DISTRICT SURVEY REPORT FOR SAND MINING DISTRICT BARWANI M.P.



AS PER NOTIFICATION NO. S.O. 141(E) NEW DELHI, THE 15TH JANUARY, 2016 & 25TH JULY 2018 OF MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

YEAR-2022

PREPARED BY SUB-DIVISIONAL COMMITTEE

COMPRISING OF SUB-DIVISIONAL MAGISTRATE, OFFICERS FROM IRRIGATION DEPARTMENT, STATE POLLUTION CONTROL BOARD, FOREST DEPARTMENT, GEOLOGY OR MINING OFFICER

State Level Environment Impact
Assessment Authority, M.P.
(EPeril

Paryavaran (30° E-5, Arera Colony, 12 - 7 (M. f.)

प्रभाशे अधिकारी कार्यालय क्लेक्टर (खनिज शाखा) जिला-क्डवानी कार्यालय कले कर कि शहरा जिला बड़वानी म.प्र.

क. 826 /खनिज / 2022 प्रति,

बड़नानी, दिनांक *25 / 08 /* 2022

सदस्य सचिव राज्य स्तरीय प्रयाविकारीमानी निर्धारण प्रधिकरण भोपाल

विषय:--

जिला बड़वानी की जिला सर्वेक्षण रिपार्ट (रेत खनिज) में 588वीं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की बैठक दिनांक 16.08.2022 में दर्ज अपत्तियों के निराकरण उपरांत संशोधित जिला सर्वेक्षण रिपोर्ट प्रस्तुत करने बावत।

उपरोक्त विषयांतर्गत लेख है कि 588वीं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की बैठक दिनांक 16.08.2022 में दर्ज अपित्तियों के निराकरण उपरांत जिला बड़वानी की जिला सर्वेक्षण रिपार्ट (रेत खनिज) की सॉफ्ट एवं हार्ड कॉपी अनुमोदन हेतु संलग्न प्रेषित है।

-		
क्र	SIGILLI	निराकरण
1	तालिका क्र. 23 के अंतर्गत लीजवार	संशोधित जिला सर्वेक्षण रिपोर्ट में तालिका क्र.
	लंबाई, चौड़ाई के साथ जो 60 मिनरल	24 का क्र. परिवर्तित होकर 14 है। तालिका
	पोटेंशियल दर्शाया गया है। इस तालिका	में जिले में प्रस्तावित रेत खदानों की नदीवार
	में उसमें गहराई दर्शाते हुये रेत की मात्रा	कुल लम्बाई, उनकी औसत चौड़ाई एवं नदी
	दर्शाये एवं इसकी मात्रा का 60 मात्रा	में 60 प्रतिशत मिनरल पोटेंशियल की
	दर्शावें।	जानकारी दी गयी है। प्रत्येक खदान में रेत
		की गहराई अलग-अलग होने से तालिका में
		गहराई दर्शाना संभव नहीं है। प्रत्येक खदान
		में रेत की लम्बाई, चौड़ाई एवं गहराई तालिका
		क्र15 में दर्शायी गयी है।
2	इसी प्रकार तालिका क्र. 24 में जो	संशोधित जिला सर्वेक्षण रिपोर्ट में तालिका क्र.
	नदीवार एवं लीज वार आंकडे (लंबाई,	24 का क्र. परिवर्तित होकर 15 है। उक्त
- 1	चौड़ाई के साथ) दर्शाये गये तत्पश्चात	तालिका में नदीवार एवं लीजवार लंबाई,
	प्राप्त क्षेत्रफल का 60 प्रतिशत मिनरल	चौड़ाई के साथ गहराई भी दर्शायी जाकर 60
	पोटेंशियल बताया गया है। इसमें गहराई	प्रतिशत मिनरल पोटेंशियल की गणना की
- 1	भी दर्शाय एवं तत्पश्चात् प्राप्त मात्रा	गयी है। तालिका के कॉलम नं. 3 एवं 4 में
- 1	(टवसनउम) का 60 प्रतिशत मिनरल	प्रस्तावित रेत खदान की औसत लम्बाई एवं
	पोटेंशियल के रूप में प्रदर्शित करें। यह	चौड़ाई दर्शायी गयी है एवं कॉलम क्र 7, 8, 9
- 4	प्रक्रिया समस्त नदी– वार लीजो की	में क्रमशः प्रस्तावित रेत खदान के जिस भाग
		में वेन वायक है नान का जिस भाग
	जानकारी में समाहित करे एवं तालिका	में रेत उपलब्ध है उसकी लम्बाई, चौड़ाई एवं
1	क 24 करे पुनरिक्षित करे।	गहराई दर्शाते हुए 60 प्रतिशत मिनरल
		पोटेंशियल की गणना की गयी है।
1	तालिका क0. 17 एवं 18 में प्री-मानसून	संशोधित जिला सर्वेक्षण रिपोर्ट में तालिका क्र
13	नदाय की रेत की मात्रा में लीजवर (60.	17 एवं 18 का क्र. परिवर्तित होकर 16 एव
-		

	टोटल मिनरल पोटेंशियल) (लंबाई एवं चौड़ाई के साथ नहीं दी गयी है। अतएव उक्त दोनों तालिकाओं पुनरिक्षित करें।	17 है। पोस्ट मानसून तालिका में मानसून जपरांत लीजवार लीज के अंश भाग में जमा हुई रेत की लम्बाई एवं चौड़ाई का भी समावेश कर दिया गया है। यदि ठेकंदार / पट्टेदार ने मानसून के बाद के मौसम के दौरान रेत की अनुमेय मात्रा का दोहन किया गया है, तो खनन योग्य खनिज क्षमता मानसून मौसम के प्रारम्भ होने से पूर्व समाप्त हो जाएगी।
		तद्नुसार तालिका 17 में लीजवार गहराई शून्य दर्शायी गयी है।
4	विगत 03 वर्षों में उत्खनित रेत की	विगत 03 वर्षों में उत्खनित रेत की खदानवार
	खदानवार मात्रा भी दर्शाई जाये, जिससे	मात्रा तालिका क्र. 18 में दर्शायी गयी है।
	यह ज्ञात हो सके कि उस स्थल पर	
	खदान का मिनरल पोटेंशियल विगत 03	
-	वर्षों में कितना रहा है।	
5	पोटेशियल की गणना दर्शाने वाली टेबल	पोटेशियल की गणना दर्शाने वाली टेबल में
	में आवश्यक संशोधन कर रेत की 60	आवश्यक संशोधन कर रेत की 60 प्रतिशत
	प्रतिशत माइनेबल पोटेशियल (रेत खनन	माइनेबल पोटेंशियल (रेत खनन हेतु) मीट्रिक
	हेतु) मीट्रिक टन यूनिट में भी दर्शाये।	टन यूनिट में तालिका क्र. 15 के कॉलम नं. 12 में दर्शाया गया है।
6	इसी प्रकार जिले में स्वीकृत/प्रस्तावित	जिले में स्वीकृत/प्रस्तावित रेत खदानों के
0	खदानों के को-आर्डिनेट के अनुसार	को—आर्डिनेट के अनुसार डिजिटाईज मेप
	डिजिटाईज मेप (आर्क व्यू/गूगल अर्थ	(आर्क व्यू/गूगल अर्थ कम्पेटेवल सी.डी. मे)
	कम्पेटेवल सी.डी. मे) भी संलग्न किया	भी संलग्न प्रेषित है।
	जाये ताकि पर्यावरण अभिस्वीकृति के	
	समय खदानों की सही स्थिति ज्ञात करने	
	में तथा 500 मीटर के अंदर स्थित अन्य	
	स्वीकृत खदानों की जानकारी प्राप्त करने	
	में सुविधा हो।	

जिला बड़वानी

बड़वानी, दिनांक **25/08/**2022

पृ.क्र. 827/खनिज/2022 बड़वानी, दिनांक 25/ प्रतिलिपि, संचालक, प्रशासन एवं खनिकर्म म.प्र. भोपाल की ओर सूचनार्थ प्रेषित।

प्रमारी अधिकारी जिला बड़वानी

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Late Level Environment Impact
Assessment Authority, M.P.

(EPCO)
Paryayaran Parisat
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Arera Colony, Bhopal (M.P.)

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-कडवानी भारत का राजपंत्र : असाधारण

7

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 25th July, 2018

S.O. 3611(E).—Whereas by notification of the Government of India in the erstwhile. Ministry of Environment and Forest issued vide number S.O. 1533(E), dated the 14th September, 2006 published in the Gazette of India, Extraordinary, Part II. Section 3, Sub-section (ii) (hereinafter referred to as the said notification) directions have been given regarding the prior environmental clearance:

And whereas, the Ministry of Environment, Forest and Climate Change has amended the said Notification vide S.O. 141 (E) dated 15th January, 2016 wherein the procedure for preparation of District Survey Report for minor mineral has been prescribed;

And whereas, the Hon'ble High Court of Jharkhand at Ranchi in its orders dated the 11th April, 2018 and 19th June, 2018 in W.P. (PIL) No. 1806 of 2015, in the matter of Court on its Own Motion Versus the State of Jharkhand & Others with W.P. (PIL) No. 290 of 2013, in the matter of Hernant Kumar Shilkarwar Versus the State of Jharkhand & Others, has inter-alia directed the preparation of District Survey Report for minor minerals other than Sand and Bajri or delegation of the powers for preparation of format of District Survey Report of minor minerals other than sand and bajri to the State Government and/or District Environment Impact Assessment Authority and District Expert Appraisal Committee:

And whereas, the Central Government hereby in the public interest dispense with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the Environment Protection Rules, 1986.

Now, therefore in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments to the notification of the Government of India, in the erstwhile Ministry of Environment and Forests vide number S.O. 1533(E), dated the 14th September, 2006, namely:

In the said notification, for Appendix X, the following shall be substituted, namely: -

"APPENTIX . X

[See paragraph 7 (Hi) (a)]

L PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT FOR SAND MINING OR RIVER BED MINING

The main objective of the preparation of District Survey Report (as per the Sustainable Sand Mining Guideline) is to ensure the following:

Identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

The report shall have the following structure:

- (1) Introduction;
- (2) overview of Mining Activity in the District;
- (3) the List of Mining Leases in the District with location, area and period of validity;
- (4) details of Royalty or Revenue received in last three years:
- (5) detail of Production of Sand or Bajri or minor mineral in last three years:
- (6) process of Deposition of Sediments in the rivers of the District;
- (7) general Profile of the District:
- (8) land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.;
- (9) physiography of the District;

State Level Environment Impact
Assessment Authority, M.P.
(EPCO)

Paryavaran Parisar E-5, Arera Colony, Bhopal (M.P.) प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बडवानी

THE GAZETTE OF INDIA: EXTRAORDINARY

[PART II-SEC, 3(ii)]

- (10) rainfall: month-wise;
- (11) geology and Mineral Wealth.

In addition to the above, the report shall contain the following:

- District wise detail of river or stream and other sand source;
- District wise availability of sand or gravel or aggregate resources;
- (c) District wise detail of existing mining leases of sand and aggregates.

A survey shall be carried out by the District Environment Impact Assessment Authority with the assistance of Geology Department or Irrigation Department or Forest Department or Public Works Department or Ground Water Boards or Remote Sensing Department or Mining Department etc. in the district.

Drainage system with description of main rivers

S. No.	Name of the River	Area drained (Sq. Km)	% Area drained in the District
(1)			
(2)			

Salient Features of Important Rivers and Streams:

S. No.	Name of the River or Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin
(1)				
(2)				

Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric toune) (60% of total mineral potential)

Mineral Potential

Annual Deposition							

State Level Environment Impact Assessment Authority, M.P. (EPCO)

Paryamen Parisar E-5, Arera Co. say, Bhopal (M.P.)

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बडवानी

[भाग ||- खण्ड अ(ii)] भारत का राजपत्र : असाधारण Length of area Area Mineable mineral River Portion of the Average width potential (in river or stream recommended recommended No recommended Stream for mineral recommended metric tonne) for mineral (60% of total for mineral concession (in for mineral concession (in mineral potential) kilometer) concession (in concession square meter) meters) (D) (2) Total for the District

A Sub-Divisional Committee comprising of (i) Sub-Divisional Magistrate, (ii) Officers from (a) Irrigation department, (b) State Pollution Control Board or Committee, (c) Forest department, (d) Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.

Methodology adopted for calculation of Mineral Potential:

The mineral potential is calculated based on field investigation and geology of the catchment area of the river or streams. As per the site conditions and location, depth of minable mineral is defined. The area for removal of the mineral in a river or stream can be decided depending on geo-morphology and other factors, it can be 50 % to 60 % of the area of a particular river or stream. For Example, in some hill States mineral constituents like boulders, river born Bajri, sand up to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

The District Survey Report shall be prepared in the district and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on the district's website for twenty-one days. The comments received shall be considered and if found correct, shall be incorporated in the final Report to be finalised within six months by the District Environment Impact Assessment Authority.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years.

II. PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT OF MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

The District Survey Report shall be prepared for each minor mineral in the district separately and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty-one days. The comments received shall be considered and if found fit, shall be incorporated in the final Report to be finalised within six months by the DEIAA.

The District Survey Report for minor minerals other than sand mining or River bed mining shall be as per structure mentioned below: -

FORMAT FOR PREPARATION OF DISTRICT SURVEY REPORT FOR MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

- (1) Introduction:
- (2) overview of Mining Activity in the District:
- (3) general Profile of the District:
- (4) geology of the District:
- (5) drainage of Irrigation pattern;
- (6) land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.;
- (7) surface Water and Ground Water scenario of the district;

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बड़वानी

State Level Environment Impact
Assessment Authority, M.P.
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E-5, Arera Colony, Bisopal (M.P.)

10 THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—Sec. 3(ii)]

- (8) rainfall of the district and climatic condition;
- (9) details of the mining leases in the District as per the following format: -

SI. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Lessee	Mining lease Grant Order No. & date	Area of Mining lease (ha)	Period of Mining lease (Initial)		Period of leas (1 ⁴ /2 nd r	ie .
						From	То	Form	То
L	2	3	4	5	6	7	8	9	10

Date of commencement of Mining Operation	Status (Working/Non- Working/Temp. Working for dispatch etc.)	Captive/ Non- Captive	Obtained Environmental Clearance (Yes/No), If Yes Letter No with date of grant of EC.	Location of the Mining lease (Latitude & Longitude)	Method of Mining (Opencast/Underground
11	12	13	14	15	16

- (10) details of Royalty or Revenue received in last three years;
- (11) details of Production of Minor Mineral in last three years;
- (12) mineral Map of the District;
- (13) list of Letter of Intent (LOI) Holders in the District along with its validity as per the following format:
- (14) total Mineral Reserve available in the District:

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

- (15) quality /Grade of Mineral available in the District;
- (16) use of Mineral;
- (17) demand and Supply of the Mineral in the last three years;
- (18) mining leases marked on the map of the district;
- (19) details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude);
- (20) details of Eco-Sensitive Area, if any, in the District;

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बड़वानी

Assessment Authority, M.P.
(EPCO)

Paryaveran Parisar E-5, Arera Colony, Bhopal (M.P.) [NET []- BUT 3(ii)]

भारत का राजपत्र : असाधारण

1.1

- (21) impact on the Environment (Air, Water, Noise, Soil, Flora & Fauna, land use, agriculture, forest etc.) due to mining activity;
- (22) remedial Measures to mitigate the impact of mining on the Environment;
- (23) reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan);
- (24) risk Assessment & Disaster Management Plan;
- (25) details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis & Tuberculosis is also needs to be submitted);
- 26) plantation and Green Belt development in respect of leases already granted in the District:
- (27) any other information.

The District Environment Impact Assessment Authority (DEIAA) based on the nature and type of minor mineral in the District may include the additional parameters in the District Survey Report in consultation with the Department of Mines and Geology of the concerned State Government.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years":

[F.No. L-11011/26/2018-IA-II (M)]

GYANESH BHARTI, Jt. Secy.

Note: The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 1533 (E), dated the 14th September, 2006 and subsequently amended by:-

- 1. S.O. 1949 (E), dated the 13th November, 2006;
- 2. S.O. 1737 (E), dated the 11th October, 2007;
- 3... S.O. 3067 (E), dated the 1st December, 2009;
- S.O. 695 (E), dated the 4th April, 2011;
- S.O. 156 (E), dated the 25th January, 2012;
- S.O. 2896 (E), dated the 13th December, 2012;
- S.O. 674 (E), dated the 13th March, 2013;
- 8. S.O. 2204 (E.), dated the 19th July 2013;
- S.O. 2555 (E), dated the 21st August, 2013;
- 10. S.O. 2559 (E), dated the 22nd August, 2013;
- 11. S.O. 2731 (E), dated the 9th September, 2013;
- 12. S.O. 562 (E), dated the 26th February, 2014;
- 13. S.O. 637 (E), dated the 28th February, 2014;
- 14. S.O. 1599 (E), dated the 25th June, 2014;
- 15. S.O. 2601 (E), dated the 7th October, 2014;
- S.O. 2600 (E), dated the 9th October, 2014;
- 17. S.O. 3252 (E), dated the 22nd December, 2014;
- 18. S.O. 382 (E), dated the 3rd February, 2015;
- 19. S.O. 811 (E), dated the 23rd March, 2015:
- 20. S.O. 996 (E), dated the 10th April, 2015;

State Level Environment Impact
Assessment Authority, M.P.
(EPCO)
Paryavaran Pari

Paryavaran Parisar E-5, Arera Co.sny, Bhopal (M.P.) प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-कडवानी

1. Introduction

In pursuance to the Gazette Notification, Ministry of Environment, Forest and Climate Change (Mo EF& CC), the Government of India Notification No S.O. 141 (E) Appendix— X, Dated 15.01.2016 & S.O. 3611 (E) New Delhi, 25th July 2018 laid procedure for preparation of District Survey Report of sand mining or river bed mining. The main purpose of preparation of District Survey Report (DSR) is to identify the Sand resources and developing the sand mining activities along with other relevant data of the district.

The process of making a DSR includes:

- Collection of baseline data from the department
- Development of related maps from satellite and secondary sources
- Understanding river flows and sedimentation vis-à-vis sand mining
- Tabulation and mapping of existing sand mining locations and yield
- Correlation with satellite data for pre and post monsoon sand yield
- Suggesting new locations for sand mining approvals
- Design and Development of DSR as per Mo EF guidelines
- Interaction with line department for data / document ownership

1.1 Guidelines to Monitor Sand Mining

For the first time, the Ministry of Environment, Forests and Climate Change (Mo EFCC) has released guidelines to monitor and check illegal sand mining in the country.

- Sustainable Sand Management Guidelines (SSMG), 2016 focuses on the management of sand mining, but there was a need to have guidelines for effective enforcement of regulatory provisions and their monitoring.
- The 2020 guidelines are to be enforced simultaneously with the SSMG, 2016, in case of conflict; the new set will hold legal precedence. The Mines and Minerals (Development and Regulation) Act, 1957 has empowered state governments to make rules to prevent illegal mining, transportation and storage of minerals.

State Level Environment Impact

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- However, there were a large number of illegal mining cases in the country and in some cases, many of the officers lost their lives while executing their duties to curb illegal mining.
- Illegal and uncontrolled illegal mining also leads to loss of revenue to the State and degradation of the environment.

1.2 Enforcement and Monitoring Guidelines for Sand Mining 2020

The fair and rapid advancement of technology in country has enabled surveillance and remote monitoring in the field of mining for the effective monitoring of the mining activities, particularly, sand mining. States are now utilizing remote sensing to prevent illegal mining. Rules have been made to prevent illegal mining, transportation and storage of minerals but in the recent past, it has been observed that there was large number of illegal mining cases in the country and in some cases, many of the officers lost their lives while executing their duties for curbing illegal mining incidence. The illegal and uncontrolled illegal mining leads to loss of revenue to the State and degradation of the environment. Thus, an effective policy for monitoring of sand mining in the Country has been enforced focusing on the effective monitoring of the sand mining since from the identification of sand mineral sources to its dispatch and end-use by consumers and the general public.

- Source to Destination Monitoring: The new set of guidelines focuses on the effective monitoring of sand mining from the identification of sand mineral sources to its dispatch and end-use by consumers and the general public and look at a uniform protocol for the whole country.
- Constantly monitor mining with drones and night surveillance of mining activity through night-vision drones.
- Audits: States to carry out river audits and put detailed survey reports of all mining areas in the public domain.
- Transparency: Online sales and purchase of sand and other riverbed materials (RBM) for transparency in the process.
- Enforcement: It gives directions to states to set up dedicated task forces at district levels.
- In cases where rivers become district boundaries or state boundaries, the districts or states sharing the boundary shall constitute the combined task force for monitoring of mined materials, mining activity and participate in the preparation of District Survey Reports (DSR) by providing appropriate inputs.

State Level Environment Impact DISTRICT BARWANI SURVEY REPORT FOR SAND

Assessment Authority, M.P. (EPCO)

Paryavaran Parisar E-5, Arera Colony, Bhopal (M.P.)

प्रभाश अधिकारी कार्यालय कलंक्टर (खनिज शाखा) जिला-बडवानी

- Sustainability: Conduct replenishment study for river bed sand in order to nullify the adverse impacts arising due to excessive sand extraction.
- While the Sustainable Sand Mining Guidelines, 2016, require the preparation of District Survey Reports (DSR), which is an important initial step before grant of mining lease, the government has found that the DSRs carried out by state and district administrations are often not comprehensive enough, allowing space for illegal mining.

1.3 Surrounding Districts

Barwani district is located in the south western part of Madhya Pradesh, occupying an area of 5422 sq.km. The district is bounded on the north by Dhar district, on the south and west by Dhule district of Maharashtra State and in the east by Khargone district. The district extends between the parallels of latitude 21° 22' and 22° 22' north and the meridian of longitude 74° 27' and 75° 30' east and falls in Survey of India toposheet Nos. 46J, 46K, 46N and 46O.

1.4 General Features

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Table 1 Administrative Setup of the District

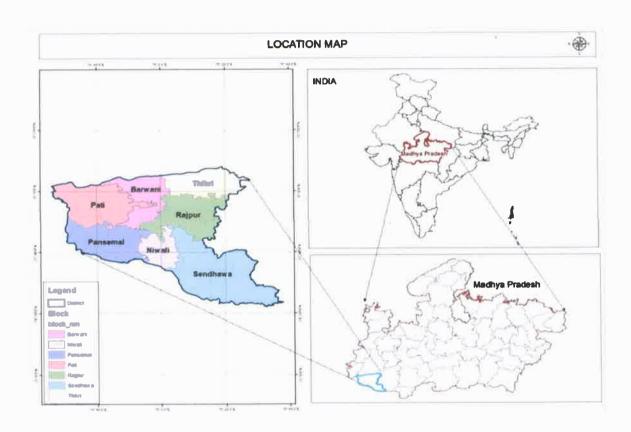
SUB-DIVISION	TEHSIL
Barwani	Barwani
	Pati
Sendhwa	Sendhwa
	Warla
Rajpur	Anjad
	Rajpur
	Thikri
Pansemal	Niwali
	Pansemal
4	9

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प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज श

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DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact
Assessment Authority, M.P.
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Paryeraran Parisar E-5, Arera Colony, Budgat (M.P.) प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बड़वानी

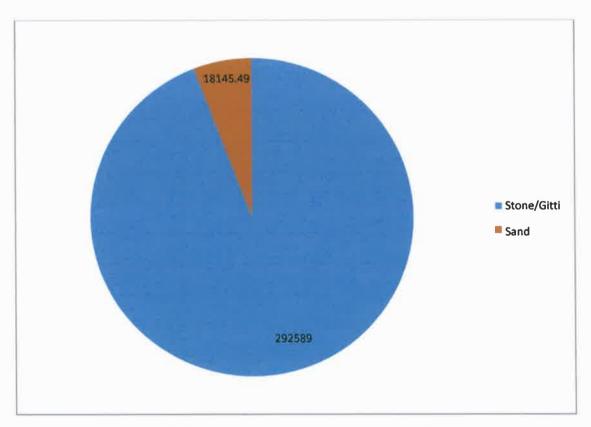
2 Overview of Mining Activity in the District

Minerals are the back bone of the economy of the country. It plays an important role in development. Geologically the Barwani district is covered by Deccan trap basalt.60 nos. of crusher are working in the district for making gitti in the district. 16 nos. of calcite leases were sanctioned out of which only 3 leases are working presently and 23 sand quarries. In all a sum total of 86 leases with a sum total of 256.223 hectare area, which is 0.047 % of the area of the district, have been sanctioned in the Barwani district of M.P. and fetches 4.04 crores of revenue during 2020-21.

Table 2 Mineral Production in the District

Sr. No.	Mineral	Production in tones
	Minor	Mineral
1.	Stone/Gitti	292589Cu.M
2.	Sand	18145Cu.M

Minor Mineral Production in District (Cu. M.)



Minor Mineral Production in the District

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DISTRICT BARWANI SURVEY REPORT FOR SAND

प्रमारी अधिकारी कार्यालय कलंक्टर (खनिज शास्त्र) जिला-बड़वानी

3. LIST OF SAND QUARRIES WITH LOCATION AND PERIOD

Table 3 Sand Mines in the District Coordinates Capacity Period Village Tehsil Name of the Mine Khasra Агеа Name of m³ Number in Ha. the No. River from date 12573 Dodwada 705 5.000 Goi Dondwada Niwali 21° 46' 27 340" N 75° 2' 15 310" E ١. of 21° 46' 29 580" N 75° 2' 15 240" E agreement to 30 th 21° 46' 20.550" N 75° 2' 42 070" E June 2023 21° 46' 19 060" N 75° 2' 40.730" E 700 158/1 4.000 Bhulgao Niwali Mujla Goi 21° 45' 46 670" N 75° 0' 29.930" E 75° 0' 14 480° E 21° 46' 17.120" N --do--21° 46′ 43.140″ N 75° 0' 33 690" E 75° 0' 33,750" E 21° 46' 42,640" N 21° 46' 17.000" N 75° 0' 15 090" E 21° 45' 46,330" N 75° 0' 30 270" E 2000 151 5.000 Sosad Anjad Anjad 3. Anjad-1 75° 1' 48,490" E 22° 3' 53.410" N --do--22° 3' 54.940" N 75° 1' 51 870" E 75° I' 56 710" E 22° 3' 48 710" N 22° 3' 47 130" N 75° 1' 56,540" E 22° 3' 44 880" N 75° 1' 57 950" E 22° 3' 38 640" N 75° 1' 58 890" E 22° 3' 38.410" N 75° 1' 56 250" E 22° 3' 43.230" N 75° 1' 54 930" E

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact Assessment Authority, M.P.

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							22° 3' 44.650" N	75° 1' 53.610" E		
				1			22° 3' 47 440" N	75° I' 53_520" E		
							22° 3' 50 970" N	75° I' 50 780" E		
							22° 3' 52 400" N	75° 1' 50.190" E		
4.	Anjad-2	151	5.000	Sosad	Anjad	Anjad	22° 3' 38 410" N	75° 1' 56 250" E	2000	
							22° 3' 38 640" N	75° 1' 58 890" E		do-
							22° 3' 29 630" N	75° 2' 0.210" E		
							22° 3' 20 880" N	75° 2' 0 470" E		
							22° 3' 15.970" N	75° 1' 59.150" E		
							22° 3' 10.020" N	75° 1' 58.660" E		
							22° 3' 10 090" N	75° l' 57 230" E		
							22° 3' 15 950" N	75° 1' 57 750" E		
							22° 3' 21 260" N	75° 1' 58 840" E		
							22° 3' 31 510" N	75° 1' 58.020" E		
5.	Anjad-3	151	5.000	Sosad	Anjad	Anjad	22° 3' 10.040" N	75° I' 56.890" E	2000	
							22° 3' 10 020" N	75° 1' 58.660" E		do-
							22° 3' 5.910" N	75° 1' 59.180" E		
							22° 3' 2 980" N	75° 2' 1 060" E		
							22° 3′ 1.590" N	75° 2' 2 890" E		
							22° 3' 0.500" N	75° 2' 5 100" E		
							22° 2' 59 270" N	75° 2' 15 140" E		
							22° 2' 58.240" N	75° 2' 17 070" E		
							22° 2' 57.100" N	75° 2' 18.300" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

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(EPCO)

Paryavaran Parisar

E-5, Arc. - Clony, Bhopal (M.P.)

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बड्यानी (3)

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8.	Pati	245	2.000	Goi	Pati	Pati	21° 56' 26.610" N	74° 45' 15.120" E	2500	
							22° 3' 20 800" N	75° 8' 15.410" E		
							22° 3' 37.900" N	75° 8' 38.410" E		
7.	Mandwada	358	5.000	Deb	Mandwada	Anjad	22° 3' 20.850" N 22° 3' 37.900" N	75° 8' 13.390" E 75° 8' 36.210" E	3000	do
					1122 22 11		22° 0' 51.930" N	75° 9′ 52.060" E	****	
							22° 0' 53.440" N	75° 9′ 58.428" E		
							22° 0' 54.400" N	75° 9′ 58.380" E		
							22° 0' 52.730" N	75° 9′ 51.780" E		
							22° 0' 58.060" N	75° 10' 19.060" E		
							22° 0′ 58.620" N	75° 10' 22.550" E		
							22° 0′ 59.710" N	75° 10' 22.220" E		
6.	Koydiya	47	3.023	Sosad	Koydiya	Anjad	22° 0' 59.010" N	75° 10′ 18.790" E	800	do
	7/ 1:	47	2.022	Connel	V andim	Amind	22° 3' 5.400" N	75° 1' 57.630" E	800	
							22° 3' 2.950" N	75° 1' 58.990" E		
							22° 3′ 1.330″ N	75° 2' 0.450" E		
							22° 2' 58.890" N	75° 2' 4.850" E		
							22° 2' 57.600" N	75° 2' 14.360" E		
							22° 2' 56.690" N	75° 2' 16.280" E		
							22° 2' 54.450" N	75° 2' 18.150" E		
			1 1				22° 2' 50.810" N	75° 2' 19.290" E		
							22° 2' 49,530" N	75° 2' 19.440" E		
							22° 2' 49 450" N	75° 2' 20 660° E		
				(1						
							22° 2' 55.070" N	75° 2' 19.840" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact Assessment Authority, M.P. (EPCO)

Paryavaran Parisar E-5, Arera Colony, Bhopal (M.P.)

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-यडवानी

							21° 56' 29 110" N	74° 45' 16 350" E		do
							21° 56' 26.340" N	74° 45' 23 820" E		
							21° 56' 23 800" N	74° 45' 22 660" E		
9.	Chipyakhedi	114	4.000	Goi	Khajpur	Pati	22° 1' 47_550" N	74° 46' 4,700" E	3000	do
							22° 2' 1 120" N	74° 46' 11.010" E		00
							22° I' 59 830" N	74° 46' 13.920" E		
							22° 1' 46,410" N	74° 46' 7 220" E		
10.	Semli	489	4.000	Goi	Semli	Pati	21° 57' 53 610" N	74° 44' 56.400" E	2000	do
			1 1				21° 57' 56 470" N	74° 44' 55 030" E		
			1 1				21° 58° 1.740" N	74° 45' 8 320" E		
							21° 57' 58.960" N	74° 45' 9.770" E		
11,	Jahur	205,136	1.360	Susri	Pansemal	Pansemal	21° 40' 43 520" N	74° 38′ 52 420° E	500	da
							21° 40′ 43.490" N	74° 38′ 51.280″ E		do
							21° 40′ 43.890" N	74° 38' 56.360" E		
							21° 40′ 43.600″ N	74° 38' 55.250" E		
							21° 40' 47.990" N	74° 39′ 10.870° E		
							21° 40′ 48 420" N	74° 39′ 10.100° E		
							21° 40′ 55 020″ N	74° 39′ 13.920° E		
							21° 40' 54.170" N	74° 39′ 14.580" E		
12.	Nisarpur	190	3.205	Gomi	Nisarpur	Pansemal	21° 39′ 35 630″ N	74° 37' 2.710" E	500	do
							21° 39′ 44.431″ N	74° 37' 23 372" E		*-00**
							21° 39′ 43.380″ N	74° 37' 23.600" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact Assessment Authority, M.P. (EPCO) Paryavaran Parisar E-5, Arera Colony, Bhopal (M.P.)

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) कार्यालय कलेक्टर (खनिज शाखा)

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							21° 39' 35 280" N	74° 37' 4.130" E		
13.	Pansemal	38/1	2.570	Gomi	Pansemal	Pansemal	21° 39' 19.360" N	74° 41' 30.080" E	600	
							21° 39′ 19 860" N	74° 41' 48 370" E		do
							21° 39′ 19 230" N	74° 41' 49.460" E		
							21° 39′ 18 200° N	74° 41' 30.460" E		
14.	Rahedkot	2/14,2/16,2/17	4.665	Narmad	BrahmanGao	Thikri	22° 7' 33 270" N	75° 18' 46 110" E	7000	do
				(खोदू मरू)			22° 7' 35.420" N	75° 18' 48.430" E		00
				Away from			22° 7' 35 116" N	75° 18' 49.955" E		
				Narmad			22° 7' 35 740" N	75° 18° 51,300° E		
				a River			22° 7' 34.477" N	75° 18' 52.677" E		
				channel			22° 7' 34.320" N	75° 18' 54.610" E		
								22° 7' 32 769" N	75° 18' 54.766" E	
							22° 7' 31.832" N	75° 18' 53.528" E		
							22° 7' 31.635" N	75° 18' 52.318" E		
							22° 7' 32.040" N	75° 18' 50.320" E		
							22° 7' 31.347" N	75° 18' 49.423" E		
							22° 7' 31.390" N	75° 18' 47.961" E		
							22° 7" 31.050" N	75° 18' 47.210" E		
							22° 7' 30 250" N	75° 18' 49.110" E		
							22° 7' 30 417" N	75° 18' 50.159" E		
							22° 7' 31 167" N	75° 18' 51 144" E		
							22° 7' 30.460" N	75° 18' 52.202" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact Assessment Authority, M.P. (EPCO)
Parvavaran Parisar

E-5, Are a Carony, Bhopal (M.P.)

प्रभारी अधि । कार्यालय कलेक्टर (डॉनिज शाखा)

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							21° 42' 19.990" N	75° 9′ 20.040" E		do
15.	Mehatgao	38	7.770	Goi	Mehatgao	Sendhwa	21° 42' 18.090" N	75° 9′ 20.150" E	2500	do
							22° 7' 27.897" N	75° 18' 56.558" E		
							22° 7' 28.730" N	75° 18' 59.240" E		
							22° 7' 29.880" N	75° 18' 58.927" E		
							22° 7' 31.003" N	75° 18' 58.428" E		
							22° 7' 31.387" N	75° 18' 57.263" E		
							22° 7' 31.501" N	75° 18' 56.087" E		
							22° 7' 31.638" N	75° 18' 55.321° E		
							22° 7' 30.493" N	75° 18' 54.796" E		
							22° 7' 30.040" N	75° 18' 53.860" E		
							22° 7' 28.725" N	75° 18' 53.613" E		
							22° 7' 27.230" N	75° 18' 53.250" E		
							22° T 29.444" N	75° 18' 49.299" E		
			1 1				22° 7' 28.973" N	75° 18' 49.891" E		
							22° 7' 28.715" N	75° 18' 49.701" E		
							22° 7' 27.760" N	75° 18' 49,960" E		
							22° 7' 28.083" N	75° 18" 51.572" E		
							22° 7' 27.920" N	75° 18' 52 610" E		
							22° 7' 28.896" N	75° 18' 53.018" E		
							22° 7' 29.848" N	75° 18' 53.070" E		
							22° 7' 30.700" N	75° 18' 53.270" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact Assessme city, M.P.

Paryava

E-5, Arera Colon

प्रमारि अधिकारी कार्यालय कलक्टर (खनिज शाखा) कार्यालय कलक्टर (खनिज शाखा)

							21° 41′ 56.090" N	75° 10' 3.020" E		
							21° 41' 58,160" N	75° 10' 3 840" E		
16.	Goi	59,80	12.659	Goi	Goi	Sendhwa	21° 42' 39 362" N	75° 7' 2 241" E	5000	
							21° 42' 40 582" N	75° 7' 4.221" E		do-
							21° 42' 12 522" N	75° 7' 32.051" E		
							21° 42' 12 392" N	75° 7' 29.871" E		
17_	Morgun	76/1	4.346	Rupa	Morgun	Rajpur	21° 56' 23.840" N	75° 10' 19.810" E	500	4.
							21° 56' 23.770" N	75° 10' 20,560" E		do
							21° 57' 13.710" N	75° 10' 13.400" E		
							21° 57' 13.730" N	75° 10' 14.200" E		
18.	Padla	L	4.000	Deb	Padla	Rajpur	21° 53' 50.960" N	75° 15' 40.590" E	800	4.
						2	21° 53' 50.430" N	75° 15' 40.960" E		do
							21° 53' 41.310" N	75° 15' 26.830" E		
							21° 53' 40.280" N	75° 15' 25 030" E		
							21° 53′ 27.200" N	75° 14' 58.240" E		
19.	PalsudNaveen	1007	4.000	Goi	Palsud	Rajpur	21° 50′ 5.190″ N	74° 58' 13 300" E	1200	do
							21° 50' 6.470" N	74° 58' 13.800" E		do-
							21° 50° 9.610" N	74° 58' 52 120" E		
							21° 50' 8 610" N	74° 58' 51.810" E		
20.	Khajuri Naveen	1	1.344	Deb	Khajuri	Rajpur	21° 58' 5.880" N	75° 15' 32.980" E	600	do
							21° 57' 54.570" N	75° 15' 53.400" E		00
							21° 57' 54,400" N	75° 15' 53 850" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Propact
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Paryayaran Parisar E-5, Arera Colony, Bhopal (M.P.) प्रभारी अधिकारी कावालय कलेक्टर (खनिज शाखा) जिला-बडवानी

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	21.	21. Ekalbara Naveen 25 12.545 Rupa Ekalbara	Ekalbara	Rajpur	21° 50' 11.610" N	74° 58' 48.950" E	4000	da			
								21° 48' 21.980" N	74° 59′ 43.830° E		do
								21° 48' 20.830" N	74° 59′ 43.090° E		
								21° 50' 10.850" N	74° 58' 48.740" E		
	22.	Bhulgao Deb River	1	8.215	Deb	Samghvi	Rajpur	21° 51' 33.620" N	75° 12' 38.110" E	6000	da
ı								21° 50° 17.070° N	75° 13' 36.280" E		do
								21° 50′ 16.960″ N	75° 13' 34.820" E		
								21° 51' 33.940" N	75° 12' 36.710" E		
	23.	Bakwadi	87	12.546	Deb	Bakwadi	Rajpur	21° 55' 36.570" N	75° 15' 55.010" E	7000	4.
ı								21° 55' 37.400" N	75° 15' 55.910" E		do
								21° 54' 14.620" N	75° 15' 52.270" E		
								21° 54' 14.250" N	75° 15' 50.710" E		

DISTRICT BARWANI SURVEY REPORT FOR SAND

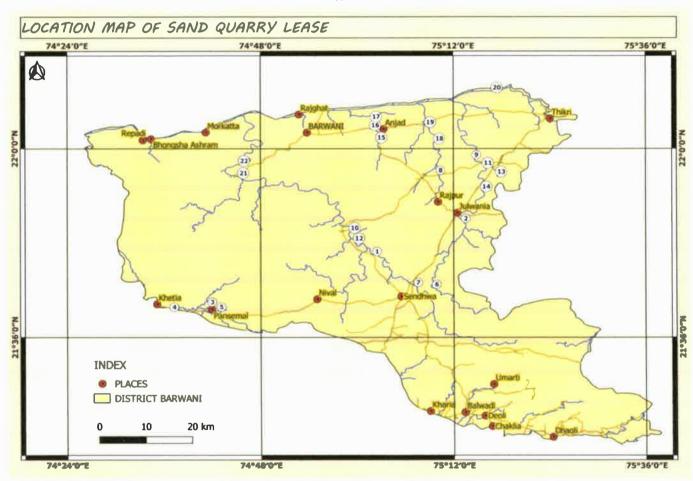
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4. DETAILS OF ROYALTY AND REVENUE RECEIVED IN LAST THREE YEARS FOR SAND

Table 4 Revenue received in last three years for Sand Mine

Year	Mineral Name	Revenue(In Rs.)
2018–2019	Sand	0
2019–2020	Sand	7475941.88
2020–2021	Sand	0

Table 5 Revenue received in last three years for Minor Mineral (Stone/Gitti) Mine

Year	Mineral Name	Revenue (In Rs.)
2018-19	Stone/Gitti	13252243
2019-20	Stone/Gitti	24064375
2020-21	Stone/Gitti	40418823

5. DETAILS OF SAND AND MINOR MINERAL PRODUCTION IN LAST 3 YEARS

Table 6 Sand Production in last 3 years

Year	Mineral Name	Production(InCu.Mt)
2018–2019	Sand	0
2019–2020	Sand	18145.49
2020–2021	Sand	0

Table 7 Minor Mineral (Stone/Gitti) Mine Production in last 3 years

Year	Mineral Name	Production(In Cu. Mt)
2018-19	Stone/Gitti	308061
2019-20	Stone/Gitti	311280
2020-21	Stone/Gitti	292589

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Paryavaran Parisar E-5, Arero (**), Bhopar (14.0*) DISTRICT BARWANI SURVEY REPORT FOR प्रभाव किलेक्टर (खनिज शाखा

जिला-कड़वानी

6. PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVERS

Rivers have a lot of energy and because they have energy, they do stuff. The obvious things rivers do with their energy is flow but, besides this, they also transport load, erode load and erode the channel through which they flow.

Erosion

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Erosion is the breaking down of material by an agent. In the case of a river, the agent is water. The water can erode the river's channel and the river's load. A river's load is bits of eroded material, generally rocks, which the river transports until it deposits its load.

A river's channel is eroded laterally and vertically making the channel wider and deeper. The intensity of lateral and vertical erosion is dictated by the stage in the river's course, discussed in more detail here but essentially, in the upper stage of the river's course (close to the source of the river) there is little horizontal erosion and lots of vertical erosion. In the middle and lower stages vertical erosion is reduced and more horizontal erosion takes place. There are several different ways that a river erodes its bed and banks. The first is hydraulic action, where the force of the water removes rock particles from the bed and banks. This type of erosion is strongest at rapids and waterfalls where the water has a high velocity. The next type of erosion is corrosion. This is where the river's load acts almost like sandpaper, removing pieces of rock as the load rubs against the bed & banks. This sort of erosion is strongest when the river is transporting large chunks of rock or after heavy rainfall when the river's flow is turbulent. Corrosion is a special type of erosion that only affects certain types of rocks. Water, being ever so slightly acidic, will react with certain rocks and dissolve them. Corrosion is highly effective if the rock type of the channel is chalk or limestone (anything containing calcium carbonate) otherwise, it doesn't have much of an effect. Cavitations is an interesting method of erosion. Air bubbles trapped in the water get compressed into small spaces like cracks in the river's banks. These bubbles eventually implode creating a small shockwave that weakens the rocks. The shockwaves are very

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प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बडवानी weak but over time the rock will be weakened to the point at which it falls apart. The final type of erosion is attrition. Attrition is a way of eroding the river's load, not the bed and banks. Attrition is where pieces of rock in the river's load knock together, breaking chunks of rock off of one another and gradually rounding and shrinking the load.

Transportation

When a river erodes the eroded material becomes the river's load and the river will then transport this load through its course until it deposits the load. There are a few different ways that a river will transport load depending on how much energy the river has and how big the load is. The largest of particles such as boulders are transported by traction. These particles are rolled along the bed of the river, eroding the bed and the particles in the process, because the river doesn't have enough energy to move these large particles in any other way. Slightly smaller particles, such as pebbles and gravel, are transported by siltation. This is where the load bounces along the bed of the river because the river has enough energy to lift the particles off the bed but the particles are too heavy to travel by suspension. Fine particles like clay and silt are transported in suspension; they are suspended in the water. Most of a river's load is transported by suspension. Solution is a special method of transportation. This is where particles are dissolved into the water so only rocks that are soluble, such as limestone or chalk, can be transported in solution.

Capacity & Competence

Rivers can only carry so much load depending on their energy. The maximum volume of load that a river can carry at a specific point in its course is called the river's capacity. The biggest sized particle that a river could carry at a specific point is called the river's competence.

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प्रभारी अधिकरी प्रभारी अधिकरी कार्यालय कलक्टर (क्लिज शाखा) जिला-क्ल्यानी

Deposition

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To transport load a river needs to have energy so when a river loses energy it is forced to deposit its load. There's several reasons why a river could lose energy. If the river's discharge is reduced then the river will lose energy because it isn't flowing as quickly anymore. This could happen because of a lack of precipitation or an increase in evaporation. Increased human use (abstraction) of a river could also reduce its discharge forcing it deposit its load. If the gradient of the river's course flattens out, the river will deposit its load because it will be travelling a lot slower. When a river meets the sea a river will deposit its load because the gradient is generally reduced at sea level and the sea will absorb a lot of energy.

As rivers get nearer to their mouths they flow in increasingly wide, gentle sided valleys. The channel increases in size to hold the extra water which the river has to receive from its tributaries. As the river gets bigger it can carry larger amounts of material. This material will be small in size, as larger rocks will have broken up on their way from the mountains. Much of the material will be carried in suspension and will erode the river banks by abrasion. When rivers flow over flatter land, they develop large bends called meanders. As a river goes around a bend most of the water is pushed towards the outside causing increased erosion. The river is now eroding sideways into its banks rather than downwards into its bed, a process called lateral erosion. On the inside of the bend, in contrast, there is much less water. The river will therefore be shallow and slow-flowing. It cannot carry as much material and so sand and shingle will be deposited. This is called a point bar or slip off slope. Due to erosion on the outside of a bend and deposition on the inside, the shape of a meander will change over a period of time. Notice how erosion narrows the neck of the land within the meander. In time, and usually during a flood, the river will cut right through the neck. The river will then take the new, shorter route. The fastest current, called the thalweg, will now tend to be in the centre of the river, and so deposition is likely to occur in gentler water next to the banks. Eventually deposition will block off the old meander to leave an

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oxbow lake. The oxbow lake will slowly dry up, only refilling after heavy rain or during a flood. Streams lose velocity and make deposits when their gradient decreases, when the volume of water decreases, when there is an increase in cross section, when they encounter obstructions, or when they enter still water. They deposit alluvial fans, alluvial cones, piedmont alluvial plains, channel fill, bars, flood plains and deltas.

6.1 Sources of sand

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Sand is world's second most consumed natural resource after water. Rapid urbanization and global population growth have created unbound demand for this limited natural resource. With urbanization as key driving factor, construction industry has expanded considerably over the last few decades leading to overuse of river sand for construction purposes. This increasing discrepancy between the need for aggregates in the society and scarcity of natural sand due to exhaustion of resources and environmental considerations, has urged concrete manufacturers to look for a suitable and sustainable alternative fine aggregate. The economical and ecological alternative is manufactured sand.

Natural Sources

Natural sand is produced by natural forces, such as river sand and sea sand. Generally, sand found at foot of mountains is more weathered, containing more mud, organic impurities and light substances. Sea sand often contains shells and other impurities, and its components such as the chlorine, sulfate and magnesium salts may cause corrosion of steel bars. All the components will affect the performance of concrete. Sources of sand can be river bed material, de-siltation pits in reservoirs/dams, agricultural land etc. these can be broadly classifies as:

Following are the natural types of the sand:

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Paryavaran Parisar E-5, Arera Colony, Bhopai (M.P.) DISTRICT BARWANI SURVEY REPORT FOR SAND

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा)

Pit Sand

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This sand is found as deposits in soil and it is obtained by forming pits into soils. It is excavated from a depth of about 1 m to 2 m from ground level. The pit sand consists of sharp angular grains which are free from salts and it proves to be excellent material for mortar or concrete work. For making mortar, the clean pit sand free from organic matter and clay should only be used.

River Sand

This sand is obtained from banks or beds of rivers. The river sand consists of fine rounded grains probably due to mutual attrition under the action of water current. The color of river sand is almost white. As river sand is usually available in clean condition, it is widely used for all purposes.

Sea Sand

This sand is obtained from sea shores. The sea sand, like river sand, consists of fine rounded grains. The color of sea sand is light brown. The sea sand contains salts. These salts attract moisture from the atmosphere. Such absorption causes dampness, efflorescence and disintegration of work. The sea sand also retards the setting action of cement. Due to all such reasons, it is the general rule to avoid the use of sea sand for engineering purposes except for filling of basement, etc. It can however be used as a local material after being thoroughly washed to remove the salt.

Manufactured Sand

Manufactured sand (M-Sand) is artificial sand produced from crushing hard stones into small sand sized angular shaped particles (rock particles with a particle size of less than 4.75 mm and is made by artificial crushing and sieving after soil removal treatment), washed and finely graded to be used as construction aggregate. It is a superior alternative to River Sand for construction purpose. The main technical indicators of artificial sand are particle gradation, fineness modulus, stone powder

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DISTRICT BARWANI SURVEY REPORT FOR S

ज्यांलय कलेक्टर (खनिज जिला-बड्यानी content, void ratio, apparent density, bulk density, ethylene blue value (MB), crushing value index, mica content, light-matter content, etc.

Most of the rivers/streams flowing in the district are originated within the district and produced black sand, because whole district of Barwani is comprised of Deccan trap basalt. However, the river Narmada originate from Amarkantak and have very huge catchment area. Its catchment area is comprised of various litho units belonging to basement granite,gneisses,Sausar group,Mahakoshal, Vindhyan, Gondwana super group of rocks and Deccan trap basalt.

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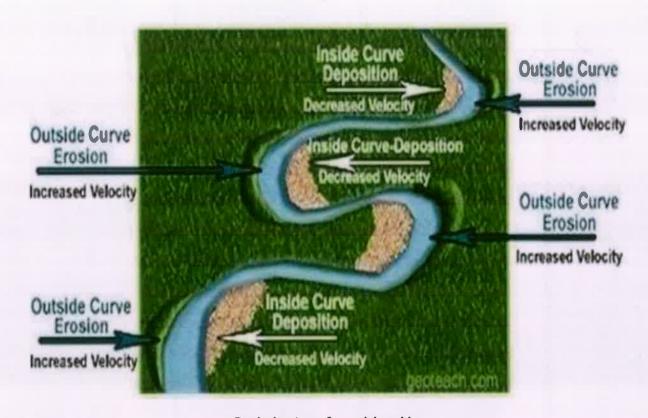
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Conducive Areas for sand deposition

DISTRICT BARWANI SURVEY REPORT FOR SAND

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प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बडवानी

7. General Profile of the District

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1.Geographical	The district extends between the parallels of latitude 21° 22' and 22'				
Position	22' north and the meridian of longitude 74° 27' and 75				
	30'eastandfallsinSurveyofIndiatopsheetNos.46J,46K,46Nand				
	46O.				
2. Area and	I. Geographical Area(Sq. Km)				
Population	Total Area(Sq. Km):5422Km ²				
	II. CENSUS2011 I. Population				
				a. TotalPopulation:1,385,881 b. MalePopulation:699,340	
		c. FemalePopulation:686,541			
		II. Literates			
	a. TotalLiterates:549,926				
	b. Male: 313,642				
	c. Female: 236,284				
	III.Main Workers(Census2011) a. TotalWorkers:525,791 b. MaleWorkers:321,855				
				c. FemaleWorkers:203,936 d. Cultivators: 287,704 e. Agricultural Laborers: 267,196 f. OtherWorkers:91,546 IV. Languages Spoken in the District The main language spoken in the district is Hindi, followed by	
	3.Temperature	Mean-Maximumtemperature:42°C			
		Mean- Minimumtemperature: 11°C			
	4. Rainfall(In mm)	Normal— South West Monsoon: 762.6mm			
		Annual Rainfall:738.64mm			
	5.Agriculture	a. Total Cultivable Area (Ha): 271.6			
	2	b. Net Area Sown(Ha):228.99			
		c. Area Sown more than once(Ha):42.57			
6.Rivers,etc.	Narmada, Goi, Kharka, Deband Tapti				
7.RevenueAd	Revenue Divisions:				
ministrative	a. RevenueTehsils:9				
Divisions	b. RevenueVillages:597				
8.LocalBodies	a. Municipalities:2				
	b. TownPanchayats:7				

DISTRICT BARWANI SURVEY REPORT FOR SAND

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प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-क्यमनी

Table 8 Census Data for year 2011

Description	2011	
Actual Population	13,85,881	
Male	6,99,340	
Female	6,86,541	
Population Growth	27.57%	
AreaSq.km.	5,427	
Density/KM ²	255	
Proportion to population of Madhya Pradesh	1.91%	
Sex Ratio(Per1000)	982	
Child Sex Ratio(0-6Age)	948	
Average Literacy	49.08	
Male Literacy	55.70	
Female Literacy	42.39	
Total Child Population(0-6 Age)	2,65,299	
Male Population(0-6Age)	1,36,212	
Female Population(0-6Age)	1,29,087	
Literates	5,49,926	
Male Literates	3,13,642	
Female Literates	2,36,284	
Child Proportion(0-6Age)	19.14%	
Boys Proportion(0-6Age)	19.48%	
Girls Proportion(0-6Age)	18.80%	

8. Land utilization Pattern in the District: Forest, Agricultural, Mining, etc.,

Land use/land cover (LULC) changes are main issues of universal environment change. The Satellite remote sensing data with their monotonous nature have proved to be rather useful in mapping land use/land cover decorations and changes with time. Quantification of such changes is conceivable through GIS techniques even if the subsequent spatial datasets are of dissimilar scales or resolutions. Such studies have helped in considerate the dynamics of human happenings in space and time. Land use refers to man's activities.

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DISTRICT BARWANI SURVEY REPORT FOR SAND

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Table 9 Land Use Pattern of the Study Area

Sr. No.	Class	Area in Ha.	Percentage of coverage
1	Agricultural Land	238009	49.51
2	Agricultural Plantation	11	0.0022
3	Barren rocky	5623	1.16
4	Deciduous(Dry/Moist/Thorn)	38822	8.07
5	Gullied/ Ravinous land	73212	15.23
6	Industrial	167	0.034
7	Lake/Ponds	5749.21	1.19
8	Mining Quarry	250.18	0.052
9	Reservoir/Tank	2920	0.60
10	River	19593	4.076
11	Rural	3351	0.69
12	Scrub Forest	48083.87	10.0032
13	Scrubland	43401	9.029
14	Urban	1492	0.31
Total		480684.26	

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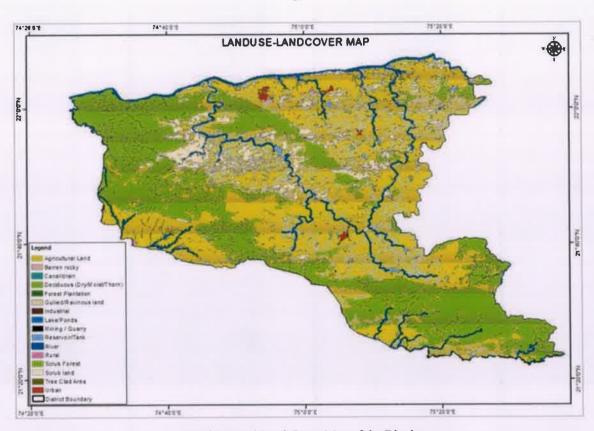
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Land Use and Land Cover Map of the District

DISTRICT BARWANI SURVEY REPORT FOR SAND

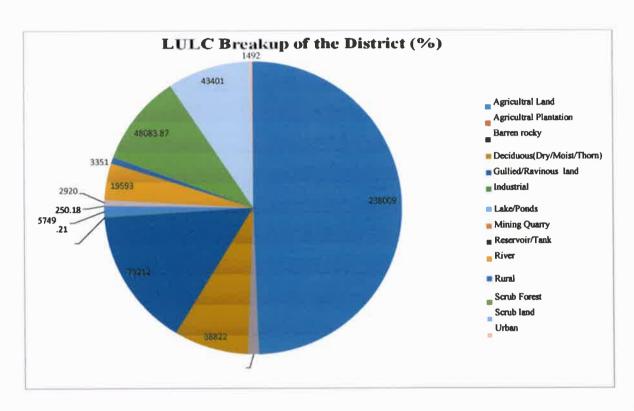
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LandUseandLandCoverBreakupof the District

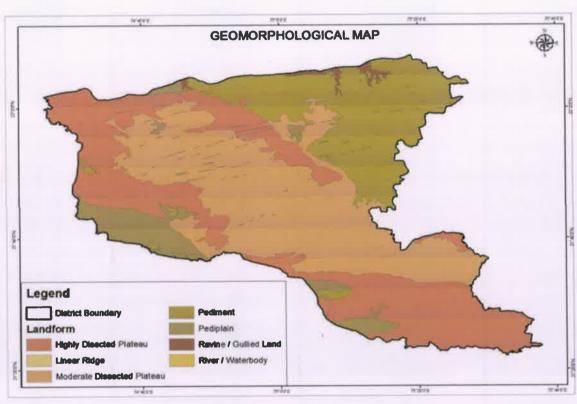
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Geomorphologic Map of the District

DISTRICT BARWANI SURVEY REPORT FOR SAND

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प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-कवानी

9. Physiographic of the District

Physiographic ally, the district comprises of three distinct natural divisions viz. Narmada valley in the northern part, uplands along southern and western margins (Satpura Range and highly dissected Deccan Plateau) and Narrow belt of scarp ridges (Vindhyan Hill Range). The area of the district displays undulating topography which includes highly dissected plateau, linear ridges, residual hills and low lying plains. The highest elevation in the district is 1033 m amsl south of Ramgarh fort in Sendhwa Block. The lowest point is at elevation 149 m amsl near Talwada Deb in Rajpur Block.

10. Details of Month wise Rainfall Data of 1 Year

Table 10 Details of Month wise Rainfall Data 2021

S. No.	Name of Month	Month wise average Value of Rainfall (m. m.)
1.	January	6.5
2.	February	00
3.	March	01
4.	April	00
5.	May	153
6.	June	72.3
7	July	149.9
8.	August	151.7
9.	September	270.2
10,	October	47.0
11	November	13.9
12	December	26.0
	Total	5341.45

Rainfall

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The district is influenced by South-West Monsoon which extends from June to September. The mean annual rainfall is 738.64 mm. There is very little rainfall in the winter season. The monsoon rainfall accounts for 80% - 85% of the annual rainfall.

DISTRICT BARWANI SURVEY REPORT FOR SAND

कार्यालय कलेक्टर (खनिय शाखा)

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The climate of the district on the whole is tropical and dry, except during south west monsoon season (middle of June to September). Winter Season is between November to February. Summer season starts from March and ends by June.

May is the hottest month of the year when general temperature goes up to 42° C, occasionally, it goes up to 47° C. December is the coldest month of the year when the mean daily temperature comes down to about 11° C.

Relative humidity is maximum in the monsoon season and is very low in dry months. It is as low as 10% in dry months and as high as 94% in the monsoon season.

11. Geology and mineral wealth:

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Geologically the district area comprises rocks of Basaltic flows of Deccan trap occupy a major part of the area in the district. They have been as Satpura groups confined to the south of the Narmada River. Satpura group comprises 55 flows of varied types between 198 m. and 1033m. elevations above the m.s.l. The general thickness of the individual flows varies between 15m and 40m. The lower and middle sequences are pahoehoe type while upper flows are of Aa type. The lawa flows show tilting in the vicinity of the faults. This group is classified in to 6 formations on the basis of occurrence of megacryst flows and presence of red/green boles. The Deccan traps belong to the type called 'plateau basalt' and are uniform in composition corresponding to dolerite or basalt. These are dark to dark greenish grey in color. These traps are distinguished in to vesicular and non vesicular varieties. The non-vesicular types are hard, tough, compact and medium to fine grained and break with a conchoidal fracture. The vesicular types are comparatively soft and friable and break more easily. Numerous ash beds are common in the upper portion. Thickness of these rocks may be 1200 meters. Numerous dykes of various length, width and composition traverse the flows. Most of them display appreciable relief giving rise to narrow ridges in the area. The dykes have a ternd of NW-SE and N700 E- S700 W which corresponds to the Narmada lineament. Compositionally the order of abundance of these dykes is basaltic, doleritic, and acidic. The calcite veins form the minor intrusive showing a general trend of ENE-WSW and N150 W-S 150 E. These are 0.5m to 20m thick and comprise greenish or yellowish transparent, rhombic crystals of calcite. Minor occurrences of calcite, have been noticed around area of villages Budi pahar, Goiriver, South of Pati, Chaklia, Yervada, Darbalia, Auoli, Valan, Palwat, Gandhawal, limbi, chandbari, Atarsama, Masaoda, Than Hirakerai, Vedpuri, palsud, chiklia, Julkheda

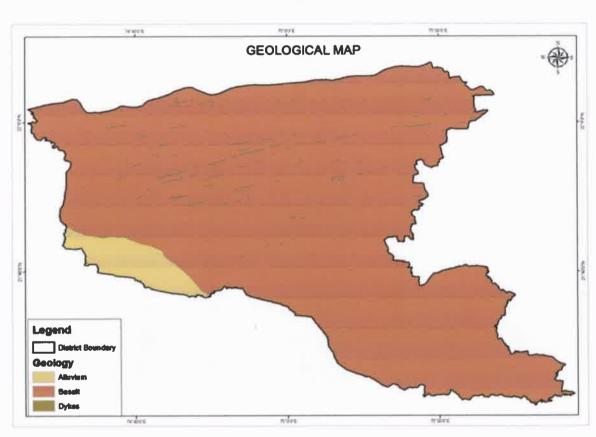
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Geological Map of the District

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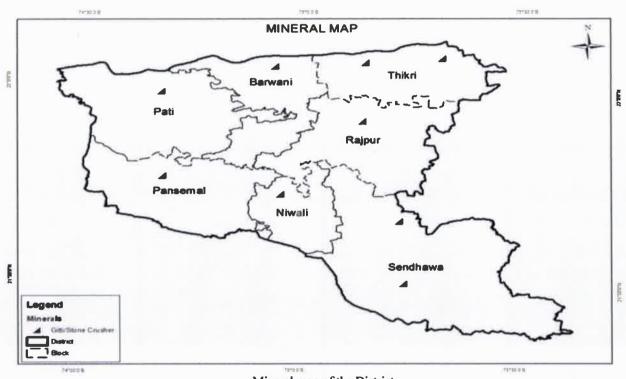
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Mineral map of the District

DISTRICT BARWANI SURVEY REPORT FOR SAND

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प्रभारी अधिकारी क्षायांलय कलेक्टर (खनिज शाखा) जिला-यड्यानी

12. Drainage system with description of main rivers:

About 78% of the district lies in Narmada Basin and 22% in Tapti Basin. The major tributaries of Narmada are Deb and Goi. No major tributary of Tapti flows in the district. However the southern part of the district is drained by Gomai, Umririvers. These streams ultimately joins river Tapti, in adjoining Maharashtra state. The surface water availability at 75% dependability for both the Basins is 966.70 MCM of which 921.95 MCM is from Narmada Basin and 44.75 MCM from Tapti Basin. The district area is drained mainly by the Narmada River and its tributaries like Goi and Deb. All of these tributaries flow from south to north and join Narmada. Similarly, tributaries like Gomai, Umri Tori, Churi, Dudhikheda etc. flow from north to south & joins Tapti. Major rivers are perennial to semi-perennial.

The total area irrigated by canals is 76 sq km, net area sown 2289.90 sq. km. The total area irrigated by tube wells is 217 sq. km., by open wells 367 sq. km and by ponds & Tanks 51 sq. km. The total area under assured irrigation from various sources is 849 sq. km. This was only 37.07% of the net sown area .Thus almost 67% of the sown area in the district is dependent on rain-fed irrigation.

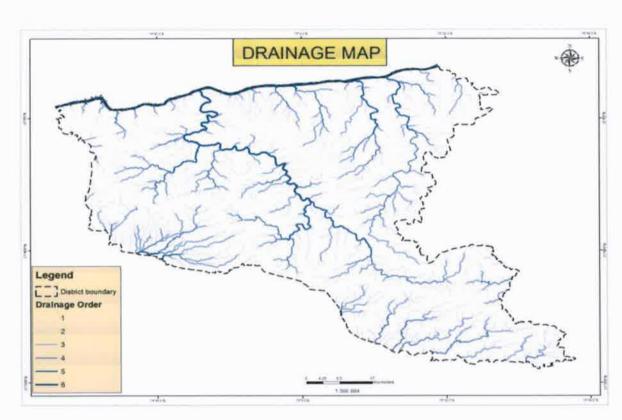
Table 11 Drainage System with description of main Rivers

S.N.	Name of the River	Area Drained in %	Area Drained in the District in KM ²	
1 Narmada		78%area of district is drained by tributaries of Narmada	4229	
2	Goi	34	1843	
3	Deb	22	1192	
4	Nahali	08	433	
5	Sosar	05	271	
6	Umri	05	271	
7	Mogri	05	271	
8	Rupa	03	162	
9	Gomai	10	542	
10	Other small rivers	09	488	

State Level Environment Impact
Assessment Authority, M.P.
(EPCD)

Paryavaran Parisar E-5, Arera Colony, Bhopal (M.P.) DISTRICT BARWANI SURVEY REPORT FOR S

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बड़वानी



Drainage Map of the District

DISTRICT BARWANI SURVEY REPORT FOR SAND

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E-5, Arera Cuitary, Bhopal (M.P.)

13. Salient features of important Rivers and streams:

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Table 12 Drainage System with description of main Rivers

S.N.	Name of the River	Area Drained in %	Area Drained in the District in KM ²
1	Narmada	78%area of district is drained by tributaries of Narmada	4229
2	Goi	34	1843
3	Deb	22	1192
4	Nahali	08	433
5	Sosar	05	271
6	Umri	05	271
7	Mogri	05	271
8	Rupa	03	162
9	Gomai	10	542
10	Other small rivers	09	488

Table 13 Salient Features of Important Rivers and Streams

S. N.	Name of the River or Stream	Total Length in the District (in km)	Place of Origin	Altitude to rig in
1	Narmada River Basin	96 Forming northern boundary	Amarkantak, Anuppur	1057 m
2	Goi	102	Goi Village	
3	Deb	76	Near Panjara Village	748.58 m
4	Nahali	40	Mohanpani Chowki(46 O/1)	560m
5	Sosar	18	South of Morni (46O/1)	545m
6	Umri	26	Raychul (46K/14)	657.45m
7	Mogri	30	Ghoddya (46K/14)	551.68m
8	Rupa	12	Abapuri Hill (46 O/1)	558.60m
9	Gomai	17	Nilabavdi Chowki(46K/14)	553.21M

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Paryavaran Parisar

E-5, Arera Colony, Bhopal (M.P.)

DISTRICT BARWANI SURVEY REPORT TORS (STATE STAT

Table 14 RIVER WISE DETAILS OF THE ANNUAL DEPOSITION WHERE CONCESSIONS ARE PROPOSED

Name of River or Stream recommended the for mineral concession	Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometres)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in m²)	Mineable mineral potential (in m ³ (60 % of total mineral potential)
Goi	Mentioned in table no 15 column no 3	09.07	69.93714	442040	30532
Deb	Mentioned in table no 15 column no 3	10.11	32.1506	338700	22043
Nahali	Mentioned in table no 15 column no 3	3.71	42.105	80200	3847
Sosar	Mentioned in table no 15 column no 3	2.45	65.989	150000	6020
Umri	Mentioned in table no 15 column no 3	1.13	38.67	45650	1003
Mogri	Mentioned in table no 15 column no 3	2.49	16.06	40000	706
Rupa	Mentioned in table no 15 column no 3	1.78	24.45	43460	501
Gomai	Mentioned in table no 15 column no 3	0.56	45.32	25700	600

Note:- Individual mine wise details are given separately in table no 15

DISTRICT BARWANI SURVEY REPORT FOR SAND

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Table 15 Details of Annual Deposition

Name Village of		Portion of the River (Khasra	Dimension of	of concession	Area recommended	Dimension with		Mineable mineral				
River	River		No.) or Stream Recommended forMineral Concession	Length of area recommended for concession (in metre)	Average width of area recommended for concession (inmeters)	for mineral concession (in m²)	Length of sand deposition (in meter)	Width of sand deposition (in meter)	Depth of sand deposition (in meter)	potential (in m³)	potential (in m ³ (60 % of total mineral potential)	potential (in MT 60 % of tota mineral potential)
1	2	3	4	5	6	7	8	9	10	11	12	
Goi	Dodwada	705	810	61.72	50000	360	59	1	21240	12744	17842	
Goi	Pati	245	230	86.95	20000	158	45	0.6	4266	2560	3583	
Goi	Chipyakhe di	114	450	87.71	40000	150	34	1	5100	3060	4284	
Goi	Semli	489	410	95.92	40000	130	32	0.8	3328	1997	2796	
Goi	Goi	59, 80	1310	96.19	126590	174	40	1.2	8352	5011	7016	
Goi	Palsud	1007	1160	34.27	40000	200	20	0.5	2000	1200	1680	
Goi	Ekalwara	25	4680	26.80	125450	550	20	0.6	6600	3960	5544	
Deb	Mehatgao n	38	1490	52.113	77700	261	40	1.2	12528	7517	10524	
Deb	Padla	1	1420	28.16	40000	150	18	0.5	1350	810	1134	
Deb	Khajuri	1	870	15.44	13440	120	14	0.6	1008	605	847	
Deb	Bhulgaon	1	3020	27.14	82150	390	20	1.3	10140	6084	8518	
Deb	Bakwadi	87	3310	37.90	125460	244	32	1.5	11712	7027	9838	

DISTRICT BARWANI SURVEY REPORT FOR SAND

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(EPCO)

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E-5, Arera Colony, Bhopal (M.P.)

Vahali	Koydiya	47	1010	29.75	30230	113	20	0.6	1356	814	1139
Nahali	Mandwad a	358	910	54.46	50000	158	40	0.8	5056	3034	4247
Sosar	Anjad	151	530	92.93	50000	80	60	0.7	3360	2016	2822
Sosar	Anjad	151	880	56.497	50000	111.5	50	0.6	3345	2007	2810
Sosar	Anjad	151	1030	48.54	50000	146	38	0.6	3329	1997	2796
Narmada	Rahedkot	2/14, 2/16, 2/17	240	194.375	46650	240	194.375	0.25	11663	7000	9800
Umri	Jahur	205, 136	440	30.90	13600	67	25	0.5	838	503	704
Umri	Nisharpur	190	690	46.44	32050	75	22.2	0.5	833	500	700
`4ogri	Mujla	158/1	2490	16.06	40000	105	16	0.7	1176	706	988
Rupa	Morgun	76/1	1770	24.45	43460	58	24	0.6	835	501	701
Gomai	Pansemal	38/1	560	45.32	25700	50	20	1.0	1000	600	840

It is pertinent to mention here that, sand is not deposited in the entire Portion of the River or Stream Recommended for Mineral Concession area. However deposition of sand is found in the part of the area recommended for Mineral Concession, hence in column no 7, 8 and 9, the length, width and depth of the sand deposition area have been given separately in the prescribed format and the total mineral capacity and 60 percent of its mineable capacity has been estimated. Total mineral capacity shown in column no 10 is likely to be replenished during monsoon and 60% of it will be available for exploitation during post monsoon.

DISTRICT BARWANI SURVEY REPORT FOR SAND

State Level Environment Impact Assessment Abority, M.P.

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Table 16 Length, width and thickness of Sand deposit available for Mining within the recommended area during Post-Monsoon period

Sr. No.	Name of Mines	Total Area in sq m	Length of sand deposition (in meter)	Width of sand deposition (in meter)	Depth of sand deposition (in meter)	Mineable mineral potential (in m³(60 % of total mineral potential)	Mineable mineral potential (in MT 60 % of total mineral potential)
1	Dodwada	50000	360	59	1	12744	17842
2.	Pati	20000	158	45	0.6	2560	3583
3.	Chipyakhedi	40000	150	34	1	3060	4284
4.	Semli	40000	130	32	0.8	1997	2796
5.	Goi	126590	174	40	1.2	5011	7016
6.	Palsud	40000	200	20	0.5	1200	1680
7	Ekalwara	125450	550	20	0.6	3960	5544
8.	Mehatgaon	77700	261	40	1.2	7517	10524
9.	Padla	40000	150	18	0.5	810	1134
10.	Khajuri	13440	120	14	0.6	605	847
11.	Bhulgaon	82150	390	20	1.3	6084	8518
12.	Bakwadi	125460	244	32	1.5	7027	9838
13.	Koydiya	30230	113	20	0.6	814	1139
14.	Mandwada	50000	158	40	0.8	3034	4247
15.	Anjad	50000	80	60	0.7	2016	2822
16.	Anjad	50000	111.5	50	0.6	2007	2810
17.	Anjad	50000	146	38	0.6	1997	2796
18.	Jahur	13600	67	25	0.5	503	704
19.	Nisharpur	32050	75	22.2	0.5	500	700
20.	Mujla	40000	105	16	0.7	706	988
21	Morgun	43460	58	24	0.6	501	701
22.	Pansemal	25700	50	20	1.0	600	840

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DISTRICT BARWANI SURVEY REPORT TO COMMON DISTRICT BARWANI SURVEY REPORT BARWANI SURVEY BARWA

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Table 17 Length, width and thickness of Sand deposit available for Mining within the recommended area during Pre-Monsoon period

Sr. No.	Name of Mines	Total Area in sq m	Length of sand deposition (in meter)	Width of sand deposition (in meter)	Depth of sand deposition (in meter)	Mineable mineral potential (in m ³ (60 % of total mineral potential)	Remark
1,	Dodwada	50000	360	59	0	0	If contractor/
2,	Pati	20000	158	45	0	0	lessee exploited
3,	Chipyakhedi	40000	150	34	0	0	the permissible
4.	Semli	40000	130	32	0	0	quantity of sand during post
5.	Goi	126590	174	40	0	0	monsoon
6.	Palsud	40000	200	20	0	0	season, the
7,,	Ekalwara	125450	550	20	0	0	Mineable
8.	Mehatgaon	77700	261	40	0	0	mineral
9.	Padla	40000	150	18	0	0	potential will exhaust prior to
10.	Khajuri	13440	120	14	0	0	the
11.	Bhulgaon	82150	390	20	0	0	commencement
12.	Bakwadi	125460	244	32	0	0	of monsoon
13.	Koydiya	30230	113	20	0	0	season
14.	Mandwada	50000	158	40	0	0	
15.	Anjad	50000	80	60	0	0	
16.	Anjad	50000	111.5	50	0	0	
17.	Anjad	50000	146	38	0	0	
18.	Jahur	13600	67	25	0	0	
19.	Nisharpur	32050	75	22.2	0	0	
20.	Mujla	40000	105	16	0	0	
21.	Morgun	43460	58	24	0	0	
22.	Pansemal	25700	50	20	0	0	

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DISTRICT BARWANI SURVEY REPORT

Table 18 LAST 3 YEARS SAND PRODUCTION DETAILS IN CUBIC METER

Name of River or Stream recommended the	Village and Survey No.	Last 3 years Sand Production Details in Cubic meter			
for mineral concession		2019-20	2020-21	2021-22	
1	2	5	6	7	
Goi	Dodwada/ 705	12570.36	0	0	
Goi	Pati/ 245	1483.06	0	0	
Goi	Chipyakhedi/ 114	0	0	0	
Goi	Semli/ 489	0	0	0	
Goi	Goi/ 59,80	0	0	0	
Goi	Palsud/ 1007	0	0	0	
Goi	Ekalwara/ 25	0	0	0	
Deb	Mehatgaon/ 38	0	0	0	
Deb	Padla/1	0	0	0	
Deb	Khajuri/1	0	0	0	
Deb	Bhulgaon/1	0	0	0	
Deb	Bakwadi/ 87	0	0	0	
Nahali	Koydiya/47	647.03	0	0	
Nahali	Mandwada/358	2945.80	0	0	
Sosar	Anjad/151	0	0	0	
Sosar	Anjad/151	0	0	0	
Sosar	Anjad/151	0	0	0	
Rahedkot	2/14, 2/16, 2/17	0	0	0	
Umri	Jahur/205,136	0	0	0	
Umri	Nisharpur/ 190	496.24	0	0	
Mogri	Mujla/ 158/1	0	0	0	
Rupa	Morgun/ 76/1	0	0	0	
Gomai	Pansemal/ 38/1	0	0	0	

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DISTRICT BARWANI SURVEY REPORT FOR SAND

15. MINERAL POTENTIAL

Boulder(MT)	Bajri (MT)	Sand (MT)	Total Mineable mineral potential(MT)
Huge as whole	It is black in	It is found	Total mineable mineral
district is occupied	colour, derived from	mainly in	potential for stone /Gitti
by the basalt stone,	basalt. associated	Narmada	is huge, immense as
used in making	with river sand,	river.	most of the district is
aggregate But as per	though the resources		occupied by basalt.
figures received from	as per their area in		Thus mineral potentials
District Mining	the district is small,		are immense. As for as
Section 292589 M3	the production of		Bajri/black sand is
of stone aggregate	sand and bajri is		concerned, total
was produced in	18145.19 M 3 in		mineable mineral
2020-21	2019-20		potential for bajri is small.

Sand Replenishment

The process of sand replenishment is highly dependent upon the rainfall received in the catchment areas of rivers and their tributaries and velocity of river. It is a dynamic process. Thus it is difficult to predict, what quantity of sand may be reclaimed/ replenished by river. Because, in case of less rain, less water in the river, there may be less erosion and transportation may also be minimal and as a result deposition too will be less. Moreover, in case of floods, the sudden gush of water may force the change in river course, thus old sites of sand deposition may not be relevant. Thus, the above figures may just be a mere prediction, based on the production in the preceding years. More so, practically, it is not possible that in such a short period, single person can visit each spot within the district and determine how much quantity of sand may be replenished every year. The data narrated in the report, regarding annual deposition of sand and associated aggregates and minable mineral potential is concerned, is only an estimation based on the production data provided by the district mining offfice. Thus, the figures may vary from area to area and year on year basis. Therefore, this document is not a static one but have to be a dynamic one, the figures of which may vary with respect to the area under question for which the prior environmental clearance will be sought.

In order to establish a safe extraction limit, such that the extracted sand gets replenished annually, a replenishment study is to be carried out. For this purpose, the river bed RL at selected points in the dry portion of riverbed will be measured during pre-monsoon period and again during post- monsoon period in order to assess the annual quantum of sand deposition. If it is observed that, there is an average increase

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Parvolation Parisar
F-5. As a colony, Bhopal (M.P.)

DISTRICT BARWANI SURVEY REPORT FOR SAND

प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-बड़वानी in riverbed RL, it shows that it is due to deposition of sand during the monsoon flow of the river and by multiplying it with the area of lease one can measure the quantity of sand replenished every year.



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प्रभारी अधिकारी कार्यालय कलेक्टर (खनिज शाखा) जिला-वड्यानी

DISTRICT BARWANI SURVEY REPORT FOR SAND



राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण, म.प्र.

(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

पर्यावरण नियोजन एवं समन्वय संगठन पर्यावरण परिसर, ई–5, अरेरा कॉलोनी भोपाल–462016 (म.प्र.)

बेवसाईट— <u>http://www.mpseiaa.nic.in</u> दूरभाष नं. — 0755—2466970, 2466859 फैक्स नं. — 0755—2462136

> No: 158/ / SEIAA/2022 Date: 9/9/22

प्रति.

कलेक्टर

जिला - बड़वानी_(म.प्र.)

विषयः नवीन जिला सर्वेक्षण रिपोर्ट – बड़वानी_(रेत खनिज)

संदर्भः आपका पत्र क्र. 826 दिनांक 25.08.2022।

राज्य स्तरीय समाघात निर्धारण प्राधिकरण द्वारा 745वी बैठक दिनांक 05.09.2022 में निम्नानुसार निर्णय लिया गया :--

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 591वीं बैठक दिनांक 27/08/2022 में जिला बड़वानी की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है।

".....सिमित ने जिला सर्वेक्षण रिर्पोटो के प्रस्तुतीकरण एवं परीक्षण हैं पाया कि रेत की कई स्वीकृत खदानों में 60 प्रतिशत माइनेबल पोटेंशियल तथा विगत् 03 से 05 वर्षों के उत्पादन की मात्रा में 10 गुना से भी अधिक का अंतर है जिसके संदर्भ में उपस्थित खनन् अधिकारियों द्वारा बताया गया कि विगत् 02 से 03 वर्षों में कोविड महामारी, मांग कम होने इत्यादि के कारण कुछ खदानों से रेत की निकासी काफी कम हुई है जिस कारण यह अंतर परिलक्षित हो रहा है। सिमित ने चर्चा उपरांत निर्णय लिया कि रेत खनन् के ऐसे प्रकरण जहां 60 प्रतिशत माइनेबल पोटेंशियल तथा विगत् 03 से 05 वर्षों के उत्पादन की मात्रा में 05 गुना या उससे से भी अधिक का अंतर है ऐसे सभी प्रकरणों में पर्यावरणीय अभिस्वीकृती हेतु प्रकरण ऑन लाईन प्रस्तुत करते समय उनकी अनुमोदित खनन् योजना में उस स्थल की सारगर्भित रिप्लेनिशमेंट स्टडी प्रस्तुत की जाये तथा 60 प्रतिशत माइनेबल पोटेंशियल के विरूद्ध 05 गुना या उससे से भी अधिक रेत की मात्रा के अंतर का औचित्य दर्शाया जाये।

समिति की यह भी अनुशंसा है कि जिला स्तर पर जिला सर्वेक्षण रिपोर्ट तैयार करने हेतु गठित जिला समिति की अनुशंसा तथा की गई रिप्लेनिशमेंट स्टडी की जानकारी (जिसके आधार पर जिला सर्वेक्षण रिपोर्ट तैयार की गई हैं) संबंधित जिला खनिज अधिकारी कार्यालय में सुरक्षित रखी जाये ।

अतः समिति द्वारा सुझाई गई उपरोक्त अनुशांसाओ के साथ बड़वानी जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघाँत निर्धारण प्राधिकारण की ओर प्रेषित किया जाये।"

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 591वीं बैठक दिनांक 27/08/2022 की अनुशंसा को मान्य करते हुए बड़वानी जिले की अद्यतन जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई की उपरोक्त अनुशंसाओं के साथ किया जाता है। तदानुसार जिला कलेक्टर, बड़वानी को पुनरीक्षित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक भौमिकी तथा खनिकर्म को सूचित किया जाये।

उपरोक्त निर्णयानुसार कृपया अनुमोदित नवीन जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करने का कष्ट करें। सुलभ संदर्भ हेतु अनुमोदित नवीन जिला सर्वेक्षण रिपोर्ट की साफ्टकॉपी ई-मेल के माध्यम से आपकी ओर प्रेषित है।

(श्रीमन् शुक्ला) सदस्य सचिव



राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण, म.प्र.

(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, मारत सरकार)

पर्यावरण नियोजन एवं समन्वय संगठन पर्यावरण परिसर, ई–5, अरेरा कॉलोनी भोपाल–462016 (म.प्र.)

बेवसाईट – http://www.mpseiaa.nic.in दूरभाष नं. – 0755–2466970, 2466859 फैक्स नं. – 0755–2462136

No:

/ SEIAA/2022

Date:

क्र.. 1582 प्रतिलिपि :-

/SEIAA/2022 भोपाल

दिनांक 9/9/22

1. प्रमुख सचिव, म.प्र. शासन, पर्यावरण विभाग, मंत्रालय, भोपाल की ओर कृपया सूचनार्थ ।

2. संचालक, प्रशासन/तकनीकी, संचालनालय, भौमिकी तथा खनिकर्म, 29-ए, खनिज भवन, अरेरा हिल्स, भोपाल (म.प्र.)

3. सदस्य सचिव, राज्यं स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), अनुसंधान एवं विकास विंग, म.प्र. प्रदूषण नियंत्रण बोर्ड, पर्यावरण परिसर, ई—5, अरेरा कॉलोनी, भोपाल (म.प्र) — 462016 की ओर सूचनार्थ।

सदस्य सचिव

राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकरण म.प्र. की 745वी बैठक दिनांक 05.09.2022 का कार्यवाही विवरण

अद्यतन जिला सर्वेक्षण रिपोर्ट का अनुमोदन SEAC द्वारा सुझाई की उपरोक्त अनुशंसाओं के साथ किया जाता है।

तदानुसार जिला कलेक्टर, सीधी को पुनरीक्षित जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक भौमिकी तथा खनिकर्म को सूचित किया जाये।

18. जिला सर्वेक्षण रिपोर्ट, जिला - बड़वानी

अ. रेत खनिज

राज्य स्तरीय समाघात निर्घारण प्राधिकरण द्वारा 745वी बैठक दिनांक 05.09.2022 में निम्नानुसार निर्णय लिया गया :--

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 591वीं बैठक दिनांक 27/08/2022 में जिला बड़वानी की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है।

समिति ने जिला सर्वेक्षण रिपोटों के प्रस्तुतीकरण एवं परीक्षण में पाया कि रेत की कई खीकृत खदानों में 60 प्रतिशत माइनेबल पोटेशियल तथा विगत् 03 से 05 वर्षों के उत्पादन की मात्रा में 10 गुना से भी अधिक का अंतर है जिसके संदर्भ में उपस्थित खनन् अधिकारियों द्वारा बताया गया कि विगत् 02 से 03 वर्षों में कोविड महामारी, मांग कम होने इत्यादि के कारण कुछ खदानों से रेत की निकासी काफी कम हुई है जिस कारण यह अंतर परिलक्षित हो रहा है। समिति ने बर्चा उपरात निर्णय लिया कि रेत खनन् के ऐसे प्रकरण जहां 60 प्रतिशत माइनेबल पोटेशियल तथा विगत् 03 से 05 वर्षों के उत्पादन की मात्रा में 05 गुना या उससे से भी अधिक का अंतर है ऐसे सभी प्रकरणों में पर्यावरणीय अभिस्वीकृती हेतु प्रकरण ऑन लाईन प्रस्तुत करते समय उनकी अनुमोदित खनन् योजना में उस रथल की सारगित रिप्लेनिशमेंट रहडी प्रस्तुत की जाये तथा 60 प्रतिशत माइनेबल पोटेशियल के विरुद्ध 05 गुना या उससे से भी अधिक रेत की मात्रा के अंतर का औचित्य दर्शाया जाये ।

सिमिति की यह भी अनुशंसा है कि ज़िला स्वर पर जिला सर्वेक्षण रिपोर्ट तैयार करने हेतु गठित जिला सिमिति की अनुशंसा तथा की गई रिप्लिक्सिट स्टडों की जानकारी जिसके आधार पर जिला सर्वेक्षण रिपोर्ट तैयार की गई हैं) सर्विधित ज़िल्हें की जाधिकारी कार्यालय में सुरक्षित रखी जाये ।

अतः समिति द्वारा सुझाई गई उपरोक्ते क्रियासाओं के साथ बडवानी जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विद्याराण् रिक्स आगामी कार्यवाही हेतु राज्य स्तरीय पर्धावरण समाधात निर्धारण प्राधिकारण की और प्रेषित किया जाये।

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 591वीं बैठक दिनांक 27/08/2022 की अनुशंसा को मान्य करते हुए बड़वानी जिले की अद्यतन जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई की उपरोक्त अनुशंसाओं के साथ किया जाता है।

तदानुसार जिला कलेक्टर, बड़वानी को पुनरीक्षित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) जिला पोर्टल पर अपलोड कर्खाये जाने एवं संचालक भौमिकी तथा खनिकर्म को सूचित किया जाये।

> (श्रीमन् शुक्ला) सदस्य सचिव

(अरूण कुनार भट्ट) अध्यक्ष

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राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण, भोपाल से पर्यावरणीय स्वीकृति हेतु प्राप्त परियोजनाओं के तकनीकी परीक्षण हेतु राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (एसईएसी) की 591वीं बैठक दिनांक 27/08/2022 को डॉ. पी.सी. दुबे की अध्यक्षता में आयोजित की गई, जिसमें समिति के निम्नलिखित सदस्य स्वयं/वीडियों कॉफेसिंग के माध्यम से उपस्थित रहें :—

- 1. श्री राघवेन्द्र श्रीवास्तव, सदस्य ।
- 2. प्रो. (डॉ.) रूबीना चौधरी, सदस्य ।
- 3 डॉ. ए.के. शर्मा, सदस्य ।
- 4. प्रो. अनिल प्रकाश, सदस्य ।
- 5. डॉ. जय प्रकाश शुक्ला, सदस्य ।
- 6. डॉ. रवि बिहारी श्रीवास्तव, सदस्य ।
- 7. श्री ए.ए. मिश्रा, सदस्य सचिव ।

सभी सदस्यों द्वारा अक्ष्यक्ष महोदय के स्वागत के साथ बैठक प्रारंभ करते हुए बैठक के निर्धारित एजेण्डा अनुसार पर्यावरणीय स्वीकृति हेतु प्राप्त प्रोजेक्ट्स का तकनीकी परीक्षण निम्नानुसार किया गया :-

1. जिला सर्वेक्षण रिपोर्ट, बड़वानी -

अ. रेत खनिज

Mineral	Sand
Earlier DSR Discussed	SEAC 588 th , & 576 th, Meeting dated 16.08.2022 & 10.06.22.
Approved /or recommend for Updation (if Updation then elaborate issues)	Recommended for DSR Updation (Sand Mineral)
Deliberation	राज्य स्तरीय मूल्यांकन समिति की 576 वीं बैठक दिनांक 10/06/22 जिला सर्वेक्षण रिपोर्ट, जिला बड़वानी (म.प्र.)
in the SEAC 588 th ,& 576 th Meeting dated 16.08.2022 & 10.06.22.	राज्य स्तरीय पर्यावरण समाघाँत निर्धारण प्राधिकारण (सिया) ने पत्र क्रमांक 606 दिनांक 27/05/22 के माध्यम सं वडवानी जिले की जिला सर्वेक्षण रिपोर्ट राज्य स्तरीय विशेषज्ञ मूल्यांकन सिमित के परीक्षण हेतु भेजी गई है जिसमें यह उल्लेखित हैं कि जिला कलंक्टर, वडवानी के पत्र दिनांक 18/4/22 को जिला सूचना केन्द्र के वेव पोर्टल पर 21 दिन की अविध हेतु अपलोड किया गया। इसके उपरांत गठित सिमित की उपस्थित अधिकारीगण द्वारा दिये गये सुझावों को सिम्मिलित किया गया। तदउपरांत उक्त जिला सर्वेक्षण रिपोर्ट को पत्र क्रमांक 352 दिनांक 26/05/22 को अग्रिम कार्यवाही हेतु सिया कार्यालय के अनुमोदन हेतु भेजा गया है। उक्त जिला सर्वेक्षण रिपोर्ट राज्य स्तरीय विशेषज्ञ मूल्यांकन सिमित के सदस्यों को दिनांक 30/05/22 (सॉफ्टकापी) को प्रेपित की गई थी तथा उस पर चर्चा राज्य स्तरीय मूल्यांकन सिमित की 576वीं बैठक दिनांक 10/06/22 में प्रस्तावित की गई।
	राज्य स्तरीय विशेषज्ञ मृल्यांकन समिति की 576वीं बैठक दिनांक 10/06/22 में बडवानी जिले की जिला सर्वक्षण रिपार्ट पर चर्चा की गई । चर्चा के दौरान खनिज विभाग, बडवानी की ओर से सुश्री अंशु जावला, प्रभारी खनिज अधिकारी ऑनलाईन उपस्थित हुए जिसमें पाया गया कि:—

- >प्रस्तुत जिला सर्वेक्षण रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा जारी अधिसूचना दिनांक 25/07/2018 में निर्धारित फार्मेंट अनुसार नहीं बनाई गई है तथा कई जानकारियाँ वांछित तालिका में नहीं दी गई है जिस कारण रिपोर्ट अपूर्ण है।
- ≽तालिका—3 में पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय के संबंधित अधिसूचना के अनुसार रेत की खदानों लीज अवधि को नहीं दर्शाया गया है ।
- ≽तालिका-4 में लीज खदानों के अक्षांश-देशांश नहीं दिये गये है ।
- ≽तालिका–21 में पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय के संबंधित अधिसूचना में निर्धारित प्रपत्र में percentage area drained in the district की जानकारी नहीं दी गई है।
- तालिका−23 एवं 24 में प्री−मानसून एवं पोस्ट−मानसून में प्रदाय की गई अनुमानित रेत की मात्रा में लीजवार (60 प्रतिशत टोटल मिनरल पोटेंशियल) (लम्बाई एवं चौड़ाई के साथ) नहीं दी गई है ।
- र्नालिका−23 में पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय द्वारा निर्धारित फार्मेट अनुसार percentage area drained in the district की जानकारी नहीं दी गई है ।
- ▶िबंदु कमांक—30 की जानकारी जो माईनर मिनरल (रेत छोड़कर) से संबंधित है, के अवलोकन से ज्ञात होता है कि बड़वानी जिले में हरित क्षेत्र के विकास हेतु प्रस्तावित पौधों की प्रजातियों की जानकारी दी गई है किंतु संचालित खदानों में किये गये वृक्षारोपण की जानकारी नहीं दी गई है, जिसको अद्यतन किया जाना चाहिए । साथ ही निर्धारित लक्ष्य के विरुद्ध कितना वृक्षारोपण किस वर्ष किया है, उसको भी अंकित किया जाना चाहिए ।
- े इसी प्रकार जिले में स्वीकृत / प्रस्तावित खदानों को को—आर्डिनेट के अनुसार डिजिटाईज मेप (आर्क व्यू / गूगल अर्थ कम्पेटेवल सी.डी.में) भी संलग्न किया जाये ताकि पर्यावरण अभिस्वीकृति के समय खदानों की सही स्थिति ज्ञात करने में तथा 500 मीटर के अंदर स्थित अन्य स्वीकृत खदानों की जानकारी प्राप्त करने में सुविधा हो ।
- प्रायः देखा जा रहा है जिला सर्वेक्षण रिपोर्ट में रेत निर्माण होने की भू-वैज्ञानिक विधि की सामान्य जानकारी दी जाती है जो सभी जिला सर्वेक्षण रिपोर्टो में एक जैसी ही है जिसके स्थान पर जिलें में मिलने वाली नदी के अपस्ट्रीम क्षेत्र में मिलने वाली चट्टानों का (रॉक फार्मेशन) का समावेश होना चाहिए
- े जिला सर्वेक्षण रिपोर्ट में प्रदर्शित नक्शों में जो भी फीचर्स दिखाया जाता है उसको संबंधित नक्शें के लीजेंड में भी दिखाया जाना चाहिए एवं नक्शों का स्केल ऐसा होना चाहिए कि समस्त फीचर स्पष्ट दिख सके । यदि ए−4 साईज में नक्शें नहीं आ पा रहे हो तो ए−3 साईज में नक्शों को बनाना चाहिए ।
- समिति ने संबंधित जिलों के खनिज अधिकारियों को निर्देशित करती है कि इस बात का भी ध्यान रखा जाये कि नदियों में किसी स्थान पर मछलियों / कछुआ / घड़ियाल / मगरमच्छ आदि जलचरों का ब्रीडिंग ग्राउण्ड तो नहीं है यदि ऐसा कोई स्थानीय संवेदनशीन क्षेत्र दृष्टिगत होता है
- ां खनन् क्षेत्र की सीमा को 60 प्रतिशत से कम कर 50 प्रतिशत तक भी सीमित किया जा सकता है ।
- समिति ने यह भी सुझाव दिया कि सभी खनिज अधिकारी अपनी साईट विजिट के दौरान खदान द्वारा किये जा रहे पर्यावरणीय एवं सामाजिक पहलुओं का भी अवलोकन करें एवं यदि कोई पर्यावरणीय संवेदनशीलता दृष्टिगत हो, जिस पर ध्यान दिया जाना आवश्यक हो तो संबंधित तथ्यों से राज्य स्तरीय पर्यावरण समाघाँत निर्धारिण प्राधिकरण को उचित कार्यवाही हेतू अवगत करायें ।

चर्चा उपरांत समिति की यह अनुशंसा है कि बड़वानी जिले की जिला सर्वेक्षण रिपोर्ट को समिति द्वारा सुझाई गई उपरोक्त अनुशांसाओं के तारतम्य में अद्यतन (अपडेट) किया जाये तथा संशोधित जिला सर्वेक्षण रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा जारी अधिसूचना दिनांक 25/07/2018 के अनुसार पुनः प्रस्तुत की जाये । ऑन लाईन उपस्थित सुश्री अंशु जावला, प्रभारी खनिज अधिकारी को भी उपरोक्त संदर्भ में समझाईश दी गई तथा पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा जारी अधिसूचना दिनांक 25/07/2018 के निर्धारित फार्मेट अनुसार जिला सर्वेक्षण रिपोर्ट को अद्यतन कर लें । तद्नुसार प्रकरण आगामी कार्यवाही राज्य स्तरीय पर्यावरण समाघाँत निर्धारण प्राधिकरण की ओर अग्रिम कार्यवाही हेतु प्रेषित है ।

राज्य स्तरीय मूल्यांकन समिति की 588 वीं बैठक दिनांक 16/08/22

जिला सर्वेक्षण रिपोर्ट, जिला जिला बड़वानी - रेत खनिज - (संशोधित)

जिला सर्वेक्षण रिपोर्ट बड़वानी (रेत खनिज)- श्री शांतिलाल निनामा, खनिज निरीक्षक-

	 तालिका क0. 23 के अन्तर्गत लीजवार लंबाई, चौड़ाई के साथ जो 60; मिनरल पोटेंशियल दर्शाया गया है। इस तालिका मे उसमें गहराई दर्शाते हुये रेत की मात्रा दर्शायें एंव इसकी मात्रा का 60: मात्रा को दर्शावें। इसी प्रकार तालिका क0. 24 मे जो नदी—वार एंव लीज—वार आंकडे (लंबाई चौड़ाई के साथ) दर्शायें गये तत्पश्चात् प्राप्त क्षेत्रफल का 60 प्रतिशत मिनरल पोटेंशियल बताया गया है इसमें गहराई भी दर्शायें एंव तत्पश्चात् प्राप्त मात्रा (Volume) का 60 प्रतिशत मिनरल पोटेंशियल के रूप में प्रदर्शित करें। यह प्रकिया समस्त नदी—वार लीजों को जानकारी में समाहित करें एंव तालिका क0 24 करे पुनरिक्षित करें। तालिका क0. 17 एंव 18 में प्री—मानसून प्रदाय की रेत की मात्रा में लीजवार (60: टोटल मिनरल पोटेंशियल) (लंबाई एंव चौड़ाई के) साथ नहीं दी गयी है। अतएव उक्त दोनों तालिकाओं को पुनरिक्षित करें। विगत 03 वर्षों में उल्खिनत रेत की खदानवार मात्रा भी दर्शाई जाये, जिससे यह ज्ञात हो सके कि उस स्थल पर खदान का मिनरल पोटेंशियल विगत 03 वर्षों में कितना रहा है । मिनरल पोटेंशियल की गणना दर्शाने वाली टेबल में आवश्यक संशोधन कर रेत की 60 प्रतिशत माइनेबल पोटेंशियल (रेत खनन हेतु) मीट्रिक टन यूनिट में भी दर्शाये । इसी प्रकार जिले में स्वीकृत / प्रस्तावित खदानों के को—आर्डिनेट के अनुसार डिजिटाईज मेप (आर्क यू / गूगल अर्थ कम्पेटेवल — सी.डी.में) भी संलग्न किया जाये तािक पर्यावरण अभिरवीकृति के समय खदानों की सही श्वित ज्ञात करने में तथा 500 मीटर के अंदर स्थित अन्य स्वीकृत खदानों की जानकारी प्राप्त करने में सुविधा हो चर्चा उपरांत समिति की यह अनुसासा है कि बड़वानी जिले की जिला सर्वेक्षण रिपोर्ट जिला सर्वेक्षण रिपोर्ट, रेत खिना (संशोधित) को समिति द्वारा सुझाई गई उपरोक्त अनुशंसाओं के तारतम्य में अद्यतन (अपडेट) किया जाये तथा संशोधित जिला सर्वेक्षण रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा जारी अधिसूचना दिनांक 25/07/2018 के अनुसार पुन प्रस्तुत की जाये। ऑन लाईन उपस्थित खिना निरीक्षक सुशी अर्वेना ताम्रकार को भी उपरोक्त संवर्ग में समझाईश दो गई तथा पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा कर प्रमुत करें।
Revised DSR received from District Collectorate	Received soft copy vide District Collectorate (Mining) Office, Badwani, No. 826 dated 25.08.2022
(Mining) Hard Copy Soft Copy or both	Hard copy & Soft copy.
SEAC meeting dated 27/08/22	 जिले की जिला सर्वेक्षण रिपोर्ट में पेज न0. 39 में दर्शित तालिका में माइनेबल मिनरल पोटेंशियल (घनमीटर में) 60% टोटल मिनरल पोटेंशियल, लीजवार, लंबाई, चौड़ाई एंव गहराई के साथ दर्शाया है एवं पेज न0. 40 विगत 03 वर्षों के उत्खिनत रेत की मात्रा का लीजवार पोटेंशियल दिया गया है। जिससे ज्ञात हो सके कि उस स्थल पर खदान का मिनरल पोटेंशियल विगत 03 वर्षों में कितना रहा। मिनरल पोटेंशियल की गणना दर्शाने वाली टेबल में आवश्यक संशोधन कर रेत की 60 प्रतिशत माइनेबल पोटेंशियल की गणना दर्शाने वाली टेबल में अवश्यक संशोधन कर रेत की 60 प्रतिशत माइनेबल पोटेंशियल (रेत खनन हेतु) मीट्रिक टन यूनिट में प्रस्तुत कर दी गई है।

आज दिनांक 27/8/22 को जिला सर्वेक्षण रिर्पोटो के प्रस्तुतीकरण के दौरान संचानालय, भौमिकी एंव खनिकर्म, विभाग भोपाल से श्री पी.पी. राय, एवं श्री शांतिलाल निनामा, खनिज निरीक्षक के साथ उपस्थित रहे ।

समिति ने पाया कि बड़वानी जिले की जिला सर्वेक्षण रिपोर्ट को समिति द्वारा सुझाई गई 03 वर्षों में उत्खिनत रेत की खदानवार मात्रा भी दर्शाई गई है, एंव विगत 03 वर्षों में उत्खिनत रेत की खदानवार मात्रा भी पोटेंशियल विगत 03 वर्षों में कितना रहा है भी दर्शाया गया है। अनूपपुर जिले की जिला सर्वेक्षण रिपोर्ट में आमजन के सुझाव आमंत्रित कर इनका अनुमोदन जिले में गठित समिति द्वारा किया जा चुका है तथा खिन. अधिकारी, कार्यालय कलेक्टर, (खिनज शाखा) जिला — बड़वानी ने पत्र कमांक 826 दिनांक 25/08/2022 के माध्यम से ''माइनेवल मिनरल पोटेंशियल'' (घनमीटर में) (60 प्रतिशत टोटल मिनरल पोटेंशियल) लीजवार विवरण की जानकारी भी प्रस्तुत कर दी गई है। तथा मिनरल पोटेंशियल की गणना दर्शाने वाली टेबल में आवश्यक संशोधन कर रेत की 60 प्रतिशत माइनेबल पोटेंशियल (रेत खनन हेतु) मीट्रिक टन यूनिट में प्रस्तुत कर दी गई है।

समिति ने जिला सर्वेक्षण रिर्पौटो के प्रस्तुतीकरण एवं परीक्षण में पाया कि रेत की कई स्वीकृत खदानों में 60 प्रतिशत माइनेबल पोटेंशियल तथा विगत् 03 से 05 वर्षों के उत्पादन की मात्रा में 10 गुना से भी अधिक का अंतर है जिसके संदर्भ में उपस्थित खनन् अधिकारियों द्वारा बताया गया कि विगत् 02 से 03 वर्षों में कोविड महामारी, मांग कम होने इत्यादि के कारण कुछ खदानों से रेत की निकासी काफी कम हुई है जिस कारण यह अंतर परिलक्षित हो रहा है। सिमिति ने चर्चा उपरांत निर्णय लिया कि रेत खनन् के ऐसे प्रकरण जहां 60 प्रतिशत माइनेबल पोटेंशियल तथा विगत् 03 से 05 वर्षों के उत्पादन की मात्रा में 05 गुना या उससे से भी अधिक का अंतर है ऐसे सभी प्रकरणों में पर्यावरणीय अभिस्वीकृती हेतु प्रकरण ऑन लाईन प्रस्तुत करते समय उनकी अनुमोदित खनन् योजना में उस स्थल की सारगर्भित रिप्लेनिशमेंट स्टडी प्रस्तुत की जाये तथा 60 प्रतिशत माइनेबल पोटेंशियल के विरूद्व 05 गुना या उससे से भी अधिक रेत की मात्रा के अंतर का औचित्य दर्शाया जाये ।

समिति की यह भी अनुशंसा है कि जिला स्तर पर जिला सर्वेक्षण रिपोर्ट तैयार करने हेतु गठित जिला समिति की अनुशंसा तथा की गई रिप्लेनिशमेंट स्टडी की जानकारी (जिसके आधार पर जिला सर्वेक्षण रिपोर्ट तैयार की गई हैं) संबंधित जिला खनिज अधिकारी कार्यालय में सुरक्षित रखी जाये ।

अतः समिति द्वारा सुझाई गई उपरोक्त अनुशांसाओं के साथ बड़वानी जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघाँत निर्धारण प्राधिकारण की ओर प्रेषित किया जाये।

ब. गौण खनिज, जिला - बड़वानी

बड़वानी जिले की नवीन जिला सर्वेक्षण रिपोर्ट रेत खनिज एंव अन्य गौण खनिज हेतु प्रस्तुत की गयी। यह प्रकरण एजेण्डा में सूचीबद्ध नहीं था किंतु संबंधित खनिज निरीक्षक के अनुरोध पर मान्नीय अध्यक्ष महोदय द्वारा प्रस्तुतीकरण की अनुमति प्रदान की गई ।