



# 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.)

वेबसाइट- <http://www.mpseiaa.nic.in>

दूरभाष नं. - 0755-2466970, 2466859

फैक्स नं. - 0755-2462136

No: 2021 / SEIAA/2022

Date:

21/11/22

प्रति,

कलेक्टर

जिला - शहडोल (म.प्र.)

विषय: नवीन जिला सर्वेक्षण रिपोर्ट - शहडोल (अन्य गौण खनिज - रेत को छोड़कर)

संदर्भ: आपका पत्र क्र. 19 दिनांक 07/10/22

राज्य स्तरीय समाघात निर्धारण प्राधिकरण द्वारा 753वी बैठक दिनांक 26.10.2022 में निम्नानुसार निर्णय लिया गया :-

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 598वीं बैठक दिनांक 07/10/2022 में शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

"..... अतः समिति शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये।"

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 598वीं बैठक दिनांक 07/10/2022 के अनुमोदन प्रस्ताव को मान्य करते हुए शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदनुसार जिला कलेक्टर, शहडोल को जिला सर्वेक्षण रिपोर्ट 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

क्र..

/SEIAA/2022 भोपाल

दिनांक

प्रतिलिपि :-

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, राज्य 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

# DISTRICT SURVEY REPORT SHAHDOL DISTRICT



**Prepared By: DSR Committee Shahdol**

*W. S. Singh*  
State Level Environment Impact  
Assessment Authority, M.P.  
(EPCO)  
Paryayaran Parisar  
E-5, Arera Colony, Bhopal (M.P.)

10  
final  
final  
कार्यालय कलेक्टर (खनिज-शाखा) जिला शहडोल म.प्र.

कं. 19/खनिज/2022/10

शहडोल दिनांक 07/10/2022

प्रति,

सदस्य सचिव  
राज्य स्तरीय विशेषज्ञ आकलन समिति  
SEAC भोपाल (म.प्र.)

विषय :- संशोधित DSR (OTHER MINERALS) जिला शहडोल।

संदर्भ :- SEAC बैठक 598 दिनांक 07/10/2022 में दिये निर्देश।

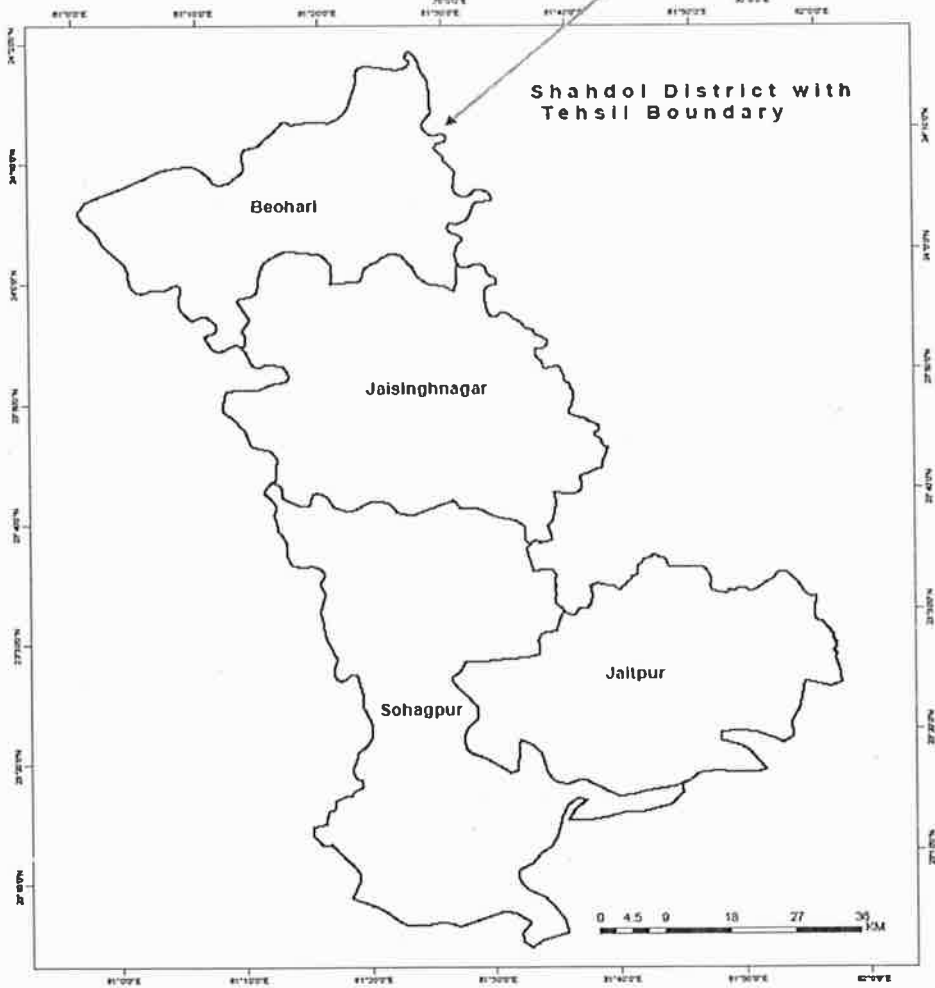
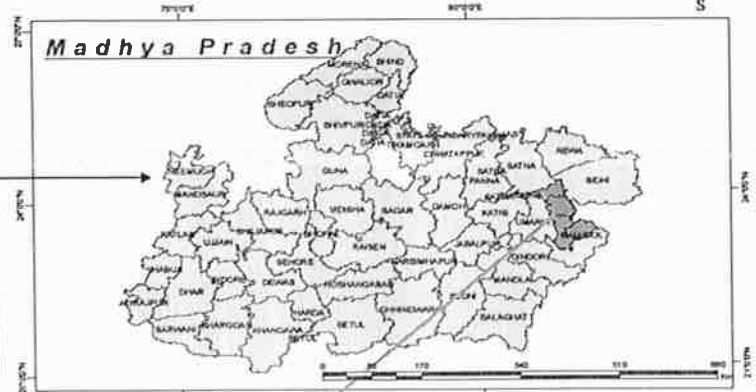
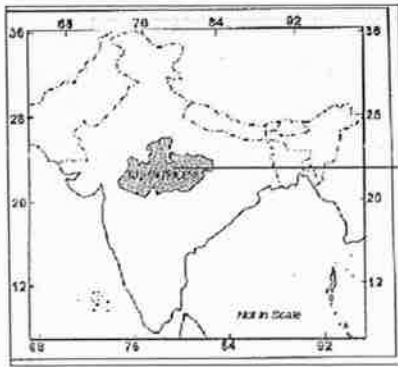
विषयांतर्गत अनुरोध है कि SEAC बैठक 598 दिनांक 07/10/2022 में जिला शहडोल की जिला सर्वेक्षण रिपोर्ट DSR (OTHER MINERALS) के संबंध में की गई चर्चा व दिये गये निर्देशानुसार आवश्यक संशोधन उपरांत संशोधित DSR (OTHER MINERALS) जिला शहडोल आवश्यक कार्यवाही हेतु प्रस्तुत है।

धन्यवाद

प्रार्थी  
7.10.2022  
प्रमोद शर्मा  
खनिज अधिकारी  
जिला शहडोल



**Location Map of Shahdol District**



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



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 (E-5)  
 Parvati Nagar, Patna  
 E-5, A-5, B-5, C-5, D-5, E-5, F-5, G-5, H-5, I-5, J-5, K-5, L-5, M-5, N-5, O-5, P-5, Q-5, R-5, S-5, T-5, U-5, V-5, W-5, X-5, Y-5, Z-5

## CHAPTER-1 INTRODUCTION

The District Survey Report was prepared by the According to Para 7 (iii) Annexure 10 of the revised notification dated 25 July 2018 issued by the Ministry of Environment, Forest and Climate Change, Government of India, provisions have been made to prepare a separate district survey report for sand minerals in the Sand and Enforcement and Monitoring Guidelines for Sand Mining 2020. The main purpose to prepare the district survey report is to identify the land increase or divisional areas and its infrastructure, structure and installation, distance from where the mining is prohibited and re calculation of annual replenishment and time required for replenishment after mining. The district survey report will be based on the application for evaluation of project.

This report is prepared for Minerals of District Shahdol. District Shahdol comes under Administration of shahdol (M.P.) The District is bounded by sidhi & satna district in north, Umaria in west, Anuppure in south and Chhattisgarh state in east. The Shahdol District is located in the Eastern part of Chhattisgarh state and in covered in Survey of India Degree sheet Nos.' 63D, 63H, 64 A & 64 E between Latitude 23° 03'-24°20' and Longitude 80°58'-81°58". District shahdol covers an area of 5,671 square kilometer.

Shahdol is the district head quarter and Sohagpur, Beohari, jaitpur, Burhar, Gohparu and jaisinghnagar are some of the Tehsil Place. Shahdol is located on the Bilaspur-katni section of the south-eastern railways. All important places within the district are well connected by a network of state highways and all weather roads, The Son River and its tributaries drain central part of the district. Narmada and johilla rivers originate from Amarkantak (1062m).

The Shahdol district in located in the north-eastern part of the deccan plateau, It lies at the trijunction of maikal ranges of the satpura Mountain, the foot of

the kymore Range of the Vindhya Mountain. In between these hill ranges lies the narrow valley of the Son and its tributaries.

Physiographically, structural land forms, represented by plateau and low lying plains with average altitude of 450m to 500m above MSL, are developed in northern-eastern and north-western and central parts of the district. In the southern part of the District, hills and highlands of Maikal Range and high to medium level (500 m to 990m) plateau and flat top, Step like terraces are developed.

Fluvial land forms represented by flood plains are present along the western boundary of the district. The maximum elevation of the area is 1123m above mean sea level at Singarh Hill (23°03' 4" N; 81°27' 37" E) in Satpura hills in southern part of the district. Tributaries of Son River in the district are Johila, Gujar Kewai and Tipan rivers. The primary occupation of the majority of the population in the district is agriculture and allied activities. On one side the spectrum of its floristic socio-cultural diversity and ethnic history of tribal.

  
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पर्यावरण, प्रकृति  
E-5, A-2



## CHAPTER-2

### OVERVIEW OF MINING ACTIVITY IN THE DISTRICT


Shahdol district is an important district for mineral deposits in Madhya Pradesh, in which coal, coal bed methane gas, fire clay, ocher's and iron ore are the main minerals. The Minor minerals are Dolerite, Laterite, Marble, stone, murum and River sand etc. are also found in huge quantity in the district.

Shahdol district has **19** coal mines in which 12 mines is in working condition and 7 coal mines is in not working condition, 01 Coal bed methane gas plant, **172** stone Mines, and **50 sand mine (tender)** in total. In which 11 coal mines are operating by south eastern coal mine, this is subsidiary of Coal India limited, 01 coal block is operated by altra Tech. Company, Coal bed methane gas plant is running by Reliance industries. According to previous year and current financial year, shahdol district revenue is continuously increasing.

State Government, is carrying on various infrastructure development projects in all districts, like pachri Nirman, Dams, Over bridge on rivers/ nalla, approach roads etc. in addition to these various power plants, steel plant and cement plants in private sectors are under implementations, all above civil works require stone boulders in different sizes which is in huge in demand.

**Total Yearly Revenue in all Minerals during last three financial years is as follows:**


S.N	FINANCIAL YEAR	REVENUE
1	2019 - 20	1501283843.00
2	2020 - 21	1488011910.00
3	2021 - 22	2064338928.00

  
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Purpura, Parisar  
E-6, Arera Colony, Bhopal (M.P.)

**CHAPTER-3**  
**THE LIST OF MINING LEASES IN THE DISTRICT WITH**  
**LOCATION, AREA AND PERIOD OF VALIDITY**

**SAND MINES**

क्र	ग्राम का नाम	तहसील का नाम	खसरा क्रमांक	रकबा (हेक्टेयर)	घोषित	घोषित करने का पत्र क्रमांक एवं दिनांक
1	चाका	बुढ़ार	853/1317	2.023	घोषित	पत्र क्रमांक 2782 दिनांक 31.12.2018
2	बदुरा		1279/1567	5	घोषित	पूर्व से घोषित।
3	चाका		853/1317	2.023	घोषित	पूर्व से घोषित।
4	पोड़ीकला	जयसिंह नगर	1801/2062	4.8	घोषित	पत्र क्रमांक 2783 दिनांक 31.12.2018
5	पोड़ीकला		2055/2063	3.9	घोषित	पत्र क्रमांक 2782 दिनांक 31.12.2018
6	भटिगवॉ खुर्द		91	4.8	घोषित	पत्र क्रमांक 1998 दिनांक 13.09.2018
7	मसीरा		39/534	20	घोषित	पत्र क्रमांक 134 दिनांक 30.01.2020
8	दतारी		191/242	0.829	घोषित	पत्र क्रमांक 2219 दिनांक 06.12.2019
9	पसौढ़		455/472, 291/471, 7/470	43.303	घोषित	पत्र क्रमांक 2216 दिनांक 06.12.2019
10	अटरिया		1, 52	4.49	घोषित	पत्र क्रमांक 138 दिनांक 30.01.2020
11	सेमरपाखा		223/559	6	घोषित	पत्र क्रमांक 2243 दिनांक 09.12.2019
12	बरकछ		266/1	10	घोषित	पत्र क्रमांक 31 दिनांक 10.01.2020
13	संनौसी		1453	1.457	घोषित	पत्र क्रमांक 137 दिनांक 30.01.2020

  
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 (EIA)


E-5, Anand Nagar, Bhopal (M.P.)  
 7

14	गंधिया		689	7.355	घोषित	पत्र क्रमांक 142 दिनांक 30.01.2020
15	दादर		567, 568	5	घोषित	पत्र क्रमांक 136 दिनांक 30.01.2020
16	भांगजीर		22, 178	3.484	घोषित	पत्र क्रमांक 135 दिनांक 30.01.2020
17	दरैन		515/1, 315	2.661	घोषित	पत्र क्रमांक 141 दिनांक 30.01.2020
18	बराछ		2524	4.734	घोषित	पत्र क्रमांक 2218 दिनांक 06.12.2019
19	बराछ		2126/1, 2490, 2491	8	घोषित	पत्र क्रमांक 132 दिनांक 30.01.2020
20	बराछ		2526, 2573, 2575/1, 626/1, 616	8	घोषित	पत्र क्रमांक 130 दिनांक 30.01.2020
21	सौता		380	2.63	घोषित	पत्र क्रमांक 191 दिनांक 04.02.2020
22	पतेराटोला		139/202	4.5	घोषित	पत्र क्रमांक 162 दिनांक 01.02.2020
23	तगावर	जयसिंह नगर	113	1.404	घोषित	पत्र क्रमांक 139 दिनांक 30.01.2020
24	नवागाँव		1, 2, 3	4.973	घोषित	पत्र क्रमांक 133 दिनांक 30.01.2020
25	भुरसी	गोहपारू	15	4	घोषित	पत्र क्रमांक 126 दिनांक 14.01.2019
26	लोढ़ी		64	3.173	घोषित	पत्र क्रमांक 301 दिनांक 23.01.2019
27	रसपुर		433	4	घोषित	पत्र क्रमांक 2156 दिनांक 03.10.2018
28	बोडिडहा	ब्यौहारी	233	4.5	घोषित	पत्र क्रमांक 100 दिनांक 14.01.2019
29	बोडिडहा			2.314	घोषित	पत्र क्रमांक 2215 दिनांक 06.12.2019

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E-5, Arora Colony, Lalpal (M.P.)



30	ब्यौहारी		197, 203, 187, 771 (180 का अंशभाग )	12.177	घोषित	पूर्व से घोषित।
31	जैतपुर	जैतपुर	576	2.023	घोषित	पत्र क्रमांक 133 दिनांक 30.01.2020
32	कमता		685	4	घोषित	पत्र क्रमांक 1741 दिनांक 17.06.2020
33	कोल्हुवा		1	4.046	घोषित	पत्र क्रमांक 1748 दिनांक 17.06.2020
34	लुकामपुर		1, 158, 159	3.641	घोषित	पत्र क्रमांक 1749 दिनांक 17.06.2020
35	लालपुर	सोहागपुर	2084	5	घोषित	पूर्व से घोषित।
36	रोहनिया		167	5	घोषित	पूर्व से घोषित।
37	पटासी		28	5	घोषित	पूर्व से घोषित।
38	पैरीबहरा	जैतपुर	718, 559, 572	10.076	अघोषित	वनमण्डलाधिकारी दक्षिण शहडोल से पत्र क्रमांक 1823 दिनांक 27.06.2020 से पुनः जानकारी मंगाई गई है।
39	पड़रिया		994	4.666	अघोषित	वन सीमा से 250 मीटर की परिधि में आने के कारण आयुक्त शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
40	पोड़ीकला	जयसिंह नगर	1801/2062, 2055/2063, 1857/2064	75.523	अघोषित	10 किलोमीटर की परिधि में नेशनल पार्क है। वनमण्डलाधिकारी उत्तर शहडोल से पत्र क्रमांक 1824 दिनांक 27.06.2020 से पुनः जानकारी मंगाई गई है।
41	सेमरपाखा	जयसिंह नगर	296/552	4	अघोषित	खसरे में राजस्व वन अंकित होने के कारण तहसीलदार

  
 Forest Environment  
 Assessment Authority, M.P.  
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 Paritosh Parisar  
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						जयसिंहनगर से पत्र क्रमांक 167 दिनांक 03.02.2020 से जानकारी मंगाई है।
42	सोनटोला (हर्रहा टोला)	गोहपारू	899/982	4.8	घोषित	वन सीमा से 250 मीटर की परिधि में आने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
43	अमझोर		470, 243, 820, 843	5.26	अघोषित	वन सीमा से 220 मीटर की परिधि में आने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
44	विशनपुरवा		363	3	अघोषित	वन सीमा से 150 मीटर की परिधि में आने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
45	अंकुरी		617	4	अघोषित	वन सीमा से बफर जोन से लगे होने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
46	सेमरा		412, 497	4.047	अघोषित	वन सीमा से 200 मीटर की परिधि में आने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
47	रसपुर	ब्यौहारी	1364, 433, 1316	23	अघोषित	10 किलो मीटर की परिधि में नेशनल पार्क है । वनमण्डलाधिकार उत्तर शहडोल पत्र क्रमांक 1824 दिनांक





7	पत्थर	जी एच व्ही इंडिया प्रायव्हेट लिमिटेड अंधेरी	बघला कास्टेब्लन ब्योहारी जिला शहडोल 9171357136	2506-02 09 2017	1 000	31 05 2017	30 05 2027	NA	13/8/2017	कायशाल	गर-कोएव 103-10.08.2017	A-24.06.39.79N B-24.06.41.05N C-24.06.37.37N D-24.06.36.89N E-24.06.32.91E	खुला	18	यू.कै.लिटि स.नीम/जामुन
8	पत्थर	मसस इटलक्स इंप्रास्टक्वर	रावा जिला रावा म प्र	239-28 08 2017	1 062	23 02 2017	22 03 2028	NA	14/9/2017	कायशाल	गर-कोएव 72-28.07.2017	A-24.5.53.52N B-24.6.53.44N C-24.5.57.47N D-24.06.57.42N E-24.3.15E	खुला	16	यू.कै.लिटि स.नीम/जामुन
9	पत्थर	श्री उपेन्द्र सिंह आ श्री सतन्द्र सिंह	ग्राम खाड बाणसागर तहसील ब्योहारी	1866-19 07 2017	1 618	20 07 2017	19 07 2027	NA	2/10/2017	कायशाल	गर-कोएव 102-10.08.2017	A-24.6.30.03N B-24.6.29.44N	खुला	15	यू.कै.लिटि स.नीम/जामुन
10	पत्थर	न्यू वनगा स्तन केशर प्रो श्री राजगीया सिंह आ श्री ललन सिंह	निवासी वाड क्रो 13 ब्योहारी तहसील ब्योहारी जिला शहडोल म प्र 9758830552		1 000	30 08 2017	29 08 2027	NA	4/11/2017	कायशाल	गर-कोएव 128-14.11.2017	A-24.6.7.03N B-24.6.7.09N C-24.6.12.48N D-24.6.12.48N E-24.6.10.70N	खुला	23	यू.कै.लिटि स.नीम/जामुन
11	पत्थर	वेष्णा एग्रीसिप्ट इजीनियर्स एण्ड कांस्ट्रक्टर, पार्टनर श्री दीपनासयण सिंह आ श्री राजेन्द्र सिंह एव श्री आम नारायण आ श्री राजेन्द्र सिंह	अकाना तहसील काटर जिला सतना म प्र 8770905698	1781-07 08 2018	4 000	28 09 2018	27 09 2028	NA	6/12/2018	कायशाल	गर-कोएव 192-12.09.2017	A-24.8.15.31N B-24.8.15.04N C-24.8.20.65N D-24.8.21.91N E-24.8.19.75N F-24.8.20.10N G-24.8.25.59E	खुला	35	यू.कै.लिटि स.नीम/जामुन
12	पत्थर	मसस आर एस स्तन केशर प्रो श्री प्रमोद कुमार गायल	वाड क्रो 02 ग्राम मुदरिया तहसील ब्योहारी जिला शहडोल म प्र	5080-31 03 2017	1 218	25 08 2017	24 08 2027	NA	10/11/2017	कायशाल	गर-कोएव 122-14.11.2017	L-24.6.24.92N B-24.6.26.18N C-24.6.03E D-24.6.20.82N	खुला	24	यू.कै.लिटि स.नीम/जामुन
13	पत्थर	मसस चियाइनाथ केशर प्रो श्री राजेंद्र तामकार	रावा राड ब्योहारी तहसील ब्योहारी जिला शहडोल 9584602555	2336-29 08 2017	1 218	30 08 2017	29 08 2027	NA	6/12/2017	कायशाल	गर-कोएव 130-14.11.2017	A-24.6.36.07N B-24.6.38.86N C-24.6.42.95E D-24.6.38.00N	खुला	21	यू.कै.लिटि स.नीम/जामुन
14	पत्थर	म आदश स्तन केशर प्रो प्रसाद शुक्ला	जयसिंहनगर जिला शहडोल 9424333547	32-7-02 01 2017	1 942	30 01 2013	29 01 2023	NA	06 06 2013	कायशाल	गर-कोएव 92456 2013	A-23.42.47.7N B-23.42.45.45.9N C-23.42.44.1N	खुला	50	यू.कै.लिटि स.नीम/जामुन
15	पत्थर	श्री शोलेन्द्र कुमार मिश्रा निवासी ग्राम कुवरा तहसील जयसिंहनगर जिला शहडोल म प्र 9752454726	ग्राम कुवरा तहसील जयसिंहनगर जिला शहडोल म प्र 9752454726	607-16 04 2017	1 000	29 04 2015	28 04 2025	NA	16/8/2015	कायशाल	गर-कोएव 396-26.03.2017	A-54.8941.951N B-54.9054.312N C-54.9082.172.N D-54.8967.068N	खुला	15	यू.कै.लिटि स.नीम/जामुन

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16	पत्थर	श्रीमती रजनी तिवारी निवासी जयसिंहनगर जिला शहडोल म प्र	जयसिंहनगर जिला शहडोल म प्र 9424369394	1712- 20/10/201 5	3 416	28.12.2015	27.12.2025	NA	8/2/2016	कायशील	गर-कोटिव 437-07.09.2016	A-23.40.11.00N B- 81.33.49.63E C- 23.40.13.31N 81.33.59.56E D- 23.40.17.08N 81.33.58.56E 23.40.13.97N	खुला	18	यू.के.।लोट स.नीम/ /जामुन
17	पत्थर	श्री कृष्णकांत गुप्ता आ.श्री तपकथा गुप्ता	ग्राम गिरुइवडी तहसील जयसिंहनगर 9630484657	2 000	4 6 2016	03.01.2017	3 6 2026	NA	14/10/2016	कायशील	गर-कोटिव 18-13.05.2016	A-23.42.46.78N B- 81.17.28.90E C- 23.42.46.34N 81.17.35.82E D- 23.42.43.06N 81.17.35.56E 23.42.43.59N	खुला	24	यू.के.।लोट स.नीम/ /जामुन
18	पत्थर	श्री राजेश कुमार तिवारी आ.स्व.श्री चन्द्रिका प्रसाद तिवारी	ग्राम अम्झार तहसील जयसिंहनगर जिला शहडोल म प्र 8969024136	940- 05 07 201 6	2 000	03.01.2017	2 1 2027	NA	3/6/2017	कायशील	गर-कोटिव 29-08.06.2018	A-23.39.32.76N B- 81.32.28.62E C- 23.39.36.22N 81.32.30.31E D- 23.39.34.89N 81.32.32.23E 23.39.33.21N 81.32.31.55E	खुला	30	यू.के.।लोट स.नीम/ /जामुन
19	पत्थर	श्री राजेश कुमार तिवारी आ.स्व.श्री चन्द्रिका प्रसाद तिवारी	ग्राम अम्झार तहसील जयसिंहनगर जिला शहडोल म प्र 896902413 6	941- 05 07 201 6	1 000	3 1 2017	2 1 2027	NA	3/6/2017	कायशील	गर-कोटिव 28-08.06.2018	A-23.39.32.76N B- 81.32.28.62E C- 23.39.36.22N 81.32.30.31E D- 23.39.34.79N 81.32.32.23E 23.39.33.21N 81.32.31.55E	खुला	27	यू.के.।लोट स.नीम/ /जामुन
20	पत्थर	श्रीमती सुनीता सिंह पत्नी स्व.श्री राघवेंद्र सिंह	जयसिंहनगर जिला शहडोल म प्र 98933006645	828- 25 03 201 7	3 844	28 03 2017	27 03 2027	NA	8/6/2017	कायशील	गर-कोटिव 281-10.05.2016	A-23.42.39.65N B- 81.17.32.62E C- 23.42.39.73N 81.17.41.17E D- 23.42.34.66N 81.17.41.23E 23.42.34.84N	खुला	21	यू.के.।लोट स.नीम/ /जामुन
21	पत्थर	रूद्र स्तन केशर प्रा.श्री रजनीश कुमार गुप्ता	कुबरा तहसील जयसिंहनगर जिला शहडोल म प्र 9926660147	400- 23 02 201 7	1 000	25 02 2017	24 02 2028	NA	5/6/2017	कायशील	गर-कोटिव 44-25.01.2016	A-23.40.26.64N B-23.40.25.98N C-23.40.28.78N D-23.40.29.47N 81.29.2.60E 81.29.6.41E 81.29.6.98E 81.29.2.97E	खुला	18	यू.के.।लोट स.नीम/ /जामुन
22	पत्थर	श्री चक्रधारी प्रसाद शुक्ला आ.श्री वृंजदत्त प्रसाद शुक्ला	जयसिंहनगर जिला शहडोल म प्र 9424369394	1157- 27 08 201 6	1 000	03 09 2016	0 2 09 2026	NA	13/12/2016	कायशील	गर-कोटिव 48-05.09.2016	A-23.44.22.67N B-23.44.22.29N C-23.44.27.27N D-23.44.27.32N 81.36.42.60E 81.36.45.30E	खुला	25	यू.के.।लोट स.नीम/ /जामुन
23	पत्थर	श्री चक्रधारी प्रसाद शुक्ला आ.श्री वृंजदत्त प्रसाद शुक्ला	जयसिंहनगर वाड क07 जिला शहडोल म प्र 94243693 94	1361- 23 05 201 7	2 000	31 05 2017	30 05 2027	NA	13/8/2017	कायशील	गर-कोटिव 71-28.07.2017	L1-23.42.40.82N 81.23.40.47E L2-23.42.40.68N 81.23.44.54E L3-23.42.35.22N 81.23.44.38E	खुला	25	यू.के.।लोट स.नीम/ /जामुन

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24	पत्थर	ध्रुव कॉन्स्ट्रक्शन व्याजिपर मुख्यालय श्री अनुपम सिंह भदोरीया	हा.म. ग्रीन सिटी शहडोल म प्र 877040070 2	4589- 24 03 201 7	6 000	28.03.2017	27.03.2027	NA	8/6/2017	कायशाल	गर-काटव	960-14.03.2017	L1-23-42.46.10"N 81-23-46.25"E L2-23-42.36.28"N 81-23-46.11"E	खुली	28	यू.कै.लॉट स.नीम/ जामुन
25	पत्थर	श्री कृष्णकाल गुप्ता आ श्री लवकेश गुप्ता	गिरुई बडो तहसील जयसिंहनगर	2105- 05 08 201 7	2 500	29 08 2017	28 08 2027	NA	9/11/2027	कायशाल	गर-काटव	116-28.08.2017	A-23-42.40.72N 81.17.28.87E B- 23.42.40.66N	खुली	23	यू.कै.लॉट स.नीम/ जामुन
26	पत्थर	श्री कृष्णकाल गुप्ता आ श्री लवकेश गुप्ता	गिरुई बडो तहसील जयसिंहनगर	2106- 05 08 201 7	1 619	29 08 2017	28 08 2027	NA	9/11/2027	कायशाल	गर-काटव	115-28.08.2017	A-23.42.40.67N 81.17.28.95E B- 23.42.36.29N	खुली	21	यू.कै.लॉट स.नीम/ जामुन
27	पत्थर	श्री चन्द्र प्रकाश राव आ श्री रामनिहोर राव.	ग्राम मह.आ टाला तहसील जयसिंहनगर जिला शहडोल म प्र.	1556- 24 06 201 7	1 000	19 07 2027	20 7 2017	NA	6/10/2017	कायशाल	गर-काटव	92-10.08.2017	A-23.43.16.29N 81.36.43.46E B- 23.44.22.53N 81.36.41.31E C- 23.44.18.63N 81.36.40.90E D-	खुली	16	यू.कै.लॉट स.नीम/ जामुन
28	पत्थर	श्रीमती पुष्पा श्याम पत्नी श्री रामनरेश श्याम	ग्राम कनाडा खुद तहसील जयसिंहनगर जिला शहडोल म प्र 9977694395	2040- 03 08 201 7	2 000	21 8 2017	20 8 2027	NA	11/11/2017	कायशाल	गर-काटव	114-28.08.2017	A-23.43.16.29N 81.18.19.29E B- 23.43.19.36N 81.18.21.06E C- 23.43.16.81N 81.18.26.85E D-	खुली	19	यू.कै.लॉट स.नीम/ जामुन
29	पत्थर	शांति मिन्नरस प्रा श्री आर.वी.मिश्रा	वाडू क्रमांक 14 शहडोल म प्र 942570997 7	2957- 30 11 201 7	2 500	16 01 2017	15 01 2027	NA	21/4/2017	कायशाल	गर-काटव	125-28.08.2017	A-23.40.27.49N 81.36.0.14E B- 23.40.25.05N 81.36.0.07E C-	खुली	50	यू.कै.लॉट स.नीम/ जामुन
30	पत्थर	म.तिवारी श्याम केसर प्रा श्री महेंद्र कुमार तिवारी	महदा तहसील गोरखपुर जिला शहडोल 96689135655	1560- 29 09 201 5	2 000	01 10 2015	30 09 2025	NA	29/1/2016	कायशाल	गर-काटव	447-07.04.2017	A-23.35.14.37N 81.16.57.04E B-23.35.16.98N 81.17.5.96 E C-23.35.19.23N 81.17.4.92E D-23.34.18.62N	खुली	52	यू.कै.लॉट स.नीम/ जामुन
31	पत्थर	मा सरवर	दियापार तहसील गोरखपुर जिला शहडोल 9993407323	1046/13 0 9 2013	1 554	01 10 2013	30 09 2023	NA	1/1/2014	कायशाल	गर-काटव	365-26.05.2017	A-23.24.15.97N 81.27.38.58E B-23.24.19.09N 81.27.04.27 E	खुली	12	यू.कै.लॉट स.नीम/ जामुन
32	पत्थर	श्री यशप्रताप सिंह आ श्री तेज प्रताप सिंह	वाडू नं 16 ग्राम रोहनिया तहसील सोहापुर जिला शहडोल म प्र 9752563562	635- 13 05 201 5	1 000	14 6 2016	13 6 2026	NA	14/10/2016	कायशाल	गर-काटव	12- 13.05.2016	A-23.26.57.33N 81.23.44.66E B-23.27.00.97N 81.23.45.80E C-23.27.01.29N 81.23.43.54E	खुली	20	यू.कै.लॉट स.नीम/ जामुन
33	पत्थर	श्री सुरभातम नायक आ श्री धनना नायक	वरदाहा तहसील गोरखपुर जिला शहडोल म प्र 769294789	42- 10 01 201 7	2 000	18 1 2017	17 1 2027	NA	8/5/2017	कायशाल	गर-काटव	57-22.02.2017	A-23.29.4.76N 81.32.48.44E H- 23.29.11.12N 81.32.49.27 E C-	खुली	25	यू.कै.लॉट स.नीम/ जामुन
34	पत्थर	श्री आशाष तिवारी आ श्री बालकृष्ण तिवारी	नवलपुर जिला शहडोल म प्र 834914609 B	423- 25 02 201 7	4 000	02 03 2017	01 03 2027	NA	22/7/2017	कायशाल	गर-काटव	NA	A-23.25.1.73N 81.33.17.20E B-23.25.1.46N 81.33.19.83E	खुली	27	यू.कै.लॉट स.नीम/ जामुन
35	पत्थर	श्री कमलेश कुमार तिवारी	निवासी बल्लो जिला शहडोल म प्र 877029913	1844- 17 07 201 7	1 000	20 7 2017	19 7 2027	NA	20/10/2017	कायशाल	गर-काटव	99-10.08.2017	L1-23-37-38-53"N 81-27-16.51"E L2-23-37-37-43"N 81-27-17.21"E L3-23-37-42.19"N	खुली	27	यू.कै.लॉट स.नीम/ जामुन

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36	पत्थर	श्री अंकित जैन आ श्री अनिल कुमार जैन	वाडै क्रमांक-06 शहडोल जिला शहडोल म.प्र.	2060-03-08-2017	1 000	24-08-2017	23-08-2027	NA	14/11/2017	कायशाल	गर-कार्टव 86-10-08-2017	A-23.25.173N 81.33.17.20E B-23.25.146N 81.33.19.83E	खुला	29	यू.कै.लॉिए स.नीम/जामुन
37	पत्थर	मंसरी तिवारी स्टेन केशर प्रो श्री महेंद्र कुमार तिवारी	भदवा तहसील गोरखपुर जिला शहडोल म.प्र. 966913565	1987-27-07-2017	1 000	01-10-2015	30-09-2025	NA	10/1/2016	कायशाल	गर-कार्टव 84-10-08-2017	A-23.35.13.15N 81.16.53.84E B-23.35.14.16N 81.16.57.86E C-23.35.16.90N	खुला	17	यू.कै.लॉिए स.नीम/जामुन
38	पत्थर	श्री आशीष सिंह आ श्री आर पी सिंह	वाडै क्र. 16 शहडोल तहसील सोहागपुर जिला शहडोल म.प्र. 7000972459	3054-20-12-2017	1 013	16-01-2018	15-01-2028	NA	20/5/2018	कायशाल	गर-कार्टव 145-29-01-2017	A-23.26.56.86N 81.23.28.64E B-23.26.57.12N 81.23.32.62E C-23.27.0.28N	खुला	25	यू.कै.लॉिए स.नीम/जामुन
39	पत्थर	कुंज मिनरल्स एटा उ.प्र.	एटा उ.प्र.	2296-24-08-2017	1 500	29-08-2017	28-08-2027	NA	14/12/2017	कायशाल	गर-कार्टव 126-14-11-2017	L1-23.27.43.64"N 81.24.27.33"E L2-23.27.43.30"N 81.24.35.50"E	खुला	15	यू.कै.लॉिए स.नीम/जामुन
40	पत्थर	श्री बुजन्द सिंह आ श्री शोधर सिंह	घरोला मोहल्ला तहसील सोहागपुर जिला शहडोल म.प्र. 9425889919		3 691	28-09-2018	27-09-2028	NA	NA	कायशाल	गर-कार्टव 93-12-09-2017	A-23.24.17.18N 81.32.34.55E B-23.24.16.98N 81.32.40.07E C-23.24.22.58N 81.32.40.17E	खुला	18	यू.कै.लॉिए स.नीम/जामुन
41	पत्थर	त्रिपाठी स्टेन केशर प्रो श्री प्रियम त्रिपाठी	शहडोल म.प्र. 9425844776	367/02-01-2014	0 647	17-01-2014	16-01-2024	NA	19/4/2014	कायशाल	गर-कार्टव 040-13-03-2017	L1-23.16.34.76" N 81.27.18.13"E L2-23.16.30.42" N 81.27.19.65"E	खुला	15	यू.कै.लॉिए स.नीम/जामुन
42	पत्थर	राकेश स्टेन क्रोसिंग प्रो राकेश अग्रवाल	दोपाखा भवन शहडोल 9425181054	2263/18-1-2014	0 405	20-11-2014	19-11-2024	NA	11/2/2015	कायशाल	गर-कार्टव 723-17-11-2017	L1-23.16.23.04" N 81.27.58.33"E L2-23.16.22.22" N 81.27.58.18"E L3-23.16.21.53" N 81.28.0.83"E L4-23.16.20.77" N 81.28.0.96"E	खुला	14	यू.कै.लॉिए स.नीम/जामुन
43	पत्थर	राकेश स्टेन क्रोसिंग प्रो राकेश अग्रवाल	दोपाखा भवन शहडोल 9425181054	147-11-02-2016	1 000	12-2-2016	11-2-2026	NA	13/5/2016	कायशाल	गर-कार्टव 34-08-06-2016	L1-23.16.13.79" N 81.27.37.36"E L2-23.16.18.22" N	खुला	13	यू.कै.लॉिए स.नीम/जामुन
44	पत्थर	म त्रिपाठी स्टेन केशर प्रो प्रियम त्रिपाठी	न्यू वसस्टेड शहडोल 2015 म.प्र. 942584477	690/30-04-2015	1 000	30-04-2015	29-04-2025	NA	13/7/2015	कायशाल	गर-कार्टव 040-13-03-2017	L1-23.15.14.75" N 81.28.17.25"E L2-23.15.19.42" N	खुला	17	यू.कै.लॉिए स.नीम/जामुन
45	पत्थर	म थावम स्टेन केशर प्रो श्रीमती मधु तिवारी	नलपुर जिला शहडोल म.प्र. 834914609	731-04-08-2007	4 000	28-10-2015	27-10-2025	NA	23/01/2016	कायशाल	गर-कार्टव 095-07-10-2017	A-23.17.4.05N 81.27.21.20E B-23.17.6.02N 81.27.14.39E C-23.17.12.18N	खुला	22	यू.कै.लॉिए स.नीम/जामुन
46	पत्थर	म विनायक स्टेन केशर प्रो गणेश सिंह	गारतरा जिला शहडोल 9407071393	229/19-02-2007	0 809	28-02-2017	27-02-2022	रूसरा	23/5/2017	कायशाल	गर-कार्टव 56-22-02-2017	A-23.17.05.70N 81.27.27.68E B-23.17.06.73N 81.27.29.71E	खुला	50	यू.कै.लॉिए स.नीम/जामुन
47	पत्थर	म बलवीर स्टेन केशर प्रो श्री बलवीर सिंह	बुढार जिला शहडोल 9826439484	955/08-07-2016	1 214	02-02-2016	01-02-2026	NA	12/5/2016	कायशाल	गर-कार्टव 31-08-06-2016	A-23.16.19.20N 81.28.17.53E B-23.16.20.02N	खुला	32	यू.कै.लॉिए स.नीम/जामुन
48	पत्थर	म तरुणाल किल्डिकान प्रो पदम कुमार सिंघानिया	बुढार जिला शहडोल 9425427592	473-06/03/2016	4 000	09-01-2018	08-01-2028	NA	21/7/2018	कायशाल	गर-कार्टव 20-13-05-2016	L1-23.17.09.96N 81.29.51.28E L2-23.17.10.96N 81.29.54.03E L3-23.17.10.96N	खुला	34	यू.कै.लॉिए स.नीम/जामुन
49	पत्थर	मोरा स्टेन केशर प्रो श्रीमती मीरा द्विवेदी	बधवाबडी तहसील सोहागपुर जिला शहडोल म.प्र.	70-11-01-2017	1 000	11-1-2016	10-1-2026	NA	11/4/2016	कायशाल	गर-कार्टव 1727-29-01-2017	A-23.10.06.40N 81.19.37.70E B-23.10.06.63N	खुला		यू.कै.लॉिए स.नीम/जामुन

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50	पत्थर	श्रीराम स्टेन कंशर पार्टनर श्री लोलाधर खोडियार	पाण्डवगंज शहडोल	1680- 31.12.201 6	4 500	4 1 2017	3 1 2027	NA	14/4/2017	कायशांत	गैर-कोटिप	18-12-09 2017	A-23.23.11.04N 81.20.21.90E B-23.23.09.21N 81.20.26.87E	खुली	30	यू.क.।लाइट स. नीम/ /जामुन
51	पत्थर	श्री शंकर मिश्रा आ श्री कृष्णागपाल मिश्रा	सिन्दुरी मरी तहसील सोहागपुर जिला शहडोल म प्र 992686845	1156- 27.08.201 6	4 000	3 9 2016	2 9 2026	NA	13/12/2016	कायशांत	गैर-कोटिप	45-05-09 2016	L1-23.19.50.66"N 81.23.10.41"E L2-23.19.49.66"N 81.23.09.95"E	खुली	28	यू.क.।लाइट स. नीम/ /जामुन
52	पत्थर	उजाला स्टेन कंशर पार्टनर श्री संजय तिवारी एवं श्री संदीप तिवारी	शहडोल जिला शहडोल म प्र 942586959 9	198- 13.01.201 7	3 000	30 1 2017	29 1 2027	NA	13/4/2017	कायशांत	गैर-कोटिप	54-22.02.2017	A-23.23.23.81N 81.23.39.46E B-23.23.26.19N 81.23.41.52E	खुली	24	यू.क.।लाइट स. नीम/ /जामुन
53	पत्थर	श्री राघव गाल आ श्री भाला प्रसाद गाल	शहडोल म प्र 11 01 201 7	1 000	16 1 2017	15 1 2027	NA	NA	16/1/2017	कायशांत	गैर-कोटिप	55-22.02.2017	L1-23.21.7.24"N 81.24.1.22"E L2-23.21.4.67"N	खुली	38	यू.क.।लाइट स. नीम/ /जामुन
54	पत्थर	प्राची स्टेन कंशर प्रो श्रीमती रानी सिंह पत्नी श्री राघवेंद्र सिंह	निवासी कंठनपुर तहसील सोहागपुर जिला शहडोल म प्र 700008135 1	1350- 22.05.201 7	1 000	22 05 2017	21 05 2027	NA	21/8/2017	कायशांत	गैर-कोटिप	68-27.07.2017	A-23.27.10.72N 81.46.30.26E B-23.27.9.83N 81.46.34.31E C-23.27.5.54N 81.46.33.41E	खुली	35	यू.क.।लाइट स. नीम/ /जामुन
55	पत्थर	अनूज स्टेन कंशर प्रो श्री अमित तिवारी	निवासी नवलपुर 9926868420 7	22 06 201 7	1 000	13 01 2017	12 01 2027	NA	23/4/2017	कायशांत	गैर-कोटिप	64-02.03.2017	A-23.17.00.33N 81.27.45.1E B- 23.16.58.9N C- 81.27.45.6E	खुली	23	यू.क.।लाइट स. नीम/ /जामुन
56	पत्थर	श्रीराम कान्स्ट्रक्शन पार्टनर श्री विवेक खोडियार एवं श्री लोलाधर खोडियार दोना	पाण्डवगंज शहडोल तहसील सोहागपुर जिला शहडोल म प्र 982680076	1780- 07.08.201 8	3 872	29 09 2018	28 09 2028	NA	18/12/2018	कायशांत	गैर-कोटिप	59-22.02.2017	A-23.20.3.53N 81.24.15.15E B-23.20.3.53N 81.24.15.95E C-23.20.8.87N	खुली	23	यू.क.।लाइट स. नीम/ /जामुन
57	पत्थर	म साइनाथ कोन्स प्रो श्रीमती माधुरी सिंह	निवासी कृष्णाकालोनी शहडोल 5	1477- 16.09.201 5	1 000	28 09 2015	27 09 2025	NA	16/12/2015	कायशांत	गैर-कोटिप	449-07.09.2017	A-23.23.40.59000N81. 24.29.87120E B-23.23.39.00961N81.	खुली	35	यू.क.।लाइट स. नीम/ /जामुन
58	पत्थर	श्री शंकरगण सिंह कुशराम आ श्री माधव सिंह कुशराम	ग्राम देरगा तहसील जेतपुर जिला शहडोल म.प्र.	939- 05.07.201 6	1 619	19 7 2016	18 7 2026	NA	19/10/2016	कायशांत	गैर-कोटिप	26-13.05.2016	A-23.25.49.81N 81.41.51.34E B-23.25.52.86N 81.41.51.32E	खुली	29	यू.क.।लाइट स. नीम/ /जामुन
59	पत्थर	श्री माहमद याहया आ श्री मांरामट यूसुफ	जेतपुर जिला शहडोल 9977138 942 6	618- 11.05.201 6	2 000	23 5 20 3	22 5 2026	NA	13/12/2016	कायशांत	गैर-कोटिप	33-08.06.2016	A-23.25.49.81N 81.41.51.34E B-23.25.52.86N	खुली	32	यू.क.।लाइट स. नीम/ /जामुन
60	पत्थर	प्रगत मिन्नरत्स प्रो गोपाल शिवहरे	चकोड्या तहसील जेतपुर 9617613106 5	1096- 08.07.201 5	2 000	28 12 2015	27 12 2025	NA	8/2/2016	कायशांत	गैर-कोटिप	10-10.08.2017	A-23.40.1.00N B- 81.53.49.63E B- 23.40.13.31N	खुली	39	यू.क.।लाइट स. नीम/ /जामुन
61	पत्थर	म विनोद स्टेन कंशर प्रो श्री विनोद कुमार सोनी	निवासी रसमाहन जिला शहडोल 9755458651 1	989- 12.08.201 7	0 405	22 02 2012	21 02 2022	NA	12/5/2012	कायशांत	गैर-कोटिप	886-29.04.2011	A-23.24.19.10N 81.36.50.80E B- 23.24.15.88N 81.36.53.46 E C- 23.24.19.76N 81.36.57.36E D- A-23.14.24.33N 81.43.48.74E B- 23.14.24.13N	खुली		शायल
63	पत्थर	श्री आभयक शर्मा आ श्री दिनेश कुमार शर्मा	गुरवा तहसील जेटपुर जिला शहडोल म प्र 990 7	1356- 22.05.201 7	2 000	03 06 2017	02 06 2027	NA	12 010 2017	कायशांत	गैर-कोटिप	78-10.08.2017	A-23.14.24.33N 81.43.48.74E B- 23.14.24.13N	खुली	35	यू.क.।लाइट स. नीम/ /जामुन
63	पत्थर	म तिरुपाल मिन्नरत्स प्रो सुनील कुमार, सुरेंद्र कुमार शर्मा	बुंदार जिला शहडोल 9826307827 8	544- 14.04.200 8	1 821	15 04 2018	14 04 2028	NA	15/7/2008	कायशांत	गैर-कोटिप	43-25.01.2011	A-23.16.2.33N B- 81.31.4.33E B- 23.16.2.48N C- 81.31.10.82E	खुली	38	यू.क.।लाइट स. नीम/ /जामुन
64	पत्थर	म जा एस मिन्नरत्स प्रो श्रीमती सरिता सिधार्थिया	बुंदार जिला शहडोल 940676500	430/02.04 2017	2 023	23 05 2017	22 05 2027	NA	23/8/2017	कायशांत	गैर-कोटिप	11-10.08.2011	L1-23.16.99.00"N 81.31.00.39"E L2-23.16.96.88"N 81.31.00.39"E	खुली	32	यू.क.।लाइट स. नीम/ /जामुन

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65	पत्थर	माम्बा स्टाइन क्वार प्रो. श्री प्रमचन्द्र मिश्रा	बुढार जिला शहडोल म.प्र. 9425471704	745- 18 05 201 5	1 282	27 05 2015	26 05 2025	NA	18/8/2015	कायशांत	गर-काटेव 590-29.04.2015 11-23 14 47 74" N 81 34 37 22" E 12-23 14 47 99" N 81 34 49 93" E	खुला	34	यू.क.लॉट स.नीम/ /जामुन
66	पत्थर	म विद्या मिन्तरस प्रो अर्चना पाण्डेय	अनूपपुर जिला अनूपपुर म.प्र. 9754631228	274- 16 04 200 8	3 035	22 04 2018	21 04 2028	NA	12/7/2018	कायशांत	गर-काटेव 43-06.07.2016 A-23.3.043N 81.34.34.3E B- 23.40.13.31N	खुला	43	यू.क.लॉट स.नीम/ /जामुन
67	पत्थर	श्री राजेश काडया	आदशा मांग अनूपपुर जिला अनूपपुर म.प्र.	577- 13 04 201 5	4 683	30 09 2015	29 09 2025	NA	15/12/2015	कायशांत	गर-काटेव 611-19.03.2015 A-23.4.7.90N 81.34.20.50E B-23.4.6.60N	खुला	50	यू.क.लॉट स.नीम/ /जामुन
68	पत्थर	श्री राजेश काडया	आदशा मांग अनूपपुर जिला अनूपपुर म.प्र.	1559- 29 09 201 5	1 416	15 04 2015	14 04 2025	NA	29/9/2015	कायशांत	गर-काटेव 115-19.07.2015 A-23.03.47.35709N 81.34.21.80947 E	खुला	50	यू.क.लॉट स.नीम/ /जामुन
69	पत्थर	म बहो दंडस प्रो श्रीमती रुचा गुप्ता	बुढार जिला शहडोल म.प्र. 9425330933	598- 15 04 201 5	3 000	22 04 2015	21 04 2025	NA	22/7/2015	कायशांत	गर-काटेव 68-06.04.2015 A-23.15.24.80N 81.32.54.45E B-23.15.19.27N 81.33.00.51 E	खुला	32	यू.क.लॉट स.नीम/ /जामुन
70	पत्थर	बालाजी स्टाइन क्वार अतरण श्री शारदा प्रसाद तिवारी	बुढार जिला शहडोल 9425182073	1260- 29 11 201 1	0 971	23 11 2012	22 11 2022	NA	7/1/2013	कायशांत	गर-काटेव 17- 13.05.2016	खुला	39	यू.क.लॉट स.नीम/ /जामुन
71	पत्थर	मसम सिद्ध साई स्टोन क्वार अतरण श्री अभय तिवारी	बुढार जिला शहडोल म.प्र. 9584679220	1815- 07 11 201 5	4 000	09 11 2015	08 11 2025	NA	19/2/2016	कायशांत	गर-काटेव 667-29.10.2015 A-24.06.30.24N 81.22.44.50E B-24.06.30.54N 81.22.48.75 E	खुला	31	यू.क.लॉट स.नीम/ /जामुन
72	पत्थर	कलाश टडस प्रो श्री नवीन सिघानिया	बुढार जिला शहडोल म.प्र. 9407368840	27- 07 01 201 7	4 000	13 1 2017	12 1 2027	NA	23/5/2017	कायशांत	गर-काटेव 95-10.08.2017 A-23.15.12.08N 81.36.18.15E B-23.15.2.85N 81.36.18.39 E C-23.15.2.78N	खुला	33	यू.क.लॉट स.नीम/ /जामुन
73	पत्थर	राकेश सिंह वटल आ श्री जैरन्ध सिंह चन्देल	अमलई वाई क्र01 पोस्ट बलहरय तहसील जैतपुर जिला शहडोल म.प्र.	571- 08 03 201 7	2 000	15 03 2017	14 03 2028	NA	25/8/2017	कायशांत	गर-काटेव 279-12.05.2017 11-23.15.39.89N 81.38.22.41E 12-23.15.39.84N 81.38.26.00E 13-23.15.39.49N	खुला	43	यू.क.लॉट स.नीम/ /जामुन
74	पत्थर	श्री राजेश काडया	आदशा मांग अनूपपुर जिला अनूपपुर म.प्र.	454- 02/03/201 7	2 023	09 03 2017	08 03 2027	NA	19/8/2017	कायशांत	गर-काटेव 89-10.04.2017 A-23.03.27.28N B- 23.03.23.57N	खुला	34	यू.क.लॉट स.नीम/ /जामुन
75	पत्थर	श्री राहुल तिवारी आ श्री रमायकर तिवारी	घरौला मोहल्ला तहसील सोहागपुर जिला शहडोल म.प्र. 942583096	1845- 17 07 201 7	1 400	20 07 2017	19 07 2027	NA	12/12/2017	कायशांत	गर-काटेव 105-10.08.2017 11-23 14 59 87" N 81 32 15 02" E 12-23 14 56 75" N 81 32 14 73" E	खुला	29	यू.क.लॉट स.नीम/ /जामुन
76	पत्थर	श्री प्रदीप पाण्डेय आ श्री ललित पाण्डेय	छिहटा तहसाल बुढार जिला शहडोल म.प्र. 989377992	1860- 18 07 201 7	1 861	20 07 2017	19 07 2027	NA	23/11/2017	कायशांत	गर-काटेव 107-10.08.2017 11-23 05 30 30" N 81 30 29 58" E 12-23 05 30 18" N 81 30 36 08" E	खुला	22	यू.क.लॉट स.नीम/ /जामुन
77	पत्थर	श्रीमती आंघता सिंह पती श्री मनोप सिंह	वाड क्र03 बुढार जिला शहडोल म.प्र. 982618292	1554- 24 06 201 7	1 000	06 07 2017	05 07 2027	NA	16/10/2017	कायशांत	गर-काटेव 73-28.07.2017 A-23.16.4.45N 81.36.2.85E B-23.16.3.94N	खुला	35	यू.क.लॉट स.नीम/ /जामुन
78	पत्थर	मसम आर एस कान्दरखन प्रो श्री वन्द्रशंकर आ श्री जगन्नाथ पाण्डेय	गाम सेमरा तहसील बुढार जिला शहडोल म.प्र. 90074159000	1969- 26 07 201 7	1 000	27 07 2017	27 07 2017	NA	15/10/2017	कायशांत	गर-काटेव 96-10.08.2017 11-23.15.18.78N 81.31.51.48E 12-23.15.18.48N 81.31.52.71E 13-23.15.14.64N 81.31.51.48E	खुला	31	यू.क.लॉट स.नीम/ /जामुन

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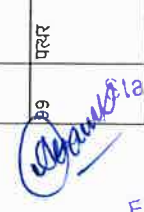


79	पत्थर	श्री विजय कुमार यादव आ श्री बसुंधारी यादव.	बदरगढ़ तहसील बुढार जिला शहडोल म प्र 916513815	1865-14 07 2017	2 500	20 7 2017	19 07 2027	NA	12/10/2017	NA	गर-कांठिव	101-10.08.2017	A-23,15.08.89N 81.36,17.39E B- 23.15,12.38N 81.36,18.00E C-	खुला	शिशिल
80	पत्थर	म प्रवाप कान्दरखान प्रा श्रीमती अरुनी	पकोरया तहसील बुढार जिला शहडोल म प्र	1354-22 05 2017	1 000	23 05 2017	22 05 2027	NA	13/8/2017	NA	गर-कांठिव	77-10-08-2017	A-23,15.45.26N 81.32,14.97E B- 23.15,15.09N 81.32,17.96E C- 23.15,11.35N	खुला	यू.क. लाई स. नीम/जामुन
81	पत्थर	कलाया टुडस प्रा श्री नवीन सिघानिया	बुढार जिला शहडोल म प्र	01 05 08 2017	1 380	5 8 2017	4 8 2027	NA	15/11/2017	NA	गर-कांठिव	59-28-07-2017	A-23,15.0.52N 81.36,13.28E B- 23.15,7.67N	खुला	यू.क. लाई स. नीम/जामुन
82	पत्थर	विद्या मिनरल्स प्रा श्रीमती अरुनी पाण्डेय	अरुणपुर जिला अरुणपुर म प्र 9754631222	1137-15 05 2018	2 000	21 05 2018	21 05 2018	NA	11/8/2018	कायशाल	गर-कांठिव	194-12.09.2017	A-23,3.35.85N 81.34,38.73E B- 23,3.36.11N 81.34,44.76E	खुला	यू.क. लाई स. नीम/जामुन
83	पत्थर	विद्या मिनरल्स प्रा श्रीमती अरुनी पाण्डेय	अरुणपुर जिला अरुणपुर म प्र 9754631222	1136-15 05 2018	2 000	22 05 2018	21 05 2029	NA	12/8/2018	कायशाल	गर-कांठिव	95-12.09.2017	A-23,3.49.72N 81.34,30.87E B- 23,3.49.78N 81.34,33.52E	खुला	यू.क. लाई स. नीम/जामुन
84	पत्थर	श्री प्रदीप पटेल आ स्व श्री शमावतार सिंह	सतना जिला सतना म प्र	1720-07 06 2017	1 550	24 07 2017	23 7 2028	NA	14/12/2017	NA	गर-कांठिव	113-28.07.2017	A-23,15.28.08N 81.32,29.42E B- 23,15.27.87N 81.32,28.23E C-	खुला	शिशिल
85	पत्थर	म क जी स्टान केशव प्रा शशर मिश्रा	सिदुरा मरा जिला शहडोल	13071-72 22 09 2021	0 728	23 10 2021	22 10 2026	NA	3/12/2020	NA	गर-कांठिव	189-12.09.2017	1-23,16.11.94" N 81.27,17.63"E 81.27,19.99"E	खुला	यू.क. लाई स. नीम/जामुन
86	पत्थर	श्री प्रदीप कुमार सिघानिया आ स्व श्री श्रवण कुमार सिघानिया	रेल्व स्टेशन क पीछे बुढार जिला शहडोल म प्र 9425427592	473-06 03 2018	8 000	31 03 2018	30 03 2028	NA	1/7/2018	NA	गर-कांठिव	NA	1-23,17.02.07" N 81.29,17.37" E 1-23,17.02.57" N 81.29,18.77" E 1-23,17.04.77" N 81.29,18.27" E	खुला	यू.क. लाई स. नीम/जामुन
87	पत्थर	मसरा तिरुपात विल्डकान प्रा लि डामरकर श्री हर्षवर्धन सिघानिया	रेल्व स्टेशन क पीछे बुढार जिला शहडोल म प्र 9425427592	474-06 03 2018	6 000	31 03 2018	30 03 2028	NA	NA	NA	गर-कांठिव	NA	A-23,16.87.00N 81.29,38.99E B- 23,16.87.05N 81.29,42.96E C- 23,16.46.06N 81.29,42.99E D-	खुला	यू.क. लाई स. नीम/जामुन
88	मुरूम	श्रीमती रजनी मिश्रा पत्नी श्री एस के मिश्रा	कल्याणपुर तहसील सोहापुर जिला शहडोल म प्र 9630355236	1962-25 07 2017	1 283	10 08 2017	09 08 2027	NA	10/8/2017	NA	गर-कांठिव	76-10.08.2017	A-23,19.49.78N 81.23,23.22E B- 23,19.49.28N 81.23,25.22E C- 23,19.33.38N 81.23,27.28E D- 23,19.51.59N 81.23,23.42E	खुला	शिशिल
89	मुरूम	मसरा श्री मावल प्ला 186. नालदा कालज रोड, महावीर नगर कटनी जिला कटनी म प्र 834982444	मसरा श्री मावल प्ला 186. नालदा कालज रोड, महावीर नगर कटनी जिला कटनी म प्र 834982444	2742-29 12 2018	4 500	22 02 2019	21 02 2049	NA	1/6/2019	कायशाल	गर-कांठिव	501-05.03.2017	A-24,07.44.560N 81.27,27.591E B- 24,07.41.086N 81.27,27.665E C- 24,07.38.560N 81.27,27.738E D- 24,07.38.814N 81.27,17.818E	खुला	यू.क. लाई स. नीम/जामुन

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90	पत्थर	श्रीमती सुनीता शर्मा पत्नी श्री यशदत्त शर्मा	निवासी रायपुर छ. ग.	9397-98 22.6.2021	4 000	18.07.2021	17.07.2032	NA	NA	NA	गर-काटव 230-06.04.2021	A23*31'26.01" 81*42'65.73 23*31.81*42'87.32 D23*31'33.29" E23*31'38.85" 81*42'80.25	खुला	शाथल	
91	पत्थर	श्री राजय सिंह	बिबल लाइन ब्योहरी जिला शहडोल 99938110	443-05.05.201	0 309	31.05.2010	30.05.2020	NA	11/8/2010	NA	गर-काटव 51-22.09.2016	A-24,06,36.07N 81,22,59.99E B-24,06,20.93N	खुला	32	यू.क.लाए स.नीम/जामुन
92	पत्थर	म. निवशांके स्तन केशर श्रीमती राजश्री सिंह	ब्याहारी जिला शहडोल 9755830552	442-05.05.201	1 214	31.05.2010	30.05.2020	NA	19/8/2010	NA	गर-काटव 60-22.02.2017	A-24,05,20.30N 81,22,26.85E B-24,06,23.67N	खुला	30	यू.क.लाए स.नीम/जामुन
93	पत्थर	म. तजरा स्तन केशर प्रो. सर्वेश सिंह	ब्याहारी जिला शहडोल 9755830552		1 522	31.05.2010	30.05.2020	NA	29/8/2010	NA	गर-काटव 66-02.03.2017	A-24,06,20.90N 81,22,32.65E B-24,06,23.67N 81,22,31.15E	खुला	33	यू.क.लाए स.नीम/जामुन
94	पत्थर	म. जय जगदम्ब स्तन केशर प्रो. श्री रमाशंकर पाठक	घातरगी जिला सिमरौली म.प्र. 9893433476	377-23.03.201	1 473	15.04.2015	14.04.2020	NA	25/7/2015	NA	गर-काटव 104-10.08.201	A-24,6,37.49N 81,23,10.32E B-24,6,35.68N 81,23,10.50E	खुला		शाथल
95	पत्थर	श्री शतद्र कुमार सिंह आ श्री यादवद्र सिंह	ग्राम मंत्री तहसाल ब्याहारी जिला शहडोल 2	1254-04.08.202	1 214	05.08.2015	04.08.2025	NA	14/11/2015	NA	गर-काटव 770-16.07.201	A-24,06,31.14N 81,22,51.02E B-24,06,31.07N	खुला		शाथल
96	पत्थर	श्री सुमन्द्र सिंह आ श्री सुवन्द्र सिंह	ग्राम मंत्री तहसाल ब्याहारी जिला शहडोल म.प्र. 9630.109394	1163-27.07.201	1 214	28.08.2015	27.08.2025	NA	17/12/2015	NA	गर-काटव 236-08.07.201	A-24,10,32.11N 81,27,05.02E B-24,10,32.07N 81,27,16.45E	खुला		शाथल
97	पत्थर	मनसे सिंदाय स्तन केशर प्रो. श्री बालकृष्ण गुप्ता	ब्याहारी तहसाल ब्याहारी जिला शहडोल म.प्र. 7	5080-31.03.201	1 000	01.04.2017	31.03.2027	NA	11/7/2017	NA	गर-काटव 276-12.05.201	A-24,06,30.24N 81,22,44.50E B-24,06,30.54N 81,22,48.75E C.	खुला		शाथल
98	पत्थर	जय जगदम्ब स्तन केशर प्रो. श्री रमाशंकर पाठक	घातरगी जिला सिमरौली म.प्र. 9893433476	1857-17.07.201	2 598	20.7.2017	19.07.2027	NA	12/10/2017	NA	गर-काटव 104-10.08.201	A-24,06,30.21N 81,23,14.53E B-24,06,30.54N	खुला		शाथल
99	पत्थर	महो. मिनरस एण्ड कान्स्ट्रक्शन कम्पनी पार्टनर श्री प्रदीप सिंह एव रिमायू पाण्डेय	कलहारी एव बोंकरा बोंकरी तहसील ब्याहारी जिला शहडोल म.प्र. 7	2329-29.08.201	2 000	29.08.2017	28.08.2027	NA	NA	NA	गर-काटव 138-14.11.201	A-24,6,4.60N 81,20,15.48E B-24,6,4.34N 81,20,18.06E C-24,6,10.72N	खुला		शाथल
100	पत्थर	श्री अशोक शांभु आ. स्व. श्री ओ. पी. चोपड़ा	ग्राम सजहरी तहसील ब्याहारी जिला शहडोल 7	2212-18.08.201	1 214	18.08.2017	17.08.2027	NA	21/11/2017	NA	गर-काटव 134-14.11.201	A-24,08,06.93N 81,24,29.09E B-24,08,10.41N	खुला		शाथल
101	पत्थर	श्री कान्हा द्विवेदा पिता श्री कामता द्विवेदी	जमुनहा तहसाल जयसिंहनगर जिला शहडोल म.प्र. 6	776-13.06.201	1 214	20.06.2016	19.06.2027	NA	NA	NA	गर-काटव 15-13.05.2016	A-23,40,26.64N 81,29,2.60E B-23,40,25.98N 81,29,6.41E C-23,40,28.78N	खुला		शाथल
102	पत्थर	श्री चन्द्रमा प्रसाद तिवारी आ श्री जमुना प्रसाद तिवारी	ग्राम अमझार तहसील जयसिंहनगर जिला शहडोल म.प्र. 8827851115	1618-03.07.201	2 000	07.7.2017	06.07.2027	NA	NA	NA	गर-काटव 17-28.08.201	A-23,40,13.52N 81,33,30.07E B-23,40,21.06N 81,33,32.29E C-23,40,20.56N	खुला		शाथल
103	पत्थर	श्रीमती अनिता माय पत्नी श्री वृजेन्द्र कुमार माय	ग्राम टपड़ा तहसील जयसिंहनगर जिला शहडोल म.प्र. 7	2326-28.08.201	2 000	30.08.2017	30.08.2017	NA	NA	NA	गर-काटव 136-14.11.201	A-23,40,13.96N 81,30,10.12E B-23,40,12.55N 81,30,10.01E C-23,40,11.83N	खुला		शाथल

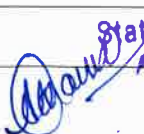

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104	पत्थर	डीडेपिन स्टोन केयर पाटनर श्री अशोक द्विवेदी आ श्री चक्रधर प्रसाद द्विवेदी	वनसुक्ला तहसील जयसिंहनगर जिला शहडोल म प्र 9977874346	443- 01 03 201 8	2 000	10 04 2018	09 04 2028	NA	NA	NA	NA	गर-कोटिव 149-23.03.2018	A-23.45.13.14N 81.37.15.67E B- 23.45.14.05N 81.37.15.70E C- 23.45.14.06N 81.37.15.27E D- 23.45.14.06N	खुला	शायल
105	पत्थर	आर्टिफ प्लासास्ट प्रा श्रीमती माला सिंह निवासी गारुपारू	गारुपारू जिला शहडोल 7974734427	847- 08 06 201 5	1 089	15 05 2015	14 05 2025	NA	25/8/2015	NA	गर-कोटिव 274-26.05.2015	A-23.28.10.59"N 81.24.13.84"E B 23.28.10.45" N81.24.15.63"E C23.28.13.78"N 81.24.16.02"E D23.28.15.95"N	खुला	शायल	
106	पत्थर	श्री अजात सिंह से गर पिता श्री रामसिंह सेगर	नहरूनगर रोवा म प्र 942503636 7	1266- 20 09 201 6	3 379	21 9 2016	20 9 2026	NA	21/9/2016	NA	गर-कोटिव 1018-30.12.2016	A-23.26.09.97N 81.24.57.58E B-23.26.10.09N 81.25.04.27E C-23.26.12.53N	खुला	शायल	
107	पत्थर	आदिनाथ स्टा न केयर प्रा श्रीमती रेखा जैन श्री प्रदीप कुमार जैन	स्टाडिपम क पाठ वार्ड क्र06 पाण्डवनगर शहडोल म प्र अंतरण श्री सुधीर सिंह	1261- 01 03 201 7	4 000	02 03 2017	01 03 2027	NA	21/07/2017	NA	गर-कोटिव 270-12.05.2017	A-23.40.11.00N 81.33.49.63E B-23.40.13.31N 81.33.59.56E C-23.40.17.08N 81.33.58.56E D-23.40.13.97N	खुला	शायल	
108	पत्थर	सावरो मिन्नरस पाटनर (1)जवाब माहम्मद खान	कमार बसस्टण्ड के पास तहसील बिजराचौगढ़ जिला कटनी म प्र	2637- 23 09 201 7	1 283	15 11 2017	14 11 2027	NA	25/01/2018	NA	गर-कोटिव 268-08.07.2017	A-23.28.4.40N 81.24.22.50E B- 23.28.0.50N 81.24.23.24E C- 23.28.0.27N 81.24.27.54E D- 23.28.2.09N	खुला	शायल	
109	पत्थर	श्री अश्विनाश शर्मा आ स्व श्री जे पी शर्मा	इंदौर हो.पू. शिवम कालोनी शहडोल तहसील साहागपुर जिला शहडोल म प्र 989362255	1 000	1 000	10 08 2017	09 08 2027	NA	12/11/2017	NA	गर-कोटिव 98-10.08.2017	A-23.27.54.60N 81.23.49.88E B- 23.27.54.66N 81.23.50.98E C- 23.27.50.17N 81.23.51.14E D- 23.28.2.09N	खुला	शायल	
110	पत्थर	श्री सुधीर सिंहनाथ बहादुरासिंह	घराला माहल्ला शहडोल जिला शहडोल म प्र 9753059080	1 000	1 000	24 08 2017	23 08 2027	NA	2/3/2017	NA	गर-कोटिव 87-10.08.2017	A-23.25.1.47N 81.33.19.84E B- 23.25.1.29N 81.33.20.20E C- 23.25.1.86N	खुला	शायल	
111	पत्थर	श्रीमती पिमा देवी शुक्ला पत्नी श्री रामचरण शुक्ला	ग्राम जमुनिहा तहसील रामपुर नेकिन जिला सीधी म प्र 9630550823	1045- 26 04 201 8	1 250	21 05 2018	20 05 2028	NA	NA	NA	गर-कोटिव 186-20.07.2017	A-23.28.38.13N 81.19.11.70E B- 23.28.36.06N 81.19.13.84E C- 23.28.41.41N 81.19.20.16E D- 23.28.44.30N	खुला	शायल	
112	पत्थर	श्री रामचरण शुक्ला आ श्री मोहनराम शुक्ला	ग्राम जमुनिहा तहसील रामपुर नेकिन जिला सीधी म प्र 9630550823	1043- 26 04 201 6	2 500	21 05 2018	20 05 2028	NA	NA	NA	गर-कोटिव 185-20.07.2017	L1-23.28.38.13"N 81.19.11.70"E L2-23.28.36.06"N 81.19.13.84"E L3-23.28.41.41"N 81.19.20.16"E	खुला	शायल	

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113	पत्थर	श्री कृष्ण कुमार पाण्डेय आ श्री नवल किशोर पाण्डेय	करोटिया तहसाल गोपद बनस जिला सोधी म प्र 963055082 3	1042-26 04 201 8	1 320	21 05 2018	20 05 2028	NA	NA	NA	गर-कोटिब 184-20.07.2017	81 18 59 82 E 81 19 02 26 E 81 19 12 26 E 81 19 15 82 E 81 19 15 82 E 81 19 12 26 E 81 19 12 26 E	खुला	शाथिल
114	पत्थर	श्री कृष्ण कुमार पाण्डेय आ श्री नवल किशोर पाण्डेय निवासी करोटिया तहसाल गोपद बनस	करोटिया तहसाल गोपद बनस जिला सोधी म प्र 963055082 3	1044-26 04 201 8	4 000	21 05 2018	20 05 2028	NA	NA	NA	गर-कोटिब 183-20.07.2017	81 18 59 82 E 81 19 02 26 E 81 19 12 26 E 81 19 15 82 E 81 19 15 82 E 81 19 12 26 E 81 19 12 26 E	खुला	शाथिल
115	पत्थर	श्रीमती नूतन सिंह चैहान पत्नी श्री महेंद्र सिंह	बाड न 18 बलपुरवा शहडोल 7000626544	1771-03 11 201 5	1 048	07 05 2016	06 05 2026	NA	17/08/2016	NA	गर-कोटिब 268-08.07.2017	A-23,24,12,04N 81,20,21,90E B-23,24,10,21N 81,20,26,87E C-23,24,03,90N 81,23,34,43E B-23,19,47,96N 81,23,38,77E C-23,19,51,22N	खुला	34 यू.क.लॉट स.नीम/जामुन
116	पत्थर	मा उज्जर आमज मा यूसूफ	कोटमा तहसाल सोहापुर जिला शहडोल म प्र 9669087761	826-25 03 201 7	1 719	28 03 2017	27 03 2028	NA	18/6/2017	NA	गर-कोटिब 282-08.07.2017	A-23,19,49,64N 81,23,34,43E B-23,19,47,96N 81,23,38,77E C-23,19,51,22N	खुला	शाथिल
117	पत्थर	मा शारदा स्नान केशर प्र श्रीमती नूतन सिंह चैहान पत्नी श्री महेंद्र सिंह	बाड न 18 बलपुरवा शहडोल तहसाल सोहापुर जिला शहडोल म प्र 700062654 4	2212-01 08 201 7	1 800	02 08 2017	01 08 2027	NA	10/12/2017	NA	गर-कोटिब 82-10.08.2017	L1-23,23,55,37N 81,20,48,50E L2-23,23,58,7N 81,20,47,91E L3-23,23,00,39N 81,20,41,64E L4-23,23,56,74N	खुला	शाथिल
118	पत्थर	मसस कयर भिमरत्न पाटेल श्री अखिल श्रीवास्तव	लालपुर तहसाल सोहापुर जिला शहडोल म प्र 942495450 1	2278-24 08 201 7	1 000	26 08 2017	25 08 2027	NA	16/11/2017	NA	गर-कोटिब 127-14.11.2017	A-23,16,43,36N 81,28,07,59E B-23,16,43,48N 81,28,10,90E C-23,16,39,70N 81,28,11,31E D-23,16,39,94N	खुला	शाथिल
119	पत्थर	श्री अविनाश प्रताप सिंह आ स्व श्री अंकार सिंह	ग्राम जांघपुर तहसाल सोहापुर जिला शहडोल म प्र 812017451 7	2279-24 08 201 7	2 000	29 08 2017	28 08 2027	NA	10/8/2017	NA	गर-कोटिब 135-14.11.2017	A-23,17,10,18N 81,29,57,91E B-23,17,05,74N 81,29,57,44E C-23,17,05,55N 81,30,07,69E D-23,17,11,51N	खुला	शाथिल
120	पत्थर	श्री किशन त्रिपाठी आ श्री अनाथ त्रिपाठी	प्रमाबहार कालोनी सतना रघुजनगर जिला सतना म प्र	2272-24 08 201 7	2 000	25 08 2017	24 08 2027	NA	25/8/2017	NA	गर-कोटिब 129-14.11.2017	A-23,24,04,04N 81,20,38,73E B-23,24,03,55N 81,20,39,92E C-23,24,03,84N	खुला	शाथिल
121	पत्थर	मसस तिरुपाति विल्डकान प्रा लि डायरेक्टर श्री हर्षवर्धन सिधानिया	रुच स्थान के पीछे बुढार जिला शहडोल म प्र 9425427592	2219 18 0 8 2017	1 700	18 08 2017	17 08 2027	NA	18/8/2017	NA	गर-कोटिब 94-10.08.2017	A-23,17,11,51N 81,29,46,40E B-23,17,10,39N 81,29,48,75E C-23,17,05,04N	खुला	शाथिल
122	पत्थर	मसस लक्ष्मी कान्दरबान प्रा क सोन सिंह पत्नी श्री ललन सिंह	ग्राम सिंगलो तहसाल जेतपुर जिला शहडोल म प्र	1355-22 05 201 7	1 000	31 05 2017	30 05 2027	NA	31/5/2017	NA	गर-कोटिब 91-10.08.2017	A-23,23,42,82N 81,43,21,39E B-23,23,42,90N 81,43,24,49E C-23,23,46,27N	खुला	शाथिल
123	पत्थर	श्रीमती दयामती सिंह पत्नी श्री भगवानदीन सिंह गाड	बराग तहसाल जेतपुर जिला शहडोल म प्र 774895844 5	1985-27 07 201 7	4 000	02 08 2017	01 08 2027	NA	28/6/2017	NA	गर-कोटिब 93-10.08.2017	A-23,25,09,85N 81,30,05,55E B-23,25,14,86N 81,30,05,71E C-23,25,17,08N	खुला	शाथिल

124	पत्थर	श्री अभय तिवारी	निवहा माहला मनावा जिला रोवा 5	1816- 07-11-2015	4 000	09-11-2015	08-11-2025	NA	9/2/2016	NA	गर-काएव 265-15-02-2016	A-23,15,19,73N 81,32,31,57E B-23,15,19,56N 81,32,39,73E	खुला	शाथल
125	पत्थर	श्रीरामभिरस प्रो श्रीमती नीलम सिंह पत्नी श्री लालजीत सिंह	झारहरा तहसील बुढार जिला शहडोल म प्र	1816 07 1 1 2015	5 000	31 1 2015	30 1 2025	NA	31/1/2017	NA	गर-काएव 41-06-07-2016	A-23,15,12,38N 81,36,17,39E B-23,15,12,38N 81,36,18,00E C-23,15,11,83N	खुला	शाथल
126	पत्थर	श्री अमित तिवारी आ श्री बुद्धसेन तिवारी	मनावा तहसील मनावा जिला रोवा म प्र 9977995549	622- 10/03/2017	2 000	24 03 2017	23 03 2027	NA	24/3/2017	NA	गर-काएव 83-10-08-2017	A-23,15,19,73N 81,32,31,57E B- 23,15,19,56N 81,32,39,73E C- 23,15,19,07N	खुला	शाथल
127	पत्थर	माहादेव भिरस प्रो श्री अश्वीय शुक्ला निवासी आ श्री एम अमलई तहसील बुढार जिला शहडोल म प्र	अमलई तहसील बुढार जिला शहडोल म प्र 909808903 0	1364- 23 05 2017	2 000	05 06 2017	04 06 2027	NA	5/6/2017	NA	गर-काएव 74-31-07-2017	A-23,15,30,36N 81,39,4,95E B-23,15,31,02N 81,39,8,02E C-23,15,36,12N 81,39,8,90E D-23,15,40,73N 81,39,9,48E	खुला	शाथल
128	पत्थर	श्री अनुराग अदरशी आ श्री भनाकाभना अवस्थी	छरोला माहला शहडोल तहसील सोहागपुर जिला शहडोल म प्र 9425180669	1970- 26 07 2017	2 000	21 08 2017	20 08 2027	NA	1/8/2017	NA	गर-काएव 106-10-08-2017	A 23*15*08.17** 81*33*08.83 B23*15*07.68* 81*33*09.18 C 23*15*05.80** 81*33*07.52** D23*15*01.38**	खुला	शाथल
129	पत्थर	श्रीमती आरती तिवारी पत्नी श्री शाहदा प्रसाद तिवारी	वाड कमका-1 धनपुरी तहसील बुढार जिला शहडोल म प्र	2056- 03 08 2017	2 000	29 08 2017	28 08 2027	NA		NA	गर-काएव 74-10-08-2017	A-23,15,30,77N B- 81,30,28,37E 23,8,30,87N C- 81,30,33,99E 23,8,31,60N	खुला	पू.क.लाए स.नीम/ जामुन
130	पत्थर	एस क थपाठी एण्ड कंपनी प्रा. श्री सनत कुमार आ श्री अनुपूर एल पी त्रिपाठी	वाड क0.07 अनुपूर जिला अनुपूर म प्र 999383517 4	271- 24 08 2017	2 000	25 08 2017	24 08 2027	NA	25/8/2017	NA	गर-काएव 119-28-08-2017	A-23,14,79N B- 81,31,4,99E 23,14,15N C- 81,34,11,34E 23,4,7,85N D- 81,34,11,44E 23,4,8,19N 81,34,4,80E	खुला	शाथल
131	पत्थर	श्री जत रमाद आ श्री जत भूरा जिला निवासी म प्र	सिवनी जिला सिवनी म प्र	2119/17 0 7 2020	3 444	29 09 2020	28 09 2030	NA	NA	NA	गर-काएव NA	A-24*756*48** 81*23*46*73 B- 24*758*89** 81*23*46*69** C-	खुला	शाथल
132	गुरुम	म कुमार कान्हादेराम प्रो सुधीर कुमार पाण्डेय	व्याहारी जिला शहडोल 9981170888	398- 30 10 2017	3 846	22 11 2010	21 11 2020	पहला	30/03/2011	NA	गर-काएव 1067-31-12-2017	A-23,06,45,10N 81,22,52,41E 21,06,27,10N	खुला	शाथल
133	गुरुम	म आम रमन कुमार प्रो सदीप कुमार तिवारी	कुवरा जिला शहडोल	918- 12 11 2017	1 942	25 11 2010	24 11 2020	NA	25/11/2010	कामयाल	गर-काएव 39-06-07-2017	A-23,41,00,64N 81,29,47,61E B-23,40,59,24N 81,29,50,49E	खुला	शाथल
134	पत्थर	श्री कृष्णकुमार गुप्ता	व्याहारी जिला शहडोल 9407851 586	627- 23 07 2017	0 687	29 07 2010	28 07 2020	पहला	11 11 2010	कामयाल	गर-काएव 90-10-08-2017	A-23,40,42,65N B- 81,33,34,41E 23,40,43,13N 81,33,36,73E C-	खुला	शाथल
135	पत्थर	श्री प्रकाश पाठक एव श्री राजनारायण पाठक	बुढार जिला शहडोल म प्र 7000112327	1410- 27/07/2017	2 000	28 08 2015	27 08 2025	NA	27/7/2015	NA	गर-काएव 732-08-06-2017	A-23,12,55,48N B- 81,44,43,47E 23,12,55,20N 81,44,58,81E C-	खुला	शाथल


  
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136	संस्कार इंटरप्राइजेज प्रा. ली. माला देवीपुला निगम, श्री मती सोनीव निगम, वाड नं. 13 घरीला मोहल्ला शहरडाल तहसील सोरागपुर जिला शहरडाल म.प्र. 70009368 53	1135-25.04.2017	2.000	01.05.2017	01.05.2017	NA	NA	NA	NA	277-12.05.2017	A-23.23.57.89N 81.20.45.99E B- 23.23.58.05N 81.20.48.47 E C- 23.24.0.79N 81.20.48.44E D- 23.24.2.05N	खुला	शायल
137	श्री रहमान खान आ. श्री अप्पुब खान काटमा तहसील सोरागपुर जिला शहरडाल म.प्र. 942519295 2	819-25.03.2017	1.114	28.03.2017	27.03.2028	NA	NA	NA	NA	278-12.05.2017	A-23.19.45.48N 81.23.32.70E B- 23.19.44.70N 81.23.34.92 E C- 23.19.48.02N 81.23.36.54E D- 23.19.47.36N 81.23.38.50E E- 23.19.47.92N 81.23.38.77E F- 23.19.49.68N 81.23.34.42E	खुला	शायल

  
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138	मुरगा	श्री आलोक मिश्रा आ श्री रामसुशील मिश्रा	ग्राम केशवारी सहस्रौल जेतपुर जिला मण्डल मण्डल	1358- 22 05 201 7	1 796	23 06 2017	22 06 2027	NA	NA	NA	ग्र-काएव	79-10 08 2017	A-23 14 16 54N B- 81 43 54 01E C- 23 14 17 63N 81 43 55 29 E D- 23 14 17 47N 81 43 58 58E 23 14 21 93N 81 43 56 90E 23 14 21 28N 81 43 52 94	खुली	शायल
139	माबल	मसस श्री माबल	प्लॉट नम्बर 186 नालदा कालज रोड मरावीर नगर कटनी जिला कटनी म प्र	2743- 25 12 202 2	4 900	22 02 2019	21 02 2049	NA	NA	NA	ग्र-काएव	69-08 04 202	A-24 07 39 447N 81 27 35 944E B-24 07 32 665N 81 27 38 153E C-24 07 32 903N 81 27 30 690E D-24 07 32 665N	खुली	शायल
140	ग्रनाईट	एस वी स्टान प्रा लि (संघातिक सहमति प्राप्त)	42 थावनार जाटवारा रुनाथपुरा जयपुर राजस्थान 8223015551	3016/5/03 /2020	3 7	05 03 2020	04 03 2050	NA	NA	NA	ग्र-काएव	NA	A23814'04 59'81"43 '54 33B23'14'05 11" 81*43'59 97" C23'14'004 65" 81*43'59 97" D23'14'03 20" 81*43'59 97"	खुली	शायल
141	ग्रनाईट	स्टानाफुल्ड वन्वसे प्रा लि (संघातिक सहमति प्राप्त)	76/01,क्षिप्रापथ मानसरोवर जयपुर राजस्थान 8223015551	298/ 03 03 202 0	9 492	05 03 2021	04 03 2051	NA	NA	NA	ग्र-काएव	NA	A 23'27'51 15 81*23'24 64" B 23'27'54 66" 81*23'41 11" C23'27'44 28" D23'27'44 34 81*23'27 07	खुली	शायल
142	ग्रनाईट	स्टानाफुल्ड वन्वसे प्रा लि (संघातिक सहमति प्राप्त)	76/01,क्षिप्रापथ मानसरोवर जयपुर राजस्थान 8223015551	295/ 03 03 202 0	9 747	05 03 2022	04 03 2052	NA	NA	NA	ग्र-काएव	NA	A23'28'04 62 81*23'40 20" B23'28'02 68 " C23'27'53 94 81*23'48 87 D23'27'55 6" 81*23'34 83"	खुली	शायल

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**DATE: 07.10.2022.**

*(Handwritten signature)*  
**9/10/2022**  
**युगिद शर्मा**  
**अधीक्षक - आरक्षण**  
**जिला: राजसिख**

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(P.E.C.O)  
Paryavaran Parisar  
Aera Colony, Bhopal (M.P.)**

## Chapter -4


### DETAILS OF ROYALTY OF REVENUE RECEIVED IN LAST THREE YEARS

No	Year	Name of Minerals Income /Production	
		Coal (Royalty in Rs.)	Production Cum.
1	2019-20	888458493.00	3663256.68
	2020-21	1028244957.00	3919410.58
	2021-22	1035044039	3253139.49
	<b>Total</b>	<b>2951747489</b>	<b>10835806.75</b>
		<b>Gas</b>	<b>Production Cum.</b>
2	2019-20	566211140.00	319.20 MMSCM
	2020-21	373693915.00	438.6 MMSCM
	2021-22	438422115.00	NA
	<b>Total</b>	<b>1378327170</b>	<b>757.8 MMSCM</b>
		<b>Stone Gitti (Royalty in Rs)</b>	<b>Production Cum.</b>
3	2019-20	29000303.00	332694.00
	2020-21	55235972.00	460299.77
	2021-22	41806573	348388.108
	<b>Total</b>	<b>126042848</b>	<b>1141381.88</b>
		<b>Stone (Royalty in Rs)</b>	<b>Production Cum.</b>
4	2019-20	14301250.00	286025.00
	2020-21	11423345	228466.90
	2021-22	3558033	71160.66
	<b>Total</b>	<b>29282628</b>	<b>586652.56</b>
		<b>Murum</b>	<b>Production Cum.</b>
5	2019-20	37250.00	745.00
	2020-21	3272409	65448.180
	2021-22	0	0
	<b>Total</b>	<b>364659</b>	<b>66193.18</b>
		<b>Sand</b>	
6	2019-20		9552453.00
	2020-21		591970.8
	2021-22		1180404.08
	<b>Total</b>		<b>11324827.9</b>
<b>Total Yearly Revenue in all Minerals (Head 0853)</b>			
	2019-20	1501283843.00	
	2020-21	1488011910.00	
	2021-22	2064338928.00	

## CHAPTER 5

### DETAILS OF PRODUCTION OF SAND OR BAJARI OR MINOR MINEWRALS DURING THE LAST THREE YEARS

Financial Year	Sand	Bajari
2019 – 20	9552453.00	0
2020 – 21	591970.8	0
2021 – 22	1180404.08	0
Total	11324827.9	0

  
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## CHAPTER-6

### PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVER OF THE DISTRICT

#### DRAINAGE:

The entire district is drained by Son river and its tributaries. Thus the area falls in the Ganga basin. The river Son flows due north till the northern extent of the district, making the western boundary of the district Shahdol with Umaria District. Thereafter, the river Son flows due east and marks the northern boundary of Shahdol district with Satna district. The important tributaries of the Son river are the Kunak nadi and the Chuwadi nadi. The river Son draining the south eastern parts of the district through its important tributaries like Tipan, Chandas and Bakan flow in the north-west direction with a dendritic pattern, draining the central plains of the district. Another important tributary of the Son River is the Banas river, flowing along the eastern North-western part of the district is drained by the Banas river and its tributaries namely the Janapar river, Kormar nadi, the Rampa nadi, and Odari Nadi, Banas River confluences with the Son River at the northern most tip of Shahdol District.

**Son River :** The Son originates near Amarkantak in Madhya Pradesh, just east of the headwater of Narmada River and flows North-north west through Madhya Pradesh state before turning sharply eastward where it encounters the south west-northeast-running Kaimur Range. The Son parallels eastward where it encounters the south west-northeast-running Kaimur Range. The Son parallels the Kaimur hills, flowing east-northeast through Uttar

Pradesh, Jharkhand and Bihar states to join the Ganges just above Patna. Geologically, the lower valley of the Son is an extension of the Narmada Valley, and the Kaimur Range an extension of the Son river at 784 kilometers (487 mi) long, in one of the largest rivers of India. (2) Its chief tributaries are the Riand and the North Koel. The Son has a steep gradient (35-55 cm per Km) with quick run-off and ephemeral regimes, becoming a roaring river with the rain-waters in the catchment area but turning quickly into a fordable stream. The Son, being wide and shallow, leaves disconnected pools of water in the remaining part of the year. The channel of the Son is very wide (about 5 km at Dehri on one) but floodplain is narrow, only 3 to 5 kilometers (2 to 3 mi) wide. In the past, the Son has been notorious for changing course, as it is traceable from the son is very wide (about 5 Km at Dehri on one) but the floodplain is narrow.

kilometres( 2 to 3 mi) wide. In the past , the Son has been notorious for changing course, as it is traceable form several old beds near its east bank. In modeern times this tendency has been checked with the anicut at Dehir, and now more so with the Indrapuri Barrage.

The flood of Son is very destrective So mining of sand is inportant for uninterrupted water flow. The erosino nprocess in the catchment area and transportation of sand along with strong water current during the rainy

season will augment the process of replenishment in the downstream mining lease area and the sand will be deposited in river ear after flooding in monsoon season. Whatever quantity of Sand are extracted from the said land during one year, extracted quantity of the sand are automatically replenished every year by the river it self through its replenishment potential which is generated due to its flow, velocity.

During monsoon this bed replenished to a large extend from the Barakar Sandstons, Talchir stones, etc. of Gondwana Group rock formation due to ersion by haavy flow in higher reach and soon as the stream reaches in older channel downward, shed their loans in river bankd due to decrease in velocity and carrying capacity. The annul deposition of 3 -3.5 meters is received. The area will be maintained as it is after monsoon season.

Fluvial Process ( erosion and dedimentation by bater) is the principal process of sedimentation in the plains. Thus the rivers are the olnl source of depositary sedimentaino in the district. Process of deposition is preceded by erosion, tranportation and finally environment of deposition. Therefore sedimentation process in dependent upon Gellogy& Geomorphology of the area, the gradient of river, flow of water or velocity of the river or flow of river in the channel in the volume of. Thus flooding in the upstream higher volume of sediments in the downstrem side. Further geo-technical as well as natural obstacles may also caue the deposition of dediments for example natural levee, meanders and structures.

**Samdhin River:-**The Samdhin River originated from in between village Bedra and Kothia, Tehsil Beohari Dist. Shahdol Madhya Pradesh, the elevation of origin point is 421m. Amsl, and Samdhin River confluences in son river elevation point is 289m. Amsl it is covered between Latitude 23°58'41.56"-Longitude 81°21'25.17". The catchment area of the Samdhin River is 34345ha. and its flows towards Northern direction. The several nalas are joins Samdhin River near jamodi village and Samdhin River takes wider shape. The length of samdhin river is 39km. the geomorphological features of this catchment is feasible for erosion and deposition of river sand. The flood of Samdhin is destructive so mining of sand is inportant for uninterrupted water flow. The erosion process in the catchment area and transportation of sand along with strong water

current during the rainy season will augment the process of replenishment in the downstream mining lease area and the sand will be deposited in river every year after flooding in monsoon season. Whatever quantity of Sand are extracted from the said land during one year; extracted quantity of the sand are automatically replenished every year by the river itself through its replenishment potential which is generated due to its flow, velocity. During monsoon this bed replenished to a large extend from the Barakar Sandstones, Talchir Stones, etc. of Gondwana Group rock formation due to erosion by heavy flow in higher reach and as soon as the stream reaches in older channel downward, shed their loads in river banks due to decrease in velocity and carrying capacity. The annual deposition of 2.5 – 3 meters is received. The area will be maintained as it is after monsoon season.

**Johila River:** Origin Maikal Hill from amarkantak (81°45'18.955"E 22°44'12.28"N) Catchment Area: The Johila River originated from Jaleshwar which is about 10 km away from Amarkantak Maikal Hill. After originating from amarkantak teh river flows from Pali manthar of umaria to manpur bijori and meets to Son River near Dashrat Ghat. The elevation of origin point is 1120 m. The total catchment area of Johila River from its origin to dashrat ghat is about 2500 sq km and has a Length of about 235 km. The annual deposition of 2.2 – 2.8 meters is received. The area will be maintained as it is after monsoon season. pg. 17

**Kunuk River :** -Origin Mahora Hill from Bijuri (81°59'3.03"E 23°30'27.76"N) Catchment Area: The Kunuk River originated from Jheenk-Bijuri village which is about 20 km away from Jaitpur (Kmta) Mahora Hill. After originating from Jheenk-Bijuri Village River flows jaitpur (kmta) of Shahdol to Bargawan, Chuhri, Devgarh and meets to Son River near Khairi Kanwahi. The elevation of origin point is 740m. The total catchment area of Johila River from its origin to Khairikanwahi is about 72561km and has a Length of about 69km. The annual deposition of 2. – 2.9 meters is received. The area will be maintained as it is after monsoon season.

**Chundi River:-** Origin from Lapri- Tilauli village (81°59'3.03"E 23°30'27.76"N) The Chundi River originated from Lapri- Tilauli village which is about 15 km away from Khannaudhi. After originating from Lapri Village River flows Bhatigawan Khurd of Jaishing nagar to Barna Nigai Village and meets to Son River near Rupaula Ghat. The elevation of origin point is 620m. The total catchment area of Chundi River from its origin to Rupaula Ghat is about 53212 ha. and has a Length of about 59km. The annual deposition of 2 – 3 meters is received. The area will be maintained as it is after monsoon season. The chundi watershed, with chundi as a major consequent stream flows east-west having a chatchment area of 532 sq. km intensively decorated with undulated moderately high denudation hills in the east and west

flat weathered buried bedrock surface termed as pediplain , spread over the rest of the region. The boundary of the watershed is formed by water divide of the chundi river system. It is located Shahdol district covering a total area geographically the chundi watershed is bounded by the watershed of Odari nadi in east, halphal and gorna nala in north and south and by the son river in the west, where it meets the son. The major towns of the chundi watershed are jaishingnagar and khannaudhi.

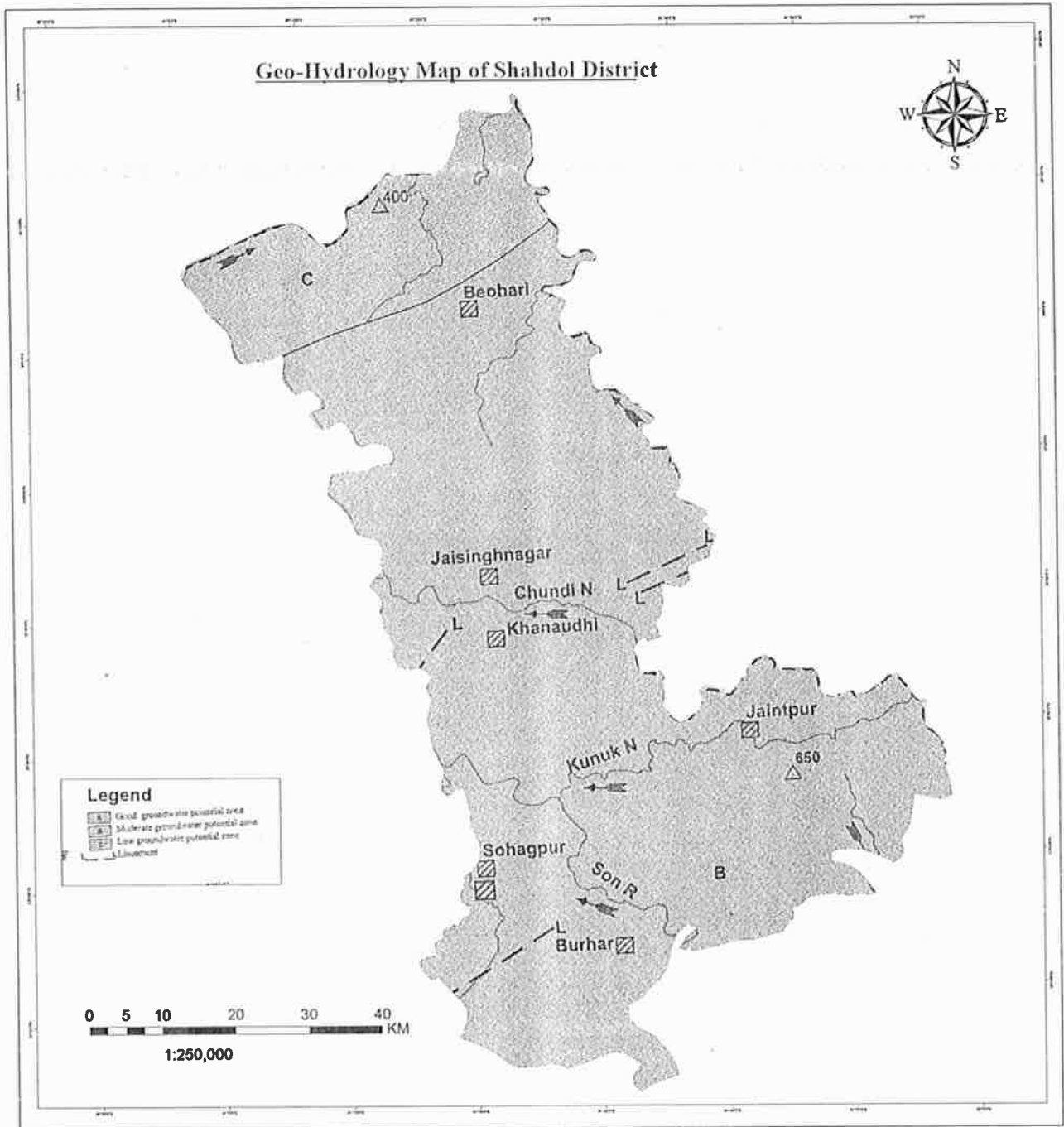
**Banas River:-** Origin from Korla Diat, Bharatpur tehsil, Ramdaha village ( $82^{\circ} 0'14.19''E$   $23^{\circ}36'9.60''N$ ). The Banas River originated from Ramdaha village which is about 43 km away from Bharatpur. After originating from Ramdaha Village River flows Bharatpur, Bansukli Bhamarha to Hathwar Village and meets to Son River near Shikarganj. The elevation of origin point is 770m. The total catchment area of Banas River from its origin to Shikarganj is about 2640sqkm. and has a Length of about 162km., flowing along the eastern boundary of the district, marking the boundary of the district Shahdol with Sidhi District. The north-western part of the district is drained by the Banas River and its tributaries namely the, Kormar nadi, the Rampa nadi, and the Odari Nadi. Banas River confluences with the Son River at the northernmost tip of Shahdol District. The annual deposition of sand 2 – 3 meters is received. The area will be maintained as it is after monsoon season. Banas River is located at NE part of the area. The drainage pattern in the area is mostly dendritic to sub-dendritic and the drainage density is low to moderate. Most of the tributary streams go dry during summer but there may be flash during the rainy season. It has been observed that the ground water condition is poor to moderate in major portion of the area thus creating the drought conditions. However, the ground water occurrence is limited to valley fills and pediplains.

**Jhapar River:** - Origin Village Semra and Tagawar near KARKI (Shahdol dist.) ( $81^{\circ}24'15.62''E$   $23^{\circ}50'21.35''N$ ) Catchment Area: The Jhanpar River originated from Tagawar village which is about 24 km away from Beohari Tehdil. After originating from Tagawar village, river flows Via Barachh village and meets to Banas River near Bhamaraha. The elevation of origin point is 448 m. The total catchment area of Jhapar River from its origin to Bhamaraha is about 20466ha. and has a Length of about 235 km. The annual deposition of 2.2 – 3.0 meters is received. The area will be maintained as it is after monsoon season.

**Other Tributaries:** - Other Tributaries are as follows: Korma, Rampa, Odari, Chuwadi, Audhi, Bakan, and Mudna. These tributaries finally join Son River and Banas rivers of Shahdol District. These tributaries flowing direction from south to North The annual sand deposition of these tributaries are more/less common approx. 2.2 to 2.8 m. the average slope of catchment area 2.2 to



1.8%

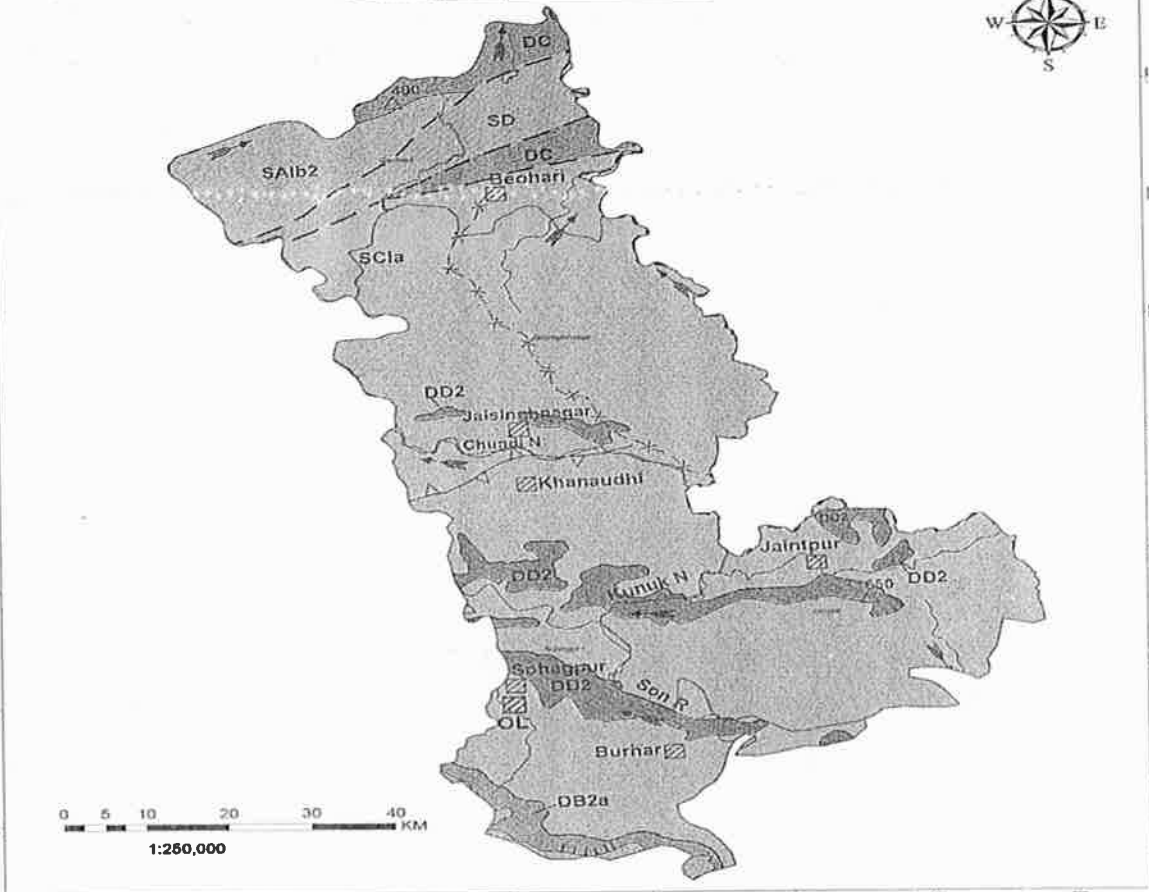


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**Drainage Map of Shahdol District**



**Legend**

- Units of erosive origin**
- Region of high level plateau (over 700m elevation)
- Region of middle level plateau (550 to 500m elevation)
- Units of structural origin**
- Lower level sandstone plateau (Vindhyanic rocks)
- Structural plain on Gondwanan rocks
- Structural hills on valleys

- Units of denudational origin**
- Denudational slope on Deccan Trap
- Pediment/plateau
- Denudational hills and valleys on the Deccan Trap rocks
- Units of fluvial origin**
- Flood plain (including in filled river beds)

- Geomorphic Representations**
- Drainage network
- Drainage basin
- Drainage divide
- Slope measurement
- Elevation
- Flow divide (topographic break)
- Potential hydrological areas

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## CHAPTER 7

### GENERAL PROFILE OF THE DISTRICT

Shahdol District is a district of Madhya Pradesh state in east central India. With a total area of 5,671 square kilometers and a population of 908,148. Shahdol is an important district of Madhya Pradesh. The town of Shahdol is the district headquarters. The district is also a Division. Some of the districts in this division are Annupur and Umaria.

The Virateshwar Temple in Sohagpur Vangana is the most important tourist destination of Shahdol and a structural masterpiece. The district extends 110 km from east to west and 170 km from north to south.

The total population of the district is 908,100, out of which 391,027 are Scheduled Tribes and 67,528 are Scheduled Castes.

#### History

The etymology of the name as ascertained from the local residents points to its derivation from the name of the one ShahdolwaAhir of Sohagpur village. The progenitor of the Ex-Illakadar family of Sohagpur, JamniBhan was the second son of Maharaja Virbhan Singh of Bagelkhand.

He decided to settle at Sohagpur and assured maximum facilities to settler around, and also declared that places settled by clearing forests will be named after the pioneer settlers.

ShahdolwaAhir is believed to have settled the former village of Shahdolwa, about 2.5 km. from the headquarters of Sohagpur after this declaration. Later on, the place used to be the camp site for the Maharaja of Rewa and British officers on tour. More villages were grouped into the village of Shahdol as it grew to a town. The District Headquarters was shifted from Umaria to Shahdol after the merger of princely states took place in 1947.

**Origin of the name of the District:** - Shahdol is named after the headquarters town Shahdol which is located on the Bilaspur-Katni Section of the South-Eastern Railways. The etymology of the name as ascertained from the local residents points to its derivation from the name of the one ShahdoJwaAhir of Sohagpur village. The progenitor of the Ex-Illakadar family of Sohagpur, JamniBhan was the second son of Maharaja Virbhan Singh of Bagelkhand. He decided to settle at Sohagpur and assured maximum facilities to settler around, and also declared that places settled by clearing forests will be named after the pioneer settlers. ShahdolwaAhir is believed to have settled the former village of Shahdolwa, about 2.5 km from the headquarters of Sohagpur after this declaration, Later on, the place used to be the camp site for the Maharaja of



Rewa and British officers on tour. More villages were grouped into the village of Shahdol as it grew to a town. The District Headquarters was shifted from Umaria to Shahdol after the merger of princely states took place in 1948. With lush green forests, natural wealth of coal, minerals and with primitive tribal population, the district Shahdol is situated among the range of Vindhyaachal and heading fast in development track. The district has vast reserves of coal mines.

### Location

Shahdol District is situated in the northeastern part of the Madhya Pradesh provinces of India. Because of the division of the district on 15-08-2003, the area of the district remains 5671 km<sup>2</sup>. It is surrounded by Anuppur in the southeast, Satna & Sidhi in the north and Umaria in the west. The district extends 110 km from east to west and 170 km from north to south. This district is situated between 22°38' N latitude to 24°20' N latitude and 80°28' E Longitude to 82°12' E longitude.

  
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**Location Map of Shahdol District**



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## Topography

The District is located in the north- eastern part of the Deccan plateau. It lies at the trijunction of Makal Ranges of the (Satpura Range), the foot of the ( Kymore Range) an extension of the Vindhya Range and a mass of parallel hills which extend over the Chhota Nagpur Plateau in jarkhand. In between these hill ranges lies the narrow valley of the Son and its tributaries, Since the Kymore Range extends physiographic divisions. They are-

- The Maikal Range
- The Hills of Eastern Plateau
- The Upper Son Valley

## Geographical scenario


District Shahdol is predominantly hilly district. It is picturesque with certain pockets and belt of SAL and mixed forests. Total geographical area of the district is 5671 km<sup>2</sup> Adjacents to the District shahdol are the boarding district Dindori, Satna, Umaria, Anuppur and Rewa.

## Main City & Town of the District

Amlai, Badra, Bangawan, Beohari, Nurhar, Deori, Devhara, Dhanpuri, Dola, Dumar Kachhar, jaisinghnagar, Kelhauri ( Chachai, Khand ( Bansagar), Pasan] shahdol

## Tehsil & Their Literacy

No	Name of the Thesil	Population Total	Male	Female	Literacy					
					Total	%	Male	%	Female	%
1	Sohagpur	469242	241433	227809	242043	51.58	148109	61.35	93934	41.23
2	Beohari	168334	86444	81890	83561	49.64	52765	61.04	30796	37.61
3	Jaisinghnagar	161717	82093	79624	63712	39.40	41524	50.58	22188	27.87
4	Jaitpur	108855	54814	54041	42563	39.10	41524	50.58	22188	27.87
	Total-	9081148	464784	443364	431879	47.56	270430	58.18	161449	36.41

  
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## **Administrative Structure**

This district is divided into 06 Tahsils, 05 Janpads and 391 village Panchayats. There are 02 Nagarpalikas and 04 Nagarpanchayats. One third part of the district is covered with forest.

## **Economy**

In 2006 the Ministry of Panchayati Raj named Shahdol one of the country's 250 most backward districts (out of a total of 640). It is one of the 24 districts in Madhya Pradesh currently receiving funds from the Backward Regions Grant Fund Programme (BRGF).

## **Agriculture**

District is very backward in the field of agriculture. Tribals of the district prefer the cultivation in the old traditional method. The sizes of the fields are very small and mainly the tribals are marginal farmers. The yearly yield of the products from the fields is not enough for their home use. Hence, for the rest part of the year they work on daily wages. Mahua fruit, wood & seeds are source of income for tribe area people.

## **Living standard of the tribe**

The living standard of tribals is very simple. Their houses are made of mud, bamboo sticks, and paddy straw and local tiles. Tribal men wear Dhoti, Bandi, Fatohi and headgear. Women wear Saree named "Kaansh" saree in the local dialect. The saree is always of body colour. Women in the tribal community prefer to get their body parts hands, legs and neck encovered with colours. They wear different kinds of ornaments made of bamboo, seeds and metals.

## **Demographics**

According to the 2011 census Shahdol District has a population of 1,064,989, roughly equal to the nation of Cyprus or the US state of Rhode Island. This gives it a ranking of 427th in India (out of a total of 640). The district has a population density of 172 inhabitants per square kilometre (450/sq mi). Its population growth rate over the decade 2001-2011 was 17.27%. Shahdol has a sex ratio of 968 females for every 1000 males, and a literacy rate of 68.36%.

## **Languages**

Vemaculars spoken in Shahdol include Bagheli, which has a lexical similarity of 72-91% with Hindi (compared to 60% for German and English) and is spoken by about 7,800,000 people in Bagelkhand.

  
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**CHAPTER – 8**  
**LAND UTILIZATION PATTERN IN THE DISTRICT**

S. No.	LAND USE	AREA in (Sq. Km.)
1	Forest Land	2278.85
2	Net Area Sown	1899.96
3	Cultivable Area	425.61
4	Mining Area	103.41

**Agriculture**

Paddy, Kodo, Kutko and Maize are the crops of the district. Til, Mustard and Groundnut are the main oilseeds produced here. The farmers have started the production of Sunflowers and Soyabean. In the central and southern part of the district, paddy is the main Crop grown and in the North-West Wheat is the main crop grown.

Sr. No.	Particulars	Area (Hects.)
1	Total Area	561006
2	Net Sown Area	221101
3	Canal Irrigation Area	18296
4	Tubewell Irrigation Area	17158
5	Total Area Irrigation other	31676
6	Total Area Irrigation	67130

CROP PRODUCTION(2019-2020)				
Sr. No.	Crop Name	Area (hect)	Yield/Hect.	Production in 000' MT
1	Rice	154234	3380	521311
2	Wheat	64771	22.00	142496
3	Oil Seeds	14815	789	11689
4	Pulse	6643	1639	10888

## FARM EQUIPMENTS

The figures of farm equipments existing are as given below:-

S. No	Equipment	Nos.
1.	Seed Drill	178
2.	M.B.Plough	112
3.	Breeder	4800
4.	Low Lift Water Device	1350
5.	Maize Shelter	7882
6.	Others	2115

## DISTRIBUTION OF LAND HOLDINGS

The distribution of land is as given below:-

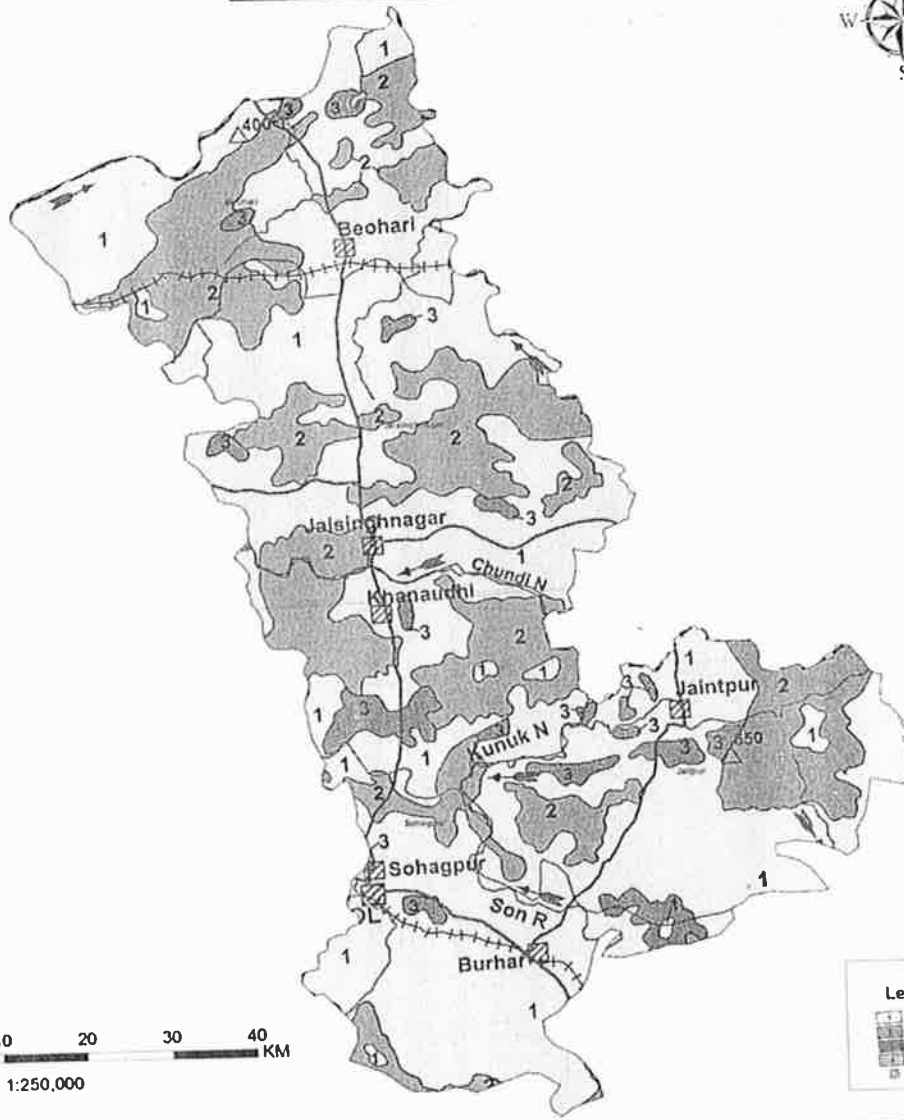
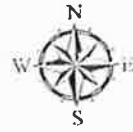
S. No	Size of Holding	Nos.
1	Less than 1 hectare	110424
2	Between 1 to 2 hectares	34806
3	Between 2 to 4 Hectares	23424
4	Between 4 to 10 hectares	6258
5	10 Hectares & above	491
	Total	175403

### Irrigation Facilities:

Since this district is mountaineous, irrigation facility is not satisfactory. Only 9% of the total crop gets irrigation facility.

  
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**Land Use Map of Shahdol District**



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 Bhopal (M.P.)

## CHAPTER - 9

### PHYSIOGRAPHY OF THE DISTRICT

Shahdol district is situated in the eastern part of Madhya Pradesh and covers an area of 14,028 sq. km. It is covered in Survey of India Degree sheet Nos. 63D, H, 64A and E between Latitude 23° 03' - 24° 20' and Longitude 80° 58' - 81° 58". The district is bounded by Satna and Rewa district in north, Dindori and Bilaspur district in south, Koriya district in east, and umria district in west and Sidhi distnct in north east. Shahdol is the district headquarters and Sohag'pur, Beohari, Umariya, Rajendragram, Anupur and Jaisinghnagar are some of the major towns. The Katni Bilaspur section of the southeastern railway throuh the district. All important places within the district are well connected by a network of state highways and all weather roads, The Son River and its tributaries drain central part of the district. Narmada and Johilla rivers originate from Amarkantak (1065mtr)

Physicgraphically, structural landforms represented by plateau, hills and valleys have developed in northern, northeastern and northwestern part of the district. Low lying plains with average altitude of 450m to 500m above MSL are developed in southeastern part, where as high to medium level (500m to 990m) plateau and flat loped, step like terraces are developed in southern and southwestem pan of the district. Denudational hills and Valleys are present in Central part of the Disnct. Fluvial Land Forms represented by flood plains are present along the Western boundary of the district. The maximum and minimum elevation of the area are 1070m and 356m above mean sea level in southern part of Satpura hills and 5 km. southeast of Dhanwahi respectively.

Rock Formations ranging in age form Archaicans to Holocene period are exposed in Shahdol district the older metamorphic rocks comprising Granite gneisses as well as massive granite are exposed in southeastem, western and to a small extent in west southern part of the district. The ENE WSW trending volcano sedimentary sequences of Mahakoshal Group of Palaeoproterozoic age consisting metasediments, crystalline limestone, phyllites, quartzite, BHQ, marble, dolomite, tufts and ash beds are exposed in northern side. Dolerite, pegmatite, granite and vein quartz have intruded these rocks. The dykes exhibit a predominant ENE-WSW trend. Jungel Group of Mesoproterozoic age unconformably overlies the Mahakosal Group of rocks, consisting of sandstone and conglomerate occur as small thin bands in the northern part of the district. Vindhyan Supergroup represented by the Semri and Bhandar Groups consist of conglomerate, quartzite, Deonarporcellanite, Palkawan shale, limestone, glauconitic bed, olive shale and Bhandar shale. Seniri group is mainly exposed in northern part and Bhandar shale is exposed as small belt in east central part of the northern side. Talchir Group of rocks comprising



diamictiferous, well-sorted sandstone, and olive green shale with basal conglomerate are exposed in southeastern and western part of the district. Barakar Formation conformably overlies the Talchir Formation and comprises yellowish to greyish white felspathic sandstone with carbonaceous grey shale including several coal seams. This rock type is exposed in the central, east central and west central pan of the district. Most part of the district is covered by unclassified Gondwana rocks, which are characterised by fementinised, pinkish to yellowish white, cross-bedded sandstone, greyish shale, green, red fossiliferous clay with basal pebbly conglomerate Lameta beds occur along the fringes of the Deccan Trap covered hills in southwestern part of the district. They rest unconformably over the Gondwana strata consisting of greenish and reddish felspathic sandstone with cherty limestone. Deccan Trap basalt of Cretaceous to Palaeogene age is exposed in southeastern and central part. Dykes and sills of dolerite are common in the area trending ENE WSW to east west. The development of lateritic profile due to weathering of the trap rocks in the southern part resulted in the formation of bauxite bodies. Quaternary sediments comprising unconsolidated sand, clay and gravel exposed in the small portion of western and northwestern part of district.

The area presents a complex structural history with a number of asymmetrical folds, faults and fractures including probably a thrust affecting all rock formations. In the Gondwana Coal measure, the preservation of the coal as well as associated sediments is mainly due to the trough faulting. Enechelon type of boundary faults between Gondwana and Precambrian rocks are noticed in the coalfields. The prominent structural feature of the Sohagpur basin is the system of ENE WSW to EW trending sub parallel faults.

The economic minerals occurring in the district are bauxite, coal, clay, dolomite, feldspar, gypsum, iron, phosphate and dimensional stone such as granite, marble, sandstone and basalt. Coal is being mined from Sohagpur coal field, Umariya-Johilla-Korar coalfield and part of Singrauli coal field. Bauxite mainly occurs in southern pan of the district. Fire clay occurs at Bhamrah, Paperthi, Parsili and Dala. Dolomite occurs at Dalbajtal and Man. Gypsum occurs as veins in Intertrappen and Semri Group of rocks. Iron ore is reported from Hirapur, Deari, Chandaula, Anwai and Dawara. Granite, basalt and sandstone, are extensively quarried as aggregate and blocks for construction purpose.

  
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## CHAPTER – 10


### RAINFALL MONTH WISE

Shahdol district experiences a temperate climate characterized by a hot summer, well distributed rainfall during the south-west monsoon season and mild winter. The winter season commences from December and lasts till the end of February followed by the summer from March to middle of June. The south-west monsoon or rainy season continues from middle of June to September when south west monsoon is active while October and November months constitute post- monsoon or retreating monsoon season. The climate of Shahdol District, as calculated by Thornthwaite Precipitation Effectiveness Method, is humid climate with forest type vegetation.

The month of May is the hottest month with mean daily maximum temperature at 41.4<sup>0</sup>C and mean daily minimum temperature at 26.5<sup>0</sup>C. With the onset of south-west monsoon during June, there is an appreciable drop in day temperature, while at the end of the September or in early October, there is slight increase in day temperature but nights become progressively cooler. January is generally the coolest month with the mean daily maximum temperature at 25.6<sup>0</sup>C and the mean daily minimum temperature at 8.4<sup>0</sup>C. The average daily maximum temperature is about 41.4<sup>0</sup>C and minimum temperature is about 26.5<sup>0</sup>C. During the southwest monsoon season the relative humidity generally exceeds 88% (August month). In rest of the year is drier. The driest part of the year is the summer season, when relative humidity is less than 38%. April is the driest month of the year. The wind velocity is higher during the pre-monsoon period as compared to post monsoon period. The maximum wind velocity of 6.8 km/hr is observed during the month of June and minimum 2.3 km/hr during the month of December. The average normal annual wind velocity of Shahdol district is 4.3 km/hr.

**The normal rainfall of Shahdol district is 1131.4 mm .**

As per rainfall statistics, frequency of occurrence of Normal drought in the area is 25 % and that of Mild drought is also 25 % while occurrence of severe droughts in the area is only 5 % i.e. on an average there is a possibility of occurrence of a nonnal or mild drought once in every seven years, while that of severe draughts is once in every 20 years. The area does not experience any most severe drought.

  
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**RAINFALL MONTH WISE 2019 & 2020**

Year 2019			Year 2020		
Month	Total	Average	Month	Total	Average
January	39.00	6.5	January	176.00	29.3
February	76.00	12.7	February	188.00	31.3
March	82.00	13.7	March	494.00	82.3
April	49.00	8.2	April	137.00	22.8
May	31.0	5.2	May	145.00	24.2
June	158.0	26.3	June	1253.00	208.8
July	1646.00	274.3	July	1465.00	209.3
August	2479.00	413.2	August	2637.5	376.8
September	1908.00	318.0	September	911.5	130.2
October	121.00	20.2	October	393.0	56.1
November	0.00	0.00	November	21.0	3.0
December	191.00	31.8	December	0.00	0.00
<b>Total</b>	<b>6780.00</b>	<b>1130.1</b>	<b>Total</b>	<b>7821.00</b>	<b>1174.1</b>

**RAINFALL MONTH WISE 2021 & 2022**

Year 2021			Year 2022		
Month	Total	Average	Month	Total	Average
January	0	0	January	257	36.7
February	70	0	February	89.5	12.8
March	19	2.7	March	0	0
April	26.5	3.8			
May	677.5	96.8			
June	1612.0	230.3			
July	1861.5	265.9			
August	1991	284.4			
September	1248.5	178.4			
October	170	24.3			
November	0	0			
December	119	17			
<b>Total</b>	<b>7795</b>	<b>1103.6</b>			

  
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**CHAPTER-11**  
**GEOLOGY AND MINNERAL WELTH**

**General Geological Succession**

The Shahdol District is located in the north-eastern part of the Deccan Plateau. It lies at the trijunction of Maikal Ranges of the Satpura Mountain, the foot of the Kymore Range of the Vindhya Mountain. In between these hill ranges lies the narrow valley of the Son and its tributaries.

Physiographically, structural landforms, represented by plateau and low lying plains with average altitude of 450m to 500m above MSL, are developed in northern, north-eastern and north-western and central parts of the district. In the southern part of the District, hills and highlands of Maikal Range and high to medium level (500m to 990m) plateau and flat topped, step like terraces are developed. Fluvial Land Forms represented by flood plains are present along the western boundary of the district. The maximum elevation of the area is 1123m above mean sea level at Singingarh Hill ( $23^{\circ}03'40''$  •  $81^{\circ}27'37''$ ) in Satpura hills, in southern part of the district. The important tributaries of Son River in the district are Johila, Gujar Kewai and Tipan rivers. The primary occupation of the majority of the population in the district is agriculture and allied activities. On one side the spectrum of its floristic socio-cultural diversity and ethnic history of tribal.

The stratigraphic sequence of various geological units with their respective rock types are described below.

  
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AGE	LITHOSTRATIGRAPHIC UNIT	LITHOLOGY
Recent to sub recent	Alluvium, Laterite	Sandy loam, silty sand, coarse medium laterite
Cretaceous to Eocene	Deccan Trap	Basaltic lava flows and older dolerite dykes and sills.
Upper Cretaceous	Lameta	Sandstone, siliceous limestone, marl and Shales.
Lower Cretaceous	Chandia  Parsora Tihki Pali  Gondwana Supergroup	White clays and medium grained sandstone
Late Norian to Rhaetic		Coarse-grained sandstone variegated shale and lilac coloured clays.
Upper Permian to Larnic		Coarse grained sandstone grey shale, red shale, red green and mottled clay with thin coal bands
Late Permian		Sand stone, Shale sand Coal seams
Upper Carboniferous to Lower Permian	Talchir	Tillite, sandstone and green shale
Pre-Cambrian	Lower Vindhyan (Semri series)	Porcellanite shales sandstone basal conglomerates
	Bijawar	Quartzes, Gneisses
Algonkian	Archaean	Granite, Gneisses, Schists etc.

  
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**Mineral resources** – District Shahdol is very rich in its mineral resources. Minerals found in district are coal, fire clay, ochers, Iron, Laterrite and marble. Sohagpur Coalfield contributes a major part in the revenue of the state. A brief description of the various occurrences is given below:

**Coal:** Coal is a combustible black or brownish-black sedimentary rock, formed as rock strata called coal seams. Coal is mostly carbon with variable amounts of other elements, chiefly hydrogen, sulfur, oxygen, and nitrogen. Coal is formed when dead plant matter decays into peat and is converted into coal by the heat and pressure of deep burial over millions of years. Vast deposits of coal originate in former wetlands—called coal forests—that covered much of the Earth's tropical land areas during the late Carboniferous (Pennsylvanian) and Permian times. However, many significant coal deposits are younger than this and originate from the Mesozoic and Cenozoic eras.

Coal is primarily used as a fuel. While coal has been known and used for thousands of years, its usage was limited until the Industrial Revolution. With the invention of the steam engine, coal consumption increased. In 2020 coal supplied about a quarter of the world's primary energy and over a third of its electricity. Some iron and steel making and other industrial processes burn coal. The extraction and use of coal causes premature deaths and illness. The use of coal damages the environment, and it is the largest anthropogenic source of carbon dioxide contributing to climate change. 14 billion tonnes of carbon dioxide was emitted by burning coal in 2020, which is 40% of the total fossil fuel emissions and over 25% of total global greenhouse gas emissions. As part of the worldwide energy transition many countries have reduced or eliminated their use of coal power. The UN Secretary General asked governments to stop building new coal plants by 2020. Global coal use peaked in 2013. To meet the Paris Agreement target of keeping global warming to below 2 °C (3.6 °F) coal use needs to halve from 2020 to 2030, and phasing down coal was agreed in the Glasgow Climate Pact.

The largest consumer and importer of coal in 2020 was China. China accounts for almost half the world's annual coal production, followed by India with about a tenth. Indonesia and Australia export the most, followed by Russia.

The important coal field in the District is Sohagpur coal field. The Barakars in this area are about 3100 km<sup>2</sup> four coal seams have been recorded from the lower Barakars whereas a few thin seams are reported from Upper Barakars. The Lower Barakar coal of lower ash content and better quality as compared to that from Upper Barakars. In general the coal is of low rank, high

moisture, high volatiles and non-coking type. A reserve of 4064 million tonnes has been estimated from this field.

**Coal Bed Methane (CBM) Gas:-** Coal bed methane (CBM), an important unconventional gas occurring naturally in coal beds, is increasingly being used for industrial and utility purposes.

The gas is formed during the natural conversion of plant material into coal, known as coalification. When coalification occurs, the coal becomes saturated with water and methane gas is trapped within it. CBM can be recovered from coal deposits and seams through drilling and extraction.

The composition of CBM in a sample of coal varies widely across several locations in the country. Generally, it consists predominantly of methane gas (CH<sub>4</sub>) although it can contain trace amounts of ethane (C<sub>2</sub>H<sub>6</sub>), carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O).

To carry out CBM production, a steel-cased hole is drilled into the coal seam and the underground (produced) water is pumped out through tubing. Removal of produced water helps reduce the hydrostatic pressure within the coal bed, causing the gas to be desorbed from its surface.

As production occurs, the change in pressure alters the porosity and permeability of the coal bed. The recovered gas is sent into a natural gas pipeline or air compressor system.

The current source of gas is the Coal Bed Methane (CBM) blocks at Sohagpur East (SP-E) and Sohagpur West (SP-W) located at Shahdol. RIL has been awarded the Coal Bed Methane (CBM) blocks located in Shahdol and Annupur districts of Madhya Pradesh state of India. CBM plateau production from these blocks is expected to be around 3.5 mmscmd. The coal bed methane (CBM) block at Sohagpur is estimated to have 3.75 trillion cubic feet of in-place gas reserves under coal stairs.

**Iron & Laterite:** Iron & Laterite deposits occur near Budwa, Paparedi, Bagdari, Hathwar, Anhara, Deori in Beohari Tehsil.

Iron ores are rocks and minerals from which metallic iron can be economically extracted.

The ores are usually rich in iron oxides and vary in color from dark grey, bright yellow, or deep purple to rusty red. The iron is usually found in the form of magnetite (Fe<sub>3</sub>O<sub>4</sub>, 72.4% Fe), hematite (Fe<sub>2</sub>O<sub>3</sub>, 69.9% Fe), goethite (FeO(OH), 62.9% Fe), limonite (FeO(OH)·n(H<sub>2</sub>O), 55% Fe) or siderite (FeCO<sub>3</sub>, 48.2% Fe).

Ores containing very high quantities of hematite or magnetite (greater than about 60% iron) are known as "natural ore" or "direct shipping ore", meaning they can be fed directly into iron-making blast furnaces. Iron ore is the raw material used to make pig iron, which is one of the main

raw materials to make steel—98% of the mined iron ore is used to make steel. In 2011 the Financial Times quoted Christopher La Femina, mining analyst at Barclays Capital, saying that iron ore is "more integral to the global economy than any other commodity, except perhaps oil".

### **Magnetite:**

Magnetite is magnetic, and hence easily separated from the gangue minerals and capable of producing a high-grade concentrate with very low levels of impurities.

The grain size of the magnetite and its degree of commingling with the silica groundmass determine the grind size to which the rock must be comminuted to enable efficient magnetic separation to provide a high purity magnetite concentrate. This determines the energy inputs required to run a milling operation.

Mining of banded iron formations involves coarse crushing and screening, followed by rough crushing and fine grinding to comminute the ore to the point where the crystallized magnetite and quartz are fine enough that the quartz is left behind when the resultant powder is passed under a magnetic separator.

Generally most magnetite banded iron formation deposits must be ground to between 32 and 45 micrometers in order to produce a low-silica magnetite concentrate. Magnetite concentrate grades are generally in excess of 70% iron by weight and usually are low phosphorus, low aluminium, low titanium and low silica and demand a premium price.

### **Hematite:**

Due to the high density of hematite relative to associated silicate gangue, hematite beneficiation usually involves a combination of beneficiation techniques.

One method relies on passing the finely crushed ore over a slurry containing magnetite or other agent such as ferrosilicon which increases its density. When the density of the slurry is properly calibrated, the hematite will sink and the silicate mineral fragments will float and can be removed. According to the US Geological Survey's 2021 Report on iron ore, India is estimated to produce a whopping 59 million tons of iron ore in 2020 (2019: 52 million tons), placing it as the eighth largest global centre of iron ore production, behind Australia, Brazil, China, India, Russia and South Africa and Ukraine.

**Laterite:** Laterite is both a soil and a rock type rich in iron and aluminium and is commonly considered to have formed in hot and wet tropical areas. Nearly all laterites are of rusty-red coloration, because of high iron oxide content. They develop by intensive and

prolonged weathering of the underlying parent rock, usually when there are conditions of high temperatures and heavy rainfall with alternate wet and dry periods. Tropical weathering (laterization) is a prolonged process of chemical weathering which produces a wide variety in the thickness, grade, chemistry and ore mineralogy of the resulting soils. The majority of the land area containing laterites is between the tropics of Cancer and Capricorn.

Laterite has commonly been referred to as a soil type as well as being a rock type. This and further variation in the modes of conceptualizing about laterite (e.g. also as a complete weathering profile or theory about weathering) has led to calls for the term to be abandoned altogether. At least a few researchers specializing in regolith development have considered that hopeless confusion has evolved around the name. Material that looks highly similar to the Indian laterite occurs abundantly worldwide.

Historically, laterite was cut into brick-like shapes and used in monument-building. After 1000 CE, construction at Angkor Wat and other Southeast Asian sites changed to rectangular temple enclosures made of laterite, brick, and stone. Since the mid-1970s, some trial sections of bituminous-surfaced, low-volume roads have used laterite in place of stone as a base course. Thick laterite layers are porous and slightly permeable, so the layers can function as aquifers in rural areas. Locally available laterites have been used in an acid solution, followed by precipitation to remove phosphorus and heavy metals at sewage-treatment facilities.

Laterite is mottled red or brown coloured scoriaceous rock with a vermicular structure near the surface. It is found as a capping over a large variety of rocks in areas subject to the tropical monsoonal and sub-tropical regime of climate. Desilication of preexisting sandstone is more possible explanation for laterite formation. It is essentially a mixture of the hydrates of aluminium and Iron. As Quarried, it is usually soft and can be stressed easily but when it is exposed to the air it hardens quickly. There is no well-defined strike and dip. The mineralisation follows the topography. The bulk density is 2.8. The Iron Oxide varies from 40 to 50% while Silica is around 15%.

**Clay:** Good black clay deposits occur near Jamuni and Hinota.

**Ochers:** Ochre is residual product derived from sandstone resulting due to chemical weathering of Shale sandstone sequence. Leaching and concentration controlled by water table fluctuation on one hand and the inherent permeability of the parent rock on other hand, appears to be responsible for the formation of Ochre/Clay deposit in the applied area. The Ochre is formed due to



enrichment of ferric oxide in sandstone having leaching action by water. The insoluble constituents like silica are removed by the constant flow of water leaving behind the soluble iron oxide in form of ochre bed. The hydrous iron oxide imparts yellow colour and the anhydrous iron oxide imparting red colour. The ochre and clay is found towards central portion on mound. The average thickness is 0.8m and is of low grade. The bulk density is of 1.5. The Ochre/Clay is not economical to be mined and is not marketable due to its grade.

Ocher is a natural clay earth pigment, a mixture of ferric oxide and varying amounts of clay and sand. It ranges in colour from yellow to deep orange or brown. It is also the name of the colours produced by this pigment, especially a light brownish-yellow. A variant of ochre containing a large amount of hematite, or dehydrated iron oxide, has a reddish tint known as "red ochre". Ochre is a family of earth pigments, which includes yellow ochre, red ochre, purple ochre, sienna, and umber. The major ingredient of all the ochres is iron oxide-hydroxide, known as limonite, which gives them a yellow colour.

- Yellow ochre,  $\text{FeO}(\text{OH}) \cdot n\text{H}_2\text{O}$ , is a hydrated iron hydroxide (limonite) also called gold ochre.
- Red ochre,  $\text{Fe}_2\text{O}_3$ , takes its reddish colour from the mineral hematite, which is an anhydrous iron oxide.
- Purple ochre is identical to red ochre chemically but of a different hue caused by different light diffraction properties associated with a greater average particle size.
- Brown ochre, also  $\text{FeO}(\text{OH})$ , (goethite), is a partly hydrated iron oxide.
- Sienna contains both limonite and a small amount of manganese oxide (less than 5%), which makes it darker than ochre.
- UMBER pigments contain a larger proportion of manganese (5-20%), which makes them a dark brown.[5]

When natural sienna and umber pigments are heated, they are dehydrated and some of the limonite is transformed into hematite, giving them more reddish colours, called burnt sienna and burnt umber. Ochres are non-toxic and can be used to make an oil paint that dries quickly and covers surfaces thoroughly. Modern ochre pigments often are made using synthetic iron oxide. Pigments which use natural ochre pigments indicate it with the name PY-43 (Pigment yellow 43) on the label, following the Colour Index International system. Ochres deposit in the Shahdol district is reported from pachdi.

**Marble:** Marble deposits are found near villages Pasgarhi, Bagdari and Paparedi. Details of the deposit to be under search in these areas.

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Other Minerals like Flagstone, Slate, Dolerite, Molybdenum, River Sand etc are also found in huge quantity in the district.

During monsoon this bed replenished to a large extend from the Barakar Sandstones, Talchir Stones, etc. of Gondwana Group rock formation due to erosion by heavy flow in higher reach and as soon as the stream reaches in older channel downward, shed their loads in river banks due to decrease in velocity and carrying capacity. The annual deposition of 3-3.5 meters is received. The area will be maintained as it is after monsoon season.

**STONE (GITTI):** Stone (Gitti) is made up of basalt, dolerite etc. which is hard and compact and fractured (which is not suitable for making Flag or blocks), Any other type of rocks which is hard and compact in nature which will be used as road metal, house building material etc.

**Murum:** Murum is the crumbly rock, broken or crushed stones, gravel of humid tropical or equatorial zones. It is characterised by the deep weathered layer fom which silica has been leached. Thus, there is no humus, but an accumulation of aluminium and iron oxides and hydroxides. These soils are reddish in color & is imparted by the iron compounds. For building huts and paths, they are good materials, as it can be compacted easily to form hard surfaces. Murum soil comes under laterite soil. Laterite is a soil and a rock type rich in iron and aluminium. Murum soil is also referred as being a rock type but it is not a rock.

The approximate density of murrum soil is 1.8 gm/cc.

Murum is also a type of soil, mostly used for construction purposes. Generally, it is deep brown or red in color. Murum is used in plinth filling, road pavements, backfilling in trenches, footing pits, etc. It is a suitable type of soil in the construction field, since it does not contain any organic matters and can be compacted easily forming hard surfaces.

1. **Son River:** The river Son flows due north till the northern extent of the district, marking the western boundary of the dist Hct Shahdol with Umaria District. Thereafter, the river Son flows due east and marks the northern boundary of Shahdol district with Satna district. The important tributaries of the Son River are the Kunaknadi and the Chuwadinadi. The river son draining the south eastern parts of the district through its important tributaries like Tipan, Chandas and Bakan flow in the north-west direction with a dendritic pattern, draining the central plains of the district.
2. **River Banas:** Banas River flowing along the eastern boundary of the district, marking the boundary of the district Shahdol with Sidhi District. The north-western part of the district is drained by the Banas River and its tributaries namely the Jhanapar River, Kormarnadi, the Rampanadi, and the OdariNadi. Banas River confluences with the Son River at the northernmost tip of Shahdol.

## CHAPTER - 12

### DRAINAGE AND IRRIGATION PATTERN:

#### **Drainage Pattern:**

The entire district is drained by Son River and its tributaries. Thus the area falls in the Ganga Basin. The river Son flows due north till the northern extent of the district, marking the western boundary of the district Shahdol with Umaria District. Thereafter, the river Son flows due east and marks the northern boundary of Shahdol district with Satna district. The important tributaries of the Son river are the Kunak nadi and the Chuwadi nadi. The river son draining the south eastern parts of the district through its important tributaries like Tipan, Chandas and Bakan flow in the north-west direction with a dendritic pattern, draining the central plains of the district. Another important tributary of the Son River is the Banas River, flowing along the eastern boundary of the district, marking the boundary of the district Shahdol with Sidhi District. The north-western part of the district is drained by the Banas River and its tributaries namely the Jhanapar River, Kornar nadi, the Rampa nadi, and the Odari Nadi. Banas River confluences with the Son River at the northernmost tip of Shahdol District.

#### **IRRIGATION**

Bansagar is a multipurpose river valley project on Son River situated in Ganga Basin in Madhya Pradesh, envisaging both irrigation and hydroelectric power generation. The Bansagar Dam across Son River is constructed at village Deolond in Shahdol district on Rewa -- Shahdol road.

However, irrigation through this Project will benefit only a small area in the north of the District. Shahdol district still has poor irrigation facility. Only 9% of the total crop gets irrigation facility.

Tribals of the district prefer the cultivation in the old traditional method and depend mainly on rain. The area irrigated by canals, tubewells, dugwells and tanks are tabulated below in Table below-

<b>IRRIGATION BY DIFFERENT SOURCES</b>		
	<b>Number of Structures</b>	<b>Area (sq km)</b>
Dugwells	2470	37.98
Tube wells/Bore wells	513	13
Tanks/Ponds	457	24
Canals	76	44
Other Sources		89.0
Gross Irrigated Area		208

**SHAHDOL RIVER MAP**



LEGEND	
	River
	District Boundary
	State Boundary
	District HQ
	Other Town
	Major Town

Map not to Scale  
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 (Updated on 25th March 2012)

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## CHAPTER - 13

### SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT:

#### **Ground Water:**

Central Ground Water Board has carried out extensive field work in the district of Shahdol to provide scientific base to understand the dynamic system of ground water in the region. Systematic hydrogeological surveys were carried out in the district during the year 1987-88 by Sh. R.N. Sharma and Sh.A.K.Budhaliya, then Junior Hydrogeologists and Sh. A.K.Jain, Sh. M.L.Parmar, Sh. M.V.Gopal and Sh. I.Javid Ali, then Assistant Hydrogeologists. Detailed hydrogeological work was carried out in the District under Technology Mission Programme for drinking water during the period 1988 to 1991 by Sh. R.N. Sharma, then Junior Hydrogeologist and Sh. I.Javid Ali, Sh. A.Srinivas and Sh. R.M.Verma, then Assistant Hydrogeologists. Re-appraisal Hydrogeological Surveys of the area was carried out by Shri A.K.Jain, Junior Hydrogeologist during year 1998-99. CGWB had carried out regular Groundwater Exploration in the district during the period 1988-93 and a total of 16 exploratory wells were drilled at various places in different geological formations of the district.

Groundwater Exploration through deep drilling was carried out by deploying four direct rotary rigs to drill through semi consolidated Gondwana sediments. Central Ground Water Board carried out exploratory drilling programme in the area between 1990 and 1994 and during this period 16 exploratory wells and 7 observation wells were constructed. 4 number of piezometers were drilled in Shahdol district under Hydrology Project for water level monitoring purpose. The details of piezometers are given in table 4. Exploration revealed occurrence of potential aquifer within Lameta formation. The Gondwana formations – the clay and mudstone facies of Tihiki stage overlying the arenaceous facies of Pali beds have an aquifer system of moderate to high yield potential in Beohari Block. The yields range from 6 to 10 lps with average drawdown of 12 to 15 m over static water level (which vary from 6 to 7.5 m.bgl). However exploratory well at Bhejari site was abandoned due to insignificant yield. The Upper Barakar Sandstone of Gondwana Super Group has a positive piezometric head and at many places, auto-flowing condition occur, e.g. in Churmura (Shallow), Churmura (Deep) and Gohparu exploratory tubewells. The Upper Barakar Sandstone are devoid of coal seams while Middle and Lower Barakars have a number of coal seams occurring at different depths, from surface exposures to 150 m.bgl. The well at Gohparu was auto flowing, but its yield was meagre. Well at Churmura confirmed a three aquifer system, out of the middle aquifer (80 – 160 m.bgl) and third aquifer (deeper 210 – 240 mbgl) showed auto-flowing condition with piezometric head of 3.3 m agl and 5 m agl respectively with free flow discharge of 3 lps. At Bijha site, very shallow water level of 0.19 m bgl was recorded with a discharge of 3.4 lps.

Table shows Hydrogeological Details of Piezometers drilled in Shahdol district.

S.N	Name of site	Depth ( m )	Aquifer zones	SWL mbmp	Yield (lpm)	E.C. (μS/cm)	Aquifer
1	Burhar-D 23°13'30" 81°31'28"	58.15	12.6-17.8 50.0-52.0	22.0	4.2	365	Barakar Sandstone
2	Burhar-S 23°13'30" 81°31'28"	30.69	12.6-17.8	9.8	4.2	570	Barakar Sandstone
3	Jaisinghnagar-D 23°40'42" 81°23'48"	46.48	32.0-35.0	1.58	1.25	166	Upper Gondwana Sandstone
4	Shahdol-D 23°17'55" 81°21'35"	61.77	37.5-38.5 46.0-50.1	9.75	0.5	466	Gondwana Sandstone

The groundwater resources of the District are under-developed and under-utilised. 513 tubewells and 2470 dugwells facilitate to irrigate an area of 50.98 sq.km. of agricultural land as against 2714.12 sq.km cultivable area and 2313 sq.km of net sown area in the district. The net groundwater availability of the district is 639.09 MCM while gross annual groundwater draft in the district is only 43.43 MCM. The stage of ground water development of the district is only 6%. Shahdol comes under safe category from ground water development point of view. Net Groundwater Availability for future irrigation development is 590.97 MCM. There is ample scope for development of groundwater for irrigation, industrial and domestic purposes.

Block wise Ground Water Resources Estimation Data of Shahdol District, Madhya Pradesh

District/ Assessment Unit	Sub-unit Command/ Non-Command/	Net Annual Ground water Availability (ham)	Existing Gross Ground water Draft for Irrigation (ham)	Existing Gross Ground water Draft for Domestic & Industrial water Supply (ham)	Existing Gross Ground water Draft for All uses (11+12) (ham)	Provision for domestic, and industrial requirement supply to next 25 year (2033) (ham)	Net Ground water Availability for future irrigation development (ham)	Stage of Ground water Development $\{(13/10)*100\}$ (%)
Beohari	Command							
	Non-Command	8154	786	385	1172	407	6960	14

	Block Total	8154	786	385	1172	407	6960	14
Burhar	Command							
	Non-Command	16944	118	309	427	371	16455	3
	Block Total	16944	118	309	427	371	16455	3
Gohparu	Command							
	Non-Command	11982	108	233	340	359	11516	3
	Block Total	11982	108	233	340	359	11516	3
Jaisinghna gar	Command							
	Non-Command	18791	844	394	1238	577	17370	7
	Block Total	18791	844	394	1238	577	17370	7
Sohagpur	Command							
	Non-Command	8038	377	529	906	895	6766	11
	Block Total	8038	377	529	906	895	6766	11
	<b>District Total</b>	<b>63909</b>	<b>2233</b>	<b>1850</b>	<b>4083</b>	<b>2610</b>	<b>59067</b>	<b>38</b>

### Ground Water Quality

In order to determine the Chemical Quality of ground water to assess the suitability for agriculture and drinking purposes, a total number of 19 water samples from phreatic aquifer were collected.

#### Quality of Ground Water for Drinking Purpose

The quality of ground water in district is being assessed by the analysis of groundwater samples from 19 number of hydrograph stations collected during May, 2011. The analysis of water samples for year 2011 indicate that The electrical conductivity (EC) values indicative of total dissolved solids in groundwater were found to be in the range of 175 and 1440  $\mu\text{s}/\text{cm}$  at 25°C. Temporary Hardness of water can be removed by boiling. However, shallow ground water is vulnerable to contamination from different sources. Nitrate concentration ranges between to 34ppm. The study

of analyzed data shows that Shahdol district does not have any problem of fluoride since all the wells have fluoride less than 1.5 ppm of BIS (1990) permissible limit and ranges between 0.05-0.69ppm. In general, groundwater in phreatic aquifer is fresh and fall in classification of good category for drinking purpose.

### **Quality of Ground Water for Irrigation Purposes**

The chemical quality of groundwater is an important factor to be considered in evaluating its suitability for irrigation purpose. The parameters such as EC, Sodium Absorption Ratio (SAR), percent sodium (% Na) and Residual Sodium Carbonate (RSC) are used to classify the water quality for irrigation purpose. US Salinity Laboratory suggested a diagram of classifying waters for irrigation purposes in 1954. It is clear that more than 82% groundwater samples from the district fall under C2-S1 class (medium salinity and low sodium) which means that these waters can be used for all type of crops on soils of low to high permeability, without causing problem of salinity. The groundwaters representing the wells of Singhpur, Gohparu and Beohari are grouped under C3-S1 (high salinity and low sodium) class, indicating that groundwater from these areas can be used for irrigation purposes on well drained soils or used for salt tolerant crops like groundnut, safflower etc.

### **Surface Water**

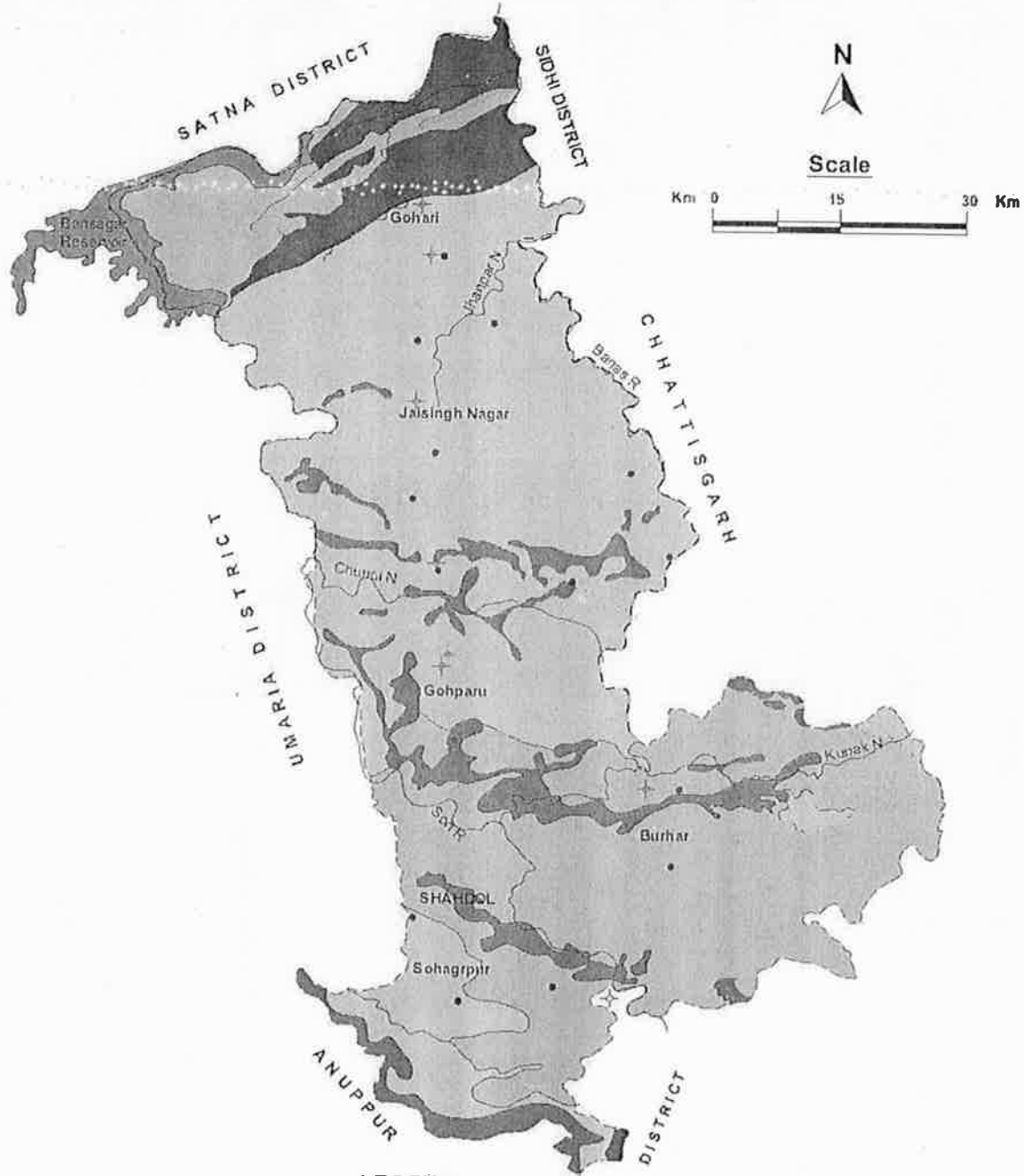
The District is located in the north-eastern part of the Deccan Plateau. It lies at the trijunction of Maikal Ranges of the Satpura Mountain, the foot of the Kaimur Range of the Vindhyan Mountain. In between these hill ranges lies the narrow valley of the Son and its tributaries.

Physiographically, structural landforms, represented by plateau and low lying plains with average altitude of 450m to 500m above MSL, are developed in northern, northeastern and northwestern and central parts of the district. In the southern part of the District, hills and highlands of Maikal Range and high to medium level (500m to 990m) plateau and flat topped, step like terraces are developed. Fluvial Land Forms represented by flood plains are present along the western boundary of the district. The maximum elevation of the area is 1123m above mean sea level at Singingarh Hill (23°03'40" : 81°27'37") in Satpura hills, in southern part of the district.

  
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**Fig. 2 : Hydrogeology, Shahdol District (M.P.)**



**Lithology**

- Basalt and Basaltic / Doleritic Intrusives
- Sandstone / Limestone Shale, Sandstone, Clay
- Sandstone and Shale with Coal - Seams
- Sandstone, conglomerate
- Pink granite with pegmatite
- Unclassified Metasediments - Phyllite, Schists, Quartzite, Dolomite and metabasics

**LEGEND**

**Yield Potential (in lps)**

- 1 - 3
- 1 - 5
- 1 - 3
- 1 - 4
- 1 - 3



River



Monitoring Well



Exploratory Well



High Yielding Exploratory Well



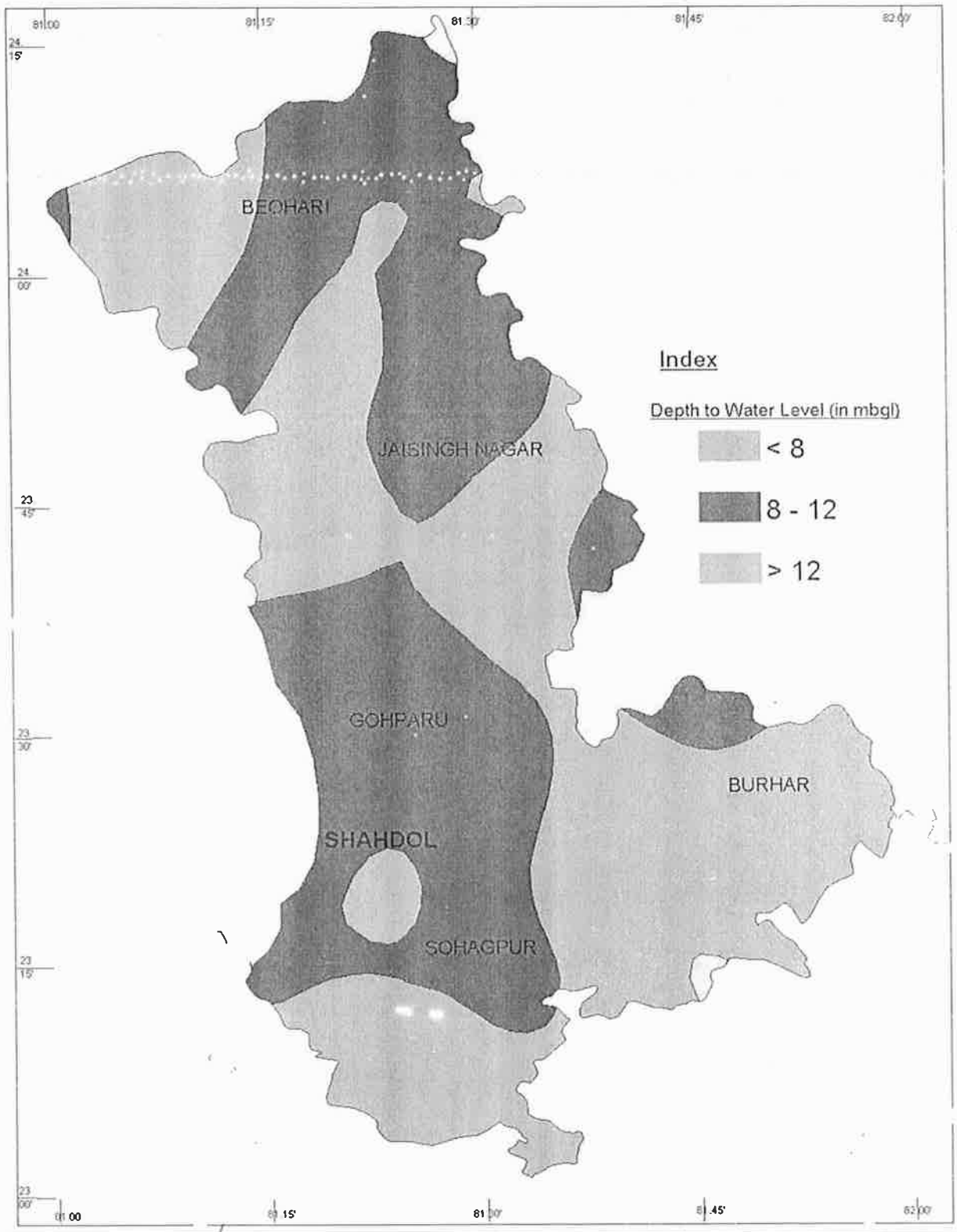
Free Flowing Exploratory Well



Groundwater Divide

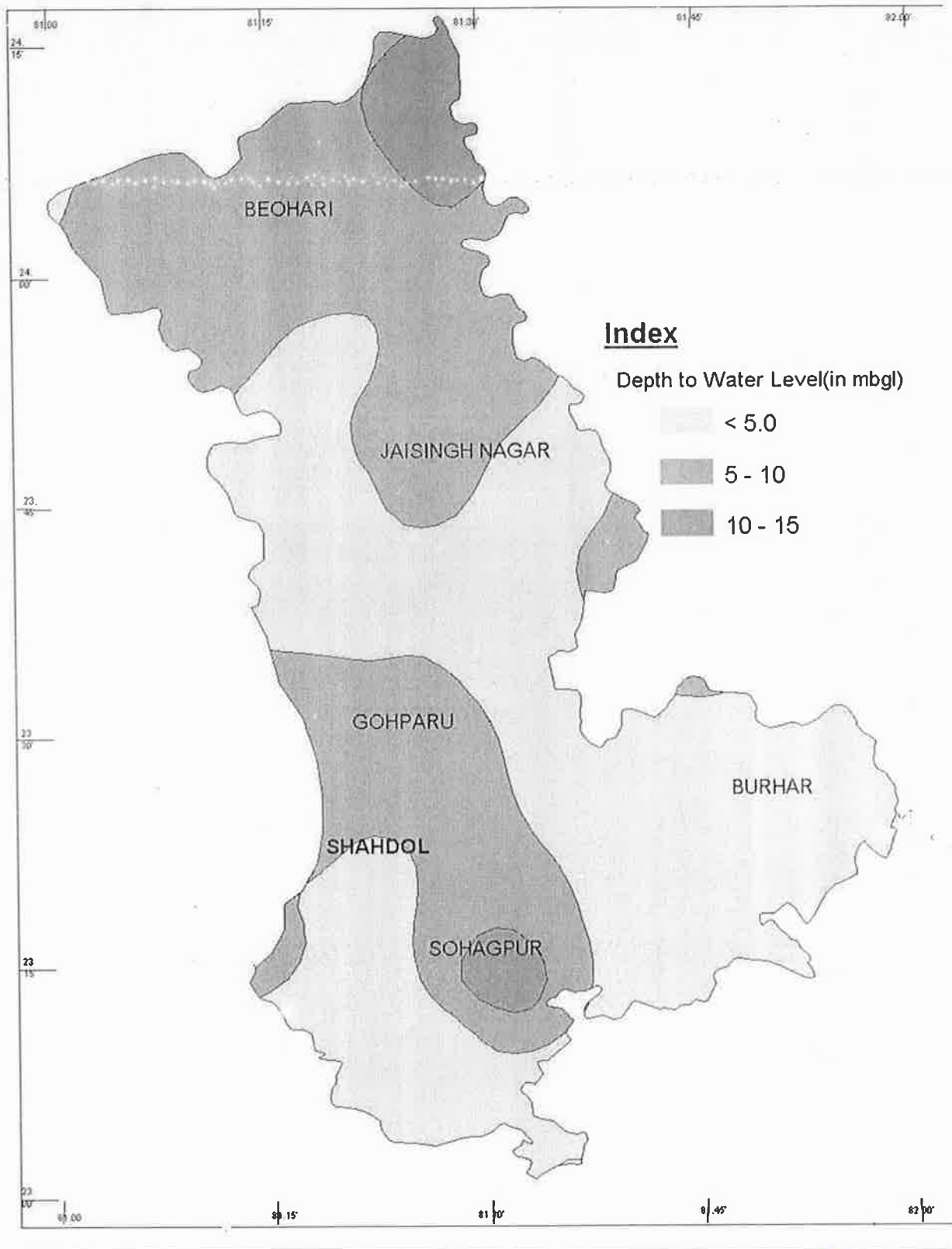
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**Depth to Water Level- Pre-Monsoon(May'2012) District Shahdol, M.P.**



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Depth to Water Level Post - Monsoon(Nov' 2012) District Shahdol, M.P.



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## CHAPTER - 14

### DETAILS OF ECO – SENSITIVE AREA, IF ANY, IN THE DISTRICT:

The eco sensitive zone that is under threat is the dense and thick forest of Shahdol district.

Recently, there have been proposals to demarcate the forest as protected, as the forest is declining rapidly.

The biodiversity may severely be threatened by negative effects as the aquatic and riparian fauna and flora are not adapted to cope with excessive rates of erosion and sedimentation.



## CHAPTER - 15

### IMPACT ON THE ENVIRONMENT DUE TO SAND MINING ACTIVITY AND MITIGATION MEASURES:

#### 1.0 INTRODUCTION

Environmental Management Plan is a guiding document for environmental impacts associated with the proposed projects. It is a guiding document for management of good environmental condition on the site & surrounding of the proposed sand mine. The Environmental Management Plan (EMP) has been formulated and integrated with the sand mine planning keeping in view overall scientific development of local habitat and the adverse impact that may be caused due to the sand mining operation. The Mining activities are no doubt essential for development & for providing better standard of life. But, there are environmental concerns related to mining activities. In order to maintain the balance in eco-system, legislations have been enacted, compliance of which would not only allow sustainable development of current needs but also leave options open for the posterity.

A scientific assessment of these impacts those are likely to influence the existing environmental scenario is needed. This could also facilitate in formulating a suitable environmental management plan depicting all mitigation measures. It can help in implementing the project in an eco-friendly manner.

The project activities influencing the following environmental attributes have been studied and their impacts on the following attributes have been assessed.

- Air Environment
- Water Environment
- Land Environment
- Noise Environment
- Biological Environment
- Socio-Economic Environment

#### 2.0 OBJECTIVES

- To ensure that sand extraction will be carried out in an eco friendly manner.
- To reduce the potential impacts of proposed sand mining extraction operations on the stream and riparian habitats of streams, river bank stability etc.
- To provide employment opportunities to the locals
- To restore the ecosystem to the maximum extent possible.
- Mining depth should be restricted to 3 meters and distance from the bank should be 1/4th of impact

river width and should not be less than 7.5 meters

### **3.0 ANTICIPATED IMPACTS AND MITIGATION MEASURES**

The pollution potential of the proposed project, its possible impacts on the surrounding environment during pre-operational and operational phases and the necessary management actions proposed for control and abatement of pollution are furnished hereunder.

#### **AIR ENVIRONMENT**

Anticipated impacts-

(A) Due to Haul road/Access Road

Plying of trucks from pulic road to river sand collection points needs access roads. Majority of such access roads are the same existing roads/tracks being used by pederstians/cart owners. Movement of heavy vehicles sometimes causes problems to cattle post, agriculture land, and human, habitations due to dust, noise and movement of public. These environmental problems are felt more as the area is rural in nature.

(B) Due to Mining process

Air pollution is likely to be caused at various stages of sand mining operations such as excavation, loading of material. Most of the dust will be generated from loading. This dust becomes air borne and gets carried away to surrounding area. The impact on air is mainly localized in nature as the dust particles are not carried to longer distances and the effect is felt within the core zone of the poject involving active Sand mining operations.

Mitigation Measures-

(A) Movement of the vehicls on the road will be increased; however, unmetalled road in the mining area will be sprinkled with water at regular intervals. In addition to prevent spillage by trucks over loading should be controlled along with spped limit. Water will be sprinkled on regular basis to control the dust generation.

(B) For Fugitive Dust Emission:

- To avoid fugitive dust emissions at the time of excavation, regular sprinkling of water will be done on regular basis.
- Sand is transported to the sites by road through trucks vovered by tarpaulin sheets.
- To minimize the vehicular pollution from the sand transporting vehicles, the following conditions are insisted to permit the vehicles of the transporters:
- The vehicles should have pollution control certificate (FUC) issued by appropriate authorities.
- Regular maintenance of transport vehicles and monitoring of vehicular emission levels

at periodical intervals.

- Green belt development along the haul roads, which will act as pollution sink.

## WATER ENVIRONMENT

### Anticipated impacts-

As the project activity is carried out in the dry part of river bed, none of the project activities will affect the water environment or riverine habitats. Project activities will not have any adverse effect on the physical components of the environment and therefore may not have any effect on the recharge of ground waters or affect the water quality. Monitoring of water quality will be checked yearly.

### Mitigation measures

- Mining is avoided during the monsoon season and at the time of floods. This will help in replenishment of sand in the river bed.
- Mining below subterranean water level will be avoided as a safe guard against environmental contamination and over exploitation of resources.
- River stream will not be diverted to form inactive channels.
- Utmost care will be taken to minimize or control leakage vehicles to be used for sand transportation.
- The washing of trucks in the river will be avoided.
- The contractor will follow all guidelines and rules for proper and scientific method of mining during the period of extracting the sand.

## LAND ENVIRONMENT

The type of mining and the characteristics of the particular mineral deposit both affect the degree to which mining disturbs the landscape. Sand Mining and allied activities will be done in the fluvial plain formed by river meandering. Mining of sand may cause a few environmental degradations.

### Anticipated impacts:

- Damage of river bank due to access ramps to river bed, may cause soil erosion.
- Destruction of river bank hinterland and ecological due to extraction of sand by probability of damage to the flood control bunds (built along the river side) due to heavy movements of vehicles over the bund to approach the mine area and further during transportation for sand from the mine area.
- Disposal of packing material, carried by the workers, would not be allowed. This packing material would include used sachet/gutkha/pan masala pouches.
- Movement of heavy vehicles sometimes cause problems to agricultural land, human

habitation, borehole users due to dust, noise and it also causes traffic hazards.

- Surface degradation due to road network.

#### Mitigation Measures-

- Safety distance will be left from both the bank of the river. (As guided by, MOEFCC guidelines on "Sustainable sand mining guidelines" & Geological Survey of India).
- No foreign material like polythene bag, jute bag and useless articles should be allowed to remain/spill in river bed and catchment area, or no pits/pockets will be allowed to be filled with such material.
- Minimum number of access roads to river bed for which cutting or river banks will be avoided and ramps are to be maintained.
- Care will be taken to ensure that ponding is not formed in the river bed.
- Mining will not exceed beyond the allowed extraction capacity.
- Green belt will be development along the haul road and the bank of rivers of mine premises and near the sand mining site. While selecting the plant species, preference will be given for planting native species of the area.

## NOISE ENVIRONMENT

### Anticipated impacts:

Noise environment in this project will be affected only by the equipment at the site and vehicular transportation. Since, slight increase in noise levels can be expected.

### Mitigation measures

- Minimum use of Horns at the village area.
- Timely maintenance of vehicles and their silencers to minimize vibration and sound.
- Phasing out of old and worn out trucks.
- Provision of green belts along the road networks.
- Care will be taken to produce minimum sound during sand loading.
- Use of Backhoe and ear plugs may be provided to the labors working at the site.

## BIOLOGICAL ENVIRONMENT

### Anticipated impacts:

#### A) Aquatic environment

Proposed mining will not have any possibility of disturbance of aquatic life as it is a dry bed.

#### B) Flora and Fauna

The mining activity will have insignificant affect on the existing flora and fauna. The project area is surrounded with agricultural land. It was found that the sand mining activity will not



have any significant impact on the biological environment of the region.

Mitigation measures:

- Improvement in river bank stability.
- Large woody debris in the riparian zone will be left undisturbed or replaced when moved and not be burnt.
- Vegetative debris will not be stored within the mine lease area.
- Operation and storage of heavy vehicles within riparian habitat will be restricted.
- Covering of loaded vehicles to reduce dust emission, which may harm surrounding agricultural crops and other plant species.
- Conservation of biological diversity of plants, birds and animals.
- Green belt Development and Bio-Diversity Preservation.
- Plantation activities will be carried out at the bank of the river and along the haul roads.
- This activity will help for maintaining ecology and environment of the area.

#### **GREEN BLET DEVELOPMENT**

- The implementation for development of green belt will be of paramount importance as it will not only add up as an aesthetic feature. But also act as a pollution sink.
- The species to be grown in the area should be dust to lerant and fast growing species so that permanent green belt is created.
- To stabilize the river bank erosion the plantation of native species of that area along the river bank.
- Apart from the green belt and aesthetic plantation for elimination fugitive of emission and noise control, all other plantation efforts shall be decided and executed with the assistance and co-operation of the local community. The following species may be considered primarily for plantation best suited for the prevailing climatic condition in the area:

- Neem (Azadirachta indica)
- Sissoo (Dalbergia sissoo)
- Mango (Mangifera indica)
- Peepal (Ficus religiosa)
- Bargad (Ficus benghalensis)
- Chirol (Holoptelea integrifolia)
- Karanj (Milletia pinnata)
- Khimi (Manilkara hexandra)
- Amaltas (Cassia fistula)

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- Jungle Jalebi (Pithecellobium dulce)
- Amla (Phyllanthus emblica)
- Bel (Aegle marmelos)

## SOCIO-ECONOMIC ENVIRONMENT

- Social welfare program like provision of medical facilities educational facilities, water supply for the employees as well as for nearby villagers will be taken.
- A well laid plan for employment of the local people has been prepared by giving priority to local people.
- Supplementing Govt. efforts in health monitoring camps, social welfare and various awareness programs among the rural population.
- Assisting social forestry program.
- Adoption of villages for general development.
- Development of facilities within villages like roads, etc.
- The management will contribute for the overall economy and social development of the area.
- In the recruitment process of the organization, local people will be given preference.

### Anticipated impacts and evaluation:

The project activities shall not have any adverse impacts on any of the common property resources of the village communities, as the sand mine lease area is not being used for any purpose by any section of the society in this region. There is no R & R involvement in this project. There is no land acquisition in this project.

- The results of the field survey conducted to understand the knowledge and perception of the people living around the project area gives a clear idea about the need for the project.
- A major portion of the houses in the study area are semi- pucca type structures. The water source to these areas is from the municipal connection and private bore wells and wells. The awareness level regarding the proposed mining activity is very high.
- The proposed mining activity is expected to provide stimulus to socioeconomic activities in the region and thereby accelerate further development processes.

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## CHAPTER - 16

### REMEDIAL MEASURE TO MITIGATE THE IMPACT OF MINING ON THE ENVIRONMENT:

#### **Air**

Mitigation measures suggested for air pollution controls are based on the baseline ambient air quality of the area.

The following measures are proposed to be adopted in the mines such as,

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust.
- Controlled blasting techniques shall be adopted.
- Water spraying on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be considered.
- Transport of material in trucks covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mine areas.
- Information on wind direction and meteorology will be considered while planning, so that pollutants, which cannot be fully suppressed by engineering technique, will be prevented from reaching the nearby agriculture area.
- Comprehensive green belt around overburden dumps has to be carried out to reduce to fugitive dust emissions in order to create clean and healthy environment.

#### **Water**

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

#### **Noise**

- Periodic maintenance of machinery, equipment shall be ensured to keep the noise generated at minimum.

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- Development of thick green belt around mining area and haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities. Workers and operators at work site will be provided with earmuffs.
- Conducting periodical medical check-up of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise level effects.
- Periodic noise monitoring at suitable locations in the mining area and nearby habitations to assess efficacy of adopted control measures.
- During the blasting, optimum Spacing, Burden and charging of holes will be made under the supervision of competent qualified mines foreman, Mate as approved by Director of Mines safety.

#### **Land Environment**

- Riparian vegetation should be developed that doesn't stress with changes over short period of time.
- Safety barrier zone should be left out in order to prevent quick sand condition or rapid erosion of river banks.
- Development of suitable greenbelt in safety and barrier zone.
- Waste dumps should be stabilized taking proper measures.
- Degradation of land environment should be checked by briefing the worker about routine works regarding cleanliness and proper mining measures.
- No such infrastructure or any construction should be done that might hinder the natural flow of the river.

#### **Biological Environment**

- Development of gap filling saplings in the safety barrier left around the quarry area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy leaves on the inactive mined out upper benches.
- Development of dense poly-culture plantation using local flora species in the mining area at conceptual stage.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.
- Construction of garland drains and settling tank to arrest silt wash off from lease area.
- Construction of retention walls around lower boundary of mining area to arrest silt wash off and roll down boulders.
- Retaining walls with weep hole will be constructed around the mine boundaries to arrest silt wash off.

  
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## CHAPTER-17

### DETAILS OF THE OCCUPATIONAL HEALTH ISSUES IN THE DISTRICT:

Open cast method involves dust generation by excavation, loading and transportation of mineral. Atsite, during excavation and loading activity, dust is main pollutant which affects the health of workers whereas environmental and climatic conditions also generate the health problems. Addressing the occupational health hazard means gaining an understanding of the source (its location and magnitude or concentration), identifying an exposure pathway (e.g., a means to get it in contact with someone), and determination of likely a receptor (someone receiving the stuff that is migrating).

Occupational hazard due to open cast mining mainly comes under the Physical hazards.

Possible physical hazards are as below: -

#### **Physical Hazards due to Mining Operations:**

Following health related hazards were identified in open cast mining operations to the workers:

**Light:** The workers may be exposed to the risk of poor illumination or excessive brightness. The effects are eye strain, headache, eye pain and lachrymation, congestion around the cornea and eye fatigue. In present case, the mining activity is done during day time only.

**Heat and Humidity:** The most common physical hazard is heat. The direct effects of heat exposure are burns, heat exhaustion, heat stroke and heat cramps; the indirect effects are decreased efficiency, increased fatigue and enhanced accident rates. Heat and humidity are encountered in hot and humid condition when temperatures and air temperatures increase in summer time up to 46.1°C or above in the river bed mining area.

**Eye Irritation:** During the high windy days in summer the dust could be the problems for eyes like itching and watering of eyes.

**Respiratory Problems:** Large amounts of dust in air can be a health hazard, exacerbating respiratory disorders such as asthma and irritating the lungs and bronchial passages.

**Noise Induced Hearing Loss:** Matching the main source of noise pollution at the mine site.

**Risk Level using Risk Matrix:** Risk Matrix is used to identify the level of risk involved in various hazards identified.

Shahdol District has 10 CHCs and 36 PHCs, which are located very well in each block of the district; district also has 2 hospitals, one in Shahdol and one in Burhar. All the CHCs are equipped with 1 ambulance and 25-30 beds respectively, while PHCS consist 10-15 beds and having no ambulance. District also has 185 ANM workers, who are well trained for first aid and primary care.

Malaria control in Madhya Pradesh is complex because of vast tracts of forest with tribal settlement. Fifty four million individuals of various ethnic origins, accounting for 8% of the total population of India, contributed 30% of total malaria cases, 60% of total falciparum cases and 50% of malaria deaths in the country. Ambitious goals to control tribal malaria by launching "Enhanced Malaria Control Project" (EMCP) by the National Vector Borne Disease Control Programme (NVBDCP), with the World Bank assistance, became effective in September 1997 in eight north Indian states. Under EMCP, the programme used a broader mix of new interventions, i.e. insecticide-treated bed nets, spraying houses with effective residual insecticides, use of larvivorous fishes, rapid diagnostic tests for prompt diagnosis, treatment of the sick with effective radical treatment and increased public awareness and IEC.

The strategic plan will serve as the guide to all the districts and the state of Madhya Pradesh to achieve the elimination goals. Success of this endeavour will be an important chapter in the history of control of infectious diseases.

Tuberculosis is a disease dreaded due to its social consequences and age old myths and misconceptions regarding its transmission and treatment. It is more often mistreated by the unqualified and untrained thus leading to patients suffering physically and monetarily. Elimination of Tuberculosis will entail mammoth efforts by each and every stakeholder involved. The launch of this document provides with the necessary roadmap and momentum, in direction of meeting the goals specified.



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## CHAPTER 18

### PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASE GRANTED IN THE DISTRICT:

Mining activities result in pollution of the environment. This requires protection of our environment. Plantation is the oldest technology for the restoration of the land damaged by the human activities as well as air pollution.

Trees are highly suitable for the detection and monitoring of the air pollutants and have been effectively used at various places

By planting trees we can achieve the dual purpose of bioaesthetics as well as mitigation of pollution. Proper planning and plantation scheme depends upon the magnitude and type of pollution, selection of pollution tolerant and dust capturing plants.

The plants should be ever green, large leaved, with rough bark, ecologically compatible, with low water requirement, requiring minimum care. capable to absorb pollutants, pollutant resistant, agro climatically suitable, fast growing, free from wind throw and breakage and with high pollution tolerance index. The species should be suitable to the climate, topography and soil. A minimum two rows of plantation will be carried out to minimize the effect of pollution. This would attenuate the pollutants level.

Table Recommended Plant species for green belt development/plantation.

S. No.	Botanical Name	Family	Common Name
1	Bougainvillea glabra choisy	Nyctagianaceac	Boogenbel
2	Hibiscus rose-sinensis L	Malvaceac	Gurhal
3	Nerium indicum Mill.	Apocynaceace	Kaner
4	Plumeria rubra L	Apocynaceac	Champa
5	Tabernaemontana divaricate (L) R. Br. Ex Roem. & Schult	Apocynaceace	Chandni
6	Ailanthus excels roxb.	Simaroubaceac	Maha nimbi
7	Alastonia scholaris (L.) R. Br.	Apocynaceac	Chitvan
8	Cassia Fistula L	Caesalpiniaceac	Amaltas
9	Butea monosperma (Lamk) taub	Fabaceac	Khakra/Palash
10	Nyctanthes arbour-tristis L.	Oleaceac	harsingar
11	Amdirachta indica A. Juss	Meliaceae	Neem

12	Ficus religiosa L	Moraceae	Pipal
13	Pterospernum acerifolium willd	Sterculiaccac	Kanak Champa
14	Teetona grandis L	Verbenaceae	Teak/ Sagun
15	Terminalia cattapa L	Cornbretaceae	Jangli badam
16	Ziziphus mauritiana Lamk.	Rhamnaceae	Bada ber

Plantation has been done by project proponent on Barrier Zone, Non Mining Area, Approach road, nearby river bank and ravines etc. as per the suggestions of the authority.

  
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## PLANTATION DONE BY MINING OFFICE SHAHDOL

### CHAPTER - 19

#### NEED FOR SAND REPLENISHMENT STUDY AND FACTORS TO BE CONSIDERED:

Environmental status of the mined out area may be affected badly if proper care is not taken to ensure sustainable extraction of sand from river bed. Proper study of the following factors must be taken into consideration to reveal the actual potential of sand deposition in river course after completion of periodical excavation annually. The main factors to be considered for the study of the replenishment potential of particular river course are:

Formation of sand comprises of the following:

- Catchment area and geographical strata.
- Erosion, weathering and transportation of load.
- Climatic conditions, precipitation.
- Geomorphology, physiographic manmade structures and activity details.

Deposition/sedimentation of material or sediment yield depends upon several factors like:

- Catchment area.
- Span of river/ flood plain.
- Travelling distance of suspended particles.
- Slope/gradient/ depth of water channel/meandering of river.
- Geology traversed.
- Climatic conditions.
- Tributaries/ confluence.
- Type/ stage of river and flow velocity.
- Flow during lean period.
- Tributaries/ confluence.
- Type/ stage of river and flow velocity.
- Flow during lean period.

(क) नदी या धारा और अन्य रेत के स्रोत के ब्योरे:

क्र. स.	जिला	नदी या धारा का नाम
1	शहडोल	सोन नदी
2		मुड़ना
3		सरफा
4		कुनुक
5		चुंदी
6		ओदरी
7		बनास
8		झापर
9		समधिन

(ख) रेत या कंकड़ या समग्र संसाधनो की उपलब्धता

- I -	जिला	नदी का नाम	खनिज की उपलब्धता
1	शहडोल	सोन नदी	1484421 घनमीटर
2		मुड़ना	निल
3		सरफा	निल
4		कुनुक	100000 घनमीटर
5		चुंदी	167460 घनमीटर
6		ओदरी	निल
7		बनास	91280 घनमीटर
8		झापर	68040 घनमीटर
9		समधिन	50000 घनमीटर
10		अखड़ा	58410 घनमीटर

$\frac{1}{4} \times \frac{1}{2}$  ftys esa fo|eku jsr ds [kuu iV~Vksa ds C;ksjs vkSj] lexz

क्र	ग्राम का नाम	तहसील का नाम	खसरा क्रमांक	रकबा (हेक्ट)	घोषित	घोषित करने का पत्र क्रमांक एवं दिनांक
1	चाका	बुढ़ार	853/1317	2.023	घोषित	पत्र क्रमांक 2782 दिनांक 31.12.2018
2	बटुरा		1279/1567	5	घोषित	पूर्व से घोषित।
3	चाका		853/1317	2.023	घोषित	पूर्व से घोषित।
4	पोड़ीकला	जयसिंह नगर	1801/2062	4.8	घोषित	पत्र क्रमांक 2783 दिनांक 31.12.2018
5	पोड़ीकला		2055/2063	3.9	घोषित	पत्र क्रमांक 2782 दिनांक 31.12.2018
6	भटिगवॉ खुर्द		91	4.8	घोषित	पत्र क्रमांक 1998 दिनांक 13.09.2018
7	मसीरा		39/534	20	घोषित	पत्र क्रमांक 134 दिनांक 30.01.2020
8	दतारी		191/242	0.829	घोषित	पत्र क्रमांक 2219 दिनांक 06.12.2019
9	पसौढ़		455/472, 291/471, 7/470	43.303	घोषित	पत्र क्रमांक 2216 दिनांक 06.12.2019
10	अटरिया		1, 52	4.49	घोषित	पत्र क्रमांक 138 दिनांक 30.01.2020
11	सेमरपाखा		223/559	6	घोषित	पत्र क्रमांक 2243 दिनांक 09.12.2019
12	बरकछ		266/1	10	घोषित	पत्र क्रमांक 31 दिनांक 10.01.2020
13	सनौसी		1453	1.457	घोषित	पत्र क्रमांक 137 दिनांक 30.01.2020
14	गंधिया		689	7.355	घोषित	पत्र क्रमांक 142 दिनांक 30.01.2020
15	दादर		567, 568	5	घोषित	पत्र क्रमांक 136 दिनांक

						30.01.2020
16	भांगजीर		22, 178	3.484	घोषित	पत्र क्रमांक 135 दिनांक 30.01.2020
17	दरैन		515/1, 315	2.661	घोषित	पत्र क्रमांक 141 दिनांक 30.01.2020
18	बराछ		2524	4.734	घोषित	पत्र क्रमांक 2218 दिनांक 06.12.2019
19	बराछ		2126/1, 2490, 2491	8	घोषित	पत्र क्रमांक 132 दिनांक 30.01.2020
20	बराछ		2526, 2573, 2575/1, 626/1, 616	8	घोषित	पत्र क्रमांक 130 दिनांक 30.01.2020
21	सौंता		380	2.63	घोषित	पत्र क्रमांक 191 दिनांक 04.02.2020
22	पतेराटोला		139/202	4.5	घोषित	पत्र क्रमांक 162 दिनांक 01.02.2020
23	तगावर	जयसिंह नगर	113	1.404	घोषित	पत्र क्रमांक 139 दिनांक 30.01.2020
24	नवागाँव		1, 2, 3	4.973	घोषित	पत्र क्रमांक 133 दिनांक 30.01.2020
25	भुरसी	गोहपारु	15	4	घोषित	पत्र क्रमांक 126 दिनांक 14.01.2019
26	लोढ़ी		64	3.173	घोषित	पत्र क्रमांक 301 दिनांक 23.01.2019
27	रसपुर		433	4	घोषित	पत्र क्रमांक 2156 दिनांक 03.10.2018
28	बोडिडहा	ब्यौहारी	233	4.5	घोषित	पत्र क्रमांक 100 दिनांक 14.01.2019
29	बोडिडहा		165	2.314	घोषित	पत्र क्रमांक 2215 दिनांक 06.12.2019



30	ब्योंहारी		197, 203, 187, 771 (180 का अंशभाग (	12.177	घोषित	पूर्व से घोषित।
31	जैतपुर	जैतपुर	576	2.023	घोषित	पत्र क्रमांक 133 दिनांक 30.01.2020
32	कमता		685	4	घोषित	पत्र क्रमांक 1741 दिनांक 17.06.2020
33	कोल्हुवा		1	4.046	घोषित	पत्र क्रमांक 1748 दिनांक 17.06.2020
34	लुकामपुर		1, 158, 159	3.641	घोषित	पत्र क्रमांक 1749 दिनांक 17.06.2020
35	लालपुर	सोहागपुर	2084	5	घोषित	पूर्व से घोषित।
36	रोहनिया		167	5	घोषित	पूर्व से घोषित।
37	पटासी		28	5	घोषित	पूर्व से घोषित।
38	पैरीबहरा	जैतपुर	718, 559, 572	10.076	अघोषित	वनमण्डलाधिकारी दक्षिण शहडोल से पत्र क्रमांक 1823 दिनांक 27.06.2020 से पुनः जानकारी मंगाई गई है।
39	पड़रिया		994	4.666	अघोषित	वन सीमा से 250 मीटर की परिधि में आने के कारण आयुक्त शहडोल को पत्र क्रमांक 238 दिनांक 18.02.2020 से प्रस्ताव भेजा गया है।
40	पोड़ीकला	जयसिंह नगर	1801/2062, 2055/2063, 1857/2064	75.523	अघोषित	10 किलोमीटर की परिधि में नेशनल पार्क है। वनमण्डलाधिकारी उत्तर शहडोल से पत्र क्रमांक 1823 दिनांक 27.06.2020 से पुनः जानकारी मंगाई गई है।

						1824दिनांक 27.06.2020 से पुन :जानकारी मंगाई गई है।
41	सेमरपाखा	जयसिंह नगर	296/552	4	अघोषित	खसरे में राजस्व वन अंकित होने के कारण तहसीलदार जयसिंहनगर से पत्र क्रमांक 167 दिनांक 03 02.2020.से जानकारी मंगाई है।
42	सोनटोला (हरहा टोला)	गोहपारु	899/982	4.8	घोषित	वन सीमा से मीटर की 250 परिधि में आने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक दिनांक 238 व भेजा से प्रस्ता 18.02.2020 गया है।
43	अमझोर		470, 243, 820, 843	5.26	अघोषित	वन सीमा से मीटर की 220 परिधि में आने के कारण महोदय शहडोल को आयुक्त दिनांक 238 पत्र क्रमांक 18.02.2020से प्रस्ताव भेजा गया है।
44	विशनपुरवा		363	3	अघोषित	वन सीमा से की मीटर 150 परिधि में आने के कारण महोदय शहडोल को आयुक्त दिनांक 238 पत्र क्रमांक व भेजा से प्रस्ता 18.02.2020 गया है।
45	अंकुरी		617	4	अघोषित	वन सीमा से बफर जोन से लगे होने के कारण आयुक्त महोदय शहडोल को पत्र क्रमांक दिनांक P. 238

						व भेजा से प्रस्ता 18.02.2020 है। गया
46	सेमरा		412, 497	4.047	अघोषित	वन सीमा से मीटर की 200 परिधि में आने के कारण महोदय शहडोल को आयुक्त दिनांक 238 पत्र क्रमांक व भेजा से प्रस्ता 18.02.2020 गया है।
47	रसपुर	ब्यौहारी	1364, 433, 1316	23	अघोषित	10 किलो मीटर की परिधि में नेशनल पार्क है ।
48	उक्सा		497	5	अघोषित	वनमण्डलाधिकारी उत्तर
49	झरौसी 1		598	6.163	अघोषित	शहडोल से पत्र क्रमांक 1824 दिनांक 27.06.2020 से पुन :
50	झरौसी 2		1492	9.203	अघोषित	जानकारी मंगाई गई है।

Annexure –I

Description of Main River & their drainage system

S.N	Name of River	Drainage area (in KM)	% of drainage area in district
1	Son river	18500	75
2	Mudna	126	70
3	Sarfa	405	100
4	Kunuk	880	97
5	Chundi	550	92
6	Odari	464	82
7	Banas	360	36
8	Jhapar	295	100
9	Samdhin	310	100


**Main characteristics of Main River or stream**

S.N	Name of river or stream	Total length in district (in km)	Place of origin	Height at place of origin (in mt.)
1	Son river	210	Sonmuda amarkantak	1,048
2	Mudna	42	kelmaniya	571
3	Sarfa	39	Samatpur	607
4	Kunuk	69	Kunuk Chhattisgarh	635
5	Chundi	52	Bhumka Chhattisgarh	509
6	Odari	44	Kavarpur Chhattisgarh	540
7	Banas	102	Chhattisgarh	-
8	Jhapar	25	Bijha	414
9	Samdhin	-	-	-

**Annexure -III**

**Main characteristics of important river or stream**

Recommended area/part of river or stream for mineral saving.	Length of area for mineral savings (in mt)	width of area for mineral savings (in mt)	Recommended area for mineral saving (in sq. km)	Mineable mineral capacity (in Mt.) 60 %of total mineral capacity.
Nil	Nil	Nil	Nil	Nil

  
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**Annexure -IV**

**Mineral Capacity**



<b>Boulder (in Mt.)</b>	<b>Sand (in Mt.)</b>	<b>Bajari (in Mt.)</b>	<b>Total mineable mineral capacity (in Mt.)</b>
-	3448276	-	5803190

Annexure -V

**Annual Deposition**

<b>Boulder (in Mt.)</b>	<b>Sand (in Mt.)</b>	<b>Bajari (in Mt.)</b>	<b>Total mineable mineral capacity (in Mt.)</b>
-	3448276	-	5803190

Annexure -VI

**Annual Deposition**

<b>S N</b>	<b>Rive r or Stre am</b>	<b>Recommende d part of river or stream for mineral saving</b>	<b>length of Recommen ded area for mineral saving (in mt.)</b>	<b>Width of Recommen ded area for mineral saving (in mt.)</b>	<b>Recommen ded area for mineral saving (in sq. km)</b>	<b>Mineable Quantity of total mineral capacity (in Mt.)</b>	<b>Latitude &amp; Longitud e of propodes area &amp; height to sea level</b>
1	NIL	NIL	NIL	NIL	NIL	NIL	NIL

Annexure -VII

**Details of Sand/M-Sand Sources**

a) River:

<b>River Name/M-Sand Plant</b>	<b>Total Stretch of River (in KM.)</b>	<b>Type of River (Perennial or Non-Perennial)</b>
Son	210	Perennial
Murna	42	Non-Perennial
Sarfa	39	Non-Perennial
Kunook	69	Perennial

Chundi	52	Non-Perennial
Odri	44	Perennial
Banass	102	Perennial
Jhapar	25	Non-Perennial
Samdhin		Non-Perennial

b) De-Siltation Location: (Lakes/Pond/Dams etc.)


Name of reservoir/ Dams	Maintain/Controlled by state Govt/PSU etc.	Location	District	Tahsil	Village	Size (HA)
Nil	Nil	Nil	Nil	Nil	Nil	Nil

c) Patta Land/Khatedari Land:

Owner	Sy. No.	Area (Ha)	District	Tahsil	Village	Agricultural Land (Yes/No)
Nil	Nil	Nil	Nil	Nil	Nil	Nil

d) M-Sand Plants:

Plant Name	Owner	District	Tahsil	Village	Geo Location	Quantity Tones/ Annum
Nil	Nil	Nil	Nil	Nil	Nil	Nil

  
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List of potential Sand Mining Area (Existing & Proposed) Rivers

River Details	Lease Details	Area (in Ha)	Distance (In K.M.) From PA/BR / WC	Distance From Forest Area (in K.M.)	Mining Lease within 500 mtr. (If yes cluster area)	Total excavation in tones / Annum considering digging depth max. as 3 mtr.	Mineral to be mined (Sand/Bajri/ RBM etc.)	Existing/ Proposed
--	--	--	--	--	--	--	--	--

Patta Lands/Khatedari Land: (Existing & Proposed)

Owner	Sy. No.	Area	District	Tahsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & Proposed)

Name of reservoir / Dams	Maintain/Controlled by state Govt/PSU etc.	Location	District	Tahsil	Village	Size (HA)	Quantity MT /Year	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

M-Sand Plants: (Existing & Proposed)

Plant Name	Owner	District	Tahsil	Village	Geo Location	Quantity Tones/ Annum	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

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**Annexure -IX****Cluster & Contiguous Cluster details Cluster**

River Name	Cluster No.	Lease No.	Location (Riverbed/ Patta Land)	Village	Area (in HA)	Total Excavation (Ton)	Total Mineral Excavation (Ton)
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**Contiguous Cluster**

River Name	Contiguous Cluster No.	Cluster No.	Number of leases in the cluster	Location (Riverbed / Patta Land)	Village	Area of cluster (HA)	Total Mineral Excavation (Ton)
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**Annexure -X****Transportation Routes for individual Sand Quarry and Sand Quarry in Cluster**

For Leases: Lease No.	Transportation Route No.	Number of tippers/day of lease	Number of tippers/day of all the lease on routes	Length of Routs in K.M.	Type of road (Black Topped / unpaved)	Recomm endation for road (Black Topped/ unpaved)	The road will be Constructe d by Govt./ Lease Owner	Route Map & Locati on
Raspur 2	SH- 09, 10,43	0	0	135,85, 3	Black Topped	Black Topped	Constructe d by Govt	-
Kamta	SH-	10	10		CC Road	CC Road	Constructe d by Govt	-
Bhatigawa n Khurd	SH-	0	0		Black Topped	Black Topped	Constructe d by Govt	-
Podikala 3	SH- 09, 10,43	15	15	135,85, 3	CC Road	CC Road	Constructe d by Govt	-
Chaka	NH - 43,78	15	15	15	CC	CC Road	Constructe d by Govt	-


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					Road		d by Govt	
Batura	NH - 43,78	0	0	12	CC Road	CC Road	Contracte d by Govt	-
Rohaniya	SH- 09A,NH 45	20	20		Black Topped	Black Topped	Contracte d by Govt	-
Boddiha 1	SH- 09, 10,43	30	30	135, 85, 3	Black Topped	Black Topped	Contracte d by Govt	-
Lalpur	NH - 43,78	0	0	32	CC Road	CC Road	Contracte d by Govt	-
Bhursi	SH-	0	0		Black Topped	Black Topped	Contracte d by Govt	-
Patasi	SH-	10	10		Black Topped	Black Topped	Contracte d by Govt	-

**For Cluster:**

Cluster No.	Transportation Route No.	Number of tippers/day of Cluster	Number of tippers/day of all the Cluster on routs	Length of Routs in K.M.	Type of road (Black Topped/unpaved)	Recommendation for road (Black Topped/unpaved)	The road will be Contracted by Govt./ Lease Owner	Route Map & Location
Beohari	SH- 09,10	45	45	44,48	Black Topped	Black Topped	Contracted by Govt	-
Jaisinghnagar	SH- 03] 08] 09,10			44,5	Black Topped	Black Topped	Contracted by Govt	-
Sohagpur	SH- 09,55 45	30	30	44,	Black Topped	Black Topped	Contracted by Govt	-
Burhar	SH- 09,78,43	15	15		CC Road	CC Road	Contracted by Govt	-
Jaitpur	SH- 09,10	10	10		CC Road	CC Road	Contracted by Govt	-

  
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**Annexure - XI**

**Final List of potential Sand Mining Area (Existing & Proposed) Rivers**

River Details	Lease Details	Area (in Ha)	Distance (in K.M.) From PA/BR/WC	Distance From Forest Area (in K.M.)	Mining Lease within 500 mtr. (If yes cluster area)	Total excavation in (MT/Yr)(Min e depth max. as 3 mtr.)	Mineral to be mined (Sand/Bajri/ RBM etc.)	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**Patta Lands/Khatedari Land: (Existing & Proposed)**

Owner	Sy. No.	Area	District	Tahsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & Proposed)**

Name of reservoir/ Dams	Maintain/Controlled by state Govt/PSU etc.	Location	District	Tahsil	Village	Size (HA)	Quantity MT /Year	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**M-Sand Plants: (Existing & Proposed)**

Plant Name	Owner	District	Tahsil	Village	Geo Location	Quantity MT/ Annum	Existing/ Proposed
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

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

Annexure -XII

**Cluster & Contiguous Cluster details Cluster:**

River Name	Cluster No.	Lease No.	Location (Riverbed/Patta Land)	Village	Area (in HA)	Total Excavation (Ton)	Total Mineral Excavation (Ton)
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**Contiguous Cluster:**

River Name	Contiguous Cluster No.	Cluster No.	Number of leases in the cluster	Location (Riverbed/Patta Land)	Distance between clusters	Village	Area of cluster (HA)	Total Mineral Excavation (Ton)
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Annexure -XIII


**Final Transportation route for individual Sand Quarry & sand quarry Cluster:**

**For Leases**

Lease No.	Transportation route No.	No. of tippers /day of lease	No. of tippers /day of all the lease on route	Length of route in KM	Type of Road (Black topped/unpaved)	Recommendation for road (Black topped/unpaved)	The road will be constructed by govt./lease owner	Route map & Location
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

**For Cluster**

Cluster No.	Transportation route No.	No. of tippers /day of Cluster	No. of tippers /day of all the Cluster on route	Length of route in KM	Type of Road (Black topped/unpaved)	Recommendation for road (Black topped/unpaved)	The road will be constructed by govt./lease owner	Route map & Location
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

  
 Assessment Authority, M.P.  
 (EPCO)  
 Paravaran Parisar  
 E-5, Arera Colony, Bhopal (M.P.)

जिले में स्थित रेत खदानों में रेत पुनर्भरण की जानकारी

जिले में मानसून प्रारम्भ की तिथि/माह	जिले में मानसून अवसान की तिथि/माह	नदी का नाम	खदान का नाम	रेत खदान की लंबाई (मी. मे)	रेत खदान की चौड़ाई (मी. मे)	रेत खदान की गहराई (मी. मे)	मानसून के पूर्व उपलब्ध खनिज रेत की मात्रा (घन मी मे)	मानसून के पश्चात उपलब्ध खनिज रेत की मात्रा (घन मी मे)	प्रतिवर्ष अनुमानित उत्पादन की मात्रा (घन मी मे)	विगत 03 वर्षों में उत्पादित खनिज रेत मात्रा (प्रतिवर्ष घन मी. मे)
30.6.20 वर्षा प्रारम्भ	30.9.20									
		कुनुक	जैतपुर	2000	10	2.53	50575	50575	50575	--
		कुनुक	कमता	2000	20	2.5	100000	100000	100000	--
		कुनुक	पैरीबहरा	5000	20	2.519	251900	251900	251900	--
		कुनुक	कोल्हुवा	2000	20	2.528	101150	101150	101150	--
		कुनुक	लुकामपुर	3000	15	2.022	91025	91025	91025	--
		सोन	लालपुर	5000	10	1.23	61500	61500	61500	184500
		सोन	रोहनिया	5000	12	2.36	142000	142000	142000	309000
		सोन	पटासी	5000	12	1.28	95000	95000	95000	--
		सोन	बटुरा	5000	15	1.9	142500	142500	142500	--
		सोन	चाका	2000	30	1	60000	60000	60000	--
		सोन	हरहाटोला	4000	20	1.25	100125	100125	100125	--
		सोन	विशनपुरवा	3000	15	2	90000	90000	90000	--
		सोन	अंकुरी	4000	10	3	120000	120000	120000	--
		सोन	सेमरा	4000	20	1.26	101175	101175	101175	--
		सोन	पौंडीकला	9440	80	3	2265690	2265690	2265690	--
		सोन	सेमरपाखा	4000	10	3	120000	120000	120000	--
		सोन	सेमरपाखा	6000	15	2	180000	180000	180000	--

State Level Environment Impact Assessment Authority, M.P. (EPCO)  
Parvatan Parisar  
E-8, Arera Colony, Bhopal (M.P.)



	सोन	पौडीकला	4000	20	1.8	144000	144000	144000	--
	सोन	पौडीकला	3000	20	1.95	117000	117000	117000	--
	सोन	चरकवाह	4000	15	2	120000	120000	120000	--
	झापर	बराछ	4000	12	2.95	142020	142020	142020	--
	झापर	बराछ	8000	12	2.5	240000	240000	240000	--
	झापर	बराछ	8000	12	2.5	240000	240000	240000	--
	झापर	बरकछ	1000	12	2.5	300000	300000	300000	--
	बलौड़	सनौसी	1000	8	2.42	36425	36425	36425	--
	झापर	रसपुर	2300	12	2.5	69000	69000	69000	--
	झापर	रसपुर	4000	12	1.41	68040	68040	68040	--
	बनास	बौद्धिहा	4000	10	1.78	71280	71280	71280	--
	बनास	बौद्धिहा	2000	10	1	20000	20000	20000	--
	झापर	उक्सा	5000	10	3	150000	150000	150000	--
	समधि न	खामडांड 0	1000	5	1	50000	50000	50000	--
	झापर	झरौसी 1	6000	12	2.67	184890	184890	184890	--
	झापर	झरौसी 2	9000	10	3	276090	276090	276090	--
	चूंदी	गंधिया	7000	10	2.62	183875	183875	183875	--
	चूंदी	भटिगवाखु र्द	4000	10	1.85	72270	72270	72270	--
	चूंदी	दादर	5000	12	2.08	125000	125000	125000	--
	लेडार	भांगजीर	3000	14	2.07	87100	87100	87100	--
	जग भुल्ला	दरैन	2600	12	2.13	66525	66525	66525	--
	मौस मी नाला	सौंता	2600	10	2.55	39450	39450	39450	--
	मौस मी नाला	पतेराटोला	1400	12	1.25	21060	21060	21060	--
	मौस मी नाला	तगावर	4500	12	1.25	67500	67500	67500	--
	चूंदी	नवागाँव	4900	13	1.95	124325	124325	124325	--
	अखड़ा	भुरसी	4000	12	1.21	58410	58410	58410	--

State Level Environment Impact  
Assessment Authority, M.P.  
(E.O.C.I.)  
Palyak, Patna  
B.P. 2, Patna, Bihar (M.P.)

		र								
		चूंदी	लौड़ी	3100	12	2.55	95190	95190	95190	--

*(Handwritten Signature)*

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

## CHAPTER - 20

### RISK ASSESSMENT & DISASTER MANAGEMENT PLAN:

The Disaster Management Plan (DMP) is supposed to be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated and personnel training through rehearsals/induction conducted by the respective department from time to time.

#### **General Responsibilities during an Emergency**

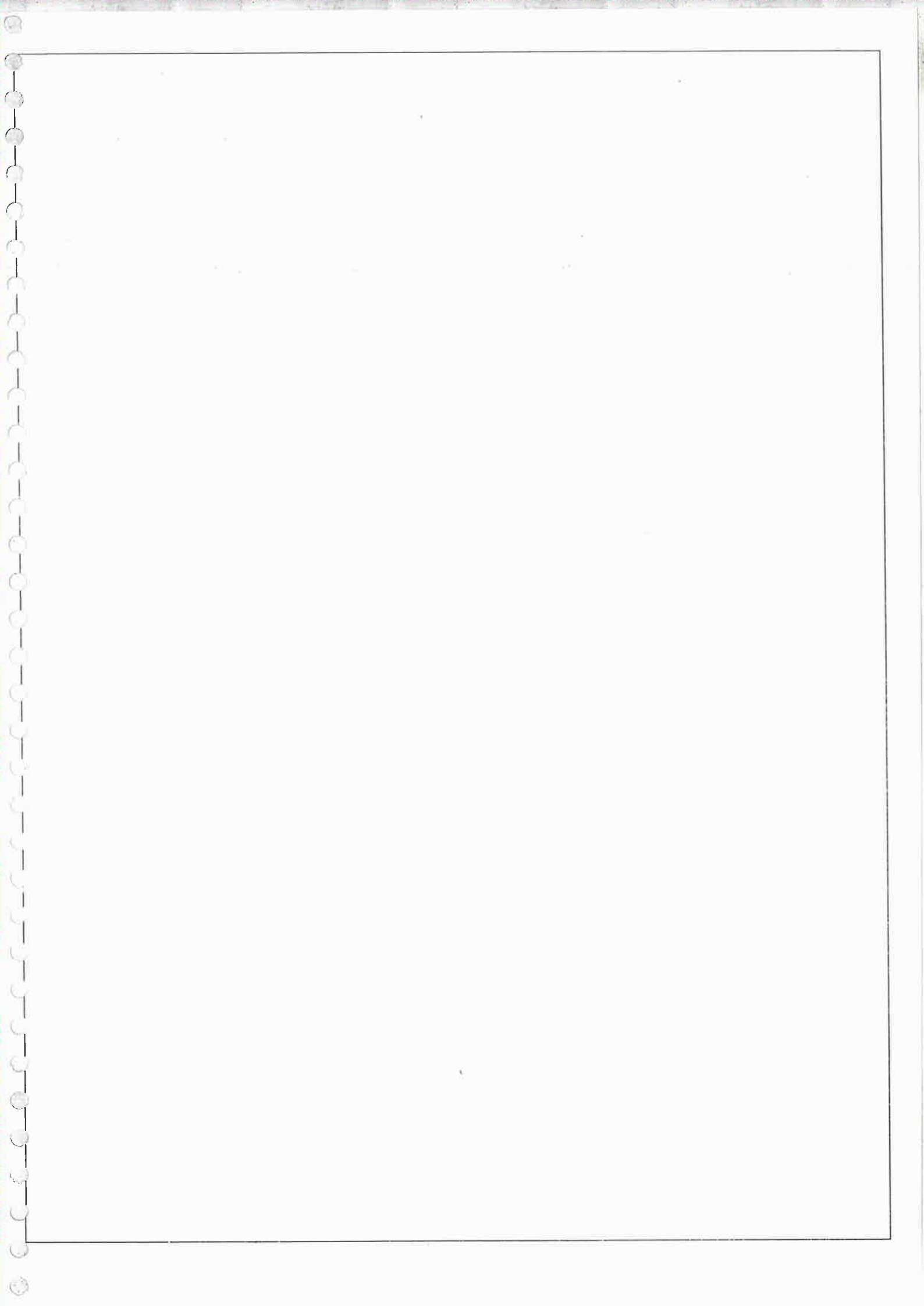
During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the workers in-charge, should adopt safe and emergency shut down and attend any prescribed duty as essential employee. If no such responsibility is assigned, he should adopt a safe course to assembly point and await instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

#### **Co-ordination with Local Authorities**

The mine manager who is responsible for emergency will always keep a jeep ready at site. In case any eventualities the victim will be taken to the nearby hospitals after carrying out the first aid at site. A certified first aid certificate holder will be responsible to carry out the first aid at site. The mine manager should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shop, district revenue authorities etc., and use them efficiently during the case of emergency.

*Abdul*

State Level Emergency  
Director, Government of India  
New Delhi  
2018





**598वीं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की बैठक**  
**दिनांक 07 अक्टूबर 2022**

SEAC meeting dated 07/10/22	जिले की जिला सर्वेक्षण रिपोर्ट में तालिका क्र०. निरंक Annexure-III पेज न०. 60 से 64 में माइनेबल मिनरल पोटेन्शियल (घनमीटर में) 60% टोटल मिनरल पोटेन्शियल, लीजवार, लंबाई, चौड़ाई एवं गहराई के साथ दर्शाया है एवं विगत 03 वर्षों के उत्खनित रेत की मात्रा का लीजवार पोटेन्शियल दिया गया है। जिससे ज्ञात हो सके कि उस स्थल पर खदान का मिनरल पोटेन्शियल विगत 03 वर्षों में कितना रहा।
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आज दिनांक 07/10/22 को जिला सर्वेक्षण रिपोर्टों के प्रस्तुतीकरण के दौरान संचानालय, भौमिकी एवं खनिकर्म, विभाग भोपाल से श्री पी.पी. राय, एवं श्री श्री प्रमोद शर्मा, खनिज अधिकारी, के साथ उपस्थित रहे।

चर्चा उपरांत समिति ने पाया कि खनि. अधिकारी, कार्यालय कलेक्टर, (खनिज शाखा) जिला— शहडोल के पत्र क्र० 848, दिनांक 04/10/22 के माध्यम से मिनरल पोटेन्शियल की गणना में आवश्यक संशोधन कर रेत की 60 प्रतिशत माइनेबल पोटेन्शियल (रेत खनन हेतु) मीट्रिक टन यूनिट में प्रस्तुत कर दी गई है मिनरल पोटेन्शियल की गणना दर्शाने वाली टेबल में आवश्यक संशोधन कर रेत की 60 प्रतिशत माइनेबल पोटेन्शियल (रेत खनन हेतु) मीट्रिक टन यूनिट में प्रस्तुत कर दी गई है।

समिति ने जिला सर्वेक्षण रिपोर्टों के प्रस्तुतीकरण एवं परीक्षण में पाया कि रेत की कई स्वीकृत खदानों में 60 प्रतिशत माइनेबल पोटेन्शियल तथा विगत 03 से 05 वर्षों के उत्पादन की मात्रा में 10 गुना से भी अधिक का अंतर है जिसके संदर्भ में उपस्थित खनन अधिकारियों द्वारा बताया गया कि विगत 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 चर्चा उपरांत निर्णय लिया कि रेत खनन के ऐसे प्रकरण जहां 60 प्रतिशत माइनेबल पोटेन्शियल तथा विगत 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 खनन योजना में उस स्थल की सारगर्भित रिप्लेनिशमेंट स्टडी प्रस्तुत की जाये तथा 60 प्रतिशत माइनेबल पोटेन्शियल के विरुद्ध 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।

## **2. अन्य गौण खनिज – रेत को छोड़कर, जिला शहडोल**

कार्यालय कलेक्टर के पत्र क्र०. 19 दिनांक 07/10/2022 के माध्यम से जिला सर्वेक्षण रिपोर्ट— शहडोल (अन्य गौण खनिज) की जिला सर्वेक्षण रिपोर्ट उप समिती का अनुमोदन एवं जिला पोर्टल पर रखने के उपरांत प्रस्तुत की गई है।

**598वीं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की बैठक  
दिनांक 07 अक्टूबर 2022**

<b>Mineral</b>	<b>Other than Sand</b>
Earlier DSR Discussed	SEAC 592 <sup>th</sup> Meeting dated 06.09.22
Approved /or recommend for Updation (if Updation then elaborate issues)	Recommended for DSR Updation ( <b>Other than Sand</b> )
Deliberation in the SEAC 591 <sup>th</sup> Meeting dated 27.08.22	<p><b>राज्य स्तरीय मूल्यांकन समिति की 591 वीं बैठक दिनांक 27/08/22</b> आज दिनांक 06/9/22 को जिला सर्वेक्षण रिपोर्टों के प्रस्तुतीकरण के दौरान संचानालय, भौमिकी एवं खनिकर्म, विभाग भोपाल से श्री पी.पी. राय एवं श्री प्रमोद शर्मा, खनिज अधिकारी के साथ उपस्थित रहे । जिले की संशोधित शहडोल जिला सर्वेक्षण रिपोर्ट (गौण खनिज) में पाया गया कि:-</p> <ol style="list-style-type: none"> <li>1. पेज 12 टेबल न0.निरंक की तालिका में 16 बिन्दुओं की जानकारी नहीं दी गयी है। जिससे लीज के अक्षांश -देशांश की जानकारी भी नहीं है।</li> <li>2. लीजवार हरित क्षेत्र विकास की जानकारी भी नहीं दी गयी है।</li> <li>3. जिले में उपलब्ध कुल खनिज भण्डार की जानकारी देवें।</li> <li>4. जिले में उपलब्ध कुल खनिज की क्वालिटी /ग्रेड की जानकारी देवें।</li> <li>5. पिछले 03 वर्षों के दौरान मांग और पूर्ति की जानकारी देवें।</li> <li>6. जिले में पारिस्थितिकी, संवेदनशील क्षेत्र (ESZ) यदि कोई हो तो जानकारी देवें।</li> </ol> <p>चर्चा उपरांत समिति की यह अनुशंसा है कि शहडोल की जिलासर्वेक्षण रिपोर्ट को समिति की सुझाई गयी उपरोक्त अनुशंसाओं के तारतम्य में अद्यतन (अपडेट) किया जाये तथा संशोधित जिला सर्वेक्षण रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय की अधिसूचना दिनांक 25/07/18 के अनुसार पुनः प्रस्तुत की जावे तत्संबंध में उपस्थित खनिज अधिकारी को भी उपरोक्त संदर्भ में समझाईश दी गयी।</p>
Revised DSR received from District Collectorate ( Mining)	Vide District Collectorate ( Mining) Office, Shahdol , No. 19 dated 07.10.2022
Hard Copy Soft Copy or both	Hard copy
SEAC meeting dated 07/10/22	<ul style="list-style-type: none"> <li>• जिले की जिला सर्वेक्षण रिपोर्ट के टेबिल क्रमांक-9 (पेज क्र0. निरंक) में खदान की जानकारी निर्धारित प्रपत्र में दे दी गई है।</li> <li>• जिले में हरित क्षेत्र के विकास हेतु पूर्व के वर्षों में लीज धारकों द्वारा किये गये वृक्षारोपण की जानकारी, संख्या एवं प्रजातियों की जानकारी जिला सर्वेक्षण रिपोर्ट टेबिल क्रमांक-9 (पेज क्र0.निरंक ) में दे दी गई है।</li> </ul>

आज दिनांक 07/10/22 को जिला सर्वेक्षण रिपोर्टों के प्रस्तुतीकरण के दौरान संचानालय, भौमिकी एवं खनिकर्म, विभाग भोपाल से श्री पी.पी. राय, एवं श्री प्रमोद शर्मा, खनिज अधिकारी के साथ उपस्थित रहे।

समिति ने पाया कि खनि. अधिकारी,कार्यालय कलेक्टर,(खनिज शाखा) जिला- शहडोल के पत्र क्र0 19 दिनांक 07/10/22 के माध्यम खदान की जानकारी निर्धारित प्रपत्र में दे दी गई है तथा लीज

## 598वीं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की बैठक दिनांक 07 अक्टूबर 2022

धारकों द्वारा किये गये वृक्षारोपण की जानकारी, पौधों की संख्या एवं प्रजाति भी प्रस्तुत कर दी गई है। अतः समिति शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज – रेत को छोड़कर) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये।

### (ह) अन्य गौण खनिज, जिला - बैतूल

Mineral	Other than Sand
Earlier DSR Discussed	SEAC 595 <sup>th</sup> Meeting dated 22.09.22
Approved /or recommend for Updation (if Updation then elaborate issues)	Recommended for DSR Updation ( <b>Other than Sand</b> )
Deliberation in the SEAC 594 <sup>th</sup> Meeting dated 22.09.22	<p>राज्य स्तरीय मूल्यांकन समिति की 595 वीं बैठक दिनांक 22/09/22</p> <p>कार्यालय कलेक्टर के पत्र क्र. 1368 दिनांक 19/09/2022 के माध्यम से जिला सर्वेक्षण रिपोर्ट- बैतूल (रेत खनिज) की जिला सर्वेक्षण रिपोर्ट उप समिती का अनुमोदन एवं जिला पोर्टल पर रखने के उपरांत प्रस्तुत की गई है।</p> <p>जिले की बैतूल जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज) में पाया गया कि:-</p> <ol style="list-style-type: none"> <li>1. प्रस्तुत संशोधित जिला सर्वेक्षण रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय की अधिसूचना दिनांक 25/07/18 में जानकारी निर्धारित फार्मेट (16 बिन्दुओं वाली टेबल) के अनुसार नहीं दी गयी है (तालिका -16 पेज 30)।</li> <li>2. पिछले तीन वर्ष के दौरान उत्पादन किये गौण खनिज का ब्यौरा नहीं दिया गया है।</li> <li>3. बड़वानी जिले में हरित क्षेत्र के विकास हेतु पूर्व के वर्षों में लीज धारकों द्वारा किये गये वृक्षारोपण की जानकारी, संख्या, प्रजातियों की जानकारी को लीज-वार जिसमें यह दर्शाया गया हो कि निर्धारित लक्ष्य के विरुद्ध कितना पौधारोपण किया गया है। इसको भी सम्मिलित करें।</li> </ol> <p>चर्चा उपरांत समिति की यह अनुशंसा है कि बैतूल जिले की जिला सर्वेक्षण रिपोर्ट अन्य गौण खनिज को समिति की सुझाई गयी उपरोक्त अनुशंसाओं के तारतम्य में अद्यतन (अपडेट) किया जाये तथा संशोधित जिला सर्वेक्षण रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय की अधिसूचना दिनांक 25/07/18 के अनुसार पुनः प्रस्तुत की जावे तत्संबंध में उपस्थित खनिज निरीक्षक को भी उपरोक्त संदर्भ में समझाईश दी गयी।</p>
Revised DSR received from District Collectorate ( Mining)	Vide District Collectorate ( Mining) Office, Baitul , No. 1481 dated 07.10.2022
Hard Copy Soft Copy or both	Hard copy
SEAC meeting dated 07/10/22	<ul style="list-style-type: none"> <li>● जिले की जिला सर्वेक्षण रिपोर्ट के टेबिल क्रमांक-9 (पेज क्र. 16-34 ) में खदान की जानकारी निर्धारित प्रपत्र में दे दी गई है।</li> <li>● जिले में हरित क्षेत्र के विकास हेतु पूर्व के वर्षों में लीज धारकों द्वारा किये गये वृक्षारोपण की जानकारी, संख्या एवं प्रजातियों की जानकारी जिला सर्वेक्षण रिपोर्ट टेबिल क्रमांक-26 (पेज क्र. 56-66 ) में दे दी गई है।</li> </ul>

राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण म.प्र. की 753वीं बैठक दिनांक 26.10.2022  
का कार्यवाही विवरण

"..... अतः समिति निवाड़ी जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये।"

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 598वीं बैठक दिनांक 07/10/2022 के अनुमोदन प्रस्ताव को मान्य करते हुए निवाड़ी जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है।

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

7. जिला सर्वेक्षण रिपोर्ट शहडोल (रेत खनिज )

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 598वीं बैठक दिनांक 07/10/2022 में निवाड़ी जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

"..... 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 है) संबंधित जिला खनिज अधिकारी कार्यालय में सुरक्षित रखी जाये।"

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत निर्णय लिया गया कि SEAC की 598वीं बैठक दिनांक 07/10/2022 के निर्णय से यह स्पष्ट नहीं हो रहा है कि शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन की अनुशंसा की गई है अथवा नहीं। अतः उक्त जिला सर्वेक्षण रिपोर्ट पुनः परीक्षण हेतु SEAC को अग्रप्रेषित की जाये।


8. जिला सर्वेक्षण रिपोर्ट शहडोल (अन्य गौण खनिज - रेत को छोड़कर )

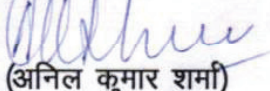
राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 598वीं बैठक दिनांक 07/10/2022 में शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

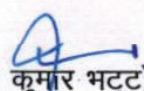
"..... अतः समिति शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये।"

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 598वीं बैठक दिनांक 07/10/2022 के अनुमोदन प्रस्ताव को मान्य करते हुए शहडोल जिले की जिला सर्वेक्षण रिपोर्ट (अन्य गौण खनिज - रेत को छोड़कर) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है।

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

  
(श्रीमान् शुक्ला)  
सदस्य सचिव

  
(अनिल कुमार शर्मा)  
सदस्य

  
(अरुण कुमार भट्ट)  
अध्यक्ष