



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: 3237 / SEIAA/2023

Date: 28/3/23

प्रति,

कलेक्टर

जिला मुरैना (म.प्र.)

विषय: नवीन जिला सर्वेक्षण रिपोर्ट मुरैना (रेत खनिज)

संदर्भ - आपका पत्र क्र. 331 दिनांक 20/03/2023

राज्य स्तरीय समाघात निर्धारण प्राधिकरण द्वारा 777 बैठक दिनांक 28.03.2023 में निम्नानुसार निर्णय लिया गया :-

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 632वीं बैठक दिनांक 21.03.2023 में मुरैना जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

.....समिति की यह 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 । अतः समिति की यह भी अनुशंसा है कि मुरैना - रेत खनिज जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) 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 632वीं बैठक दिनांक 21.03.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए मुरैना जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदनुसार जिला कलेक्टर, मुरैना 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 कॉपी ई-मेल के माध्यम से आपकी ओर है।

मुजीबुर्रहमान खान)
सदस्य सचिव

क्र.. /SEIAA/2023 भोपाल दिनांक

प्रतिलिपि :-

1. प्रमुख सचिव, म.प्र. शासन, पर्यावरण विभाग, मंत्रालय, भोपाल की ओर कृपया सूचनार्थ।
2. संचालक, भौमिकी तथा खनिकर्म, 29-ए, खनिज भवन, अरेरा हिल्स, जेल रोड़ भोपाल (म.प्र.) की ओर संबंधितों को सर्वोच्च प्राथमिकता पर शीघ्र निर्देश प्रसारित करने हेतु कृपया पालनार्थ प्रेषित।
3. सदस्य सचिव राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), अनुसंधान एवं विकास विंग, मप्र प्रदूष नियंत्रण बोर्ड, पर्यावरण परिसर ई-5 अरेरा कॉलोनी भोपाल (म.प्र.) 452016 की ओर सूचनार्थ -

सदस्य सचिव



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
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प्रति,

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जिला मुरैना (म.प्र.)

विषय: नवीन जिला सर्वेक्षण रिपोर्ट मुरैना (रेत खनिज)
संदर्भ - आपका पत्र क्र. 331 दिनांक 20/03/2023

राज्य स्तरीय समाघात निर्धारण प्राधिकरण द्वारा 777 बैठक दिनांक 28.03.2023 में निम्नानुसार निर्णय लिया गया :-

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 632वीं बैठक दिनांक 21.03.2023 में मुरैना जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

.....समिति की यह अनुशंसा है कि जिला स्तर पर जिला सर्वेक्षण रिपोर्ट तैयार करने हेतु गठित जिला समिति की अनुशंसा तथा की गई रिप्लेनिशमेंट स्टडी की जानकारी (जिसके आधार पर जिला सर्वेक्षण रिपोर्ट तैयार की गई हैं) संबंधित जिला खनिज अधिकारी कार्यालय में सुरक्षित रखी जाये । अतः समिति की यह भी अनुशंसा है कि मुरैना - रेत खनिज जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) 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 632वीं बैठक दिनांक 21.03.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए मुरैना जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदनुसार जिला कलेक्टर, मुरैना 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 कॉपी ई-मेल के माध्यम से आपकी ओर है।

मुजीबुर्रहमान खान)

सदस्य सचिव

क्र.. 3238

/SEIAA/2023 भोपाल

दिनांक 28/3/23

प्रतिलिपि :-

1. प्रमुख सचिव, म.प्र. शासन, पर्यावरण विभाग, मंत्रालय, भोपाल की ओर कृपया सूचनार्थ।
2. संचालक, भौमिकी तथा खनिकर्म, 29-ए, खनिज भवन, अरेरा हिल्स, जेल रोड भोपाल (म.प्र.) की ओर संबंधितों को सर्वोच्च प्राथमिकता पर शीघ्र निर्देश प्रसारित करने हेतु कृपया पालनार्थ प्रेषित।
3. सदस्य सचिव राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), अनुसंधान एवं विकास विंग, मप्र प्रदूष नियंत्रण बोर्ड, पर्यावरण परिसर ई-5 अरेरा कॉलोनी भोपाल (म.प्र.) 452016 की ओर सूचनार्थ


सदस्य सचिव

समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये

राज्य स्तरीय समाघात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 630वीं बैठक दिनांक 16.03.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए कटनी 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, कटनी को जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक, भौमिकी तथा खनिकर्म को सूचित किया जाये।

37. जिला सर्वेक्षण रिपोर्ट, मुरैना (रेत खनिज)

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 632वीं बैठक दिनांक 21.03.2023 में मुरैना जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

".....समिति की यह अनुशंसा है कि जिला स्तर पर जिला सर्वेक्षण रिपोर्ट तैयार करने हेतु गठित जिला समिति की अनुशंसा तथा की गई रिप्लेनिशमेंट स्टडी की जानकारी (जिसके आधार पर जिला सर्वेक्षण रिपोर्ट तैयार की गई हैं) संबंधित जिला खनिज अधिकारी कार्यालय में सुरक्षित रखी जाये । अतः समिति की यह भी अनुशंसा है कि मुरैना – रेत खनिज जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) 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 632वीं बैठक दिनांक 21.03.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए मुरैना जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदनुसार जिला कलेक्टर, मुरैना को जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक, भौमिकी तथा खनिकर्म को सूचित किया जाये।

38. जिला सर्वेक्षण रिपोर्ट, श्योपुर (रेत खनिज)

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 632वीं बैठक दिनांक 21.03.2023 में श्योपुर जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

".....समिति की यह अनुशंसा है कि जिला स्तर पर जिला सर्वेक्षण रिपोर्ट तैयार करने हेतु गठित जिला समिति की अनुशंसा तथा की गई रिप्लेनिशमेंट स्टडी की जानकारी (जिसके आधार पर जिला सर्वेक्षण रिपोर्ट तैयार की गई हैं) संबंधित जिला खनिज अधिकारी कार्यालय में सुरक्षित रखी जाये । अतः समिति की यह भी अनुशंसा है कि श्योपुर रेत खनिज जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) 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 632वीं बैठक दिनांक 21.03.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए श्योपुर जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के



(मुजीबुरहमान खान)
सदस्य सचिव



(अनिल कुमार शर्मा)
सदस्य



(अरुण कुमार भट्ट)
अध्यक्ष

- details of the measures proposed. Layout map showing the dumping sites vis-à-vis other project components will be prepared and appended in the chapter.
16. A detail of the source (quantum of water available, other potential users etc.) from where water is envisaged to be lifted shall be furnished.
 17. Places where diversions of nallah/natural drains are proposed should be detailed out in the EIA report.
 18. Sedimentation study in the pipe lines including the deposition, scaling etc should be furnished with EIA report along with the methodology proposed for its cleaning.
 19. Economic viability and cost benefit analysis be conducted and presented in the EIA report and should also take into consideration environmental/ecological factors.
 20. How micro-irrigation technology shall be implemented in this project after the completion of the project should be discussed in the EIA report.
 21. The study area for the EIA shall include 2.5 Km area on either sides of the pipeline.
 22. Management plan for dug-out material generated during laying / construction of the pipe line / structures.
 23. An inventory of various features such as sensitive area, fragile areas, mining / industrial areas, habitation, water-bodies, major roads, etc. shall be prepared and furnished with EIA.
 24. Muck management plan wrt mechnary deployment and movement of trucks shall be discussd in the EIA report.
 25. An inventory of flora & fauna based on actual ground survey shall be presented and assessment of ecological services and damage with respect to flora & fauna air, water, land and other environmental attributes shall be studied and reported in EIA report.
 26. PP should also explore the possibility of reducing proposed power requirement and methods proposed for dealing with back pressure in case of electricity failure should be studied in the EIA report.
 27. EIA report should cover impact of anticipated change in cropping pattern and associated activities like horticulture, animal husbandry etc.
 28. PP should carry out the public hearing of the site as per the procedure laid down in the EIA Notification, 2006.

20. अध्यक्ष महोदय की अनुमति से जिला सर्वेक्षण रिपोर्ट पर चर्चा

अ. मुरैना- रेत खनिज

कार्यालय कलेक्टर के पत्र क्र०. 331 दिनांक 20/03/2023 के माध्यम से जिला सर्वेक्षण रिपोर्ट, मुरैना (रेत खनिज) की जिला सर्वेक्षण रिपोर्ट उप समिति का अनुमोदन एवं जिला पोर्टल पर रखने के उपरांत प्रस्तुत की गई है ।

632वीं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की बैठक दिनांक 21 मार्च 2023

आज दिनांक 21/03/23 को जिला सर्वेक्षण रिपोर्ट पर चर्चा की गई । चर्चा उपरांत पाया गया कि खनि. अधिकारी, कार्यालय कलेक्टर, (खनिज शाखा) जिला-मुरैना के पत्र क्र0 331 दिनांक 20/03/2023 के माध्यम से प्राप्त जिले की जिला सर्वेक्षण रिपोर्ट की तालिका क्र0. -06 पेज न0. 20 में माइनेबल मिनरल पोर्टेशियल (घनमीटर में) 60: टोटल मिनरल पोर्टेशियल, लीजवार, लंबाई, चौड़ाई एवं गहराई के साथ दर्शाया है ।

समिति की यह 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 ।

अतः समिति की यह भी अनुशंसा है कि मुरैना – रेत खनिज जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये ।

ब. श्योपुर (रेत खनिज)

कार्यालय कलेक्टर के पत्र क्र0. 2338 दिनांक 21/03/2023 के माध्यम से जिला सर्वेक्षण रिपोर्ट, मुरैना (रेत खनिज) की जिला सर्वेक्षण रिपोर्ट उप समिती का अनुमोदन एवं जिला पोर्टल पर रखने के उपरांत प्रस्तुत की गई है ।

आज दिनांक 21/03/23 को जिला सर्वेक्षण रिपोर्ट पर चर्चा की गई । चर्चा उपरांत पाया गया कि खनि. अधिकारी, कार्यालय कलेक्टर, (खनिज शाखा) जिला-श्योपुर के पत्र क्र0 2338 दिनांक 21/03/2023 के माध्यम से प्रस्तुत जिला सर्वेक्षण रिपोर्ट के बिंदु क्रमांक-14 की तालिका-6 पेज नं. 18 पर माइनेबल मिनरल पोर्टेशियल (घनमीटर में) 60: टोटल मिनरल पोर्टेशियल, लीजवार, लंबाई, चौड़ाई एवं गहराई के साथ दर्शाया है ।

समिति की यह 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 ।

अतः समिति की यह भी अनुशंसा है कि श्योपुर रेत खनिज जिले की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण की ओर प्रेषित की जाये ।

स. जिला सर्वेक्षण रिपोर्ट, पन्ना – अन्य गौण खनिज –संशोधित

कार्यालय कलेक्टर के पत्र क्र0. 364 दिनांक 21/03/2023 के माध्यम से जिला सर्वेक्षण रिपोर्ट, मुरैना (रेत खनिज) की जिला सर्वेक्षण रिपोर्ट उप समिती का अनुमोदन एवं जिला पोर्टल पर रखने के उपरांत प्रस्तुत की गई है ।

प्रति,

सदस्य सचिव

राज्य स्तरीय विशेषज्ञ, मूल्यांकन समिति (SEAC)

म.प्र. प्रदूषण नियंत्रण बोर्ड,

पर्यावरण परिसर, ई-5, अरेरा कॉलोनी, भोपाल (म.प्र.)

विषय:- सस्टेनेबल सेण्ड माइनिंग मैनेजमेंट गाईडलाईन, 2016 एवं इनफोर्समेंट मानिट्रिंग फार सेण्ड माइनिंग 2020 गाईड लाईन के तहत अनुमोदित बालू खनन या नदी तल खनन (रित खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (D.S.R.) प्रस्तुत करने बावत।

संदर्भ:- 1.-संचालक,भौमिकी तथा खनिकर्म, संचालनालय,भौमिकी तथा खनिकर्म, 29 ए खनिज भवन,अरेरा हिल्स,भोपाल का पत्र क्र.-5012/भौमिकी/नं0कं0/2022, दि0 13.04.2022।
2.-संचालक,भौमिकी तथा खनिकर्म,संचालनालय,भौमिकी तथा खनिकर्म, 29 ए खनिज भवन, अरेरा हिल्स, भोपाल का पत्र क्र.-2981/खनिज/विविध/नंक्रं./2022 दि. 03.03.2022।

उपरोक्त विषयान्तर्गत संदर्भित पत्रों के तारतम्य में माननीय सर्वोच्च न्यायालय द्वारा सिविल अपील क्रमांक 3661-3662/2020 (बिहार राज्य एवं अन्य विरुद्ध पवन कुमार एवं अन्य) में पारित आदेश दिनांक 10.11.2021 के अनुसार सस्टेनेबल सेण्ड माइनिंग मैनेजमेंट गाईडलाईन, 2016 एवं इनफोर्समेंट मानिट्रिंग फार सेण्ड माइनिंग 2020 गाईड लाईन के तहत बालू खनन या नदी तल खनन (रित खनिज)के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (D.S.R.) का परीक्षण किया गया एवं अनुमोदित किये जाने हेतु अनुशंसा की गई है।

डी.एस.आर. नियत समयावधि हेतु दिनांक 27.02.2023 से 19.03.2023 (21 दिवस) हेतु मुरैना जिले के एन.आई.सी. पोर्टल (morena.nic.in) पर तथा हार्डकॉपी खनिज कार्यालय मुरैना में आमजन के दाबा/आपत्ति एवं सुझाव हेतु रखी गई, जिसमें दाबा/आपत्तियां प्राप्त नहीं हुई है।

पूर्ण परीक्षण उपरांत जिला सर्वेक्षण रिपोर्ट (DSR) के भौतिक और भौगोलिक क्षेत्रों से संबंधित प्रासंगिक तथ्यों के सही पाये जाने पर समिति द्वारा अनुमोदन किया गया।

अतः मुरैना जिले की बालू खनन या नदी तल खनन (रित खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (D.S.R.) अग्रिम कार्यवाही हेतु आपकी ओर सादर प्रस्तुत है।

(कलेक्टर महोदय द्वारा अनुमोदित)

संलग्न:- बालू खनन या नदी तल खनन (रित खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (D.S.R.)

जिला खनि अधिकारी
(खनिज शाखा)

जिला मुरैना (म0प्र0)

मुरैना, दिनांक

पृ0क्रमांक / खनिज / DSR-Sand / 2023

प्रतिलिपि:-

1. सदस्य सचिव, राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण, म0प्र0 SEIAA की ओर सूचनार्थ प्रेषित।
2. संचालक,भौमिकी तथा खनिकर्म,29-ए, खनिज भवन, अरेरा हिल्स, भोपाल की ओर सूचनार्थ।
3. कार्यवाहक संचालक, म.प्र. राज्य खनिज निगम लिमिटेड, भोपाल की ओर सूचनार्थ।
4. क्षेत्रीय कार्यालय, संचालनालय भौमिकी तथा खनिकर्म, मोतीमहल ग्वालियर की ओर सूचनार्थ।
5. प्रभारी अधिकारी, एन0आई0सी0 कलेक्ट्रेट मुरैना की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
6. जिला खनि अधिकारी, जिला मुरैना की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।

जिला खनि अधिकारी
(खनिज शाखा)

जिला मुरैना (म0प्र0)

कार्यालय कलेक्टर (खनिज शाखा) जिला मुरैना म0प्र0)

क्रमांक / खनिज / DSR / Sand / 2023 / 237
प्रति,

मुरैना, दिनांक 24.02.2023

प्रभारी अधिकारी
एन0आई0सी0
कलेक्टर, मुरैना (म0प्र0)।

विषय:- सस्टेनेबल सेण्ड माइनिंग मैनेजमेंट गाईडलाईन, 2016 एवं इनफोर्समेंट मानिटरिंग फार सेण्ड माइनिंग 2020 गाइड लाईन के पालन में तहत बालू खनन या नदी तल खनन (रेत खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (District Survey Report) एन0आई0सी0 पोर्टल पर अपलोड किये जाने बावत्।

संदर्भ:- 1-संचालक, भौमिकी तथा खनिकर्म, मध्यप्रदेश भोपाल के पत्र क्रमांक 5012 / भौमिकी / नं0कं0 / 2022 भोपाल, दिनांक 13.04.2022।
2-संचालक, भौमिकी तथा खनिकर्म, मध्यप्रदेश भोपाल के पत्र क्रमांक 2981 / खनिज / विविध / न.क्र. / 2022 भोपाल, दिनांक 03.03.2022।

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उपरोक्त विषयान्तर्गत संदर्भित पत्रों के तारतम्य में सस्टेनेबल सेण्ड माइनिंग मैनेजमेंट गाईडलाईन, 2016 एवं इनफोर्समेंट मानिटरिंग फार सेण्ड माइनिंग 2020 के तहत बालू खनन या नदी तल खनन (रेत खनिज) के लिये जिला सर्वेक्षण रिपोर्ट (District Survey Report) तैयार की गई है, जिसे नियमानुसार एन0आई0सी0 पोर्टल पर आमजन से आपत्ति/अनापत्ति एवं सुझाव प्राप्ति के संबंध में 21 दिवस की अवधि हेतु अपलोड किया जावे।

संलग्न:-

रेत खनिज डी.एस.आर. की प्रति

कलेक्टर

जिला मुरैना (म.प्र.)

मुरैना, दिनांक

पृ0क्रमांक / खनिज / DSR / Sand / 2023

प्रतिलिपि:-

1. प्रमुख सचिव, म0प्र0 शासन, खनिज साधन विभाग, मंत्रालय भोपाल की ओर सूचनार्थ।
2. आयुक्त, चम्बल संभाग, जिला मुरैना की ओर सूचनार्थ।
3. संचालक, भौमिकी तथा खनिकर्म, 29-ए, अरेरा हिल्स, भोपाल की ओर सूचनार्थ।
4. क्षेत्रीय प्रमुख, संचालनालय भौमिकी तथा खनिकर्म, मोतीमहल ग्वालियर की ओर सूचनार्थ।
5. वनमण्डलाधिकारी, सामान्य वनमण्डल, मुरैना की ओर सूचनार्थ।
6. अनुविभागीय अधिकारी (राजस्व) अनुभाग जिला मुरैना की ओर सूचनार्थ।
7. मुख्य कार्यपालन अधिकारी, जिला पंचायत, मुरैना की ओर सूचनार्थ।
8. मुख्य कार्यपालन अधिकारी, जनपद पंचायत की ओर सूचनार्थ।
9. सरपंच/सचिव ग्राम पंचायत की ओर सूचनार्थ।
10. जनसंपर्क अधिकारी, जनसंपर्क कार्यालय, मुरैना की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
11. जिला खनि अधिकारी, जिला मुरैना की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।

कलेक्टर

जिला मुरैना (म.प्र.)

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

कार्यालय कलेक्टर (खनिज शाखा) जिला मुरैना (म.प्र.)

क्रमांक/खनिज/DSR/2023/224

मुरैना, दिनांक 22/02/2023

आदेश

संचालक, भौमिकी तथा खनिकर्म, मध्यप्रदेश भोपाल के पत्र क्रमांक 5012/भौमिकी/नं0कं0/2022 भोपाल, दिनांक 13.04.2022 के माध्यम से निर्देश दिये गये हैं कि, बालू खनन या नदी तल खनन (रित खनिज) के लिये जिला सर्वेक्षण रिपोर्ट (D.S.R.) तैयार की जानी है।

संचालक, भौमिकी तथा खनिकर्म, मध्यप्रदेश भोपाल के पत्र क्रमांक 2981/खनिज/विविध/न.क्र./2022 भोपाल, दिनांक 03.03.2022 के माध्यम से निर्देश दिये गये हैं कि प्रत्येक जिले में सस्टेनेबल सेण्ड माइनिंग मनेजमेंट गाईडलाईन, 2016 एवं इनफोर्समेंट मानिटरिंग फार सेण्ड माइनिंग 2020 तथा माननीय सर्वोच्च न्यायालय द्वारा सिविल अपील क्रमांक 3661-3662/2020 (बिहार राज्य एवं अन्य विरुद्ध पवन कुमार एवं अन्य) में पारित आदेश दिनांक 10.11.2021 के अनुसार जिला मुरैना की जिला सर्वेक्षण रिपोर्ट (DSR) निम्नानुसार समिति द्वारा गठित कर की जानी है:-

- 1- अनुविभागीय अधिकारी (राजस्व) मुरैना।
- 2- खनिज अधिकारी, जिला मुरैना
- 3- कार्यपालन यंत्री, जल संसाधन विभाग, मुरैना।
- 4- राज्य प्रदूषण नियंत्रण मण्डल के नामांकित अधिकारी।
- 5- उप वनमण्डलाधिकारी, उप वनमण्डल, मुरैना।

बालू खनन या नदी तल खनन (रित खनिज) के लिये जिला सर्वेक्षण रिपोर्ट (डी.एस.आर.) का परीक्षण उक्त समिति द्वारा किया जाना है।

अतः उपरोक्तानुसार गठित समिति द्वारा प्रारूप जिला सर्वेक्षण रिपोर्ट (डी.एस.आर.) का परीक्षण कर प्रतिवेदन प्रस्तुत किया जावे, जिससे अग्रिम कार्यवाही की जा सके।
(यह आदेश तत्काल प्रभावशील होगा।)

कलेक्टर
जिला मुरैना (म0प्र0)

पृ0क्रमांक/खनिज/DSR/2023/224
प्रतिलिपि:-

मुरैना, दिनांक 22/02/2023

1. प्रमुख सचिव, म0प्र0 शासन, खनिज साधन विभाग, मंत्रालय बल्लभ भवन, भोपाल की ओर सूचनार्थ
2. संचालक, भौमिकी तथा खनिकर्म, 29-ए, अरेरा हिल्स, भोपाल की ओर सूचनार्थ।
3. क्षेत्रीय अधिकारी, म.प्र. प्रदूषण नियंत्रण बोर्ड, दीनदयाल नगर हाउसिंग बोर्ड कालोनी ग्वालियर की ओर, स्वयं अथवा नामांकित अधिकारी नियुक्त कर सूचित करने हेतु।
4. संबंधित
की ओर सूचनार्थ एवं पालनार्थ।

कलेक्टर
जिला मुरैना (म0प्र0)

जिला सर्वेक्षण रिपोर्ट (District Survey Report) की अनुशंसा हेतु आयोजित
बैठक का कार्यवाही विवरण

—00—

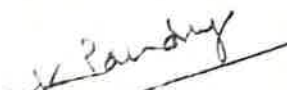
माननीय सर्वोच्च न्यायालय द्वारा सिविल अपील क्रमांक 3661-3662/2020 (बिहार राज्य एवं अन्य विरुद्ध पवन कुमार एवं अन्य) में पारित आदेश दिनांक 10.11.2021 के अनुसार सस्टेनेबल सेण्ड माइनिंग मेनेजमेंट गाईडलाईन, 2016 एवं इनफोर्समेंट मानिट्रिंग फॉर सेण्ड माइनिंग 2020 के पालन में संचालक, भौमिकी तथा खनिकर्म, मध्यप्रदेश भोपाल के पत्र क्रमांक 2981 / खनिज / विविध / न.क्र. / 2022 भोपाल, दिनांक 03.03.2022 के पालन में बालू खनन या नदी तल खनन (रेत खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (District Survey Report) की अनुशंसा हेतु बैठक दिनांक 27/02/2023 को आयोजित की गई है। उक्त बैठक में निम्नानुसार सदस्य उपस्थित हुये :-


- 1- अनुविभागीय अधिकारी (राजस्व) मुरैना।
- 2- खनि अधिकारी, जिला मुरैना
- 3- कार्यपालन यंत्री, जल संसाधन विभाग, मुरैना।
- 4- राज्य प्रदूषण नियंत्रण मण्डल के नामांकित अधिकारी।
- 5- उप वनमण्डलाधिकारी, उप वनमण्डल, मुरैना।

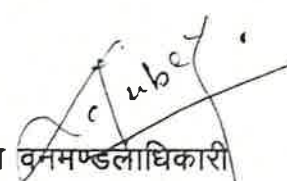
उपरोक्तनुसार आयोजित बैठक में बालू खनन या नदी तल खनन (रेत खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट (D.S.R.) के संबंध में चर्चा की गई, जो सही पाई गई। उक्त जिला सर्वेक्षण रिपोर्ट (प्रारूप) पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना दिनांक 25.07.2018 में विहित प्रावधानों के अनुरूप है। उक्त बालू खनन या नदी तल खनन (रेत खनिज) के लिये तैयार की गई जिला सर्वेक्षण रिपोर्ट की अग्रिम कार्यवाही हेतु सर्वसम्मति से अनुशंसा की जाती है।


संलग्न :-

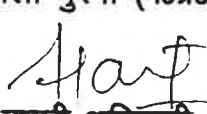
बालू खनन या नदी तल खनन (रेत खनिज)
जिला सर्वेक्षण रिपोर्ट (D.S.R.) की प्रति।


अनुविभागीय अधिकारी
(राजस्व)
अनुभाग मुरैना (म0प्र0)

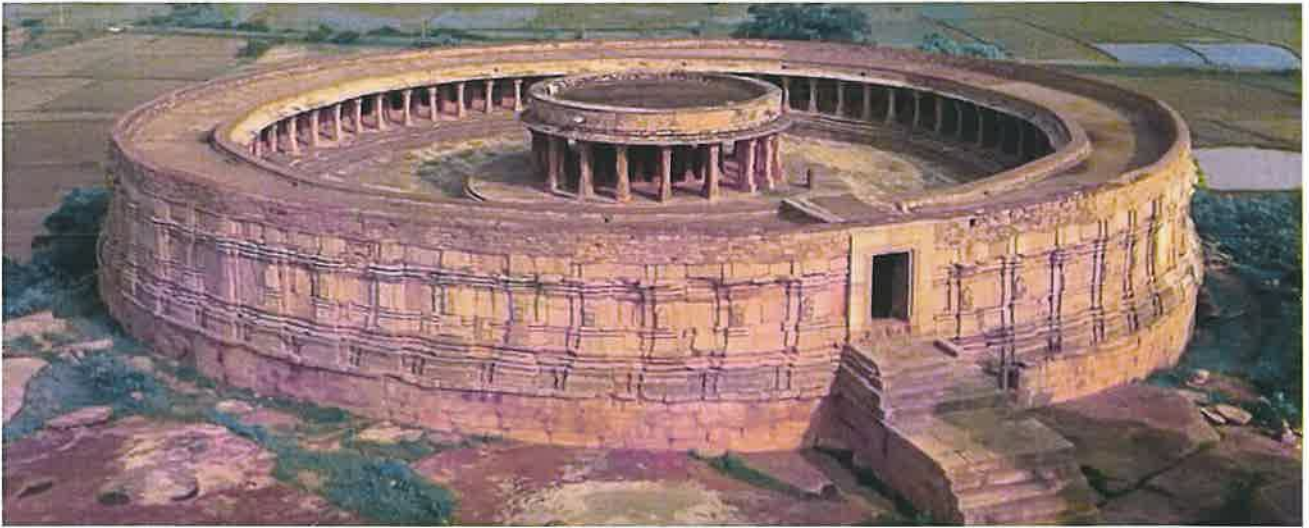

जिला खनि अधिकारी
(खनिज शाखा)
जिला मुरैना (म0प्र0)


उप वनमण्डलाधिकारी
सामान्य वनमण्डल,
जिला मुरैना (म0प्र0)


कार्यपालन यंत्री
जल संसाधन विभाग
जिला मुरैना (म0प्र0)


प्रभारी अधिकारी
राज्य प्रदूषण नियंत्रण
मण्डल
ग्वालियर (म0प्र0)

DISTRICT SURVEY REPORT FOR SAND MORENA DISTRICT




MINERAL RESOURCES DEPARTMENT

YEAR-2023

MORENA

DISTRICT

*IN COMPLIANCE OF MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE,
NOTIFICATION DATED: 15.01.2016*


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

PREAMBLE

In pursuance to the Gazette Notification, Ministry of Environment, Forest and Climate Change (MoEF& CC), the Government of India Notification No.S.O.141(E)Appendix- X, Dated 15.01.2016 & S.O. 3611

(E) New Delhi, 25th July 2018 laid procedure for preparation of District Survey Report of sand mining or river bed mining keeping in mind the "Sustainable Sand Management Guidelines 2016" which focuses on the Management of Sand Mining in the Country and "Enforcement & Monitoring Guidelines for Sand Mining- 2020" which focus on prevention of illegal mining in the country.

The Ministry of Environment, Forests & Climate Change (MoEFCC), Government of India, made Environmental Clearance (EC) for mining of minerals mandatory through its Notification of 27th January, 1994 under the provisions of Environment Protection Act, 1986.

Keeping in view the experience gained in environmental clearance process over a period of one decade, the MoEF & CC came out with Environmental Impact Notification, SO 1533 (E), dated 14th September 2006. It has been made mandatory to obtain environmental clearance for different kinds of development projects as listed in Schedule-1 of the Notification.

Further, In pursuance to the order of Hon'ble Supreme Court dated the 27th February, 2012 in I.A. No.12- 13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease;


And also in view of the Hon'ble National Green Tribunal, order dated the 13th January, 2015 in the matter regarding sand mining has directed for making a policy on environmental clearance for mining leases in cluster for minor Minerals,

The Ministry of Environment, Forest and Climate Change in consultation with State governments has prepared Guidelines on Sustainable Sand Mining detailing the provisions on environmental clearance for cluster, creation of District Environment Impact Assessment Authority and proper monitoring of minor mineral mining using information technology and information technology enabled services to track the mined out material from source to destination.

The SEIAA and SEAC will scrutinize and recommend the prior environmental clearance of mining of minor minerals on the basis of District Survey Report. This will be a model and guiding document which is a compendium of available mineral resources, geographical set up, environmental and ecological set up of the district and replenishment of minerals and is based on data of various departments, published reports, journals and websites. The District Survey Report will form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report will be updated once every five years.

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

- (i) Identification of areas of aggradations or deposition where mining can be allowed; and
- (ii) Identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.
- (iii) Identification of mineral wealth in the district.


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

CONTENTS

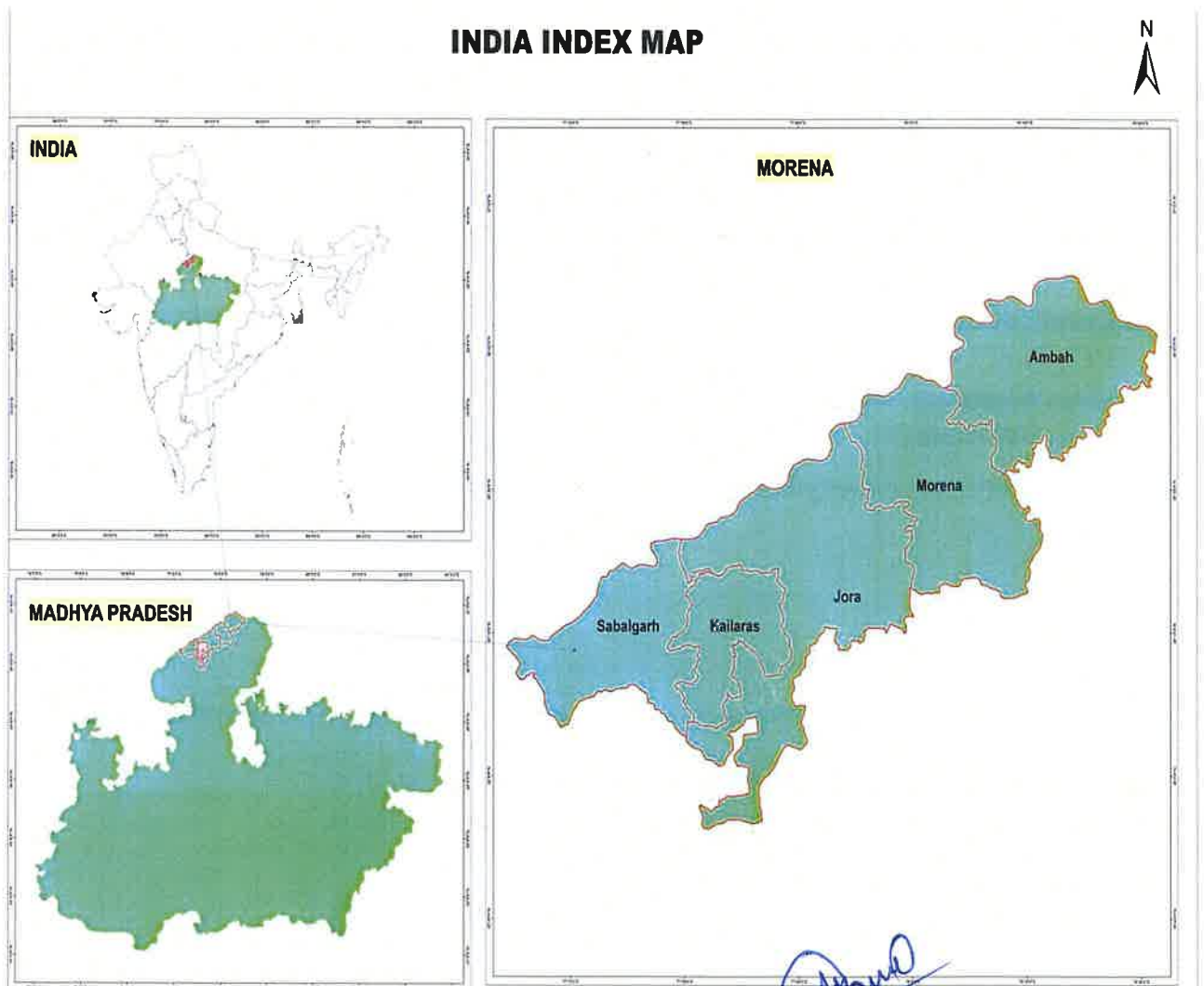
SN	PARTICULARS	PAGE NO.
1.	Introduction	1-2
2.	Overview of Mining Activity in the District	3
3.	The list of mining Lease in the district with location area period of validity	4
4.	Details of Royalty or Revenue received in last three years	5
5.	Details of Production of Sand in last three years	5
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9.	Physiography of the district	11
10.	Rainfall Month wise	12
11.	Geology and Mineral wealth	13-14
12.	Drainage and irrigation pattern	15
13.	Surface and ground water scenario of the district	16-18
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	Sand mining area based on Pre-Monsoon	19
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	Length and width of sand mines	19
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	Details of Annual Deposition	20
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 State Level Environment Impact
 Assessment Authority, M.P.
 (EPGO)
 Paryavaran Parisar
 E-5, Arera Colony, Bhopal (M.P.)

1. Introduction

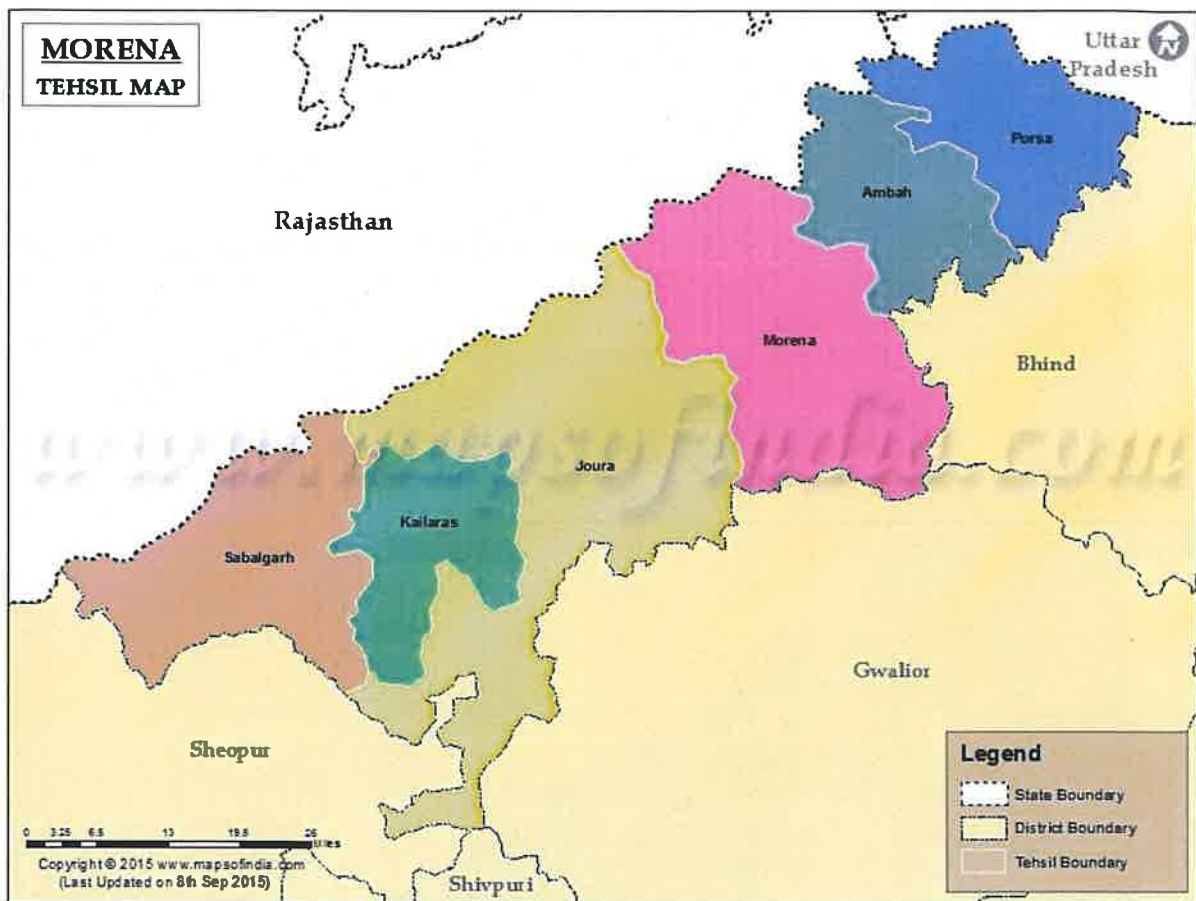
Morena district is extended in the north $25^{\circ} 17'$ to $26^{\circ} 52'$ latitudes and $76^{\circ} 30'$ to $78^{\circ} 33'$ East longitudes. The river Chambal flows forming all northern boundaries of the district and divides Rajasthan and Uttar Pradesh from the district. In the south-east of the district is Gwalior, Shivpuri in south, Bhind in east, Agra (U.P) in north-east, Dhaulpur and Karauli (Rajasthan) in north-west and Sheopur in southwest. The district is situated at 150 to 300 meters from the mean sea level. As reported by Surveyor General of India, its geographical area is 4,989 sq.km. It is the 34th largest district of the state in respect of area which is 1.6% of the total area 308,244 sq.kms of the state. The district lies on the meeting point of the Vindhyan Plateau and the low lying zone of Chambal Valley. The southern and the south-eastern parts of the district lie on the Vindhya Plateau and the northern part and the north-western belt along the Chambal lie in the valley. The plateau is the part of northern edge of the Malwa and the great Vindhya plateau which extends upto Gwalior and Morena district. The general height is about 300 meters above mean sea level. In this part the ridges and low hills of Bhandar sandstones are marked, whose height is about 350 to 400 meters. The slope is towards south to north-west. The major part of the district is the part of Chambal valley whose average height is 160 meters from the mean sea level. The Chambal valley can be divided into two parts i.e. the first part is the bank of Chambal ravines (Beehads) where series of ravines deep gullies and ridges of dividing moulds are developed. On the other hand the main canal of Chambal of south-eastern plain part is very fertile.


LOCATION MAP OF MORENA DISTRICT



Administrative Setup of the District

DISTRICT	Tehsil Places
MORENA	AMBAH
	PORSA
	MORENA
	BANMOR
	JOURA
	KAILRAS
	SABALGRAH




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

2. Overview of Mining Activity in the District

Minor Minerals are mainly use for construction purpose. Minor Minerals' comprise of gravel, building stones, soil, ordinary clay, ordinary sand, and murrum. Other sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral.


Crushed stone (Gitti):Angular crushed stone is the key material for macadam road construction, which depends on the interlocking of the individual stones' angular faces for its strength. Also use as rip rap, as railroad track ballast, as composite material (with a binder) in concrete, tarmac, and asphalt concrete.

Sand:Sand is used to give strength, bulk and other properties to construction materials like asphalt and concrete. In landscaping, it is used as a decorative material. A particular type of sand is used for glass manufacturing. Likewise, it is used for metal casting as a moulding material.

Murrum: It is a mixture of minerals, organic matters, gravels, rock particles etc. Murrum is used in plinth filling, road pavements, backfilling in trenches, footing pits, etc. Given that it doesn't contain any organic matters and can be compacted easily forming hard surfaces, it is a soil suitable in the field of construction.

Soil: Ordinary earth soil used for filling the embankment, roads, railways and building. Soil which is excavated from mine is also used for different purpose of construction.

Brick Clay/Soil: Brick clay/Soil is rich in alumina, silica, calcium, oxides of iron, magnesium and organic matter. These are low grade clays used most for the manufacturing of of building bricks and similar clay products.


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

3. The list of Sand mines lease in the district with location area and period of validity

List of sand mine is being sanction

अनुसूची -2 (म0प्र0 राजपत्र दिनांक 31 जनवरी 2023 अनुसार)

वनमण्डल- मुरैना जिला मुरैना तहसील-जौरा/मुरैना स्थल/घाट का नाम-बरवासिन

क्रं0	ग्राम का नाम	सर्वे क्रमांक	कुल क्षेत्रफल (हे0 में)	स्वीकृत/चिन्हित क्षेत्रफल (हे0 में)	बिन्दु	क्षेत्र के जी.पी.एस. निर्देशांक	
1	खाण्डौली तह0 जौरा	852/1	40.661	32.45	B	N-26° 36' 38.01" , E-77° 51' 05. 60"	
		852/2	05.894	04.00	C	N-26° 36' 44.27" , E-77° 51' 30.39"	
		746	67.706	56.40	F	N-26° 36' 33.25" , E-77° 51' 54.11"	
2	कैथरी तह0 मुरैना	02	17.62	15.50	G	N-26° 36' 30.94" , E-77° 51' 48.13"	
		103	11.432	09.51	H	N-26° 36' 32.04" , E-77° 51' 40. 84"	
					I	N-26° 36' 31.61" , E-77° 51' 35.33"	
					J	N-26° 36' 18.23" , E-77° 50' 47.10"	
					D	N-26° 36' 41.63" , E-77° 52' 06.51"	
		101	01.327	0.80	E	N-26° 36' 33.92" , E-77° 52' 07.270"	
					A	N-26° 36' 06.58" , E-77° 50' 08.32"	
योग :-					118.66	K	N-26° 36' 01.65" , E-77° 50' 11.97"

अनुसूची -3 (म0प्र0 राजपत्र दिनांक 31 जनवरी 2023 अनुसार)

वनमण्डल- मुरैना जिला मुरैना तहसील-मुरैना स्थल/घाट का नाम-राजघाट

क्रं0	ग्राम का नाम	सर्वे क्रमांक	कुल क्षेत्रफल (हे0 में)	स्वीकृत/चिन्हित क्षेत्रफल (हे0 में)	बिन्दु	क्षेत्र के जी.पी.एस. निर्देशांक
1	भानपुर	02	25.30	21.05	B	N-26° 39' 35.04" , E-77° 54' 46. 01"
		03	01.34	01.34	C	N-26° 39' 35.76" , E-77° 54' 59. 58"
					D	N-26° 39' 31.65" , E-77° 55' 49. 46"
					E	N-26° 39' 30.29" , E-77° 56' 08. 36"
		14	01.50	0.80	F	N-26° 39' 25.26" , E-77° 56' 27. 61"
					I	N-26° 39' 20.75" , E-77° 56' 27. 01"
					J	N-26° 39' 26.82" , E-77° 55' 32. 06"
					K	N-26° 39' 30.40" , E-77° 55' 27. 44"
L	N-26° 39' 26.00" , E-77° 55' 26. 01"					
16	0.39	0.39	M	N-26° 39' 29.05" , E-77° 55' 08. 45"		
			N	N-26° 39' 30.26" , E-77° 55' 07. 57"		
2	पिपरई	02	03.49	2.40	O	N-26° 39' 30.12" , E-77° 55' 03. 92"
		177	19.51	17.91	P	N-26° 39' 30.80" , E-77° 54' 58. 65"
					Q	N-26° 39' 29.33" , E-77° 54' 49. 10"
					R	N-26° 39' 22.87" , E-77° 54' 49. 60"
					S	N-26° 39' 23.26" , E-77° 54' 42. 23"
					T	N-26° 39' 24.49" , E-77° 54' 42. 17"
		180	03.10	2.10	G	N-26° 39' 24.04" , E-77° 56' 41. 70"
					H	N-26° 39' 21.48" , E-77° 56' 41. 99"
236	28.39	16.71	A	N-26° 39' 31.08" , E-77° 54' 26. 42"		
			U	N-26° 39' 20.74" , E-77° 54' 29. 45"		
योग :-					78.90	

4. Details of Royalty or Revenue Received in Last 3 Years for Sand:- NA
(Earlier sand mines was not sanction)

5. Details of production in last 3 year for sand mines:- NA
(Earlier sand mines was not sanction and New sand mines)

6. Process to deposition of sediment in the river of the district

Majority of rivers originate from mountains and as they continue their journey with force, through these mountains, the bigger rocks and boulders disintegrate slowly, and over a period of time, starts rolling down as fragments. These fragments become smaller and smaller due to weathering process by water, wind and other rocks. Thus, developed sand particles are transported, washed and stored and again transported during floods and deposited at river beds and largely on river shores. In case the sand deposits are mined / removed, cavities are formed in their place and again filled during next cycle(s) of deposition. River sand is preferred as a source of sand because of the following factors: → Cities tend to be located near rivers so transport costs are low, the energy in a river grinds rocks into gravels and sands, → Eliminating the costly step of mining, grinding, and sorting of rocks → The material produced by rivers tends to consist of resilient minerals of angular shape that are preferred for construction. → Also, offer the advantages of being naturally sorted by grain-size. easily accessible and able to be transported inexpensively using barges. Despite plentiful supplies of desert sand 5 (Aeolian), which produce materials unsuitable for making concrete. A meandering stream has a single channel that wind snakelike through its valley. As water flows around these curves, the outer edge of water is moving faster than the inner edge. This creates an erosion surface on the outer edge (a cut bank) and a depositional surface on the inner edge (a point bar) Where the bends of two meanders meet. they bypass the curve of river, creating an oxbow lake which may then be in-filled with over wash sediment. Meanders change position by eroding sideways and slightly downstream. The sideways movement Secures because the maximum velocity of the stream shifts toward the outside of the bend, causing erosion of the outer bank. At the same time the reduced current at the inside of the meander results in the deposition of coarse sediment, especially sand. Thus by eroding its outer bank and depositing material along its inner bank, a stream moves sideways without changing its channel size. Due to the slope of the channel, erosion is more effective on the downstream side of a meander. The specific gravity of an aggregate is considered as the measure of strength or quality of the material. Specific gravity is defined as the ratio of weight of a given volume of aggregate to the weight of equal volume of water. Aggregates having low specific gravity are generally weaker than those with aggregates having high specific gravity. This property helps in a general identification of aggregates. The specific gravity of (sand) is

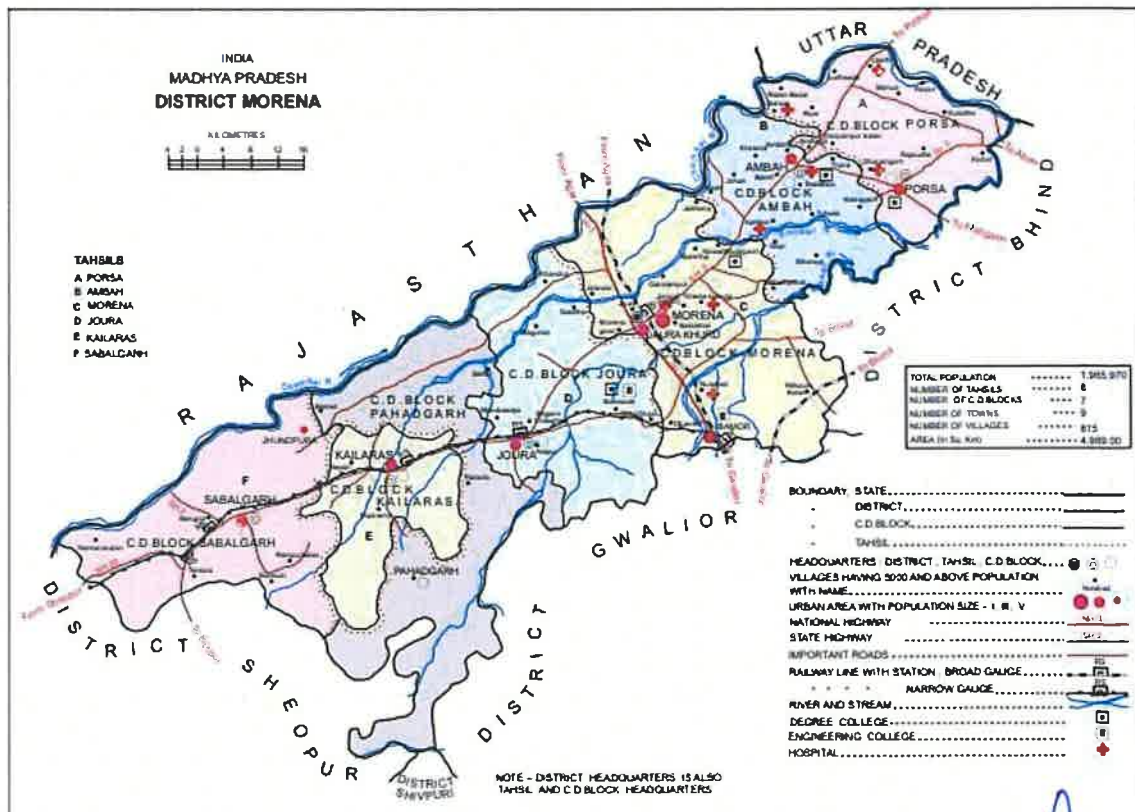
considered to be around 2.65 to 2.67. Sand particles composed of quartz have a specific gravity between 2.65 to 2.67 While inorganic clays generally range from 2.70 to 2.80. Soils with large amounts of organic matter or porous particles have specific gravity below 2.60 (Some range as low as 2.00) Sources of sand Sand is world's second most consumed natural resource after water. Rapid urbanization and global population growth have created unbound demand for this limited natural resource. With urbanization as key driving factor, construction industry has expanded considerably over the last few decades leading to overuse of river sand for construction purposes. This increasing discrepancy between the need for aggregates in the society and scarcity of natural sand due to exhaustion of resources and environmental considerations, has urged concrete manufacturers to look for a suitable and sustainable alternative fine aggregate The economical and ecological alternative is manufactured sand. Natural Sources Natural sand is produced by natural forces, such as river sand and sea sand. Generally, sand found at foot of mountains is more weathered, containing more mud, organic impurities and 6 light substances. Sea sand often contains shells and other impurities, and its components such as the chlorine, sulfate and magnesium salts may cause corrosion of steel bars. All the components will affect the performance of concrete. Sources of sand can be river bed material, de-siltation pits in reservoirs/dams, agricultural land etc these can be broadly classifies as Following are the natural types of the sand: Pit Sand This sand is found as deposits in soil and it is obtained by forming pits into soils. It is excavated from a depth of about 1 m to 2 m from ground level. The pit sand consists of sharp angular grains which are free from salts and it proves to be excellent material for mortar or concrete work. For making mortar, the clean pit sand free from organic matter and clay should only be used. River Sand This sand is obtained from banks or beds of rivers. The river sand consists of fine rounded grains probably due to mutual attrition under the action of water current. The color of river sand is almost white. As river sand is usually available in clean condition, it is widely used for all purposes. Sea Sand This sand is obtained from sea shores. The sea sand, like river sand, consists of fine rounded grains. The color of sea sand is light brown. The sea sand contains salts. 6 These salts attract moisture from the atmosphere Such absorption causes dampness. efflorescence and disintegration of work. The sea sand also retards the setting action of cement Due to all such reasons, it is the general rule to avoid the use of sea sand for engineering purposes except for filling of basement, etc. It can however be used as a local material after being thoroughly washed to remove the salt.


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7. General Profile of the District

Geography & Climate	
Latitude	76 ⁰ 30" से 78 ⁰ 33"
Longitude	25 ⁰ 17" से 26 ⁰ 52"
Height from Sea Level	150-300 mts.
Average Rainfall	862.6 mm.
Temperature (Avg Max to Min)	47.10° C to 3.8° C
Area & Population	
Geographical Area	4989 sq.km.
Forest Area	50,669 hectares
Total Population	19,65,970
Tehsils	7 Nos.
Blocks	9 Nos.
Total Gram Panchayats	478 Nos.
Total Zanpad Panchayats	9 Nos.
Total Municipals	9 Nos.
Total Rural Population	14,95,508 Nos.
Total Urban Population	4,70,462 Nos.
Total Males	10,68,417 Nos.
Total Females	8,97,553 Nos.

Location Map of the District



8. Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc. (Area in Hect.)

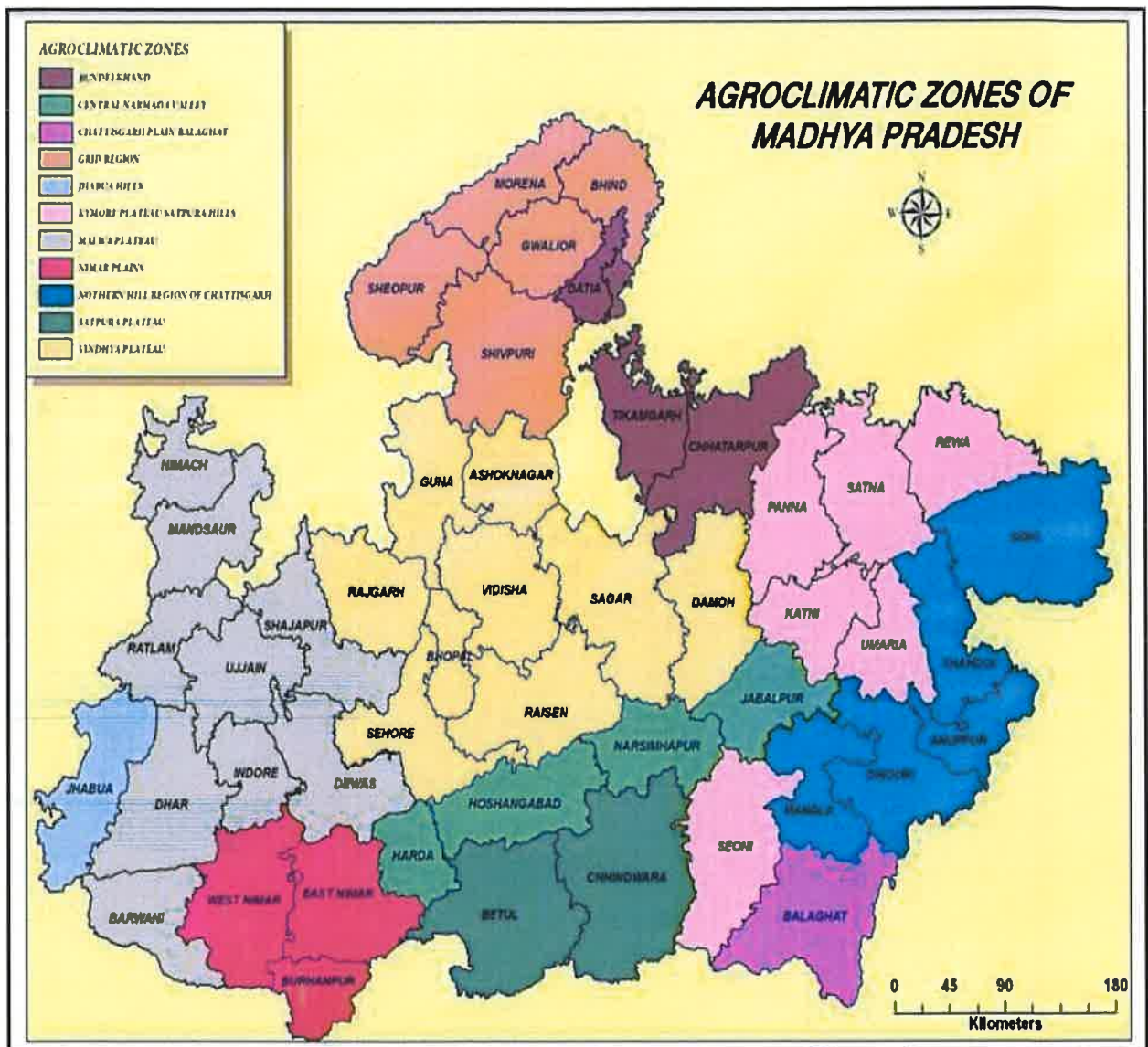
FOREST:

The forest are mostly tropical dry deciduous type Kardhai (*Anogeissus pendula*) is most important species. The quality of Kardhai depends on the depth, drainage, rainfall, etc. But most important factors is altitude and moisture contents of the soil. Kardhai occurs almost pure on the flat areas, on the higher altitude Kardhai is noticed on slopes having cooler aspect. Other common tree species noticed are salai (*Boswellia serrata*) dhooda, khair (*Alacia Catechu*), tendu, krir dhudhi, medha-singh (*Dolichandron faleata*), arjun, kulhu (*stereulia urens*), kusum, kasai, kari (*miliusa tomentosa*) semal (*salmalia mala-barica*) aonla, kala siris (*Albizzia lebbek*), safed siris (*Albizzia Procers*), palas (*Butea monosperma*), haldu, spisham (*Dalbergio latifelia*), padar, raj etc. The forest are generally open and poorly stocked over considerable part of the area, due to shallow nature of the soil. The height and diameter growth of trees are in general poor. The reserved forest area in the district is 50,669 hectares and 26,847 hectares is protected forest which are mostly found in Sabalgarh and Jorra CD blocks. The forests are dry and autumnal. Fire wood, grass and gum are mainly found in these forests . In forest areas, Blue bull (Neelgai) 564, wild boar 112, jackal 1072, hyenas 74, peacocks 72,152, rabbits 107, foxes 171, syah 61, wolves 35, spotted deer's 12, deer's 471 and bears 27 are the wild life found. The district has black buck, cheetal, nilgai, sambhar, etc in the forest. The deer group of animal is represented by chital (*Axis*) which used to be seen in herds. Now such herds are rarely seen. The other common deer species is sambhar (*cervus unicolor*) which is generally seen in hilly areas. The other common deer species is barking deer (*mantiaeus muntejak*). They are found in thick forest and come out to graze in open areas, Chinkara and black buck are ANALYTICAL NOTE DISTRICT CENSUS HANDBOOK : MORENA 5 very active animals. The black faced monkey (*preslytic entallus*) is seen in the forests. The other animals generally noticed are hyaena, wild dog, fox etc. The most magnificent quite common birds found locally is peacock (*pavo cristatus*). Grey jungle and jungle fowls are also be seen. The common snakes in the district are cobra, craite, python etc.

2. भारत सरकार का राजपत्र प्रकाशन दिनांक 21 फरवरी 2020 पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना अनुसार राष्ट्रीय चंबल अभ्यारण्य (चंबल नदी) से रेत खनन प्रतिबंधित किया गया है। संलग्न :- राजपत्र प्रकाशन दिनांक 21 फरवरी 2020

AGRICULTURE:

The soil of the district is alluvial. The level of the river banks land are also alluvial. The economy of the district is mainly based on agriculture. More than 50% land is under cultivation. The double crops i.e. Rabi and Kharif crops are wholly sown in the district. Under kharif crops jawar, bajra, rice, tuar, urad and moong are sown and under Rabi crops wheat, gram and mustard are sown. Mustard is sown in the largest area of the district. Main crops according to use of area is mustard 174,982 hect., wheat 81,506 hect, gram 12,704 hect, vegetables 608 hect's and spices in 239 hect.



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MINING:

Morena district holds a distinct place in the state with respect to sand stone mining .

In the district mainly sand stone, clay, gitti, murum and sand are found.


Morena distt sand deposits in the Chambal river century which is probited for the sand mining.

2. भारत सरकार का राजपत्र प्रकाशन दिनांक 21 फरवरी 2020 पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना अनुसार राष्ट्रीय चंबल अभ्यारण्य (चंबल नदी) से रेत खनन प्रतिबंधित किया गया है। संलग्न :- राजपत्र प्रकाशन दिनांक 21 फरवरी 2020


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9. Physiography of the district

Morena district is extended in the north 25° 17' to 26° 52' latitudes and 76° 30' to 78° 33' East longitudes. The river Chambal flows forming all northern boundaries of the district and divides Rajasthan and Uttar Pradesh from the district. In the south-east of the district is Gwalior, Shivpuri in south, Bhind in east, Agra (U.P) in north-east, Dhaulpur and Karauli (Rajasthan) in north-west and Sheopur in southwest. The district is situated at 150 to 300 meters from the mean sea level. As reported by Surveyor General of India, its geographical area is 4,989 sq.km. It is the 34th largest district of the state in respect of area which is 1.6% of the total area 308,244 sq.kms of the state. The district lies on the meeting point of the Vindhyan Plateau and the low lying zone of Chambal Valley. The southern and the south-eastern parts of the district lie on the Vindhya Plateau and the northern part and the north-western belt along the Chambal lie in the valley. The plateau is the part of northern edge of the Malwa and the great Vindhya plateau which extends upto Gwalior and Morena district. The general height is about 300 meters above mean sea level. In this part the ridges and low hills of Bhandar sandstones are marked, whose height is about 350 to 400 meters. The slope is towards south to north-west. The major part of the district is the part of Chambal valley whose average height is 160 meters from the mean sea level. The Chambal valley can be divided into two parts i.e. the first part is the bank of Chambal ravines (Beehads) where series of ravines deep gullies and ridges of dividing moulds are developed. On the other hand the main canal of Chambal of south-eastern plain part is very fertile.


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10. Rainfall : Details of Month wise Rainfall data of 1year

Tehsil/ Month	PORSA	AMBAH	MORENA	JOURA	KAILARAS	SABALGRAH
Jan	2.0	3.0	3.0	2.0	7.0	3.0
Feb	0	0	0	0	0	0
Mar	0	0	0	0	0	0
Apr	0	0	0	0	0	0
May	8.0	5.0	10.2	18.0	12.0	3.0
Jun	23.0	13.0	27.0	14.0	42.0	67.0
Jul	152.0	108.0	256.2	181.0	188.0	232.0
Aug	205.0	197.0	198.8	163.0	177.0	365.0
Sep	335.0	165.0	92.8	155.0	141.0	225.0
Oct	40.0	49.0	30.4	30.0	17.0	34.0
Nov	0	0	1.0	0	4.0	3.0
Dec	2.0	7.0	6.0	4.0	9.0	12.0

Rainfall of the District and Climate Conditions

Rainfall

Morena has a cool and dry climate .The hot weather starts from about the middle of April and lasts up to mid of May. The temperature in June touches 47 degree Celsius. By the end of June or by the 1st week of July, the monsoon breaks and the weather becomes cool, through humid. The district receives its rains from the Arabian Sea. The rains are over generally by end of September. Morena receives on an average 530 mm of rain.

Climatic Conditions

The climate of this district is semi dry and generally dryness prevails in the region. The heat is intense in summer, dust-laden scorching winds and heatstroke flows which often makes the weather very uncomfortable. The mean daily temperature in the months of May and June is maximum 44.0 celsius. In cold season the district has freezing cold and temperature drops to 2.80 celsius. During the monsoon season light air blows west to east . After the withdrawal of the monsoon and winter there is slight air that flows mostly from north to north western direction. Generally rainfall in the district is irregular and on an average the annual rainfall recorded is 862.6 mm . About 92% of the rainfall in the district is received during June to September.

The forest are generally open and poorly stocked over considerable part of the area, due to shallow nature of the soil. The height and diameter growth of trees are in general poor.

The reserved forest area in the district is 50,669 hectares and 26,847 hectares is protected forest which are mostly found in Sabalgarh and Jaura CD blocks. The forests are dry and autumnal Fire wood, grass and gum are mainly found in these forests . In forest areas, Blue bull (Neelgai) , wild boar , jackal , hyenas , peacocks , rabbits , foxes , porcupine, wolves , spotted deers and deers and are the wild life found.The deer group of animal is represented by chital (Axis) which used to be seen in herds. Now such herds are rarely seen. The other common deer species is sambhar (cervus unicolor) which is generally seen in hilly areas. The black faced monkey (presliytic entallus) are seen in the forests. The other animals generally noticed are hyaena, wild dog, fox etc. The most magnificent quite common birds found locally is peacock (pavo cristatus). The common snakes in the district are cobra, crate, python etc.

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11. Geology and Mineral wealth

Geology of the District

Vindhyan Super group of rocks of Meso to Neo-Proterozoic age, Laterites of Cainozoic age and Quaternary Alluvium are the rock types exposed in the area, The Vindhyan Supergroup in the area is represented by Kaimur, Rewa and Bhandar Group of rocks. Kaimur in the area is represented Dudauni Sandstone. The rock is white to dirty white in colour, fine to medium grained, thinly to thickly bedded with interbands of siltstone at places. The rock is fine grained, thickly bedded and massive towards the top. The Rewa Group is represented by Jhiri Shales and Upper Rewa Sandstone. Jhiri Shale conformably overlies the Dudauni Sandstone with a sharp contact. The shale is predominantly argillaceous in nature and olive green to khaki, grey, chocolate brown to reddish brown, splintery and thinly bedded with minor interbands of siltstone containing numerous veins of calcite. The Upper Rewa Sandstone is represented by light grey to greenish grey, brown, pink, white to dirty white, fine to medium grained and moderately sorted glauconitic sandstone. The rock is quartzitic and flaggy to thickly bedded in nature, The Bhandar Group, which overlies the Rewas with a gradational contact, is represented by Ganurgarh Shale, Lower Bhandar Limestone, Lower Bhandar Sandstone and Sirbu Shales. Ganurgarh Shale is the lower most formation of Bhandar Group of rocks and is represented by greyish green, reddish brown to dark brown, purple coloured shale. The rock is friable, splintery to thinly laminated in nature. It is generally ferruginous, at places arenaceous and calcareous towards the top. It shows intercalations of limestone at places. Ganurgarh Shale is overlain by the Lower Bhandar Limestone. Being an almost persistent horizon, the limestone forms good marker horizon. It is marked by occasional presence of intraformational breccia at the base. This limestone is typical ash grey in colour, fine grained, thinly to thickly bedded and shows elephant skin weathering and breaks along the conchoidal fractures. Overlying the Lower Bhandar Limestone, the Lower Bhandar Sandstone is exposed in the western part of the area. It is dirty white, pinkish to light brown colour, fine to medium grained, quartzitic and thinly to thickly bedded. Cross bedding of tabular and trough type are common in this rock. The overlying Sirbu Shale is greenish to greenish blue, pale grey, purple, red and brown in colour with thin interbands of siltstone at places. The shale generally thinly bedded and splintery. Laterite forms flat and slightly undulatory capping over the rocks of Vindhyan Supergroup. It occurs at two elevations between altitudes of 425 m to 530 m above m.s.l. It is dark reddish brown and red in colour and mainly consists of Haematite, Goethite, gibbsite, few opaques and quartz. Quaternary Alluvium consisting of unconsolidated to consolidated yellowish brown sand, silt and clay with gravel and pebbles forms the youngest formation exposed in the area. The thickness of the alluvium varies from a meter to more than 15m. The area exhibits good development of sedimentary structures viz, current bedding, ripple marks, rain prints, rib and furrow structures, ball and pillow structures, mud cracks, clay balls, concretion, load and flute structures etc. The general strike of the bedding is N-S to NNE-SSW with varying dips of 4 to 10° towards west and north. The deformational structures of the area are mainly represented by various sets of joints trending NW- SE, NE-SW, E-w and NNE-SSW with vertical dips.

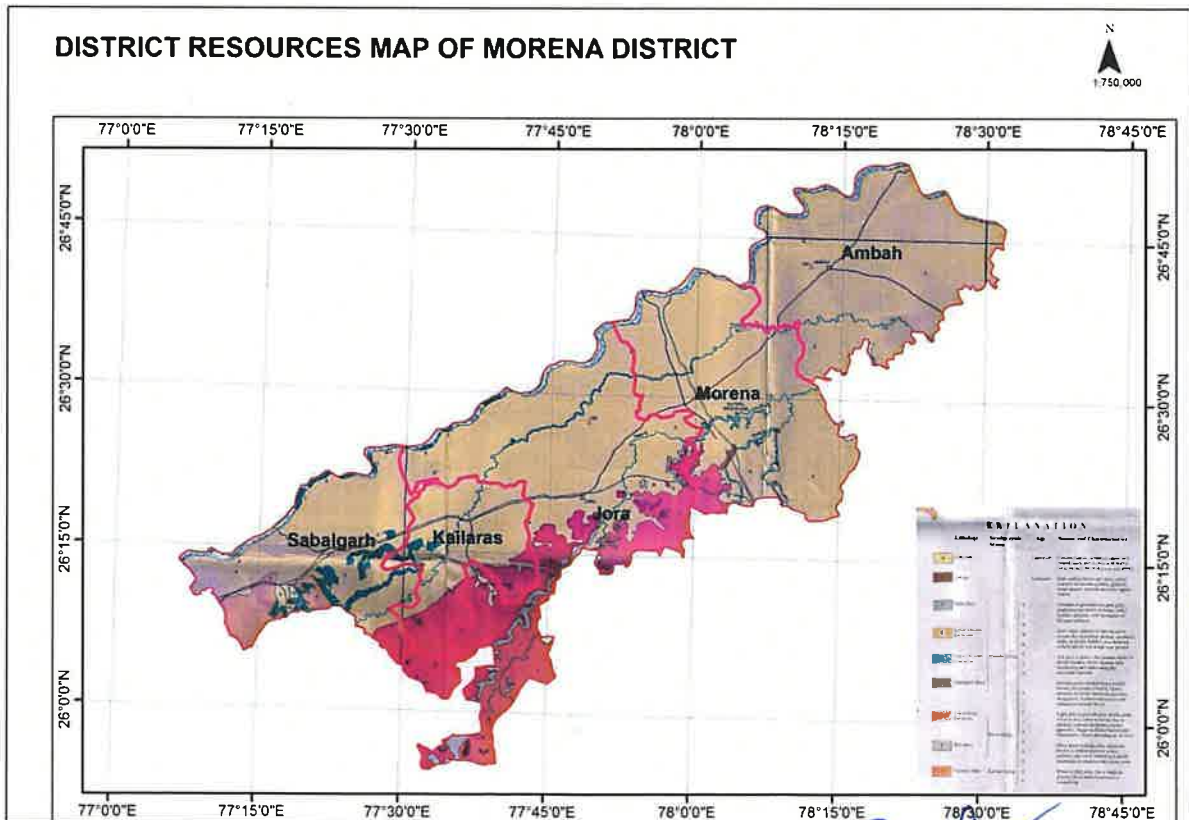
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STRATIGRAPHIC STATUS

LITHOLOGY	STRATIGRAPHIC STATUS	NATURE AND CHARACTERISTICS
Alluvium	Quaternary	Unconsolidated, semi consolidated and consolidated, grey to yellowish brown sand, silt and clay with gravel and pebble
Laterite	Cainozoic	Dark reddish brown and red in color, consists of limonite, goethite, gibbsite some opaque minerals and a few quartz Grains
Sirbu Shale	BHANDER GROUP	Greenish to greenish blue, pale grey, purple red and brown in color, thinly bedded, splintery, with interbands of Siltstone at places
Lower Bhander Sandstone		Dirty white, pinkish to light brown in colour, fine to medium grained, quartzitic, thinly to thickly bedded, cross bedding of both tabular and trough type present
Lower Bhander limestone		Ash grey in colour, fine grained, thinly to thickly bedded, shows elephant skin weathering and breaks along the conchoidal fractures
Ganurgarh Shale		Greyish green, reddish brown to dark brown, and purple coloured, friable, splintery to thinly laminated, generally ferruginous, at places arenaceous and calcareous towards the top
Upper Rewa Sandstone	REWA GROUP	Light grey to greenish grey, brown, pink, white to dirty white in colour, fine to medium grained, moderately sorted, quartzitic, flaggy to thickly bedded and Glauconitic; shows intercalations of shale
Jhiri shale		Olive green to khaki, grey, chocolate brown to reddish brown in colour, splintery and thinly bedded with minor interbands of siltstone with calcite veins
Dudauni Shale	KAIMUR GROUP	White to dirty white, fine to medium grained, thick bedded and massive toward top.

Geological Map of the District



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12. Drainage and Irrigation Pattern:-

DRAINAGE

The district falls in drainage area of Ganges system. The whole water of the district drained out through Chambal river which joins the Yamuna . Generally, the flow of the water is towards north-east. Chambal is the main river of the district. Asan and Kunwari are the tributaries of Chambal river.

(1) The Chambal river :

This river flows from west to north in the district. The Chambal river rises from the Janapao hills (854 meters) in Indore district. It flows through Indore ,Ujjain, Ratlam, and after Mandsaur through Rajasthan. At the point of Parvati confluence it touches the Sheopur district and forming the eastern boundary of the district. It enters Morena district north to Nitanvas and makes the inter-state natural boundary between Madhya Pradesh and Rajasthan and flows ahead. After identification of boundary of Uttar Pradesh it joins Yamuna river in Etawa district. The Chambal valley has high banks with deep and widely development ravines by which it is known as Chambal ravines (Chambal Beehad).

(2) Asan river


This river rises from the plateau of Deori in Vijaypur tahsil of Sheopur district . It makes about 24 kms. boundary away from the district and flows north-easterly course. Its course has two dams at Pagara and Kutwar. The river forms the district boundary with Bhind for some distance and flows towards north of Bhind district . The main tributary is Kunwari which joins at Sangoli village . On the right bank of the district the south or the Sank is the only tributary joining the Asan from the north-eastern course of Kutwar dam.

(3) The Kunwari river

The Kunwari river rises from the north-eastern plateau of Deogarh in Shivpuri district and enters Sabalgarh tehsil of Sheopur district . It flows towards north east at the middle part of the district and flows to Joura, Morena and Ambah tahsil and joins Asan river. The small tributaries like Sole, and Son etc. are flowing in the district.

Irrigation Practices

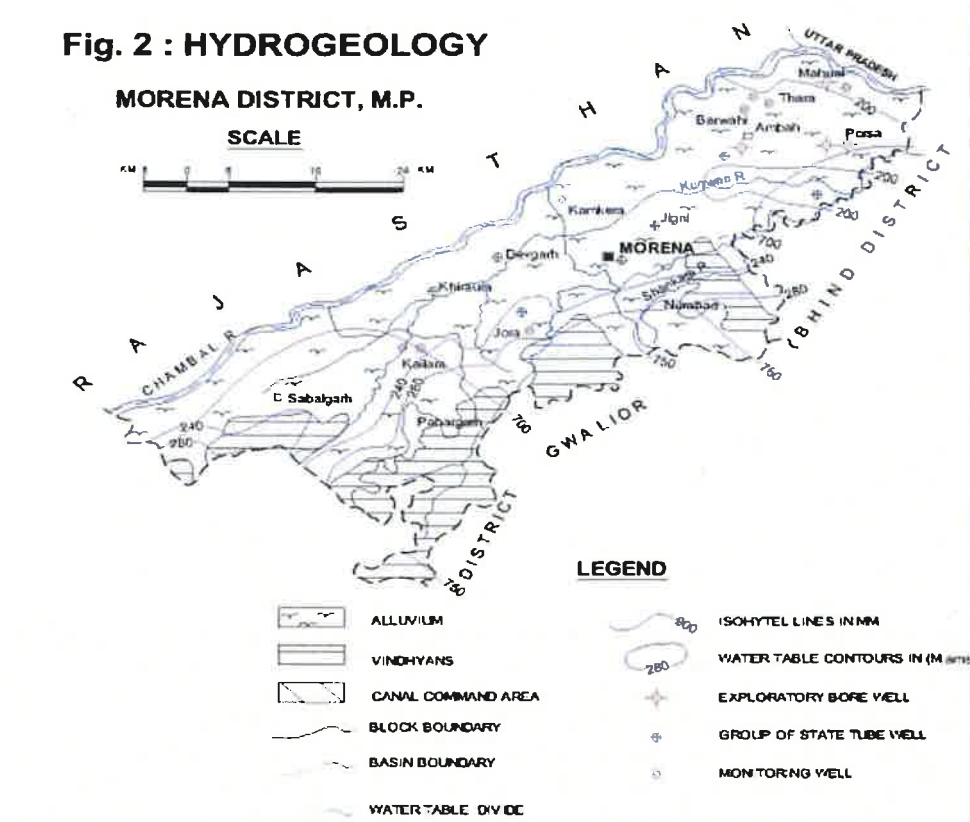
Irrigation is the artificial application of water to the soil for normal growth of plants. Water is an important determinant factor for production of crops in agriculture sector. Intensive and extensive cultivation of land depends mainly on the availability of water. Medium and minor irrigation schemes are implemented in the state for augmenting the water supply for agriculture. The various sources of irrigation are canals, tanks, tube wells, ordinary wells, springs and channels.


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13. Surface and Ground water scenario of the district

Ground Water SCENARIO

Hydrogeology The hydrogeological map of the district is presented as figure 2.

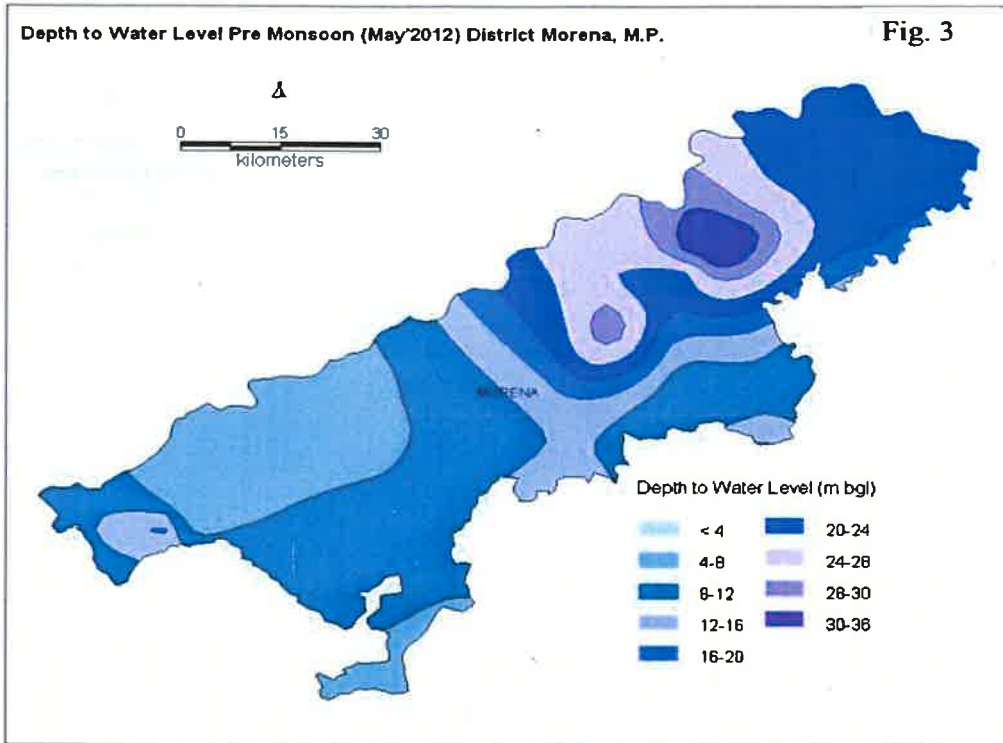


Vindhian super group of rocks, sand stones and shales, laterite and alluvium are the rock types exposed in the area.(Fig 2) The area exhibits good development of sedimentary structures viz., current bedding, ripple marks, rain prints, rib and furrow structures, ball and 3 pillow structures, mud cracks, clay balls, concretions, load and flute structures etc. The general strike of the bedding is North-South to NNE-SSW with varying dips of 4 to 10 degrees towards west and north. The deformational structures of the area are mainly represented by various sets of joints trending NW-SE, NE-SW, E-W and NNE-SSW with vertical dips. (GSI) The sandstones are hard and compact with siliceous matrix and as such are devoid of primary porosity and permeability. But wherever they are weathered and jointed secondary porosity and permeability is developed and made them water bearing. It is observed that sandstones in general are poorly and moderately weathered (2 to 4 metres) and at places they are jointed and do not possess sufficient ground water potential. Ground water occurs under water table condition and exists in weathered portions and in jointed zones. The shales are fine grained and compact and are porous but are not permeable. At most places in most of the area shales are devoid of ground water but near river beds they form water bearing due to the presence of bedding planes and joints. Ground water occurs under water table conditions. The water holding capacity in alluvium mainly depends upon the thickness and the aerial extent. It is found that along the banks of Chambal and Kanwari rivers, gully erosion is very common and spread over 1 to 2 Km away from the banks. It is more clayey and silty and as such has poor to moderate water bearing capacity. One or two aquifers are present in the formation and ground water is found to be under phreatic as well as semi confined to confined conditions. Central Ground Water Board had constructed 11 exploratory wells and 8 observation wells in the area. The details of aquifer zones, discharge, water levels and aquifer parameters etc., are given in Table 1. It is observed that Alluvium forms prolific aquifer whereas Vindhyan forms poor aquifer in the district.

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4.1.1 Water levels

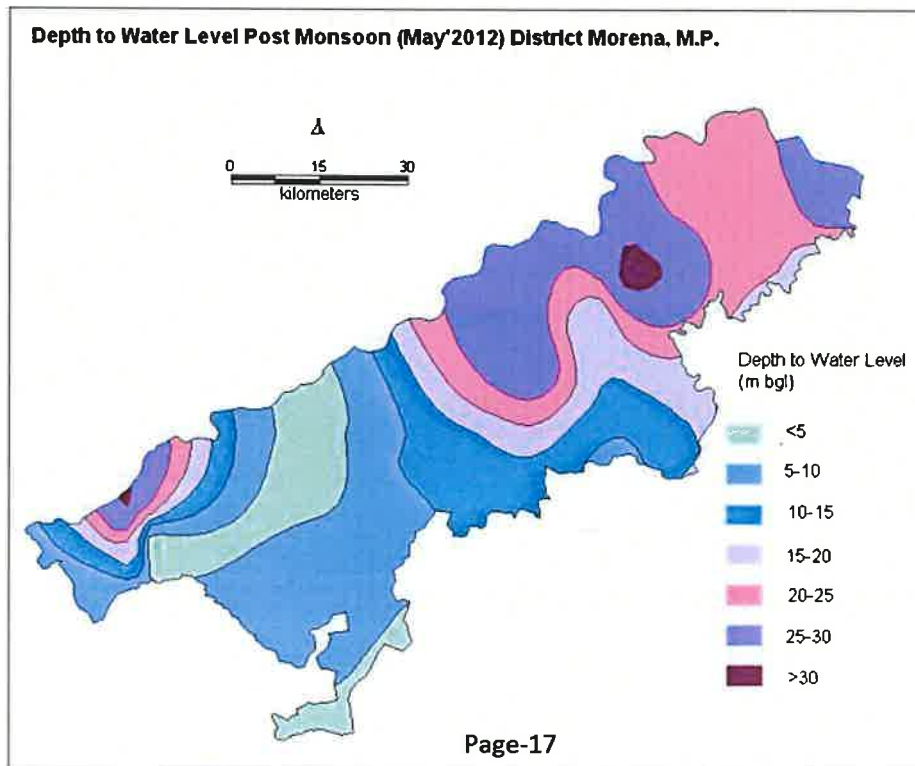
Water level data, including historical data, are essential not only to know the present ground water conditions but also for forecasting future trends in response to ground water reservoir operations. CGWB is monitoring 17 NHS wells in the district. Pre and Post monsoon depth to water level maps are prepared and presented (Fig 3 &4) 4.1.1.1 Pre- monsoon (May, 2012) Pre monsoon depth to water levels map is presented as figure 3. A perusal of map reveals that the depth to water level ranges from less than 5.6mbgl to 31.78 mbgl in the district. However, in major part the DTW is less than 28 mbgl. DTW of more than 30 mbgl was observed in an isolated patch in north eastern par




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Post- monsoon (Nov. 2012)

Post monsoon depth to water level map is presented as figure 4. during post monsoon period, water levels ranges from 1.60 mbgl to 31.78 mbgl. However, in major part the depth to water level is less than 30 mbgl. Deeper water level of more than 30 mbgl is observed in two small isolated patches one each in western part and in north eastern part. Long term water level trend for 10 years (2003-10) shows that there is overall decline in the area. The decline ranges from 0.61 cm/year to 106 cm/year.



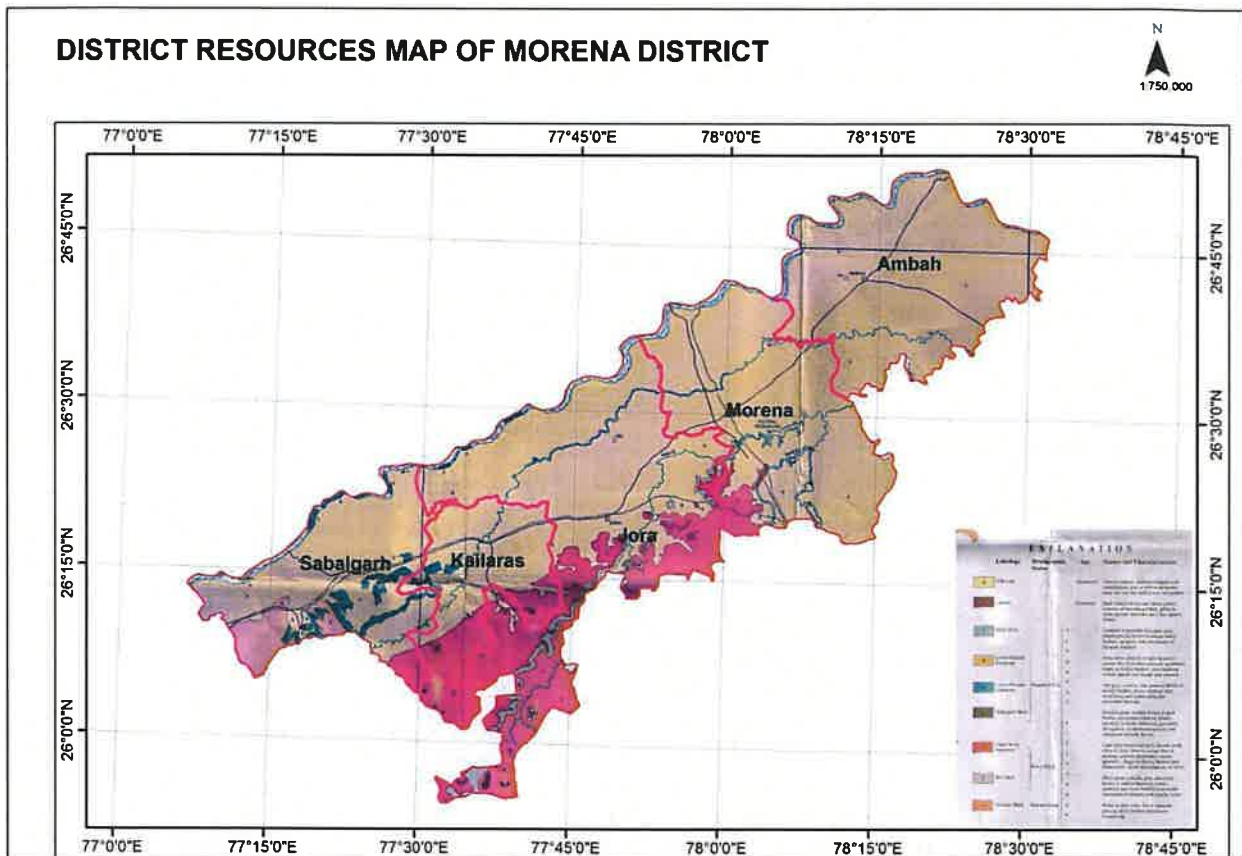

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4.2 Ground Water Resources (2009)

Morena district is characterized by alluvial formation, Vindhyan Formation and Gwalior Series. Dynamic ground water resources of the district have been estimated for base year -2008/09 on block-wise basis (Table 2). There are seven assessment units (block) in the district which fall under command (48 %) and non-command (52 %) sub units. Non command areas of Kailaras , Morena and Sabalgarh blocks of the district are categorized as semi critical . The highest stage of ground water development is computed as 74 % in Morena block. The net ground water availability in the district 64,244 ham and ground water draft for all uses is 27,597 ham, making stage of ground water development 43% as a whole for district. After making allocation for future domestic and industrial supply for next 25 years, balance available ground water for future irrigation would be 34,232 ham.

4.3 Ground Water Quality

Ground water quality in Morena district is assessed annually by CGWB on the basis of analysis of ground water samples collected from hydrograph stations located in the district. The Electrical conductivity ranges from 550 to 2080 $\mu\text{S}/\text{cm}$ at 25°C. The Fluoride is within permissible limits and ranges from 0.06 mg/l to 1.4 mg/l. The Nitrate ranges from 2.5 mg/l to 298 mg/l.



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14. List of Table

1. Sand Mining Area based on Pre-Monsoon

S.N.	Name of Mines	Tehsil	Total Area in m ²	Estimated Quantity in M ³
1.	Barwasin Ghat (Khandoli-Kenthri)	Joura/Morena	1186600	2728950
2.	Rajghat (Bhanpur-Piprai)	Morena	789000	1950000

2. Sand Mining Area based on post-Monsoon:- NA

3. Drainage System with description of main rivers

S.N.	Name of River	Area Drained (km ²)	Area Drained in the district (km ²)	% Of area drained in the district
1	Chambal	143219	170	0.118

4. Salient features of important river and streams

S.N.	Name of River or stream	Total length in (km)	Place of Origin	Altitude of Origin
1	Chambal	1024	Mhow (MP)	870.25 m

5. Length and width of sand mines

S.N.	Name of River or stream	Name of the mines	Area	Length of the sand mine	width of the sand mine
1.	Chambal	Barwasin Ghat (Khandoli-Kenthri)	118.66	3500	339
2.	Chambal	Rajghat (Bhanpur-Piprai)	78.90	3000	260


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6. Sand mineral potential data

SN	Portion of the River or Stream commended of Minerals Concession			Average length	Average Width	Sanction Area Hect.	Area recommended Hect.	Total Sand m3	Mineable Mineral potential (60% of total mineral potential)	Annual Sand Production m3
	River/Ghat	Village	Khasra no.							
1.	Barwasin Ghat	Khandoli	852 / 1,852 / 2,746	3500	339	118.66	118.66	2728950	1637508 m3	1637370 m3
		Kenthri	02,103,101							
2.	Rajghat	Bhanpur	02,03,14,15,16,17	3000	260	78.90	78.90	1950000	1170000 m3	1170000 m3
		Piprai	02,177,180,236,239							

7. Details of Annual Deposition

SN	Name of River	Portion of the district or stream recommended for mineral concession	Area recommended for mineral concession (in hectare)	Mineable Mineral potential (60% of total mineral potential) in m3
1.	Chambal (Barwasin Ghat)	Along the River bank in khasra no. 2,103,101 of village Kenthri Barwasin Ghat.	118.66	1637370 m3
2.	Chambal (Rajghat)		78.90	1170000 m3

8. Concession area detail

SN	Name of River	Total Area in m2	Standard depth in meters	Sand mines quantity m3	Total Mineable Mineral potential (60%)	Name of River
1.	Barwasin Ghat	1186600	2.3	2729180 m3	1637508 m3	Chambal
2.	Rajghat	789000	2.5	1972500 m3	1183500 m3	Chambal

टीप:- मुरैना जिले में म०प्र० राजपत्र दिनांक 31 जनवरी 2023 गजट नोटिफिकेशन होने के पश्चात् नवीन रेत खदान का घोषित / चिन्हित किया गया है। इससे पूर्व वित्तीय 03 वर्षों में रेत खदान स्वीकृत नहीं रही है। वित्तीय तीन वर्षों में खनिज रेत खदान का उत्पादन शून्य है। गजट नोटिफिकेशन के बाद ही रेत खदान क्षेत्र चिन्हित/घोषित किये जाने की कार्यवाही की गई है।


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