol Po-Ghosda, P.S-Karanjia	2015-16	2019-20	Working
Karanjia	106	Baitarani	22 48' 23.05" to 21 48' 45.01' N 85 48' 56.08" to 85 49' 12.02" E, Mahadevdeuli-II, Khata No - 125, Plot No-922/1, Kissam-River	0.3	60	8.9068 Ha	46,500 m3	46,500 m4	Md. Nasir, At-Chadheibhol Po-Ghosda, P.S-Karanjia	2015-16	2019-20	Working
Karanjia	107	Deo	Vill-Chitraposi & Asanbani Khata No-152 and 119, Plot No-1127, 400,403 & 404, Kissam-River, Area-5.1902 Ha.	-	-	5.1902 Ha	-	-	Md Nurul Islam, At-Chadheibhol, Karanjia	2015-16	2019-20	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Karanjia	108	Deo	21'46'59N to 21'47'25N 85'52'58E to 85'53'32E, Vill-Bhanra, Khata No-215, Plot No-2234, Kissam-River, Area-5.0000 Ha.	-	-	5.00 Ha	27410 Cum	42000 Cum	Wasim Nayar,Keonjhar Project proponent of Ms Montecarlo Pvt Ltd	-	-	Non Working
Sukruli	109	Baitarani River	GPS- Latitude-21˚53'49.9"N to 21˚54'3.2" N, Longitude-85˚47'33.3"E to 85˚47'48.1" E, Village- Adipur, Khata No.- 225 , Plot No.-1951/1 Kisam-Nadi	386 m	100 m	4.53 Ha	45890 Cum	45950 Cum	Kshirod Mohanta, S/o- Janaki Ram Mohanta,, At/Po- Karanjia, W. No-14, P.S.- Karanjia Dist- Mayurbhanj Pin No.- 757039	2015-16	2019-20	Working
Sukruli	110	Baitarani River	GPS- Latitude-21˚53'36.4" N to 21˚53'55.5" N, Longitude-85˚47'40" E to 85˚47'59" E, Village- Keshna Khata, No.- 174, Plot No.-1887/1, Kisam-Nadi	600 m	80 m	5.26 Ha	57382 Cum	49568 Cum	Wasim Bari S/o- Asaf Ali, At- Magurgadia, Keonjhar Town, Po/P.S- Keonjhar, Dist- Keonjhar	2015-16	2019-20	Working
Sukruli	111	Baitarani River	GPS- Latitude-21˚52'32.2"N to 21˚52'49.4"N Longitude-85˚47'59" E to 48'10.2" E, Village- Baradapal, Khata No.- 60, Plot No.-386 & 89, Kisam-Nadi	380 m	100 m	5.078 Ha	8476 Cum	10286 Cum	Abdul Hannann, S/o- Sk. Belal, At-Chadheibhol, Po- Ghosada, P.S- Karanjia, Dist- Mayurbhanj	2016-17	2020-21	Working
Sukruli	112	Kanta-Khairi river	GPS-Latitude-21˚55' 00" N to 21˚55'8.5" N Longitude-85˚49'28.5" E to 85˚ 50' 8.4" E, Village-Khiching Khata No.- 169, Plot No.-883,991 & 1320/1 Kisam-Nadi	891 m	25 m	5.034 Ha	11139 Cum	17181 Cum	Rabindra Kumar Sah, S/O- La te Ekadash @ Harekrushna Sahu, At- Naupanha, Po- Sukrul, P.S- Raruan, Dist- Mayurbhanj, Pin No.-757039	2016-17	2020-21	Working
Sukruli	113	Khairi-Bhandan River	GPS- Latitude-21˚54'59"N to 21˚55'29" N Longitude-85˚48'59"E to 85˚49'29"E, Village- Ghodeikudar Khata No.- 39, Plot No.- 130,178,188,189 & 91/192 Kisam-Nadi & Vill- Panasi, Khata No- 97, Plot No.-1418 &1491	688 m	25 m	6.078 Ha	10320 Cum	18278 Cum	Babish Prusty, S/O- Suresh Ch. Prusty, At/Po- Pandarsil, Via- Sukruli, P.S- Raruan, Dist- Mayurbhanj	2016-17	2020-21	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Sukruli	114	Kanta-Khairi river	GPS- Latitude- 21˚55'3.9"N to 21˚55'14.6" N Longitude-85˚50'19.8" E to 85˚50'55.4" E , Village- Pandavilla, Khata No.-88 & Khata No.-169 Plot No.-732, 732/761 & 1320/1, Kisam-Nadi	1300 m	25 m	5.09 Ha	11116 Cum	12666 Cum	-	2016-17	2020-21	Non working
Sukruli	115	Kanta-Khairi river	GPS- Latitude -21˚54'17.82"N to 21˚54' 43.03" N Longitude- 85˚52'53.80" E to 85˚53'28.69" E Village- Bangiriposi, Khata No.-91 Plot No.-1 & 516, Kisam-Nadi	286 m	35 m	5.156 Ha	11903 Cum	25797 Cum	-	2016-17	2020-21	Non working
Sukruli	116	Kanta-Khairi river	GPS-Latitude- 21˚52'32.2" N to 21˚52'49.4" N Longitude-85˚47'49" E to 85˚48'10.2" E, Village- Silmaposi, Khata No.-59, Plot No.-50,189,194 & 323, Kisam-Nadi & Village-Panasi, Khata-97, Plot No.-48,1403,1405 & 1414	460 m	50 m	5.244 Ha	11500 Cum	16000 Cum	-	2016-17	2020-21	Non working

1	2	3	4	5	6	7	8	9	10	11	12	13
Sukruli	117	Khairi Bhandan	GPS- Latitude- 21˚55'59.9" N to 21˚56'20.9"N Longitude-85˚49'56.7" E to 85˚50'24.4" E, Village-Khandiadar, Khata No.- 18, Plot No.- 1 & 66/1, Kisam-Nadi	1.5 km	48m	5.00 Ha	14812.5 Cum	36052.5 Cum	Deo Irregation Project, Karanjia	2017-18	2021-22	Working
Sukruli	118	Baitarani	GPS- Latitude- 21˚54'28.2" N to 21˚54'51.6"N Longitude-86˚47'17.8" E to 86˚47'26.2" E Village- Adipur, Khata No.- 225 Plot No.- 1604 & 1578, Kisam-Nadi	1.130 km	30 m	6.454 Ha	47825 Cum	80675 Cum	-	2018-19	2022-23	Non-working
Thakurmunda	119	Tel Nadi	GPS- Latitude -21° 35' 8.11" N to 21° 36'10.1"N, Longitude - 86° 03'12"E to 86° 03'48.3, Village-Khasakudar & Oriam, Khata - 61, 56 & 56 Plot - 1, 24 & 472 Kissam- Upa Nadi, Upa Nadi & Upa Nadi respectively	2.484	39.56	5.196 Ha.	17973 Cum	29206 Cum	Sri Basanta Kumar Paibarty At/Po./Ps.- Thakurmunda, Dist Mauurbhanj, Mobile -9437252261	2015-16	2019-20	Working
Thakurmunda	120	Sima Nadi	GPS- Latitude -21° 34' 17.8" N to 21° 34'46.9"N Longitude - 86°07'24.8"E to 86°08'23.6"E Village-Bharanibeda, Khata No - 64, Plot No - 588,589 & 591, Kissam- Nadi, Nadi & Nadi	2.48	40	5.04 Ha.	3510 Cum	6000 Cum	Sri Anjan Kumar Mohanta At-Nishaposi, Po-Khandabandha, Ps-Thakurmunda Dist - Mauurbhanj, Mobile-8658002409	2016-17	2020-21	Working
Raruan	121	Kangira	GPS- Lat. 22° 3' 24.2" to 22° 3' 47.1" N, Long. 84° 41' 29.9" to 86° 41' 43.8" E Village- Righa Khata No.- 155 Plot No.- 1/1 & 1/1797 Kisam- Nadi	1.112 km	53.5 m	5.15 Ha	35767 cum.	40375 cum.	Sarat Chandra Patra, S/o-Late Bhanu Patra, At-Naibhanga, P.O-Nuagan, P.S-Ghagarbeda	2015-16	2019-20	Working
Raruan	122	Baitarani	GPS- Lat. 21° 59' 18"N to 21° 59' 34.8" N, Long. 85° 43' 28.2"E to 85° 43' 54.9" E Village- Nuagan Khata No.- 224 Plot No.- 1860/1 Kisam- Nadi	0.940 km	53.5 m	5.00 Ha	4475 cum.	6604 cum.	Kamalakanta Mahanta, S/o-Late Guru Charan Mahanta, At/P.O-Nuagan, P.S-Ghagarbeda	2016-17	2020-21	Working

1	2	3	4	5	6	7	8	9	10	11	12	13
Raruan	123	Kangira	GPS- Lat. 22° 4' 39.1"N to 22° 5' 7.6" N, Long. 85° 45' 25.1"E to 85° 45' 35.8" E Village- Narasandha & Dhanyatri Khata No.- 276 &129 Plot No.- 1/1,1/2002 &1025/1 Kisam- Nadi & Nadi	1.148 km	54 m	6.40 Ha	31728 cum.	51046 cum.	Mahendranath Mahanta, S/o-Banamali Mahanta, At-Batisahi, P.O/P.S-Ghagarbeda	2015-16	2019-20	Working
Raruan	124	Kangira	GPS- Lat. 22° 3' 29.7"N to 22° 3' 46.34" N, Long. 85° 42' 32.8"E to 85° 43' 10.25" E Village- Solghara, Khata No.- 130, Plot No.- 1/1, 1/1164 Kisam- Nadi	0.972 km	56.5 m	5.947 Ha	22522.68 cum.	34053.63 cum.	Sashibhusan Giri, S/o-Late Shiba Giri, At/P.O-Bamanposi, P.S-Ghagarbeda	2015-16	2019-20	Working
Raruan	125	Baitarani	GPS- Lat. 21° 56' 27.4"N to 21°56' 57.4" N, Long. 85° 47' 32.9"E to 85° 47' 37" E , Village- Mukuna, Khata No.- 97, Plot No.- 1, Kisam- Nadi	0.908 km	64.66 m	5.135 Ha	10767 cum.	14090 cum.	Rahas Bihari Mahanta, S/o-Late Dasaratha Mahanta, At/P.O-Nuagan, P.S-Ghagarbeda	2016-17	2020-21	Working
Raruan	126	Khairi Bhandan	GPS- Lat. 21° 56' 14.8"N to 21°56' 45.2" N, Long. 85° 51' 21.2"E to 85° 51' 34.2" E Village- Bad-Raruan & San-Raruan Khata No.- 412 & 36 Plot No.- 2588/1 &153/1 Kisam- Nadi & Nadi	1.330 km	43.2 m	5.042 Ha	2057 cum.	3589 cum.	Kamalakanta Mahanta, S/o-Late Guru Charan Mahanta, At/P.O-Nuagan, P.S-Ghagarbeda	2016-17	2020-21	Working
Raruan	127	Khairi Bhandan	GPS- Lat. 21° 57' 53"N to 21°58' 18.7" N, Long. 85° 56' 16.6"E to 85° 56' 48.5" E Village- Badmenta & Brundeiposi, Khata No.- 56 & 91, Plot No.- 674/1,51, 616 & 462/619 Kisam- Nadi & Nadi	1.408 km	44 m	5.171 Ha	4918 cum.	7976 cum.	SK Immam Hossain, S/o-SK Alli Hossain At/P.O/P.S-Jashipur	2016-17	2020-21	NonWorking
Raruan	128	Kangira/ Routa	GPS- Lat. 22° 05' 39.4"N to 22°05' 52.9" N, Long. 85° 46' 33.3"E to 86° 47' 7.8" E Village- Rangamatia Khata No.- 173 Plot No.- 1 & 297/968, Kisam- Nadi	1.134 km	53.5 m	5.532 Ha	3797 cum.	6612 cum.	-	2016-17	2020-21	NonWorking

1	2	3	4	5	6	7	8	9	10	11	12	13
Raruan	129	Baitarani	GPS- Lat. 21° 58’ 24.7”N to 21°58’ 41.7” N, Long. 85° 45’ 8.4"E to 85° 45’ 31.2” E Village- Kendua Khata No.- 59 Plot No.- 1463/1 Kisam- Nadi	0.778 km	76 m	5.018 Ha	38000 cum.	63444 cum.	-	2015-16	2019-20	NonWorking
Raruan	130	Baitarani	GPS- Lat. 21° 59’ 6.5”N to 21°59’ 17.6” N, Long. 85° 42’ 38.9"E to 85° 42’47.9” E Village- Talbiunria Khata No.- 57, Plot No.- 725/1, Kisam- Nadi	0.426 km	73.33 m	5.000 Ha	21085 cum.	26060 cum.	-	2019-20	2023-24	NonWorking
Raruan	131	Kangira	GPS- Lat. 22° 03’ 48.9”N to 22°04’ 6” N , Long. 85° 43’ 38.2"E to 85° 44’ 11.6” E, Village- Hindola & Dhanyatri , Khata No.- 299 & 129 Plot No.- 1(Part), 1(Part) 1(Part), 1/1914 & 1/1915 ,Kisam-Nadi Kisam-Nadi	1.044 km	58.66 m	5.000 Ha	13151 cum.	16893 cum.	-	2019-20	2023-24	Non Working