



राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकरण

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



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

वेबसाइट- <http://www.mpseiaa.nic.in>
दूरभाष नं. - 0755-2466970, 2466859

No: /1068 / SEIAA/2023

Date: 8/8/23

प्रति,

कलेक्टर
जिला - जबलपुर (म.प्र.)

विषय: संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर रेत खनिज (संशोधित)

राज्य स्तरीय समाधात निर्धारण प्राधिकरण की 797^{वीं} बैठक दिनांक 01.08.2023 में निम्नानुसार निर्णय लिया गया :-

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 657^{वीं} बैठक दिनांक 11.07.2023 में जबलपुर जिले की संशोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

“..... प्रस्तुत संशोधित जिला सर्वेक्षण रिपोर्ट रेत खनिज (संशोधित) समिति के समक्ष प्रस्तुत की गई थी जिसको समिति द्वारा मान्य किया गया एवं संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर रेत खनिज (संशोधित) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु अनुशंसा सहित राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकरण की ओर प्रेषित किया जाये। ”

राज्य स्तरीय समाधात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 657^{वीं} बैठक दिनांक 11.06.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए जबलपुर जिले की संशोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदानुसार जिला कलेक्टर, जबलपुर को जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक, भौमिकी तथा खनिकर्म को सूचित किया जाये।

उपरोक्त निर्णयानुसार कृपया संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर रेत खनिज (संशोधित) 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।

% (मुजीबुर्रहमान खान)
सदस्य सचिव

क्र. 1069

/ SEIAA / 2023 भोपाल

दिनांक 8/8/23

प्रतिलिपि :-

- प्रमुख सचिव, म.प्र. शासन, पर्यावरण विभाग, मंत्रालय, भोपाल की ओर कृपया सूचनार्थ ।
- संचालक, प्रशासन / तकनीकी, संचालनालय, भौमिकी तथा खनिकर्म, 29-ए, खनिज भवन, अरेंगा हिल्स, भोपाल (म.प्र.)
- सदस्य सचिव, राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), अनुसंधान एवं विकास विंग, म.प्र. प्रदूषण नियंत्रण बोर्ड, पर्यावरण परिसर, ई-5, अरेंगा कॉलोनी, भोपाल (म.प्र.) - 462016 की ओर सूचनार्थ ।

% सदस्य सचिव



657
117

राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकरण (पर्यावरण, धन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)



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

वेबसाइट- <http://www.moselaa.nic.in>
दूरभाष नं. - 0755-2466970, 2466859
No: 739 / SEIAA/2023
Date: 23/6/23

प्रति,

कलेक्टर

जिला - जबलपुर (म.प्र.)

विषय: संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर (रेत खनिज)

संदर्भ: आपका पत्र क्र. 369 दिनांक 08.06.2023

राज्य स्तरीय समाधात निर्धारण प्राधिकरण की 793^{वीं} बैठक दिनांक 21.06.2023 में निम्नानुसार निर्णय लिया गया :-

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की 650वीं बैठक दिनांक 08.06.2023 में जबलपुर जिले की संशोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

अतः समिति द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर (रेत खनिज) की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकरण की ओर प्रेषित किया जाये।

राज्य स्तरीय समाधात निर्धारण प्राधिकरण (SEAC) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की 650वीं बैठक दिनांक 08.06.2023 के अनुमोदन प्रस्ताव को मान्य करते हुए जबलपुर जिले की संशोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदानुसार जिला कलेक्टर, जबलपुर को जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक, भौमिकी तथा खनिकर्म को सूचित किया जाये।

उपरोक्त निर्णयानुसार कृपया संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर (रेत खनिज) 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।

(मुजीबुर्रहमान खान)
सदस्य सचिव

क्र.. / SEIAA / 2023 भोपाल दिनांक

प्रतिलिपि :-

- प्रमुख सचिव, म.प्र. शासन, पर्यावरण विभाग, मंत्रालय, भोपाल की ओर कृपया सूचनार्थ ।
- संचालक, प्रशासन / तकनीकी, संचालनालय, भौमिकी तथा खनिकर्म, 29-ए, खनिज भवन, अरेंग हिल्स, भोपाल (म.प्र.)
- सदस्य सचिव, राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), अनुसंधान एवं विकास विंग, म.प्र. प्रदूषण नियंत्रण बोर्ड, पर्यावरण परिसर, ई-5, अरेंग कॉलोनी, भोपाल (म.प्र.) - 462016 की ओर सूचनार्थ ।

सदस्य सचिव



राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकरण

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



पर्यावरण नियोजन एवं समन्वय संगठन
पर्यावरण परिसर, ई-५, अरेंडा कॉलोनी

भोपाल-४६२०१६ (म.प्र.)

ब्रेवसाईट- <http://www.mpsseiaaa.nic.in>

दूरभाष नं. - ०७५५-२४६६९७०, २४६६८५९

No: / SEIAA/2023

Date:

प्रति,

कलेक्टर

जिला - जबलपुर (म.प्र.)

विषय: संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर (रेत खनिज)

संदर्भ: आपका पत्र क्र. ३६९ दिनांक ०८.०६.२०२३

राज्य स्तरीय समाधात निर्धारण प्राधिकरण की ७९३^{वीं} बैठक दिनांक २१.०६.२०२३ में निम्नानुसार निर्णय लिया गया :-

राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC) की ६५०वीं बैठक दिनांक ०८.०६.२०२३ में जबलपुर जिले की संशोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में निम्नानुसार सुझाव सहित अनुशंसा की गई है :

“अतः समिति द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ संशोधित जिला सर्वेक्षण रिपोर्ट जिला-जबलपुर (रेत खनिज) की जिला सर्वेक्षण रिपोर्ट (रेत खनिज) अनुमोदन हेतु विचारार्थ एवं आगामी कार्यवाही हेतु राज्य स्तरीय पर्यावरण समाधात निर्धारण प्राधिकारण की ओर प्रेषित किया जाये।”

राज्य स्तरीय समाधात निर्धारण प्राधिकरण (SEIAA) द्वारा विस्तृत चर्चा एवं विचार विमर्श उपरांत SEAC की ६५०वीं बैठक दिनांक ०८.०६.२०२३ के अनुमोदन प्रस्ताव को मान्य करते हुए जबलपुर जिले की संशोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन SEAC द्वारा सुझाई गई उपरोक्त अनुशंसाओं के साथ किया जाता है। तदानुसार जिला कलेक्टर, जबलपुर को जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर अपलोड करवाये जाने एवं संचालक, भौमिकी तथा खनिकर्म को सूचित किया जाये।

उपरोक्त निर्णयानुसार कृपया संशोधित जिला सर्वेक्षण रिपोर्ट जिला- जबलपुर (रेत खनिज) 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।

(मुजीबुर्रहमान खान)
सदस्य सचिव

क्र. ७४०

/SEIAA/2023 भोपाल

दिनांक २३/६/२३

प्रतिलिपि :-

- प्रमुख सचिव, म.प्र. शासन, पर्यावरण विभाग, मंत्रालय, भोपाल की ओर कृपया संचारार्थ ।
- संचालक, प्रशासन/तकनीकी, संचालनालय, भौमिकी तथा खनिकर्म, २९-ए, खनिज भवन, अरेंडा हिल्स, भोपाल (म.प्र.)
- सदस्य सचिव, राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), अनुसंधान एवं विकास विंग, म.प्र. प्रदूषण नियंत्रण बोर्ड, पर्यावरण परिसर, ई-५, अरेंडा कॉलोनी, भोपाल (म.प्र.) - ४६२०१६ की ओर सूचनार्थ।

सदस्य सचिव

Final

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

क्रमांक ३६७ / खनिज / 2023-24

जबलपुर, दिनांक ४ / ६ / 2023

प्रति,

सदस्य सचिव
राज्य विभोशज्ज मूल्यांकन समिति
भोपाल (म.प्र.)

विषय:- सं गोधित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) का अनुमोदन बाबत।

—0—

उपरोक्त विषयांतर्गत लेख है कि मध्यप्रदेश शासन खनिज साधन विभाग के मंशाअनुरूप जिले की रेत खदानों के समूह का गठन मौका निरीक्षण किया जाकर नये सिरे से किया गया है। जिससे रेत खदानों के अक्षांश-देशांश, खनिज मात्रा तथा खदानों के रकबे में परिवर्तन हुआ है तथा 05 खदानें कम हुई हैं।

जिसके कारण जबलपुर जिले की पूर्व से अनुमोदित जिला सर्वेक्षण रिपोर्ट (रेत खनिज) में उल्लेखित रेत खदानों के अक्षांश-देशांश, खनिज मात्रा, खदानों गहराई, खसरा व रकबे में परिवर्तन तथा 05 खदानें कम की जाकर संशोधित/अनुमोदित जिला सर्वेक्षण रिपोर्ट जिला पोर्टल पर दिनांक 25/05/2023 को आमजन के दावे/आपत्ति हेतु अपलोड किया गया है।

उपरोक्त के संबंध में आज दिनांक तक कोई दावा/आपत्ति प्राप्त नहीं हुई है। नियत अवधि में जिला सर्वेक्षण रिपोर्ट के संबंध में आमजन द्वारा कोई आपत्ति/दावे प्राप्त होते हैं तो जिला सर्वेक्षण रिपोर्ट में सुधार किया जाकर पुनः प्रस्तुत की जावेगी। अतः गठित कमेटी द्वारा संशोधित तैयार/अनुमोदित जिला सर्वेक्षण रिपोर्ट की प्रति संलग्न कर अनुमोदन हेतु सादर प्रेशित है।

[Signature]
खनि अधिकारी
जिला जबलपुर म.प्र.

पृ. क्रमांक / / खनिज / 2023-24

जबलपुर, दिनांक / / 2023

प्रतिलिपि:-

1. सदस्य, सचिव, राज्य पर्यावरण प्रभाव आंकलन प्राधिकरण भोपाल म.प्र. की ओर अग्रिम कार्यवाही हेतु सूचनार्थ।

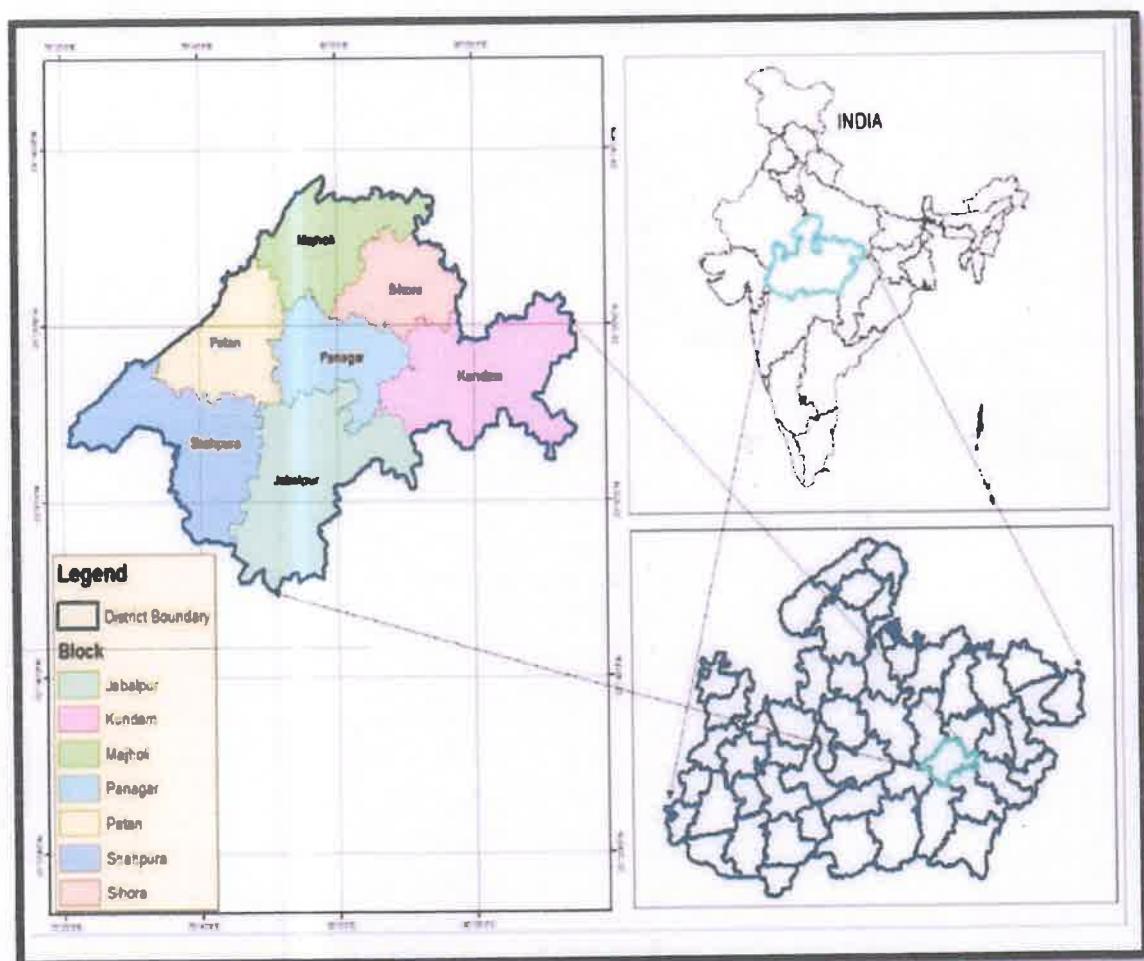
खनि अधिकारी
जिला जबलपुर म.प्र.

DSR: DISTRICT SURVEY REPORT

FOR RIVER SAND MINING

DISTRICT - JABALPUR

STATE – MADHYA PRADESH



IN PURSUANCE TO THE GAZETTE NOTIFICATION, MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (MoEF & CC), THE GOVERNMENT OF INDIA NOTIFICATION Dated, 25 July 2018.

[Signature]
State Level Environment Impact Assessment Authority, M.P.

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

[Signature]
State Level Environment Impact Assessment Authority, M.P.
(EPFO)
Paryavaran Farisar
E-5, Arera Colony, Bhopal (M.P.)

INDEX

Sr. No.	Content	Page No.	
1.	Introduction	1 - 5	
2.	Overview of Mining Activity in the District	6	
3.	The List of Mining Lease in the District with location, area and period of validity	7 - 22	
4.	Details of Royalty or Revenue received in last three years	23	
5.	Detail of Production of Sand in last three years	23	
6.	Process of Deposition of Sediments in the rivers of the district	24 - 32	
7.	General Profile of the District	33 - 35	
8.	Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.	36 - 38	
9.	Physiography of the District	39	
10.	Rainfall: month-wise;	40	
11.	Geology and Mineral Wealth	41 - 44	
12.	Drainage and Irrigation Pattern	45 - 46	
13.	Surface and Ground Water scenario of the District	47 - 50	
14.	Mining Lease Marked on the District Map	51	
15	List of Tables	Sand Mining Area based on Pre-Monsoon	52- 54
		Sand Mining Area based on Post-Monsoon	55 - 57
		Drainage System with description of main rivers	58
		Salient Features of important rivers and streams	58

	Length and width of the sand mines	59 - 63
	Sand Mineral Potential Data	64
	Details of Annual Deposition	64
	Concession area detail	65
15	Google Images of Sand Mines	-


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


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

District Survey Report: Jabalpur

District Survey Report: Jabalpur

1 Introduction

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. The main purpose of preparation of District Survey Report (DSR) is to identify the Sand resources and developing the sand mining activities along with other relevant data of the district.

The process of making a DSR includes:

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

Guidelines to Monitor Sand Mining

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

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


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


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

District Survey Report: Jabalpur

- Illegal and uncontrolled illegal mining also leads to loss of revenue to the State and degradation of the environment.

Enforcement and Monitoring Guidelines for Sand Mining 2020

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

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

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

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

District Survey Report: Jabalpur

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

Surrounding Districts

Jabalpur District is a district of Madhya Pradesh state in central India. The city of Jabalpur is the administrative headquarters of the district. Jabalpur District is located in the Mahakoshal region of Madhya Pradesh, on the divide between the watersheds of Narmada and the Son, but mostly within the valley of the Narmada, which here runs through the famous gorge known as the Marble rocks, and falls 30 ft. over a rocky ledge (the Dhuan dhar, or misty shoot). The district is bounded in the South east and east by Mandla & Dindori districts, in the south by Seoni and in the south West Narsingpur district and in the west by Damoh district. The district falls in survey of India Top sheet Nos. 55m, 64A- and 55 N on 1:250,000.

General Features

Table 1 Administrative Setup of the District

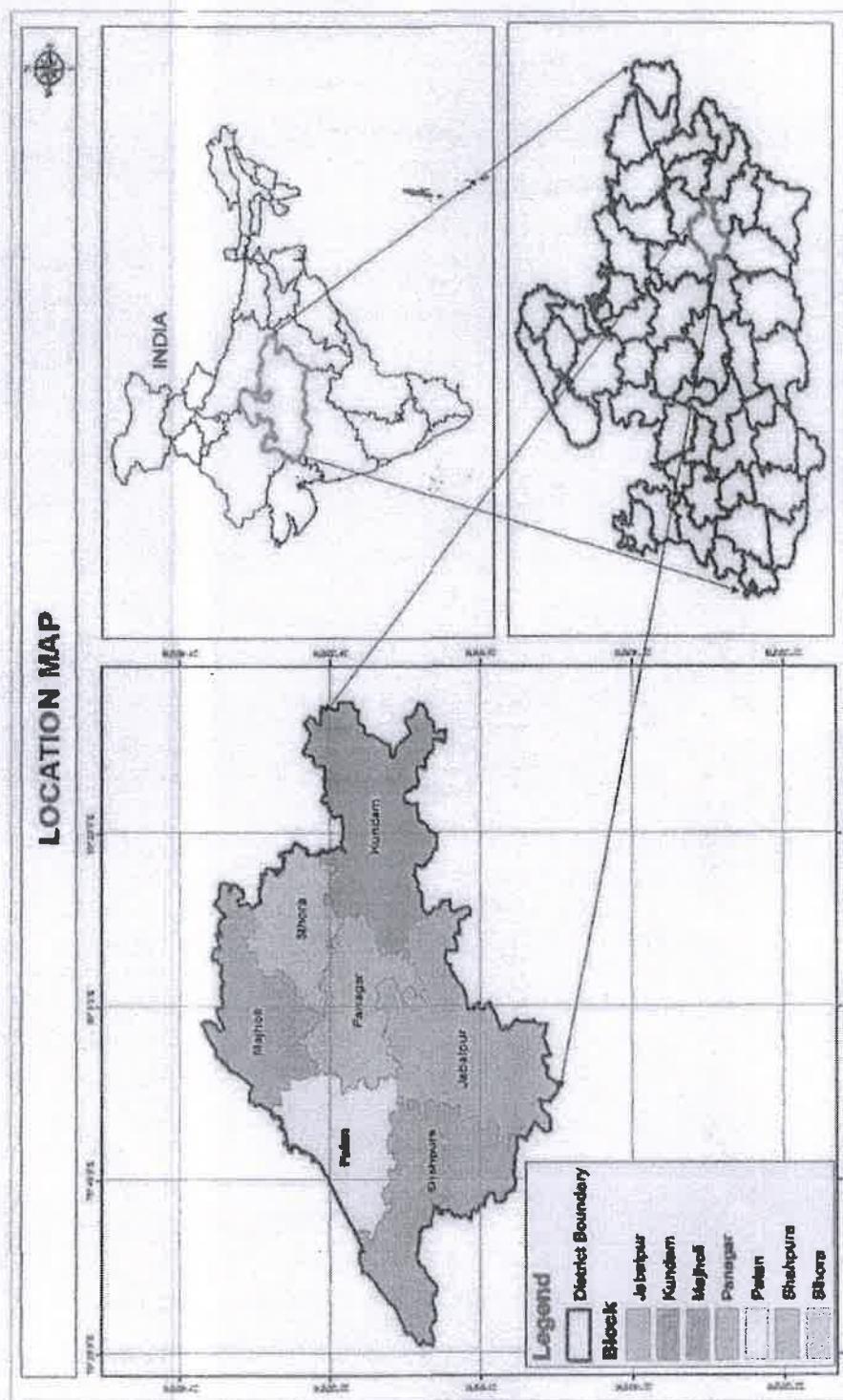
District.	TEHSIL	BLOCKS
Jabalpur	Jabalpur	Sihora
	Kundam	Majholi
	Majholi	Patan
	Patan	Shahpura
	Panagar	Panagar
	Sihora	Jabalpur
	Shahpura	Kundam
	Adhartal	
	Ranjhi	
	Gorakhpur	
Total	10	7

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

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

District Survey Report: Jabalpur

Location of the District



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

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

District Survey Report: Jabalpur

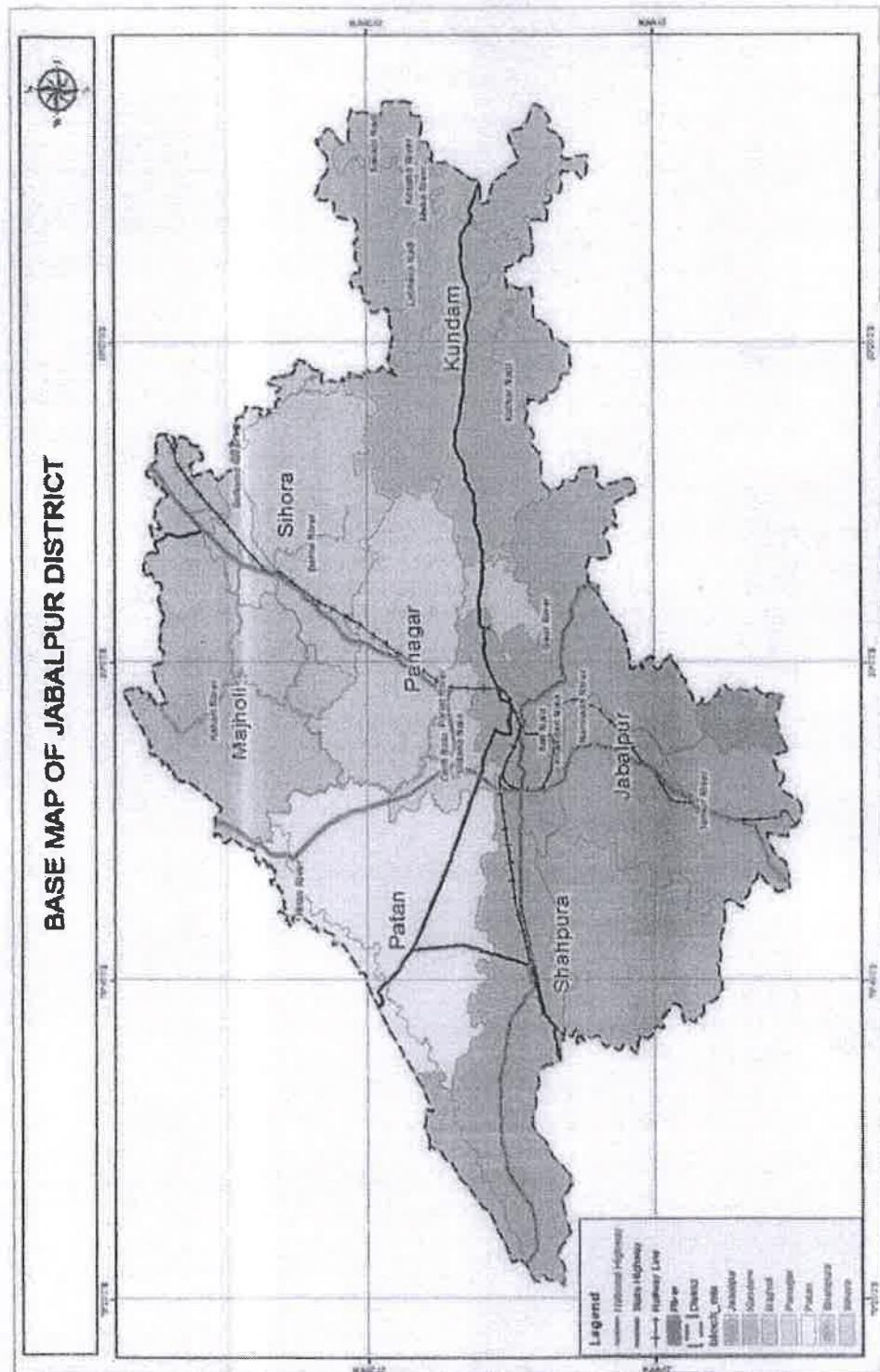


Figure 2 Base Map of the District

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

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

District Survey Report: Jabalpur

2 Overview of Mining Activity in the District

Table 2 Minor Mineral Production in the District

Sr. No.	Mineral	Production in tones
1.	Stone Gitti	989632.23
2.	Murrum	131880.01
1.	Soil	41661.6
2.	Bolder	18300
3.	Marbe	400
4.	Silica Sand	465
5.	Dolomite	86887.77
6.	Fireclay	31835
7.	Leterite	570958.7
8.	Ochre	11165.66
9.	Red Ochre	220
10.	Stone Gitti	989632.23
11.	Murrum	131880.01
12.	Sand	2,88,728

Minor Mineral production in Cu.m

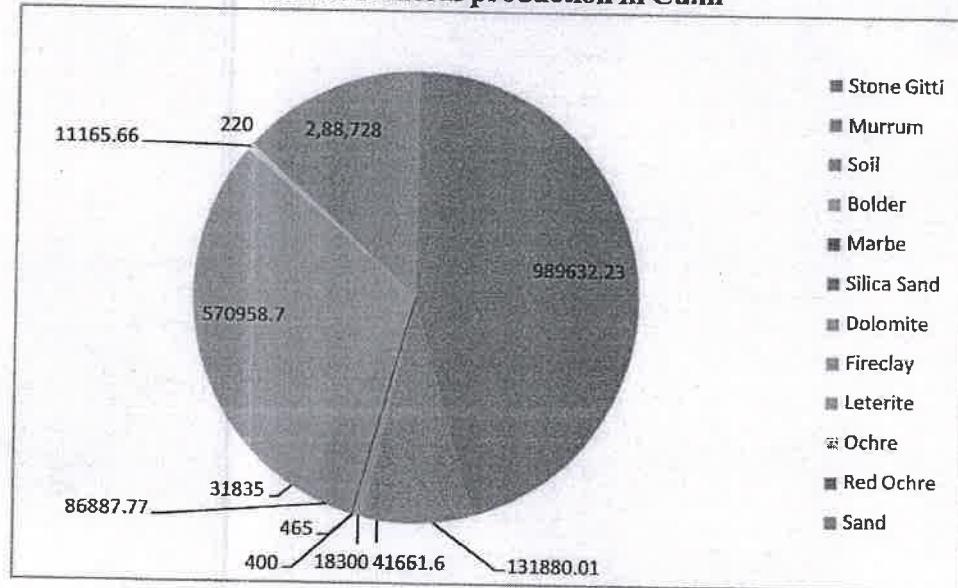


Figure 3 Minor Mineral production in the District

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

6
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Parivar Parivar
E-5, Arera Colony, Bhopal (M.P.)

District: Jabalpur

The list of Sand Mining Leases in the District With Location, area and Period of Validity

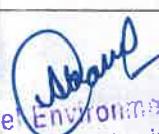
Sr. No.	Lease period	Tehsil	Village(Name of Mine)	Khasra No.	Approved Area (Ha) / Quantity in cum	BP. No.	LATITUDE	LONGITUDE	Coordinate
1	"	Jabalpur	Sagda Jhapani	1	2,023/ 36414	A B C D	23° 0'24.43"N 23° 0'25.65"N 23° 0'17.62"N 23° 0'16.51"N	79°55'29.50"E 79°55'27.72"E 79°55'22.33"E 79°55'24.17"E	
2	"	Jabalpur	Saliwada	464	4,000/ 60000	A B C D	22°59'41.15"N 22°59'38.10"N 22°59'32.51"N 22°59'36.72"N	79°54'32.45"E 79°54'32.93"E 79°54'23.42"E 79°54'20.88"E	
3	"	Jabalpur		119	4,000/ 3000	1 2 3 4 5 6	22°56'52.58"N 22°56'51.39"N 22°56'48.23"N 22°56'42.64"N 22°56'38.66"N 22°56'39.75"N	79°51'17.29"E 79°51'20.67"E 79°51'20.09"E 79°51'17.67"E 79°51'17.55"E 79°51'14.11"E	


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


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

District: Jabalpur

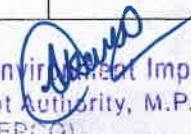
					BP. No.	LATITUDE	LONGITUDE
4	"	Jabalpur	Siliuwa	103	4,000/ 3000	22°54'37.22"N 22°54'42.99"N 22°54'45.27"N 22°54'48.69"N 22°54'51.33"N 22°54'53.98"N 22°54'50.57"N 22°54'49.21"N 22°54'45.21"N 22°54'41.79"N 22°54'36.98"N	79°51'0.07"E 79°51'1.52"E 79°51'01.42"E 79°50'58.74"E 79°50'52.71"E 79°50'57.10"E 79°51'00.53"E 79°51'00.57"E 79°51'03.44"E 79°51'03.52"E 79°51'01.98"E
5	"	Jabalpur	Para	436	6,500/ 2000	22°57'49.36"N 22°57'50.25"N 22°58'8.13"N 22°58'7.43"N	79°54'25.67"E 79°54'28.72"E 79°54'24.64"E 79°54'19.92"E
6	"	Jabalpur	Salaiya	241	4,000/ 2000	23°931.09"N 23°934.43"N 23°932.13"N 23°930.19"N 23°916.58"N 23°915.81"N 23°929.03"N 23°930.78"N	80°9'17.13"E 80°9'7.26"E 80°9'16.34"E 80°9'19.24"E 80°9'32.28"E 80°9'31.02"E 80°9'18.89"E 80°9'16.59"E


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


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

District: Jabalpur

7	"	Sihora	Khirhani Kalan	271	2,000/ 4000	BP. No.	LATITUDE	LONGITUDE	
						1	23°25'25.89"N 23°25'27.28"N 23°25'24.24"N 23°25'16.15"N 23°25'15.63"N 23°25'23.31"N	80°16'28.57"E 80°16'29.02"E 80°16'36.24"E 80°16'44.63"E 80°16'43.73"E 80°16'35.35"E	
8	"	Kundam	Ranipur	428	5,000/2000	BP. No.	LATITUDE	LONGITUDE	
						1	23°7'23.93"N 23°7'30.38"N 23°7'31.91"N 23°7'35.78"N 23°7'33.85"N 23°7'27.24"N 23°7'26.70"N 23°7'21.74"N	80°10'47.14"E 80°10'52.91"E 80°10'55.21"E 80°10'59.57"E 80°11'11.67"E 80°10'54.21"E 80°10'54.45"E 80°10'51.26"E	
9	"	Kundam	Kalyanpur	121	2,900/7000	BP. No.	LATITUDE	LONGITUDE	
						A	23°8'02.62"N 23°8'06.15"N 23°8'11.72"N 23°8'11.21"N 23°8'02.49"N	80°09'51.64"E 80°09'51.64"E 80°09'53.63"E 80°09'56.91"E 80°09'54.94"E	


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


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

District: Jabalpur

S. No.	Name of Gram Panchayat	Name of Village	Number of Households	4,500/2000		
				BP. No.	Latitude	Longitude
10	Shahpura	Kushti	481	1	23° 831.69"N	79°31'35.36"E
				2	23° 834.90"N	79°31'36.01"E
				3	23° 833.97"N	79°31'40.55"E
				4	23° 831.41"N	79°31'49.32"E
				5	23° 831.24"N	79°31'53.03"E
				6	23° 828.30"N	79°31'52.34"E
11	Shahpura	Mudkatiya	1	BP. No.	Latitude	Longitude
				1	23° 630.78"N	79°42'11.53"E
				2	23° 635.35"N	79°42'16.61"E
				3	23° 636.58"N	79°42'18.87"E
				4	23° 638.94"N	79°42'26.26"E
				5	23° 635.73"N	79°42'27.40"E
				6	23° 633.46"N	79°42'22.04"E
12	Shahpura	DhartiKachhar	1	BP. No.	Latitude	Longitude
				A	23° 64.21"N	79°40'33.56"E
				B	23° 65.67"N	79°40'29.94"E
				C	23° 557.48"N	79°40'21.94"E
13	Shahpura	Bhairavghat	98	BP. No.	Latitude	Longitude
				1	23°13'43.32"N	79°32'12.11"E
				2	23°13'43.50"N	79°32'12.98"E
				3	23°13'44.42"N	79°32'14.25"E
				4	23°13'45.21"N	79°32'15.97"E



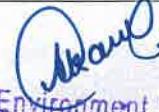
**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
 Paryavaran Parisar
 E-5, Arera Colony, Bhopal (M.P.)



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

District: Jabalpur

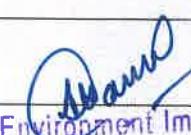
District: Jabalpur			
		BP. No.	LATITUDE LONGITUDE
14	Shahpura	Neemkheda	5 23°13'46.84"N 79°32'20.21"E 6 23°13'48.42"N 79°32'22.25"E 7 23°13'47.11"N 79°32'23.28"E 8 23°13'45.20"N 79°32'20.71"E 9 23°13'44.17"N 79°32'19.68"E 10 23°13'41.93"N 79°32'12.47"E
			4,000/10000
15	"	NewChargawa	414 13.370/ 8000
			BP. No.
			LATITUDE LONGITUDE
			1 23°7'2.51"N 79°34'45.12"E 2 23°7'3.10"N 79°34'48.85"E 3 23°6'58.27"N 79°34'49.67"E 4 23°6'52.57"N 79°34'51.57"E 5 23°6'51.61"N 79°34'47.53"E 6 23°6'57.11"N 79°34'45.83"E


**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)


**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

District: Jabalpur

District: Jabalpur			
		BP. No.	LATITUDE LONGITUDE
15		23° 8'27.63"N 16	79°32'7.44"E 23° 8'28.20"N 79°32'7.40"E
17		23° 8'28.18"N 18	79°32'4.84"E 23° 8'28.59"N 79°32'3.16"E
19		23° 8'27.79"N 20	79°32'2.53"E 23° 8'28.44"N 79°32'1.53"E
21		23° 8'29.15"N 16	79°31'59.93"E 23° 8'29.90"N 79°31'59.93"E
16	Shahpura	Barbari 484	6,000/ 8000
17	Shahpura	Juggpura 124	12,785/ 71500


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


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

District: Jabalpur

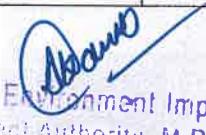
				11	23° 6'29.33"N	79°22'0.15"E
				12	23° 6'30.09"N	79°22'2.49"E
				13	23° 6'32.90"N	79°22'7.27"E
				14	23° 6'30.94"N	79°22'7.49"E
				15	23° 6'22.98"N	79°21'51.01"E
				16	23° 6'21.67"N	79°21'44.69"E
				17	23° 6'22.94"N	79°21'20.09"E
18	"	Shahpura	Dharampura	415	3,000/ 30000	BP. No.
						LATITUDE
						LONGITUDE
19	"	Shahpura	Malkachhar	152	2,000/ 8000	BP. No.
						LATITUDE
						LONGITUDE
				1	23° 6'23.32"N	79°38'58.03"E
				2	23° 6'25.05"N	79°38'58.78"E
				3	23° 6'24.43"N	79°39'0.04"E
				4	23° 6'24.52"N	79°39'1.09"E
				5	23° 6'21.13"N	79°39'6.92"E
				6	23° 6'20.71"N	79°39'7.15"E
				7	23° 6'20.82"N	79°39'7.83"E
				8	23° 6'20.05"N	79°39'9.37"E
				9	23° 6'18.31"N	79°39'8.39"E
20	"	Shahpura	Bhadpura	483	4,500/4000	BP. No.
						LATITUDE
						LONGITUDE
				1	23° 6'19.42"N	79°38'46.45"E
				2	23° 6'22.81"N	79°38'46.94"E
				3	23° 6'22.47"N	79°38'52.70"E
				4	23° 6'21.42"N	79°38'58.54"E


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

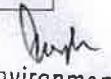

 State Level Environment Impact
 Assessment Authority, M.P.
 (EPSCO)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

District: Jabalpur

				District: Jabalpur			
No.	Name	Location	Elevation	BP.		Latitude	Longitude
				No.	BP.	No.	BP.
21	"	Shahpura	Ramkhediya	300	2,150/5000	1	23° 6'19.63"N 79°39'2.21"E
						2	23° 6'16.53"N 79°39'0.92"E
						3	23° 6'18.47"N 79°38'55.75"E
						4	23° 6'19.01"N 79°38'54.52"E
22	"	Shahpura	Khairi	151	4,000/ 5000	1	23° 6'31.22"N 79°36'5.26"E
						2	23° 6'34.03"N 79°36'6.43"E
						3	23° 6'31.25"N 79°36'13.80"E
						4	23° 6'28.48"N 79°36'12.56"E
23	"	Shahpura	Belkedi	339	13,450/ 73000	1	23° 8'21.64"N 79°33'4.87"E
						2	23° 8'18.35"N 79°33'2.81"E
						3	23° 8'13.93"N 79°33'13.48"E
						4	23° 8'17.48"N 79°33'15.55"E
24	"	Shahpura	Kudakalan	558	10,000/ 20000	1	23° 6'42.07"N 79°22'48.48"E
						2	23° 6'45.88"N 79°22'30.28"E
						3	23° 6'27.21"N 79°23'31.33"E
						4	23° 6'25.45"N 79°23'27.88"E



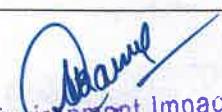
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCO)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

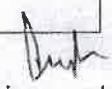


 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCO)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

District:Jabalpur

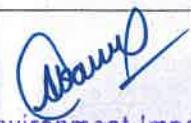
4	23° 6'20.60"N	79°26'39.73"E		
5	23° 6'20.21"N	79°26'40.00"E		
6	23° 6'19.41"N	79°26'40.08"E		
7	23° 6'16.94"N	79°26'43.82"E		
8	23° 6'15.40"N	79°26'45.27"E		
9	23° 6'11.02"N	79°26'52.06"E		
10	23° 6'7.45"N	79°26'56.12"E		
11	23° 5'59.32"N	79°27'10.41"E		
12	23° 5'57.53"N	79°27'13.18"E		
13	23° 5'56.94"N	79°27'15.12"E		
14	23° 5'54.31"N	79°27'12.41"E		
15	23° 5'59.87"N	79°27'3.40"E		
16	23° 6'7.83"N	79°26'52.00"E		
17	23° 6'12.55"N	79°26'45.72"E		
25	Patan Pondikalan	4,000/ 4000	BR. No.	LATITUDE LONGITUDE
			1	23°15'59.30"N 79°36'18.96"E
			2	23°16'2.45"N 79°36'17.28"E
			3	23°16'4.58"N 79°36'11.60"E
			4	23°16'5.98"N 79°36'4.06"E
			5	23°16'9.19"N 79°35'57.62"E
			6	23°16'10.33"N 79°35'58.58"E
			7	23°16'8.66"N 79°36'1.92"E
			8	23°16'4.91"N 79°36'16.26"E
			9	23°16'3.33"N 79°36'19.23"E
			10	23°15'59.70"N 79°36'20.97"E

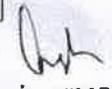

 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCO)
 Paryavaran Parishar
 E-5, Arera Colony, Bhopal (M.P.)


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

District: Jabalpur

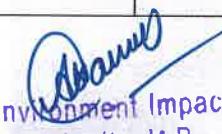
BP. No.	LATITUDE	LONGITUDE	2.000/ 4000		
			Patan	Malakhurd	1
1	23°15'9.08"N	79°34'5.69"E			
2	23°15'7.13"N	79°34'6.54"E			
3	23°15'5.90"N	79°34'5.14"E			
4	23°15'4.21"N	79°34'4.51"E			
5	23°15'2.40"N	79°34'5.03"E			
6	23°14'59.40"N	79°34'7.26"E			
7	23°14'58.89"N	79°34'8.29"E			
8	23°14'57.97"N	79°34'9.26"E			
9	23°14'53.72"N	79°34'12.45"E			
10	23°14'52.07"N	79°34'13.42"E			
11	23°14'51.98"N	79°34'11.86"E			
12	23°14'52.63"N	79°34'11.65"E			
13	23°15'1.27"N	79°34'4.49"E			
14	23°15'4.63"N	79°34'3.57"E			
15	23°15'7.90"N	79°34'4.76"E			
BP. No.	LATITUDE	LONGITUDE	4.000/ 4000		
			Patan	Pondikhurd	188
1	23°15'32.48"N	79°34'52.04"E			
2	23°15'32.37"N	79°34'50.22"E			
3	23°15'26.50"N	79°34'48.76"E			
4	23°15'20.74"N	79°34'46.63"E			
5	23°15'14.78"N	79°34'42.83"E			
6	23°15'9.03"N	79°34'40.33"E			
7	23°15'8.48"N	79°34'41.90"E			
8	23°15'13.43"N	79°34'44.60"E			
9	23°15'25.18"N	79°34'50.40"E			


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


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

District: Jabalpur

District: Jabalpur					
				BP. No.	LATITUDE LONGITUDE
28	"	Patan	Kaimori	87 2.000/ 2000	23°23'38.81"N 79°44'44.57"E
				1	23°23'38.81"N 79°44'44.57"E
				2	23°23'39.11"N 79°44'6.19"E
				3	23°23'36.36"N 79°44'6.98"E
				4	23°23'34.81"N 79°44'7.07"E
				5	23°23'26.71"N 79°44'10.69"E
				6	23°23'23.76"N 79°44'13.04"E
				7	23°23'22.63"N 79°44'12.49"E
				8	23°23'24.83"N 79°44'10.67"E
				9	23°23'27.59"N 79°44'8.90"E
				10	23°23'34.22"N 79°44'5.91"E
29	"	Patan	Chhituraha	1 2.000/ 10000	BP. No.
				A	23° 21'25.21"N 79°42'53.38"E
				B	23° 21'26.40"N 79°42'54.08"E
				C	23° 21'20.60"N 79°42'39.94"E
				D	23° 21'20.19"N 79°42'40.75"E
30	"	Patan	Gadaghat	1 2.000/4000	BP. No.
				1	23°18'21.28"N 79°38'44.56"E
				2	23°18'23.76"N 79°38'43.52"E
				3	23°18'25.05"N 79°38'44.55"E
				4	23°18'35.01"N 79°38'46.66"E
				5	23°18'37.24"N 79°38'47.45"E
				6	23°18'39.16"N 79°38'49.03"E
				7	23°18'38.53"N 79°38'49.77"E
				8	23°18'36.10"N 79°38'48.33"E
				9	23°18'24.08"N 79°38'45.95"E
				10	23°18'22.22"N 79°38'45.38"E



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



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

District: Jabalpur

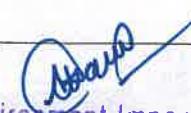
District: Jabalpur					
Sl. No.	Patan	Mahaikeda	42	2,000/8000	BP. LATITUDE LONGITUDE
			No.		
31	"	Patan	A	23°19'30.58"N	79°41'16.36"E
			B	23°19'31.53"N	79°41'16.40"E
			C	23°19'30.40"N	79°41'37.19"E
			D	23°19'29.33"N	79°41'36.46"E
32	"	Patan	Amalkheda	1	0,800/4500
				No.	BP. LATITUDE LONGITUDE
				1	23°15'41.42"N 79°35'29.48"E
				2	23°15'42.47"N 79°35'30.56"E
				3	23°15'39.38"N 79°35'34.76"E
				4	23°15'38.10"N 79°35'33.64"E
				5	23°15'40.85"N 79°35'29.92"E
33	"	Patan	Jorikalan	2	6,000/5000
				No.	BP. LATITUDE LONGITUDE
				1	23°17'18.14"N 79°37'29.23"E
				2	23°17'18.25"N 79°37'28.09"E
				3	23°17'11.05"N 79°37'25.20"E
				4	23°17'9.44"N 79°37'18.60"E
				5	23°17'15.36"N 79°36'54.78"E
				6	23°17'11.66"N 79°36'32.18"E
				7	23°17'10.53"N 79°36'32.82"E
				8	23°17'14.22"N 79°36'54.78"E
				9	23°17'8.78"N 79°37'15.91"E
				10	23°17'11.77"N 79°37'27.05"E
34	"	Patan	Mandwa	86	2,00/4000
				No.	BP. LATITUDE LONGITUDE
				1	23°16'23.03"N 79°35'57.62"E
				2	23°16'24.72"N 79°35'59.82"E
				3	23°16'28.11"N 79°36'31.16"E

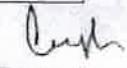

**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)


**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

District: Jabalpur

District: Jabalpur																																																			
		BP.	LATITUDE																																																
		No.	LONGITUDE																																																
35	..	Sihora	Ghorakoni	48	2.00/4000	1	23°24'49.28"N 2	23°24'50.33"N 3	23°24'51.07"N 4	23°24'50.67"N 5	23°24'44.77"N 6	23°24'43.77"N 7	23°24'44.86"N 8	23°24'46.39"N 9	23°24'50.09"N 10	23°24'49.95"N 11	23°24'49.54"N 12	23°24'47.92"N	1	23°24'49.24"E 2	23°24'50.62"E 3	23°24'51.57"E 4	23°24'54.96"E 5	23°24'55.02"E 6	23°24'54.32"E 7	23°24'42.89"E 8	23°24'40.49"E 9	23°24'33.86"E 10	23°24'32.49"E 11	23°24'32.01"E 12	23°24'28.73"E	1	80°01'27.24"E 2	80°01'28.62"E 3	80°01'33.57"E 4	80°01'34.96"E 5	80°01'45.02"E 6	80°01'44.32"E 7	80°01'42.89"E 8	80°01'40.49"E 9	80°01'33.86"E 10	80°01'32.49"E 11	80°01'32.01"E 12	80°01'28.73"E	1	80°1'156.81"E 2	80°1'156.42"E 3	80°1'158.54"E 4	80°1'21.26"E 5	80°1'22.93"E 6	80°1'22.69"E
36	..	Sihora	Madha	1	1.000/4000	BP.	LATITUDE	LONGITUDE																																											
						1	23°28'56.72"N 2	23°28'58.65"N 3	23°28'59.37"N 4	23°28'59.54"N 5	23°28'59.14"N 6	23°28'57.36"N	80°1'156.81"E 80°1'156.42"E 80°1'158.54"E 80°1'21.26"E 80°1'22.93"E 80°1'22.69"E																																						


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


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

District: Jabalpur

						BP.	LATITUDE	LONGITUDE
				No.				
37	"	Sihora	Deorikanhai	782	2.00/2000	A	23°24'35.25"N	80°16'55.05"E
						B	23°24'34.02"N	80°16'57.06"E
						C	23°24'43.49"N	80°16'56.03"E
						D	23°24'42.35"N	80°16'54.30"E
38	"	Majholi	Bindali	180	1.00/10000	BP.	LATITUDE	LONGITUDE
					No.			
					1	23°26'45.39"N	79°49'54.27"E	
					2	23°26'44.07"N	79°49'54.23"E	
					3	23°26'45.89"N	79°49'45.41"E	
					4	23°26'47.07"N	79°49'45.65"E	
39	"	Majholi	Magarkata	191	1.000/3000	BP.	LATITUDE	LONGITUDE
					No.			
					1	23°24'44.30"N	79°59'15.64"E	
					2	23°24'45.12"N	79°59'15.62"E	
					3	23°24'45.22"N	79°59'18.44"E	
					4	23°24'44.64"N	79°59'28.55"E	
					5	23°24'43.76"N	79°59'28.32"E	
					6	23°24'44.11"N	79°59'21.88"E	
					7	23°24'44.03"N	79°59'19.68"E	
40	"	Majholi	Mandia	91/274	1.000/10000	BP.	LATITUDE	LONGITUDE
					No.			
					A	23°25'8.55"N	79°56'57.23"E	
					B	23°25'9.40"N	79°56'56.89"E	
					C	23°25'5.50"N	79°56'49.52"E	

**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)


**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

District: Jabalpur

				BP.			LATITUDE		LONGITUDE	
		No.								
41	"	Majholi	Khakhara	201	2,000/5000		1	23°25'15.12"N	79°57'19.88"E	
							2	23°25'16.59"N	79°57'11.91"E	
							3	23°25'18.29"N	79°57'13.35"E	
							4	23°25'21.04"N	79°57'17.16"E	
							5	23°25'21.52"N	79°57'17.02"E	
							6	23°25'24.08"N	79°57'20.84"E	
							7	23°25'25.05"N	79°57'21.02"E	
							8	23°25'26.66"N	79°57'22.49"E	
							9	23°25'26.64"N	79°57'23.30"E	
							10	23°25'24.69"N	79°57'23.62"E	
							11	23°25'19.59"N	79°57'16.35"E	
							12	23°25'15.47"N	79°57'12.75"E	
							13	23°25'14.13"N	79°57'10.31"E	
42	"	Shahpura	Pawla	397	14,920/20000		BP. No.	LATITUDE	LONGITUDE	
							1	23° 6'48.02"N	79°22'40.26"E	
							2	23° 6'50.82"N	79°22'40.04"E	
							3	23° 6'51.47"N	79°22'42.91"E	
							4	23° 6'50.87"N	79°22'44.56"E	
							5	23° 6'51.29"N	79°22'46.24"E	
							6	23° 6'51.60"N	79°22'48.78"E	
							7	23° 6'49.49"N	79°23'33.91"E	



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



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

District: Jabalpur

		8	23° 6'47.43"N	79°23'7.96"E
9	23° 6'47.16"N	79°23'9.31"E		
10	23° 6'44.80"N	79°23'12.72"E		
11	23° 6'41.81"N	79°23'20.22"E		
12	23° 6'42.40"N	79°23'20.89"E		
13	23° 6'42.04"N	79°23'21.72"E		
14	23° 6'39.03"N	79°23'19.30"E		
15	23° 6'44.99"N	79°23'7.57"E		
16	23° 6'47.33"N	79°23'0.83"E		
17	23° 6'48.59"N	79°22'54.41"E		
18	23° 6'48.57"N	79°22'45.97"E		


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


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

District Survey Report: Jabalpur

4 Details of Royalty and Revenue received in last three years for Sand Mine (2020-21, 2021-22 and 2022-23):

Year	Revenue (In Rs.)
2020-21	7,88,63,639
2021-22	14,73,93,023
2022-23	19,427,875

5 Details of Production in last three years for Sand Mine (2020-21, 2021-22 and 2022-23):

Year	Production (In Cu. Mt)
2020-21	20699.67
2021-22	3,31,777
2022-23	1,55,419

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

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

CHAPTER-6

PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVERS OF THE DISTRICT:

Place of origin, Catchment area, Tributaries, General profile of river stream:

Narmada River

The Narmada River is a river flowing from east to west. It is the biggest flowing river to the west. The Narmada River is the only river in India, which runs in a rift valley running west amid the Vindhya and Satpura Mountain ranges despite the fact that the Mahi and Tapti River run through rift valleys but amid other mountain ranges. It runs through the states of Madhya Pradesh (1,077 km (669.2 mi)), Maharashtra, and (39 km (24.2 mi) boundary of Madhya Pradesh and Gujarat and in Gujarat (161 km (100.0 mi)).

The origin of the river is a tiny reservoir named as Narmada Kund, which is situated on the Amarkantak Hill in Anuppur District of East Madhya Pradesh at an elevation of 1,057 m (3,467.8 ft.)

Jabalpur district lies at the Junction of the Vindhyan and Satpura range and forms part of the great central watershed of India. The Narmada and its tributaries, the Hiran, Gaur drain the district. Chotimahanadi drains a very small area in the east, which is tributary of Son River falling in the Ganga basin. The general slope of the Narmada valley is towards west & of Hiran towards south west. The drainage in the district is generally of dendrite type except in the valley of Narmada, along the right banks of Hiran below Katangi where it is of the straight trunk & trellis pattern. The total length of the Narmada River in the district is about 110 km (*Ref. Ground water Information Booklet Jabalpur district Madhya Pradesh*)

The catchment area of the river, bordered by the Satpura and Vindhya Mountain Ranges, stretches over a territory of 98,796 km² (38,145.3 sq mi). It is situated between longitudes 72°32' and 81°45' east and latitudes 21°20' to 23°45' north, on the northern edge of the Deccan Plateau. The catchment area encompasses important regions in Madhya Pradesh, Gujarat, and Maharashtra.

The catchment area features five distinct geological area and they are as follows:

- (I) The upper mountainous regions encompassing the district of Mandla, Shahdol, Balaghat, Durg, and Seoni.

[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Parivaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Parivaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

- (2) The upper terrains encompassing the district of Narsimhapur, Jabalpur, Damoh Sagar, Hoshangabad, Chhindwara, Raisen, Betul, and Sehore.
- (3) The central terrains encompassing a portion of west Nimar, the district of East Nimar, Indore, Dewas, and Dhar.
- (4) The lower mountainous regions including portion of the west Nimar, Dhulia, Jhabua, Narmada, and portions of Vadodara.
- (5) The lower terrains encompassing mostly the district of Bharuch, Narmada, and portion of Vadodara.

The mountainous areas are quite woody. The entire catchment area mostly comprises black soils.

Hiran River

Hiran River is the 2nd most important river of the Jabalpur district and the principal right bank tributary of Narmada River in the district. It originates near Kundam ($23^{\circ} 19'N-80^{\circ} 21'E$) near the SE boundary of the district. It takes a northern course for about basaltic terrain and turns towards west and flows to Katangi through a zigzag course crossing from south of Patan and Patan. From this point, it takes a SW direction and merges with Narmada between Sankal and Hirapur. Its main feeder stream is Belkund, Sohar, Kairnala (from the north) and Kadri and Pariyat (from the south). Amongst them, Pariyat is the principal affluent one. The river is about 190 km long. It is a rich source of sands and other associated aggregates as after entering into Narmada basin and sedimentary rocks of Vindhya and Gondwanas, carries and deposits a good load. Moreover, due to lithology of the course, the quality of Sand is also good one. A large tract of this river is utmost suitable for sand mining e.g near Patan, Patan and Katangi. The Hiran River catchment has area 4617.48 Sq. Km. The entire catchment is spread over Jabalpur district, Madhya Pradesh.

Gaur River

Gaur River is a important river of the Jabalpur district and the principal right bank tributary of Narmada river in the district. It originates near Niwas in Mandla district and forms the

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

[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCO)
Paryavaran Parivar
E-5, Arera Colony, B... (M.P.)

boundary with Mandla district for some distance. It runs towards north initially and then turns SW and join Narmada in the right bank at about 12 km south of Jabalpur. The total length of river is about 80 km of which about 50 km is in the district. It is a rich source of sands and other associated aggregates as after entering in to Narmada basin. Moreover, due to lithology of the course, the quality of sand is also good one.

The Gaur river catchment area is 4.0 sq. km in Jabalpur District, Madhya Pradesh.

Jabalpur district lies at the Junction of the vindhyan and Satpura range and forms part of the great central watershed of India. The Narmada and its tributaries, the Hiran, Gaur drain the district. Chotimahanadi drains a very small area in the east, which is tributary of Son River falling in the Ganga basin. The general slope of the Narmada valley is towards west & of Hiran towards south west. The drainage in the district is generally of dendrite type except in the valley of Narmada, along the right banks of Hiran below Katangi where it is of the straight trunk & trellis pattern. The total length of the Narmada River in the district is about 110 km

ii) Geology / Lithostratigraphy:

Jabalpur district is located almost in the central part of Madhya Pradesh and it is having 15% tribal population to the population of the district. The deposits of tale around Bharaghata near the Marble rocks on the Narmada River, about 13 miles west of Jabalpur are the best known. The district lies between the North latitude $22^{\circ} 49'$ and $23^{\circ} 07'$ North and meridian of longitude $79^{\circ} 21'$ and $80^{\circ} 35'$ East. The district is bounded in the South east and east by Manda & Dindori district, in the south by Seoni and in the south West Narsingpur district and in the west by Damoh district. The district falls in survey of India Top sheet Nos. 55M, 64A- and 55 N on 1:250,000 scale & occupies an over of 5655 Sqkm.

The district is often called as the Museum of Geology. It exhibits very wide spectrum of rocks, ranging in age from Archaean to Pleistocene and recent period. The older metamorphic rocks comprising of granite gneiss with enclaves of amphibolites and schist, are exposed in the central part of the district. The volcano-sedimentary sequence of Mahakoshal group, trending in ENE-WSW direction, is exposed in the central and SW parts of the district. It comprises meta volcanic rocks, chemical precipitation and turbidites. Dolerite dykes, amphibolites, granites and quartz veins intrude these rocks. These intrusives exhibit a peculiar ENE-WSW trend. The intrusive MadanMahal granite occurs in the form of inselberg and

conical hills near Jabalpur. Vindhyan supergroup is represented by kaimur, Rewa and Bhander group which consist of sandstone, shale and glauconitic partings occur in the northern plateau and form of steep escarpments. Gondwara supergroup is represented by Jabalpur group and comprises of alternate beds of coarse and pebbly sandstone and clay and is exposed in the east, central and SW part of the district. The plant fossils are found within them. Lameta Group comprises of green glauconitic sandstone, grit, nodular siliceous limestone and clay in the SC parts of the district. Remains of Dinasaur fossils are encountered within it. Deccan trap Basalt form extensive plateau in the southern part and comprises of 14 to 22 flows. The quaternary sediments comprise mainly of clay and calcareous concretions. Tight isoclinal folding of Mahakoshals, intense deformation of Vindhyan along its contact with Mahakoshals and general broad shallow synclinal structures of Vindhyan are highlights of the structural features. The region is a part of Cuanmansonata zone and exhibit a regional trend of ENEWSW. The contact between Mahakoshals is faulted all along. It is intersected and inter veined by no. of minor faults and micro lineaments which trend in NNW-SSE to NW-SE direction.

iii) Climate Data & Annual Precipitation:

The climate of Jabalpur District M.P. characterized by a hot summer and general dryness except during the south west monsoon. The year may divide into seasons. The cold season December to February is followed by the hot season from March to about the middle of June. The period from the middle of June to September is the south west monsoon season. October and November form the post monsoon or transition period. The normal maximum temperature received during the month of December is 90C. The normal annual means maximum and minimum temperature of Jabalpur District is 32.10C & 18.30C respectively. During the south west monsoon season the relative humidity generally exceeds 87% (August month.) In the rest of the year is drier. The driest part of the year is the summer season. When relative humidity's are less 27%. May 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 8.6 km/hr observed during the month of annual wind velocity of Jabalpur district is 5.3 km/hr.

Annual Precipitation:

The average annual rainfall of Jabalpur District is 1259.50 mm. Jabalpur received maximum rainfall received during south west monsoon period i.e. June to September. About 90% of the

annual rainfall received during monsoon season. Only 10% of the annual rainfall takes place between October to May period. Thus, surplus water for ground water recharge is available only during the south west monsoon period. (*Ref. Ground water Information Booklet, Jabalpur district Madhya Pradesh*)

iv) Erosion & Weathering:

Since the temperature variation during various in a year is quite considered high degree of weathering is likely to result. The rainfall being moderate, the potential of transportation of weathering material into the river is also moderate. Catchment area being an alluvium deposit it stands a good chance of getting weathered and eroded sand.

v) Sedimentation & Transportation:

In the context of stream sediment is inorganic and organic material that is transported by, suspended in, or deposited by streams. Sediment load, which is the quantity of sediment transported by a stream, is a function of stream discharge, soil and land-cover features, weather conditions, land-use activities, and many other factors. Sediment load carried by streams and rivers can be composed either of fine materials, mostly silts and clays, or larger materials such as sand.

When a river erodes the eroded material becomes the river's load and the river will then transport this load through its course until it deposits the load. There are a few different ways that a river will transport load depending on how much energy the river has and how big the load is Physiographically, Jabalpur district can broadly be divided in to three physiographic units.

1. The Vindhyan Tract

2. The South eastern plateau of the Satpura

3. The Bhitrughat Range & the associated hill area.

The Bhander&Kaimur ranges of Vindhyan System attains & altitude of 530 mamsl& form the western boundary of the district. The Bhander range is in the form of dry abrupt & step scarp & at the foot of this escarpment flows the Hiran River. The south eastern plateaus of satpura are cut across by the Narmada its south of Jabalpur & Deccan carps farming flat topped hills cover the whole area of satpuras in south east. The general height of table land is

460 maml south of Narmada & about 535 maml east of Jabalpur. The Bhitrigarh range & associated hill area run across the northern part of the district from south west to north east. It consists of metamorphic rocks & meets the spur of Satpuras at almost right angle. These have general elevation of 460 to 550 maml. The range forms the watershed between the catchments of Hiran in the south & Katni in the north. Between the high lands of Vindhyan in the west & Satpuras in east is low lying alluvial farmed due to Narmada & Hiran rivers & is called as the 'Havelli'.

The physiography of Jabalpur district is much favorable to carry quantum of sediment load which generate and replenish a large quantity of sand in the river.

vi) Engineering Structures STOP DAM / CHECK DAM / BARRAGE/ HYDAL DAMS:

Man-made structures like stop dam / check dam / barrage / and hydal dams also affects the sand flow and act as check over the sand deposition in downstream area. As per Google map near by the QL area such structure not considered.

vii) Activity near river bank:

Any man-made activity such as rock mining / trenching/ channeling/ canal etc. produce large quantity of fines of existing rocks with transports in river bed may deposited nearby the area in river course.

viii) Tributaries and its confluences:

Stream may be 1st order to 3rd order, that to a streamlet to a major one, have a great impact on deposition of sand where some physiographic features are also have imperative role:

- a. Tributary / confluence
- b. Meanders
- c. Negative reliefs
- d. Slope / gradients


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


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

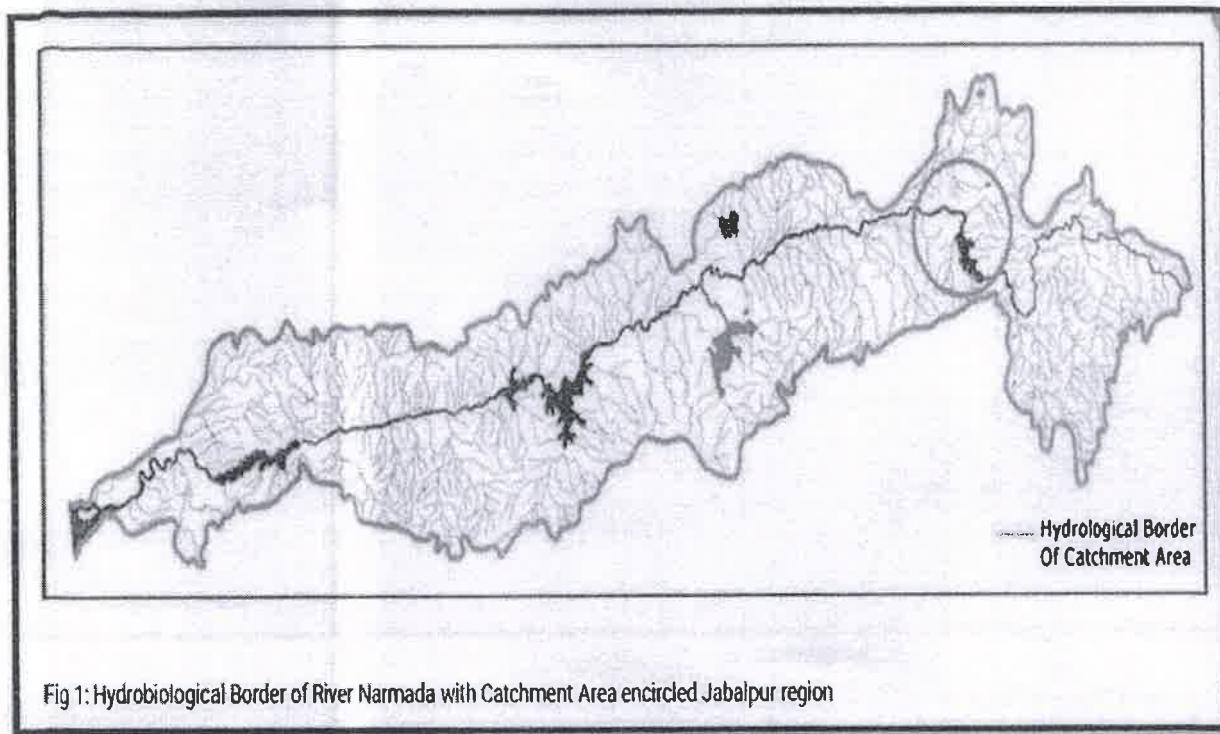
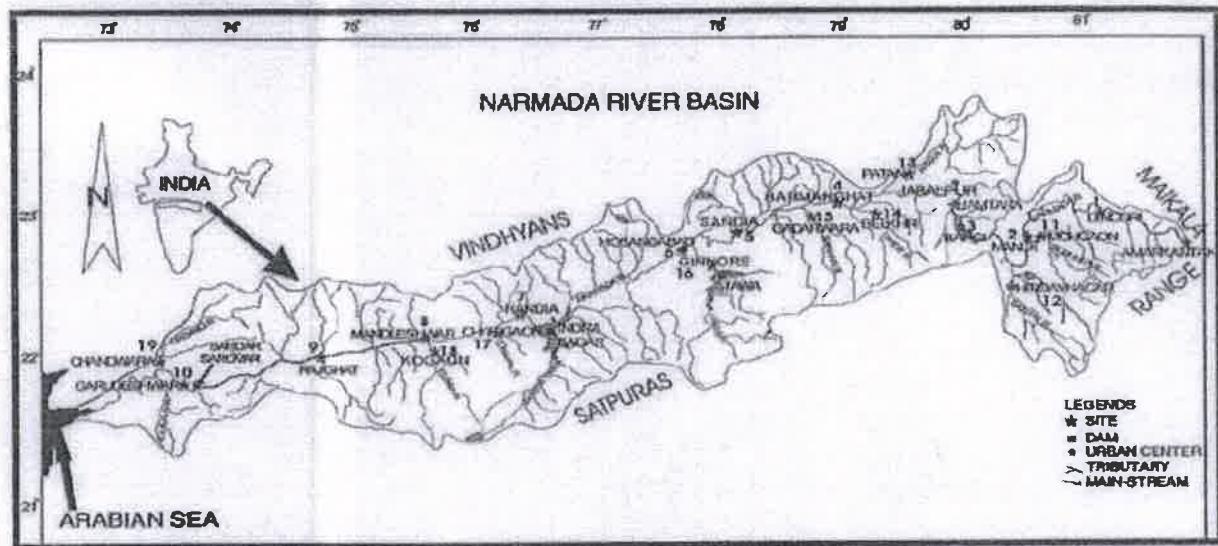


Fig 1: Hydrobiological Border of River Narmada with Catchment Area encircled Jabalpur region

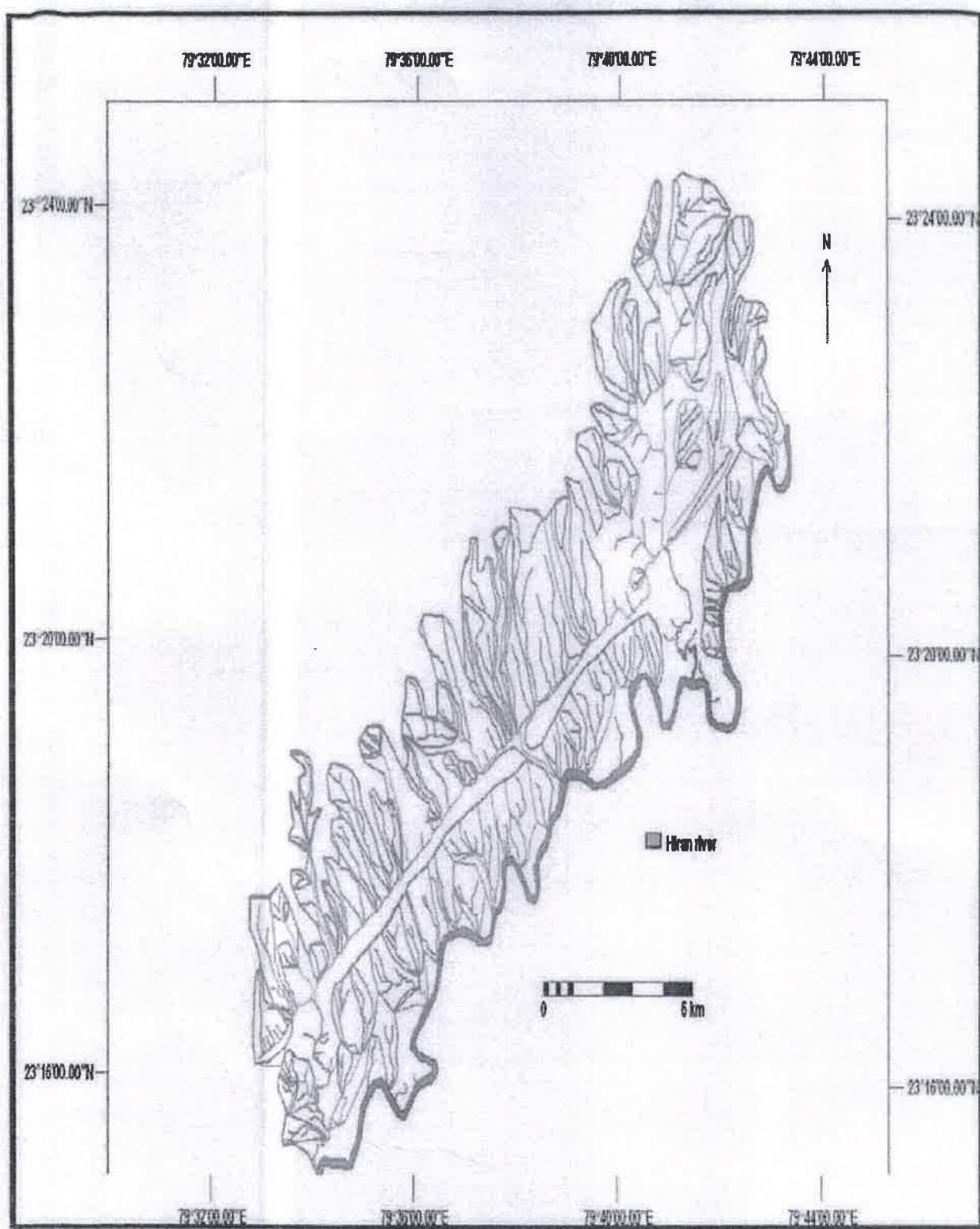


Annual Rainfall

The average annual rainfall of Jabalpur District is 1279.50mm. Jabalpur received maximum rainfall received during south west monsoon period i.e. June to September. About 90% of the annual rainfall received during monsoon season. Only 10% of the annual rainfall takes place

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

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



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

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

between October to May period. Thus surplus water for ground water recharge is available only during the south west monsoon Period. (Ref. *Ground Water Information Booklet, Jabalpur district Madhya Pradesh*)

Month-wise Rainfall Data of Jabalpur District of last five years

YEAR	JAN		FEB		MAR		APR		MAY		JUN	
	R/F	%DEP	R/F	%DEP								
2016	14.8	-19	0.0	-100	26.7	134	0.0	-100	51.3	574	92.5	-26
2017	8.2	-55	20.2	77	3.8	-67	0.0	-100	21.9	188	127.1	2
2018	0.0	-100	19.8	73	0.9	-93	2.9	-23	3.0	-61	78.2	-37
2019	3.1	-79	9.4	-33	3.1	-69	17.1	418	0.3	-97	64.5	-55
2020	27.5	82	2.1	-65	21.3	115	0.7	-79	18.0	96	114.7	-20

JUL		AUG		SEPT		OCT		NOV		DEC	
R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP
604.4	70	587.5	43	76.4	-62	32.3	-2	0.0	-100	0.0	-100
364.9	3	206.9	-50	139.3	-30	10.2	-69	0.0	-100	0.0	-100
439.0	24	450.3	10	87.8	-56	0.0	-100	0.0	-100	0.2	-98
393.5	16	734.3	76	394.8	88	24.7	-15	0.0	-100	14.7	20
203.1	-40	627.3	51	88.7	-58	2.4	-92	5.3	-45	1.0	-92

(Ref.[http://hydro.imd.gov.in/hydrometweb/\(S\(2pbqgbuxid2rrmqdm5jrhz55\)\)/Districtrainfall.aspx](http://hydro.imd.gov.in/hydrometweb/(S(2pbqgbuxid2rrmqdm5jrhz55))/Districtrainfall.aspx)

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

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

7 General Profile of the District

1. Geographical Position	The district lies between the North latitude $22^{\circ}49'$ and $23^{\circ}07'$ North and meridian of longitude $79^{\circ}21'$ and $80^{\circ}35'$ East.
2. Area and Population	<p>I. Geographical Area (Sq. Km) Total Area (Sq. Km): 5211 Km^2</p> <p>II. CENSUS 2011</p> <p>I. Population</p> <ul style="list-style-type: none"> a. Total Population: 2,463,289 b. Male Population: 1,277,278 c. Female Population: 1,186,011 <p>II. Literates</p> <ul style="list-style-type: none"> a. Total Literates: 1,756,468 b. Male: 980,307 c. Female: 776,161 <p>III. Main Workers (Census 2011)</p> <ul style="list-style-type: none"> a. Total Workers: 1,005,624 b. Male Workers: 705,970 c. Female Workers: 299,654 d. Cultivators: 106,882 e. Agricultural Labourers: 283,636 f. Other Workers: 545,160 <p>V. Languages Spoken in the District</p> <p>The main language spoken in the district is Hindi, followed by Urdu. The main dialect of the area is Bagheli.</p>
3. Temperature	Mean- Maximum temperature: 32.1°C Mean- Minimum temperature: 18.3°C
4. Rainfall (In mm)	Normal – South West Monsoon: 1168.40 mm Annual Rainfall: 1279.50 mm
5. Agriculture	<ul style="list-style-type: none"> a. Total Cultivable Area (Ha): 306.10 b. Net Area Sown (Ha): 273.80 c. Area Sown more than once (Ha): 98.0
6. Rivers, etc.	Narmada river, Chhoti Mahanadi & their tributary

7. Revenue Administrative Divisions	Revenue Divisions:- a. Revenue Tehsils: 10 b. Revenue blocks: 7
8. Local Bodies	a. Municipalities: 1 b. Village Panchayats: 542


**State Level Environment Impact
Assessment Authority, M.P.**

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

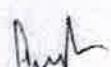

**State Level Environment Impact
Assessment Authority, M.P.**
(EPCO)
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

Census Data 2011

Census Data for year 2011

Description	2011
Actual Population	2,463,289
Male	1,277,278
Female	1,186,011
Population Growth	14.51%
Area Sq. km.	5,211
Density/KM ²	473
Proportion to population of Madhya Pradesh	3.39%
Sex Ratio (Per 1000)	929
Child Sex Ratio (0-6 Age)	923
Average Literacy	81.07
Male Literacy	87.29
Female Literacy	74.37
Total Child Population (0-6 Age)	296,565
Male Population (0-6 Age)	154,210
Female Population (0-6 Age)	142,355
Literates	1,756,468
Male Literates	980,307
Female Literates	776,161
Child Proportion (0-6 Age)	12.04%
Boys Proportion (0-6 Age)	12.07%
Girls Proportion (0-6 Age)	12.00%


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


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

District Survey Report: Jabalpur

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

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

Table 12 Land Use Pattern of the Study Area

Sr. No.	Class	Area in Ha.	Percentage of coverage
1	Agricultural Plantation	129.92684	0.03 %
2	Barren rocky	163.02896	0.03 %
3	Canal/drain	1,442.0095	0.28 %
4	Cropland	3,44,702.33	67.67 %
5	Deciduous (Dry/Moist/Thorn)	31,748.592	6.23 %
6	Fallow land	1,208.464	0.24 %
7	Forest Plantation	46.960396	0.01 %
8	Gullied/Ravinous land	2,868.0754	0.56 %
9	Industrial	3,072.0457	0.60 %
10	Lake/Ponds	2,116.7199	0.42 %
11	Mining / Quarry	1,207.4463	0.24 %
12	Reservoir/Tank	7,193.0231	1.41 %
13	River	5,540.8868	1.09 %
14	Rural	5,515.4766	1.08 %
15	Scrub Forest	5,583.8873	1.10 %
16	Scrub land	59,219.648	11.63 %
17	Tree Clad Area	26,923.921	5.29 %
18	Urban	10,691.44	2.10 %
	Total	5,09,373.8784	100.00 %


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


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

District Survey Report: Jabalpur

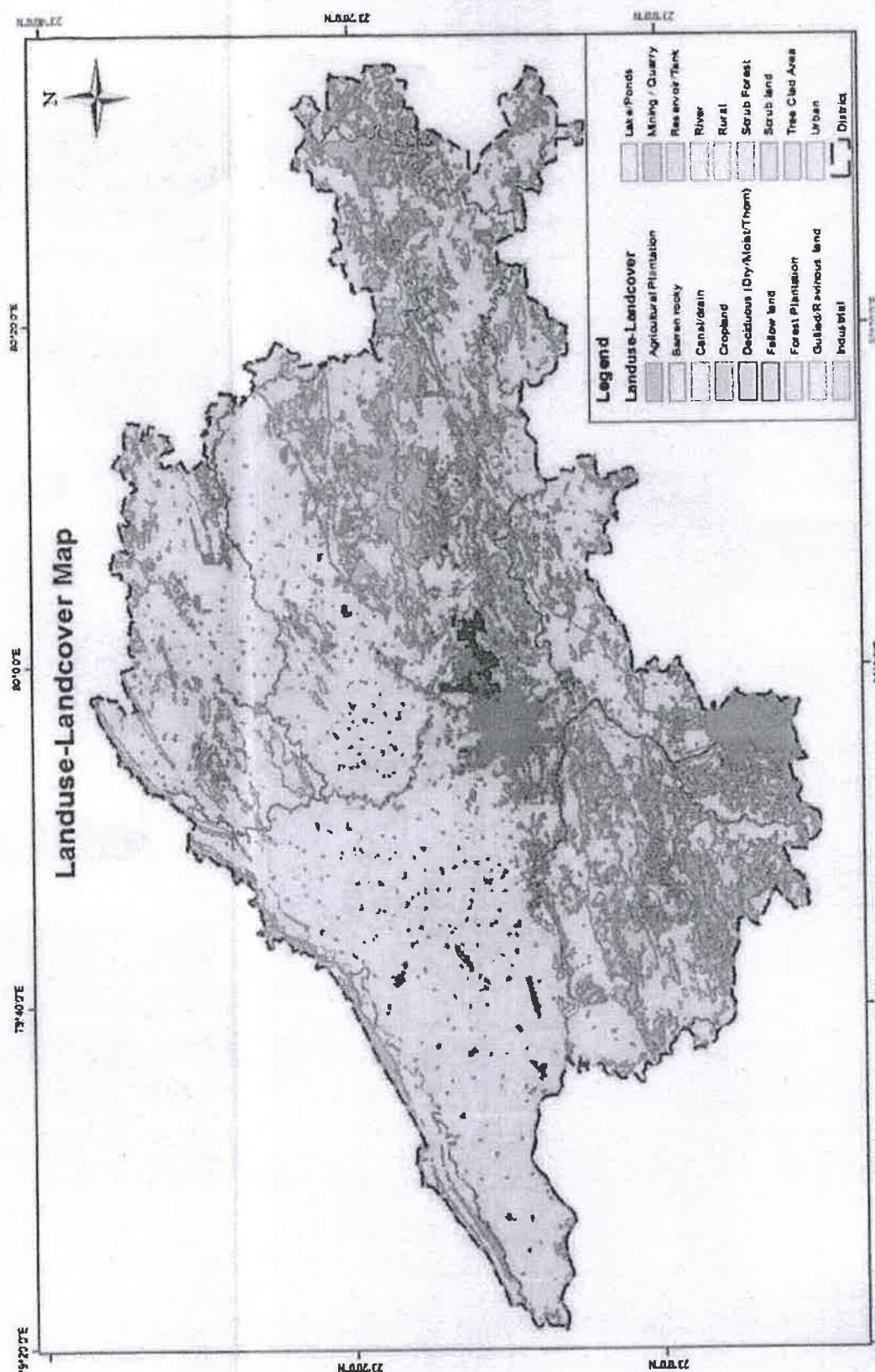
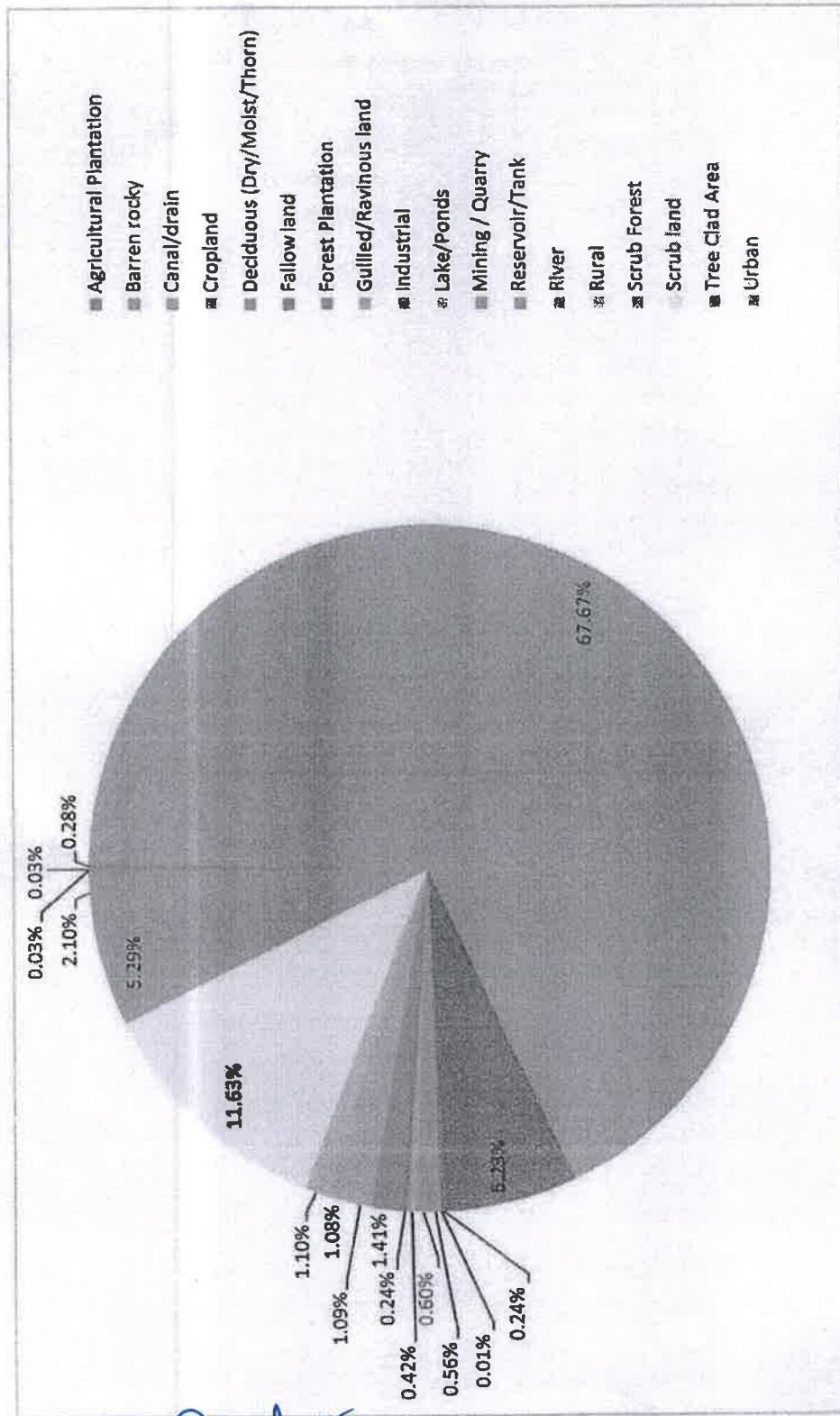


Figure 5 Land Use and Land Cover Map of the District

District Survey Report: Jabalpur

LULC Breakup of the District (%)



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

Figure 6 Land Use and Land Cover Breakup of the District

District Survey Report: Jabalpur

9 Physiography of the District

Jabalpur district can broadly be divided in to three physiographic units.

- 1) The Vindhyan Tract
- 2) The South eastern plateaus of the Satpura.
- 3) The Bhitright Range & the associated hill area.

The Bhander & Kaimur ranges of Vindhyan System attains & altitude of 530 m amsl & form the western boundary of the district. The Bhander range is in the form of abrupt & step scarp & at the foot of this escarpment flows the Hiran River. The south eastern plateaus of satpura are cut across by the Narmada its south of Jabalpur & Deccan carps farming flat topped hills cover the whole area of satpuras in south east. The general height of table land is 460 m amgl south of Narmada & about 535 m amgl east of Jabalpur. The Bhitright range & associated hill area run across the northern part of the district from south west to north east. It consists of metamorphic rocks & meets the spur of satpuras at almost right angle. These have general elevation of 460 to 550 m amgl. The range forms the watershed between the catchments of Hiran in the south & Katni in the north. Between the high lands of Vindhyan in the west & Satpuras in east is low lying alluvial plain farmed due to Narmada & Hiran rivers & is called as the 'Haveli'.

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

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

District Survey Report: Jabalpur

10 Details of month wise Rainfall data of 1 year

Table 13 Details of Month wise Rainfall Data (April-2021 to March.2022)

Sr. No.	Month	Month wise average Value of Rainfall (m.m.)
01	April 2021	4.5
02	May -2021	110.9
03	June-2021	105.1
04	July-2021	265.2
05	August-2021	205.5
06	September-2021	208.6
07	October-2021	15.5
08	November-2021	1.5
09	December-2021	5.4
10	January-2022	54.4
11	February-2022	0.2
12	March-2022	0.0

Rainfall

The average annual rainfall of Jabalpur District is 1279.50mm. Jabalpur received maximum rainfall received during south west monsoon period i.e., June to September. About 90% of the annual rainfall received during monsoon season. Only 10% of the annual rainfall takes place between Octobers to May period. Thus, surplus water for ground water recharge is available only during the south west monsoon period.

Climatic Conditions

The climate of Jabalpur is characterized by a hot summer and general dryness except during the south west monsoon. The year may be divided into four seasons. The cold season. December to February is followed by the hot season from March to about the middle of June. The period the middle of June to September is the south west monsoon season. October and November form the post monsoon or transition period.

The normal maximum temperature received during the month of December is 9°C. The normal annual means maximum and minimum temperature of Jabalpur District is 32.1°C & 18.3°C respectively. During the south west monsoon season the relative humidity generally exceeds 87% (August month). In the rest of the year is drier. The driest part of the year is the summer season. When relative humidity is less, around 27%. May 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 8.6 km/hr observed during the month of annual wind velocity of Jabalpur district is 5.3 km/hr.

11. Geology and Mineral Wealth:

Regional Geology:

Jabalpur district is located almost in the central part of Madhya Pradesh and it is having 15% tribal population to the population of the district. The deposits of talc around Bharaghat near the Marble rocks on the Narmada River, about 13 miles west of Jabalpur are the best known. The district lies between the North latitude $22^{\circ} 49'$ and $23^{\circ} 07'$ North and meridian of longitude $79^{\circ} 21'$ and $80^{\circ} 35'$ East. The district is bounded in the South east and east by Manda & Dindori district, in the south by Seoni and in the south West Narsingpur district and in the west by Damoh district. The district falls in survey of India Top sheet Nos. 55M, 64A- and 55 N on 1:250,000 scale & occupy an over of 5655 Sqkm.

The district is often called as the Museum of Geology. It exhibits very wide spectrum of rocks, ranging in age from Archaean to Pleistocene and recent period. The older metamorphic rocks comprising of granite gneiss with enclaves of amphibolites and schist, are exposed in the central part of the district. The volcano-sedimentary sequence of Mahakoshal group, trending in ENE-WSW direction, is exposed in the central and SW parts of the district. It comprises Meta volcanic rocks, chemical precipitation and turbidites. Dolerite dykes, amphibolites, granites and quartz veins intrude these rocks. These intrusives exhibit a peculiar ENE-WSW trend. The intrusive MadanMahal granite occurs in the form of inselberg and conical hills near Jabalpur. Vindhyan supergroup is represented by kaimur, Rewa and Bhander group which consist of sandstone, shale and glauconitic partings occur in the northern plateau and form of steep escarpments. Gondwara supergroup is represented by Jabalpur group and comprises of alternate beds of coarse and pebbly sandstone and clay and is exposed in the east, central and SW part of the district. The plant fossils are found within them. Lameta Group comprises of green glauconitic sandstone, grit, nodular siliceous limestone and clay in the SC parts of the district. Remains of Dinasaur fossils are encountered within it. Deccan trap Basalt form extensive plateau in the southern part and comprises of 14 to 22 flows. The quaternary sediments comprise mainly of clay and calcareous concretions. Tight isoclinal folding of Mahakoshals, intense deformation of Vindhyan along its contact with Mahakoshals and general broad shallow synclinal structures of Vindhyan are highlights of the structural features. The region is a part of Cramansonata zone and exhibit a regional trend of ENEWSW. The contact between Mahakoshals is faulted all along. It is intersected and inter veined by no. of minor faults and micro lineaments which trend in NNW-SSE to NW-SE direction. For A detailed geological set up and geological map of Jabalpur, please

refer District Resource Map of Jabalpur district, published by Geological Survey of India A concise account of geological set up district is given below.

Pleistocene to Recent	Recent		Alluvial soil Laterite
Upper Cretaceous to Eocens	Amarkantak group		Sills and dykes and flows of Deccan Trap Basalt and intertrappeans
Upper Cretaceous	Lameta group		Sandstone, clay, siliceous limestone and grit
Cretaceous to Carboniferous	Jabalpur group (Up. Gondwana)		Sandstone, clay, shales with thin coal seams
Neo to Meso Proterozoic	Vindhyan supergroup	Bhander Rewa Kaimur	Sandstone, shales, siltstones
Palaeo-Proterozoic	Intrusives		Quartz vein Basic dykes granite
	Mahkoshal group		Quartzite, BHQ/BHJ, conglomerate, chert breccias, phyllite, dolomite
Archaean			Granite gneiss with enclaves of amphibolites and schists


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


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

District Survey Report: Jabalpur

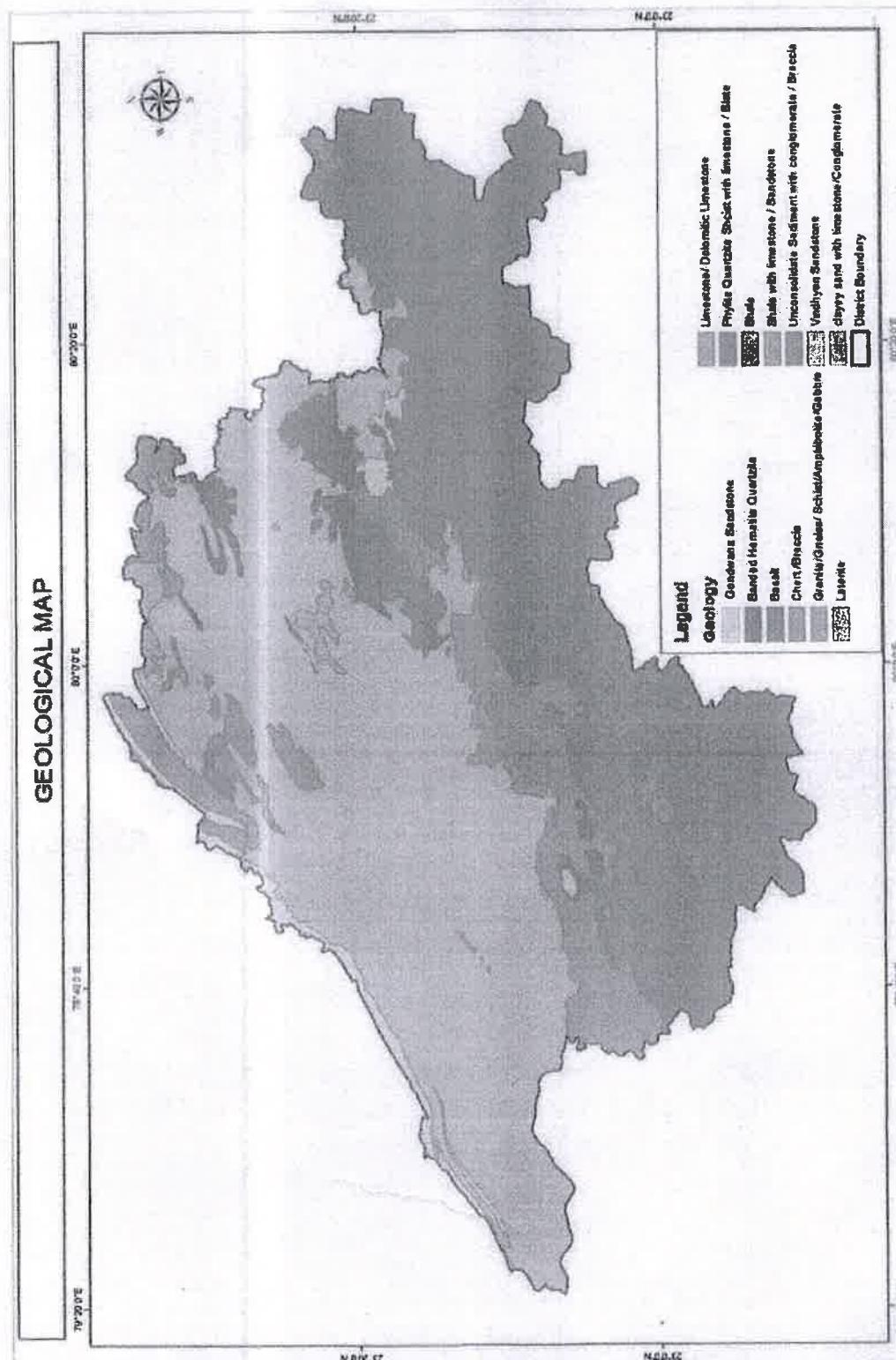


Figure 7 Geological Map of the District

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

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

District Survey Report: Jabalpur

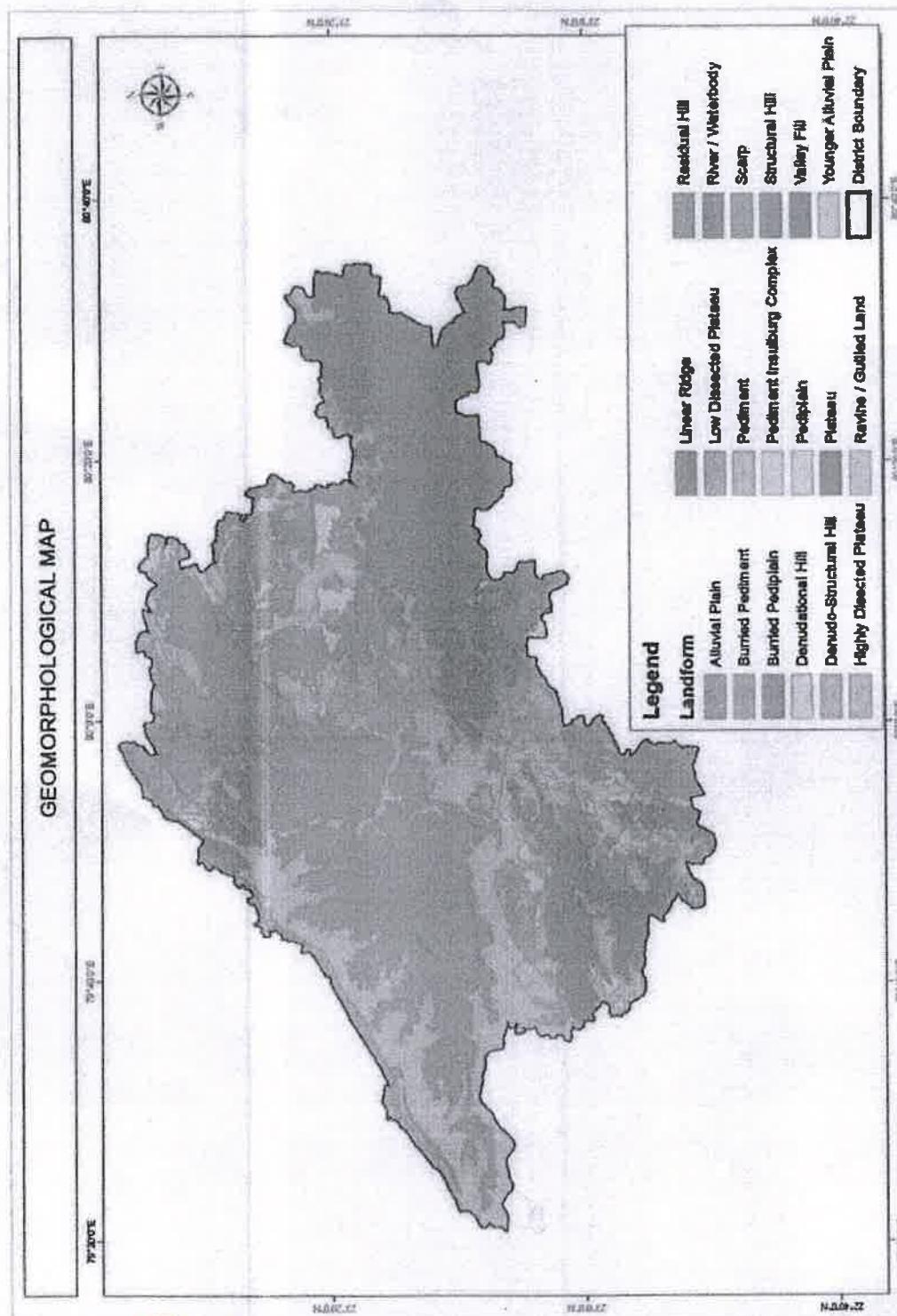
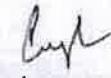


Figure 8 Geomorphologic Map of the District


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


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

District Survey Report: Jabalpur

Drainage and Irrigation Pattern

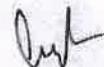
Drainage Pattern

Jabalpur district lies at the Junction of the vindhyan and Satpura range and forms part of the great central watershed of India. The Narmada and its tributaries, the Hiran, Gaur drain the district. Choti Mahanadi drains a very small area in the east, which is tributary of Son River falling in the Ganga basin. The general slope of the Narmada valley is towards west & of Hiran towards south west. The drainage in the district is generally of dendrite type except in the valley of Narmada, along the right banks of Hiran below Katangi where it is of the straight trunk & trellis pattern. The total length of the Narmada River in the district is about 110 km.

Irrigation Practices

The total area under irrigation by various sources is 1100.42 sq. km & Net sown area is 2726.60 sq. km which is 40.35% of net sown area in the district. The area irrigated by canals was 78.54 sq. km (2.88% of total area sown), by tube wells 739.11 sq. km (27.10%), by open wells 281.88 sq. km (8.92%) and by ponds (0.04%). There are 8832 tube wells and 8010 dug wells in the district for irrigation.


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


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

District Survey Report: Jabalpur

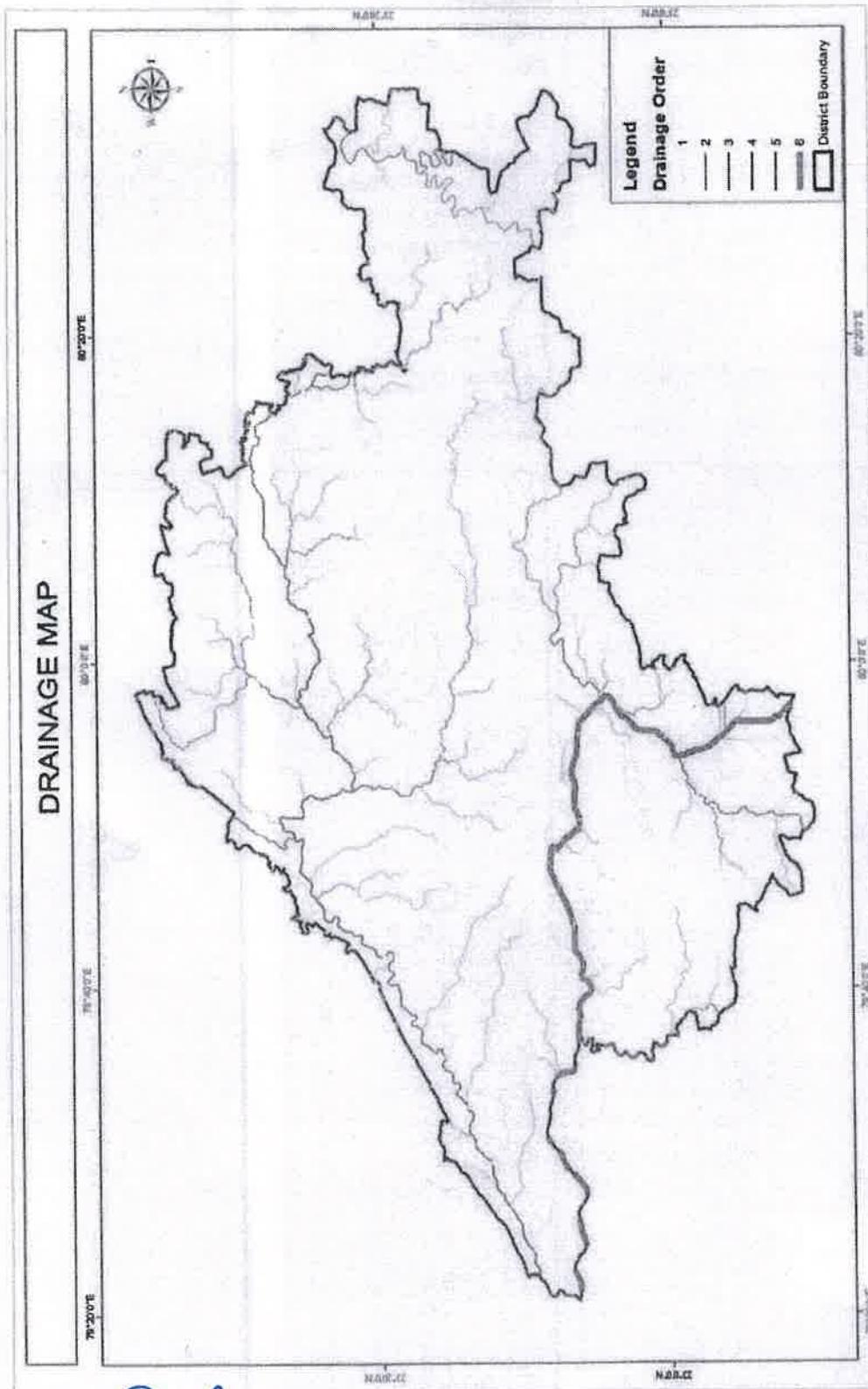


Figure 9 Drainage Map of the District

[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

District Survey Report: Jabalpur

Surface Water and Ground water scenario of the district

Ground Water

Ground Water is found beneath the earth's surface and is an important source of water in most of the Districts in the State. Ground Water is withdrawn for Agriculture, Municipal and industrial use. The depth at which the ground water occurs is called Ground water Table.

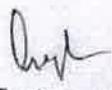
To study ground water regime of the area, pre monsoon & post monsoon depth to water level maps of the district has been prepared. Eastern part of the district is highly undulating & forested. In general depth to water level during Pre- Monsoon in the district ranges between 0.37m-14.20mbgl. In general depth to water level during post-Monsoon in the district ranges between 2.30m-16.80mbgl. Long term water level trend suggests Fall - 0.02-0.2 m/year and Rise of 0.01-0.14 m/year during Pre-monsoon.

Surface Water

District lies at the Junction of the vindhyan and Satpura range and forms part of the great central watershed of India. The Narmada and its tributaries, the Hiran, Gaur drain the district. Choti Mahanadi drains a very small area in the east, which is tributary of son river falling in the Ganga basin. The general slope of the Narmada valley is towards west & of Hiran towards south west. The drainage in the district is generally of dendrite type except in the valley of Narmada, along the right banks of Hiran below Katangi where it is of the straight trunk & trellis pattern. The total length of the Narmada River in the district is about 110 km.



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



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

District Survey Report: Jabalpur

WATER RESOURCES MAP

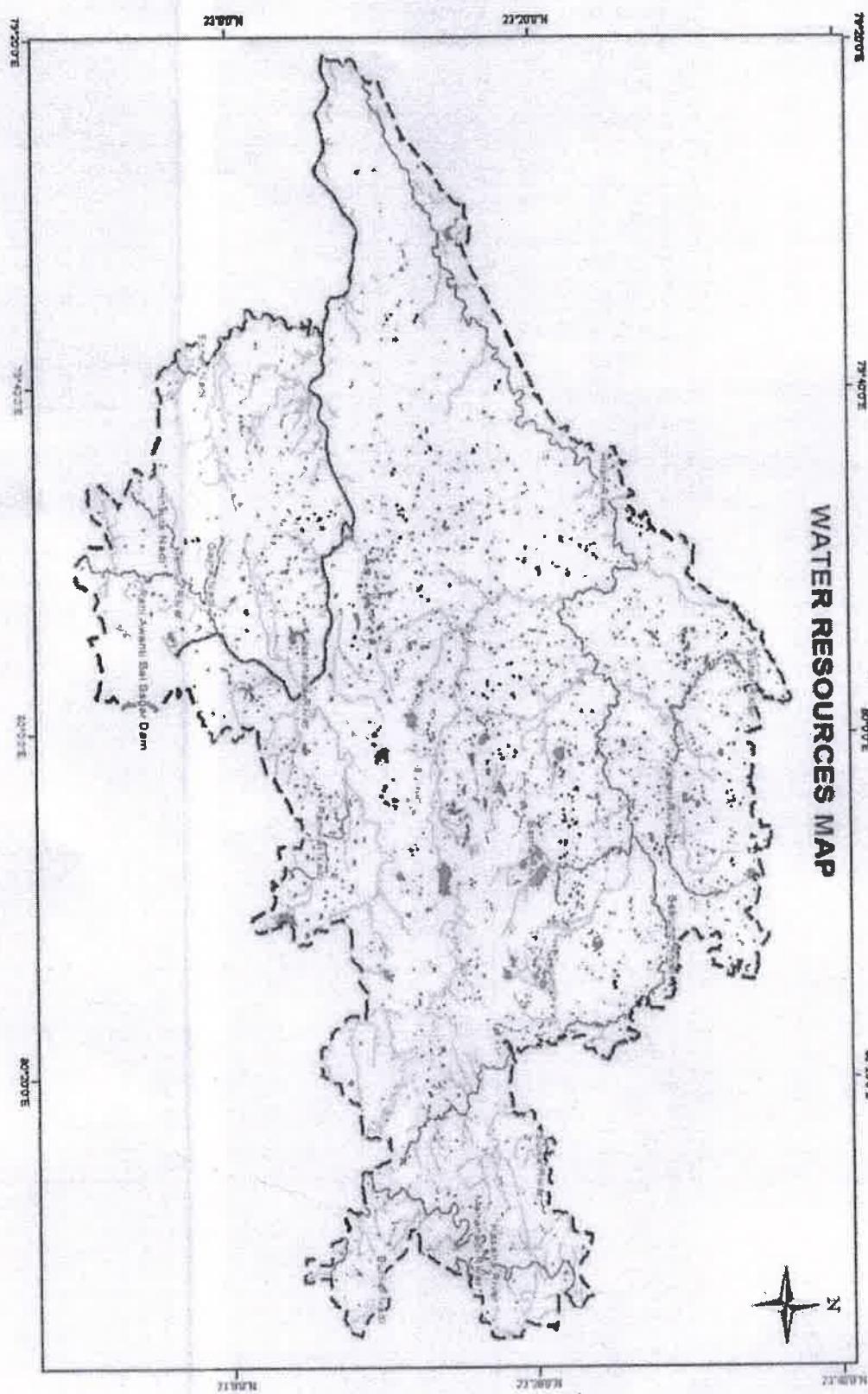


Figure 10 Water Resources Map of the District

[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parishar
E-5, Arera Colony, Bhopal (M.P.)

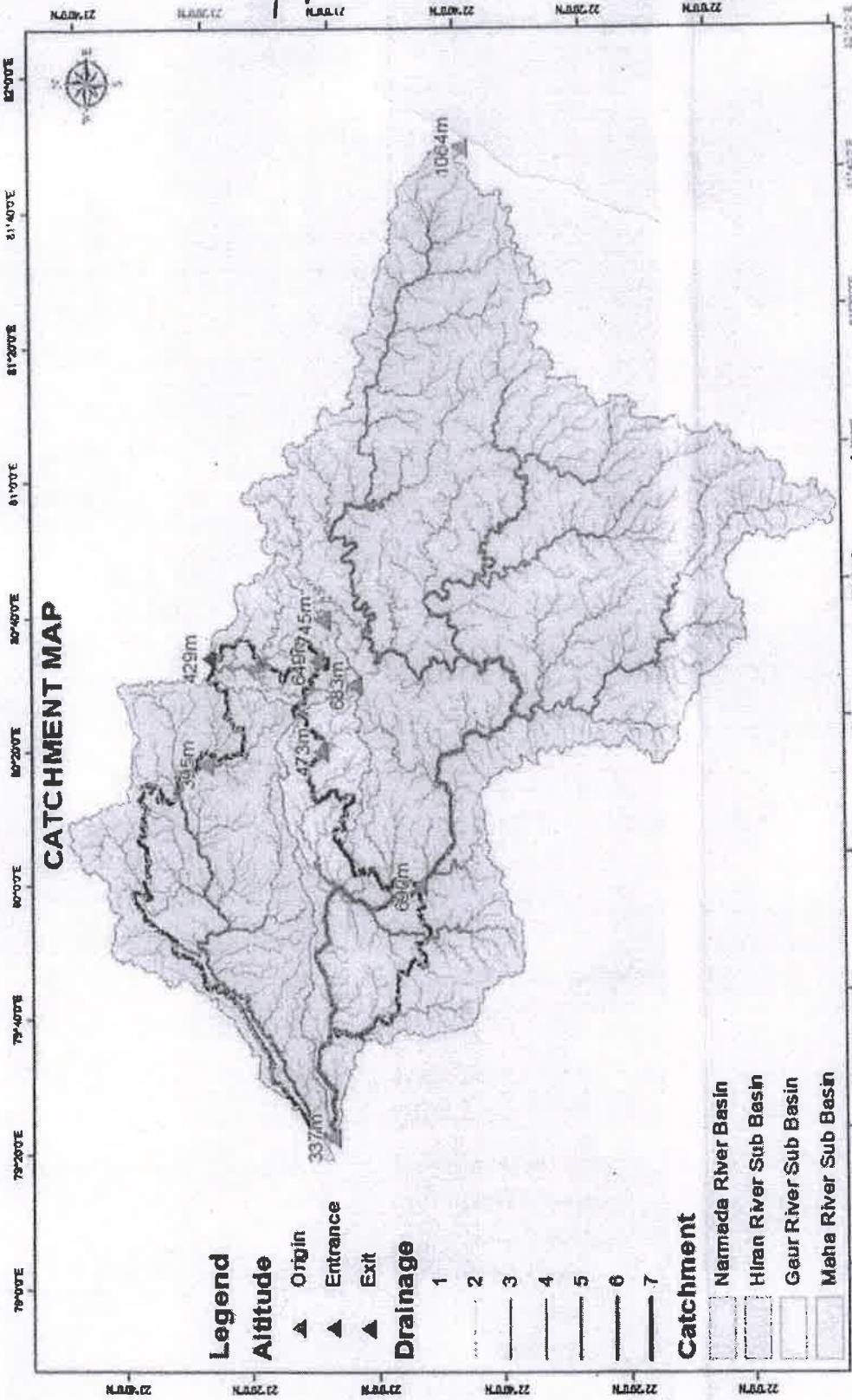
[Signature]
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parishar
E-5, Arera Colony, Bhopal (M.P.)

District Survey Report: Jabalpur

49

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

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



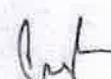
State Level Environmental Impact
Assessment Authority, M.P.
(EPCO)
Parivaran Parisar
E-5, Arera Colony, Bhopal (M.P.)

Figure 11 Catchment Map of District

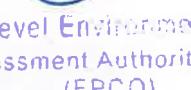
District Survey Report: Jabalpur

Table 14 Details of Catchment Area

Sr. No.	Properties	Narmada River Basin	Hiran River Sub-Basin	Gaur River Sub-Basin	Maha River Sub-Basin
1	Catchment Area up to Exit spot of Particular District	17449 sq. km	4684 sq. km	923 sq. km	961 sq. km
2	Catchment Area of Particular District	1251 sq. km	3079 sq. km	489 sq. km	300 sq. km
3	Length of the Catchment Area	253 km	130 km	54 km	41 km
4	Length of the Catchment Area of Particular District	67 km	98 km	35 km	34 km
5	Altitude at Origin of the River	1064 m	395 m	683 m	745 m
6	Altitude at Entrance of the Particular District	690 m	395 m	473 m	649 m
7	Altitude at Exit of the Particular District	337 m	337 m	337m	429 m

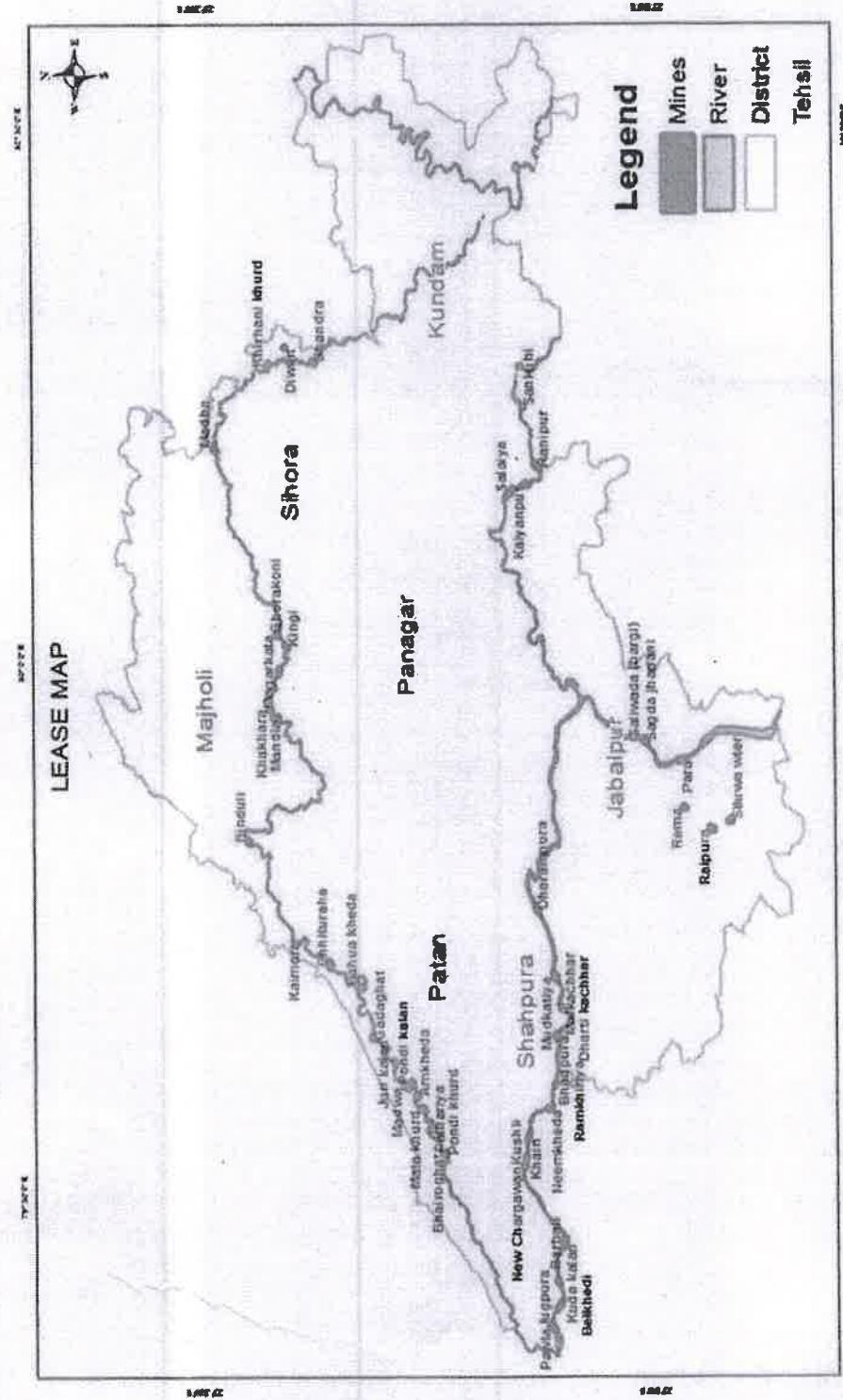


 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)



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

District Survey Report: Jabalpur

25 Mining Lease Marked on the District



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

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

Figure 12: Mining Lease Marked on the district Map

51

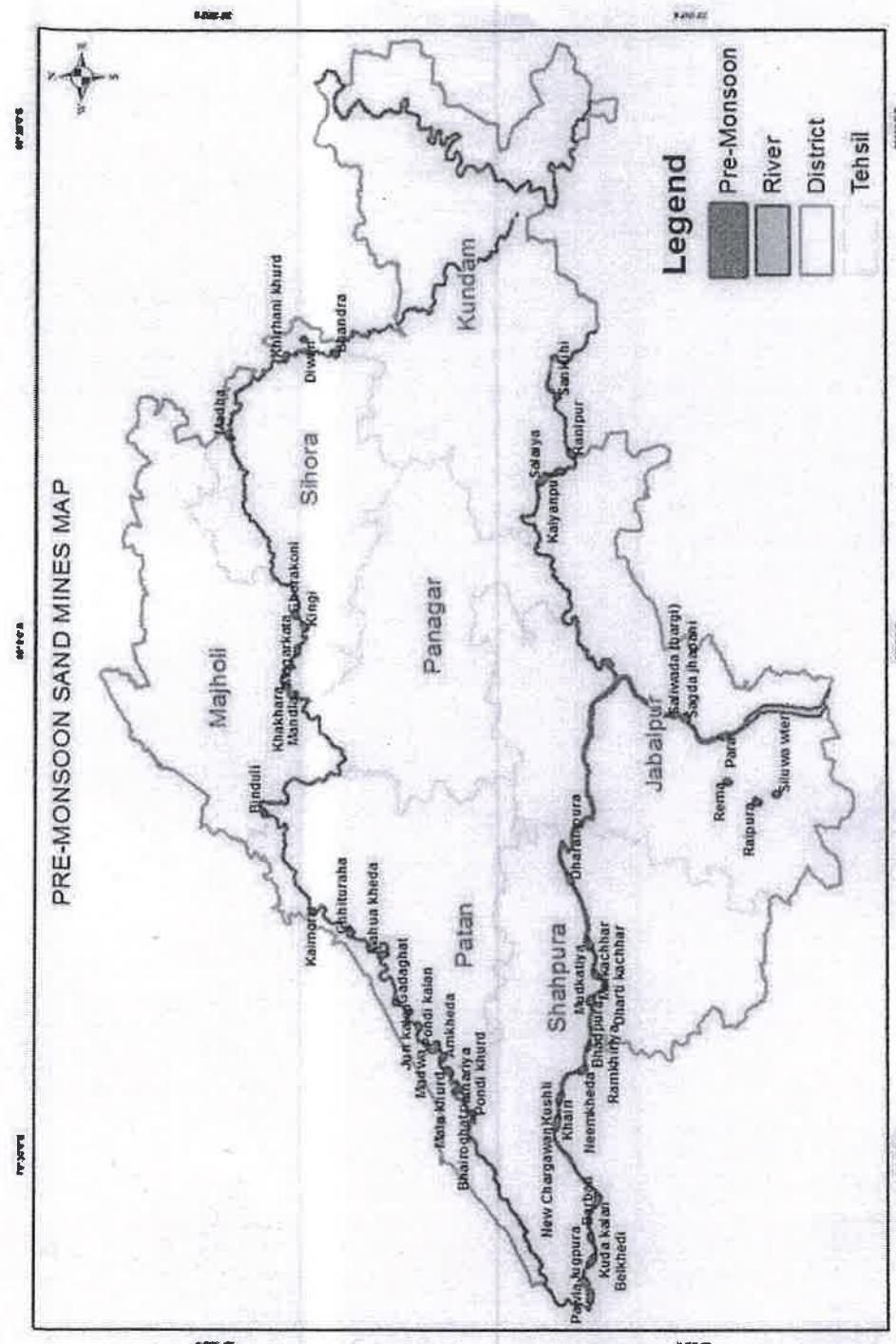


Figure 13 Sand Mining Map of the District – Pre-Monsoon

[Signature]
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

[Signature]
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

Sand Mining Area based on Pre- Monsoon Map

Sr. No.	Name of Mines	Tehsil	Total Area in sqm	Sand Quantity
1	Sagda Jhapani	Jabalpur	20230	30345
2	Saliwada	Jabalpur	40000	60000
3	Reema	Jabalpur	40000	12000
4	Siluwa	Jabalpur	40000	12000
5	Para	Jabalpur	65000	13000
6	Salaiya	Jabalpur	40000	12000
7	Khirhani Kalan	Sihora	20000	10000
8	Ranipur	Kundam	50000	15000
9	Kalyanpur	Kundam	29000	14500
10	Kushli	Shahpura	45000	13500
11	Mudkatiya	Shahpura	60000	18000
12	Dharti kachhar	Shahpura	40000	60000
13	Bhairavghat	Patan	20000	8000
14	Neemkheda	Shahpura	40000	40000
15	New Chergawa	Shahpura	133700	40110
16	Barbati	Shahpura	60000	18000
17	Jugpura	Shahpura	127850	95887.5
18	Dharampura	Shahpura	30000	30000
19	Malkachhar	Shahpura	20000	10000
20	Bhadpura	Shahpura	45000	13500
21	Ramkhiriya	Shahpura	21500	6450
22	Khairi	Shahpura	40000	20000
23	Belkhedi	Shahpura	134500	67250
24	Kudakalan	Shahpura	100000	30000
25	Pondi Kalan	Patan	40000	12000
26	Malakhurd	Patan	20000	8000
27	Pondi Khurd	Patan	40000	12000
28	Kaimori	Patan	20000	6000
29	Chhituraha	Patan	20000	10000
30	Gadaghat	Patan	20000	10000
31	Mahuakheda	Patan	20000	20000
32	Amakheda	Patan	8000	6000
33	Joorikalan	Patan	60000	18000
34	Mandwa	Patan	20000	6000
35	Ghorakoni	Sihora	20000	6000
36	Madha	Sihora	10000	7500



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



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

37	Deori Kanhai	Sihora	20000	6000
38	Bindali	Majholi	10000	8000
39	Magarkata	Majholi	20000	10000
40	Mandla	Majholi	10000	10000
41	Khakhara	Majholi	20000	10000
42	Pawla	Shahpura	149200	74600


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


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

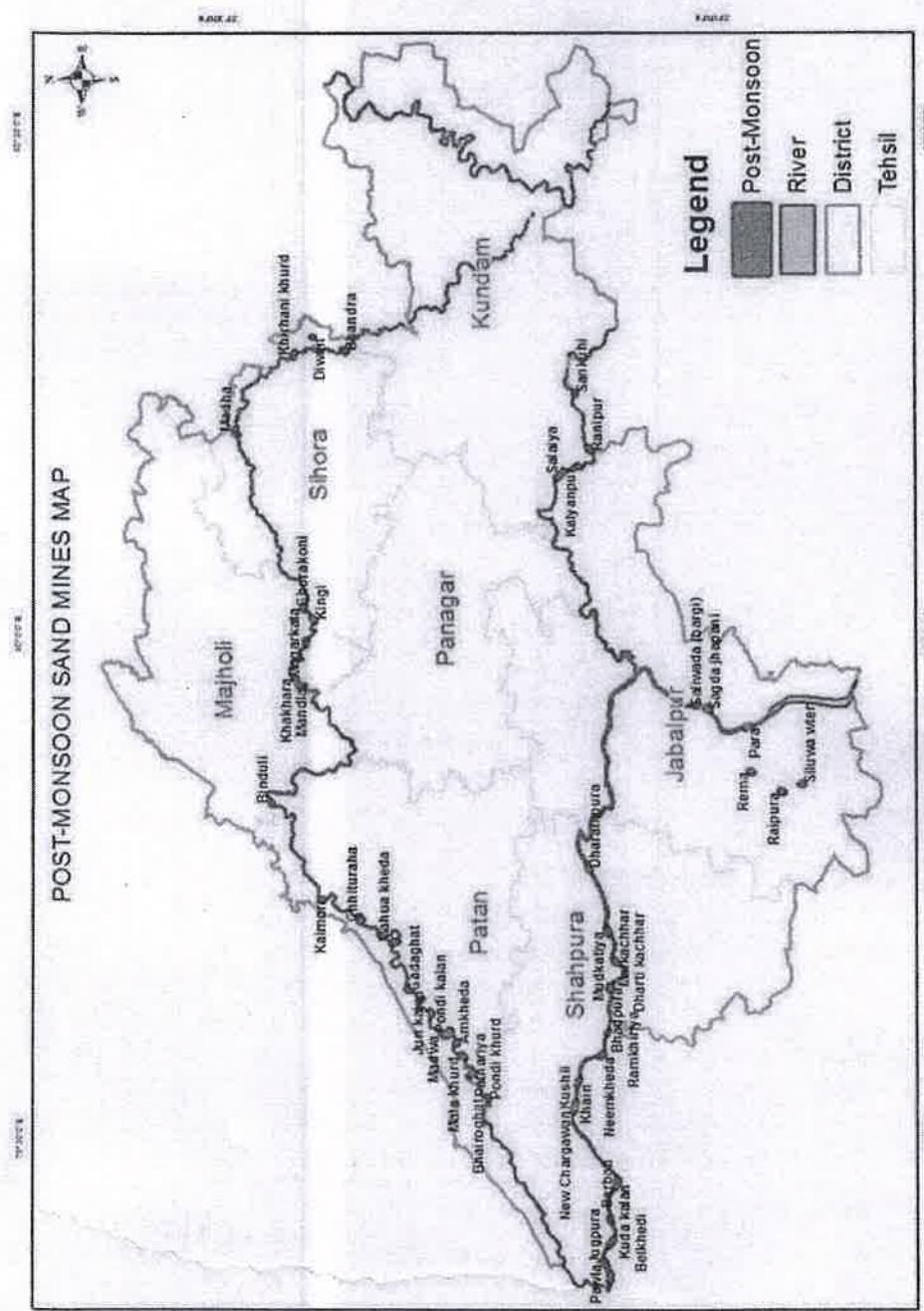


Figure 14 Sand Mining Map of the District – Post -Monsoon

[Signature]
**State Level Environment Impact
Assessment Authority, M.P.
(EPCO)
Paryavaran Parishad
E-5, Arera Colony, Bhopal (M.P.)**

[Signature]
**State Level Environment Impact
Assessment Authority, M.P.
(EPCO)
Paryavaran Parishad
E-5, Arera Colony, Bhopal (M.P.)**

Sand Mining Area based on Post- Monsoon Map

Sr. No.	Name of Mines	Tehsil	Total Area in sqm	Sand Quantity
1	Sagda Jhapani	Jabalpur	20230	60690
2	Saliwada	Jabalpur	40000	120000
3	Reema	Jabalpur	40000	20000
4	Siluwa	Jabalpur	40000	20000
5	Para	Jabalpur	65000	22750
6	Salaiya	Jabalpur	40000	20000
7	Khirhani Kalan	Sihora	20000	30000
8	Ranipur	Kundam	50000	25000
9	Kalyanpur	Kundam	29000	29000
10	Kushli	Shahpura	45000	22500
11	Mudkatiya	Shahpura	60000	30000
12	Dharti kachhar	Shahpura	40000	120000
13	Bhairavghat	Patan	20000	14000
14	Neemkheda	Shahpura	40000	80000
15	New Chargawa	Shahpura	133700	66850
16	Barbati	Shahpura	60000	30000
17	Jugpura	Shahpura	127850	159812.5
18	Dharampura	Shahpura	30000	60000
19	Malkachhar	Shahpura	20000	20000
20	Bhadpura	Shahpura	45000	22500
21	Ramkhiriya	Shahpura	21500	10750
22	Khairi	Shahpura	40000	40000
23	Belkhedi	Shahpura	134500	134500
24	Kudakalan	Shahpura	100000	50000
25	Pondi Kalan	Patan	40000	20000
26	Malakhurd	Patan	20000	15000
27	Pondi Khurd	Patan	40000	20000
28	Kaimori	Patan	20000	10000
29	Chhituraha	Patan	20000	30000
30	Gadaghat	Patan	20000	20000
31	Mahuakheda	Patan	20000	40000
32	Amakheda	Patan	8000	10000
33	Joorikalan	Patan	60000	30000
34	Mandwa	Patan	20000	10000
35	Ghorakoni	Sihora	20000	10000
36	Madha	Sihora	10000	12500


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


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

37	Deori Kanhai	Sihora	20000	10000
38	Bindali	Majholi	10000	17000
39	Magarkata	Majholi	20000	20000
40	Mandla	Majholi	10000	20000
41	Khakhara	Majholi	20000	20000
42	Pawla	Shahpura	149200	74600

Abdul
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parishad
 E-5, Arera Colony, Bhopal (M.P.)

Vish
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parishad
 E-5, Arera Colony, Bhopal (M.P.)

DRAINAGE SYSTEM WITH DESCRIPTION OF MAIN RIVER

Annexure - 1

S. NO.	Name of the River	Area Drained (Sq. Km.)	Area Drained in the District (Sq. Km.)	Percentage of Area Drained in the District
1	Narmada River Basin	17450	1252	7 % (Approx)
2	Hiran River Basin	4684	3079	66 % (Approx)
3	Gaur River Basin	924	490	53 % (Approx)
4	Maha River Sub - Basin	961	309	32% (Approx)

SALIENT FEATURES OF IMPORTANT RIVERS AND STREAMS

Annexure - 2

S. No.	Name of the River or Stream	Total Length in the District (in km)	Place of Origin	Altitude at origin
1	Narmada River Basin	110 km	Amarakantak	1064 m
2	Hiran River Sub-Basin	98 km	Bhaner range, Jabalpur	395 m

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

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

MINEABLE MINERAL POTENTIAL (60% OF TOTAL MINERAL POTENTIAL)

Annexure - 3

SL No	Portion of the River or Stream Recommended for Mineral Concession	Length of area recom- mended for mineral concession (in kilometers)	Average width of area recom- mended for mineral concession (in meters)	Total Area (in m ²) (rounded)	Area recommended for mineral concession (in m ²) Area x Depth	Mineable mineral potential (60% of total mineral potential)	Last 3 years sand excavation details in cubic meter			
							Cubic meter	Metric Tonne	2020-21	2021-22
1	Narmada River Village – Sagda Jhapani Khasra No. – 1	0.29	69.75	20330	12138 x 3	36414	50979.6	16424.71	12398.26	22424
2	Narmada River Village – Saliwada Khasra No. – 464	0.355	112.67	40000	20000 x 3	60000	84000	57452.28	50843.67	44500
3	Temur River Village – Recema Khasra No. – 119	0.405	98.76	40000	6000 x 0.5	3000	4200			
4	Temur River Village – Siluwa Khasra No. -103	0.573	69.80	40000	6800 x 0.5	3400	4750			
5	Narmada River Village – Para Khasra No. – 436	0.576	112.84	65000	8000 x 0.35	2800	3920			
6	Gaur River Village – Sulaiya Khasra No. – 241	0.93	43.01	40000	6000 x 0.5	3000	4200			

[Signature]
**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parishar
E-5, Arera Colony, Bhopal (M.P.)**

[Signature]
**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parishar
E-5, Arera Colony, Bhopal (M.P.)**

7	Hiran River Village – Khirhani Kalan Khasra No. - 271	0.572	34.96	20000	3200 x 1.5	4800	6720	
8	Gaur River Village – Ranipur Khasra No. - 428	0.512	97.65	50000	4000 x 0.5	2000	2800	No Production has been done due to absence of Environment clearance
9	Gaur River Village – Kalyapur Khasra No. - 121	0.292	99.31	29000	7700 x 1	7700	10780	
10	Narmada River Village – Kushli Khasra No. - 481	0.495	90.91	45000	4000 x 0.5	2000	2800	42861 0 0
11	Narmada River Village-Mudkatiya Khasra No. - 1	0.502	119.52	60000	10000 x 0.5	5000	7000	No Production has been done due to absence of Environment clearance
12	Narmada River Village – Dharti Kachhar Khasra No. - 1	0.345	115.94	40000	11100 x 3	33300	46620	
13	Hiran River Village – Bhairavghat Khasra No. - 98	0.355	56.33	20000	6200 x 0.7	4340	6076	No Production has been done due to absence of Environment clearance
14	Narmada River Village – Neemkheda Khasra No. - 326	0.35	114.28	40000	5800 x 2	11600	16240	56596 21543 0
15	Narmada River Village – New Chargawa Khasra No. - 414	1.104	121.10	133700	16000 x 0.5	8000	11200	26613 16 0


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


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

16	Narmada River Village – Barbatū Khasra No. – 484	0.579	103.62	60000	20000×0.5	10000	14000	No Production has been done due to absence of Environment clearance
17	Narmada River Village – Jugpura Khasra No. – 124	90.67	127850	76710×1.25	95887.5	134242.5	No Production has been done due to absence of Environment clearance	
18	Narmada River Village – Dharanpura Khasra No. – 415	0.472	63.56	30000	18000×2	36000	50400	No Production has been done due to absence of Environment clearance
19	Narmada River Village – Malkachhar Khasra No. – 152	0.455	43.95	20000	10000×1	10000	14000	No Production has been done due to absence of Environment clearance
20	Narmada River Village – Bhadpura Khasra No. – 483	0.428	105.14	45000	8000×0.5	4000	5600	No Production has been done due to absence of Environment clearance
21	Narmada River Village – Ramkhiriyā Khasra No. – 300	0.226	95.13	21500	10000×0.5	5000	7000	No Production has been done due to absence of Environment clearance
22	Narmada River Village – Khairī Khasra No. – 151	0.332	120.48	40000	5500×1	5500	7700	No Production has been done due to absence of Environment clearance
23	Narmada River Village – Belkchedi Khasra No. – 339	1.33	101.12	134500	80000×1	80000	112000	No Production has been done due to absence of Environment clearance
24	Narmada River Village – Kundakalan Khasra No. – 558	1.292	77.40	100000	40000×0.5	20000	28000	No Production has been done due to absence of Environment clearance

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

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

25	Hiran River Village - Pondi Kalan Khasra No. - 229	0.76	52.63	40000	9300 x 0.5	4650	6510	No Production has been done due to absence of Environment clearance
26	Hiran River Village-Malakhurd Khasra No. - 1	0.61	32.78	20000	6400 x 0.75	4800	6720	
27	Hiran River Village- Pondi Khurd Khasra No. - 188	0.796	50.25	40000	8200 x 0.5	4100	5740	No Production has been done due to absence of Environment clearance
28	Hiran River Village - Kainori Khasra No. - 181, 87	0.55	36.36	20000	4100 x 0.5	2050	2870	
29	Hiran River Village - Chhituraha Khasra No. - 1	0.554	36.10	20000	8100 x 1.5	12150	17010	3049
30	Hiran River Village - Gadaghat Khasra No. - 1	0.56	35.71	20000	4000 x 1	4000	5600	43098
31	Hiran River Village - Mahukheda Khasra No. - 42, 1	0.603	33.16	20000	7900 x 2	15800	22120	29068
32	Hiran River Village Amakheda Khasra No. - 1	0.154	51.94	8000	4800 x 1.25	6000	8400	14318
33	Hiran River Village-Joorikalan Khasra No. - 2	1.825	32.87	60000	11000 x 0.5	5500	7700	3171
34	Hiran River Village - Mandwa Khasra No. - 86	0.511	39.14	20000	8000 x 0.5	4000	5600	No Production has been done due to absence of Environment clearance



**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)



**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

35	Hiran River Village - Ghorakoni Khasra No. - 48	0.576	34.72	20000	8000 x 0.5	4000	5600	No Production has been done due to absence of Environment clearance
36	Hiran River Village - Madha Khasra No. - 1	0.191	52.35	10000	3200 x 1.25	4000	5600	No Production has been done due to absence of Environment clearance
37	Hiran River Village - Deorikanhai Khasra No. - 782	0.335	59.70	20000	8400 x 0.5	4200	5880	28729 21453 7493
38	Hiran River Village - Bindali Khasra No. - 180	0.257	38.91	10000	6000 x 1.7	10200	14280	No Production has been done due to absence of Environment clearance
39	Hiran River Village - Magarkata Khasra No. - 191	0.368	54.34	10000	3000 x 1	3000	4200	
40	Hiran River Village - Mandla Khasra No. - 91/274	0.412	24.27	10000	6000 x 2	12000	16800	673 2367 17419
41	Hiran River Village - Khatara Khasra No. - 201	0.505	39.52	20000	5000 x 1	5000	7000	No Production has been done due to absence of Environment clearance
42	Narmada River Village - Pawla Khasra No. - 397	1.175	126.98	149200	40000 x 0.5	20000	28000	
	Total	24.923 (Approx)	71.18 avg. (Approx)	—	—	5791915	810858.1	331776 283727 155419



**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parishar
E-5, Arera Colony, Bhopal (M.P.)



**State Level Environment Impact
Assessment Authority, M.P.
(EPCA)**
Paryavaran Parishar
E-5, Arera Colony, Bhopal (M.P.)

MINERAL POTENTIAL

Annexure - 4

BOULDER (MT)	BAJRI (MT)	SAND (MT)	TOTAL MINEABLE MINERAL POTENTIAL 60% (MT)
NIL	NIL	1351447	810868.1

ANNUAL DEPOSITION

Annexure - 5

BOULDER (MT)	BAJRI (MT)	SAND (MT)	TOTAL MINEABLE MINERAL POTENTIAL 60% (MT)
NIL	NIL	1351447	810868.1

[Signature]
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

[Signature]
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

Annexure - 6

Sr. No.	River or Stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in km)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable Mineral Potential (in metric tonne) (60% of total mineral potential)
1	Narmada	Narmada	11.716	99.17	1161.876	
2	Hiran	Hiran	10.495	41.89	439.635	
3	Temur	Temur	0.978	84.28	82.425	
4	Gaur	Gaur	1.734	79.99	138.702	810868.1
Total for the District			24.923	305.33	7609.74	

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

[Signature] State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Parivaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

जिले में घोषित / स्वीकृत रेत खदानों की सूची (COMPARATIVE CHART)

क्र.	गांव/खदान का नाम	तहसील	नदी का नाम	खसरा क्रमांक	पुराना रेकर्ड (हे.)	एकबा (हे.)	पुरानी डी.एस आर के अनुसार गहराई मी.	नवीन डी.एस आर के अनुसार गहराई मी.	पूर्व भौ. एस आर में स्थिकृत मात्रा (घ.मी.)	नवीन डी.एस आर के अनुसार गहराई मी.	पूर्व भौ. एस आर में स्थिकृत मात्रा (घ.मी.)	माइनेश्वर मात्रा में परिवर्तन (घ.मी.)	स्थिक	
1.	साराड़ा झपनी	जबलपुर	नर्मदा	1 नदी (पुराना 1/1)	2.023	2.023	3.0	3.0	36414	36414	0	0	0	खसरा में सुधार किया गया है। (खसरा क्र. 1/1 के स्थान पर खसरा क्र. 1 है)
2.	सालीवाडा	जबलपुर	नर्मदा	464	4,000	4,000	3.0	3.0	60000	60000	0	0	0	कोई परिवर्तन नहीं है।
3.	रीमा	जबलपुर	टेसर नदी	119	4,000	4,000	1.0	0.5	10080	3000	-7080	0	0	खनिज मात्रा कम हुई है एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 10080 के स्थान पर 3000 है)
4.	सिलुवा	जबलपुर	टेसर नदी	103	4,000	4,000	1.0	0.5	10392	3000	-7392	0	0	खनिज मात्रा कम हुई है एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 10392 के स्थान पर 3000 है)
5.	पारा	जबलपुर	नर्मदा नदी	436	6,500	6,500	0.5	0.35	5238	2000	-3238	0	0	खनिज मात्रा कम हुई है तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 5238 के स्थान पर 2000 है)



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



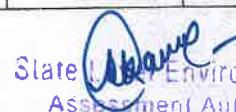
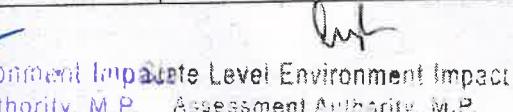
 State Level Environment Impact
 Assessment Authority, M.P.
 (EPCO)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

6.	सतैया	जबलपुर	गौर नदी	241	7.000	4.000	0.50	0.50	5150	2000	-3150	पुल होने से प्रतिबंधित दूरी काटने पर रकवा 6.87 हेवटर के स्थान पर 4.00 हेवटर किया गया। खनिज मात्रा कम हुई है (खनिज मात्रा 5150 के स्थान पर 2000 है)
7.	खिरही कला	सिहोरा	हिस्से नदी	271	2.000	2.000	1.0	1.5	10075	4000	-6075	खनिज मात्रा कम हुई है एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 10075 के स्थान पर 4000 है)
8.	रामेपुर	कुण्डम	गौर नदी	428	5.000	5.000	1.0	0.5	5428	2000	-3428	खनिज मात्रा कम हुई है एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 5428 के स्थान पर 2000 है)
9.	कल्याणपुर	कुण्डम	गौर नदी	121	4.000	2.900	2.0	1.0	10226	7000	-3226	पुल होने से प्रतिबंधित दूरी काटने पर रकवा 4.000 हेवटर के स्थान पर 2.900 हेवटर किया गया एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है तथा खनिज मात्रा भी कम हुई है। (खनिज मात्रा 10226 के स्थान पर 7000 है)

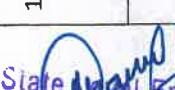
State Level Environment Impact Assessment Authority, M.P.
(EPCA)
Parivaran Parisar
E-5, Arera Colony, Bhopal (M.P.)

State Level Environment Impact Assessment Authority, M.P.
(EPCA)
Parivaran Parisar
Bhopal (M.P.)

10.	कुशली	शहपुरा	नर्मदा	481	10.890	4.500	0.5	0.5	22866	2000	-20866	कायालीयन रिपोर्ट के आधार पर रकबा 10.890 हेक्टर के स्थान पर 4.50 हेक्टर किया गया। खनिज मात्रा कम हुई है एवं अक्षांश-देशांश का परिवर्तन हुआ है। (खनिज मात्रा 22866 के स्थान पर 2000 है)
11.	मुट्ठकटिया	शहपुरा	नर्मदा	1	6.000	6.000	0.5	0.5	5000	5000	0	केवल अक्षांश-देशांश का परिवर्तन हुआ है।
12.	धरतीकातार	शहपुरा	नर्मदा	1	4.000	4.000	3.0	3.0	40000	30000	-10000	केवल खनिज मात्रा कम हुई है। (खनिज मात्रा 40000 के स्थान पर 30000 है)
13.	भीरोधाट	शहपुरा	हिस्स	98	2.000	2.000	2.0	0.7	20349	4000	-16349	खनिज मात्रा कम हुई है एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 20349 के स्थान पर 4000 है)
14.	नीमखेड़ा	शहपुरा	नर्मदा	326	22.070	4.000	1.0	2.0	60000	10000	-50000	पुल होने से प्रतिबिधित दूरी काटने पर रकबा 22.070 हेक्टर के स्थान पर 4.000 हेक्टर किया गया एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है तथा खनिज मात्रा भी कम हुई है। (खनिज मात्रा 60000 के स्थान पर 10000 है)


 State Environment Impact Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

 Assessment Authority, M.P.
 (ERGO)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)

15.	चराचा	शहपुरा	नमंदा	414	13.370	13.370	0.5	0.5	19615	8000	-11615	खनिज मात्रा कम हुई है एवं अकांश-देशांश का परिवर्तन हुआ है। (खनिज मात्रा 19615 के स्थान पर 8000 है)
16.	बरबटी	शहपुरा	नमंदा	484	6.000	6.000	1.0	0.5	10000	8000	-2000	केवल अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 10000 के स्थान पर 8000 है)
17.	जुगपुरा	शहपुरा	नमंदा	124	12.785	12.785	0.5	1.25	42928	71500	+28572	खनिज मात्रा में बढ़ि हुई है एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 42928 के स्थान पर 71500 है)
18.	धरमपुरा	शहपुरा	नमंदा	415	3.000	3.000	3.0	2.0	45000	30000	-15000	केवल खनिज मात्रा कम हुई है तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 45000 के स्थान पर 30000 है)
19.	मालकछार	शहपुरा	नमंदा	152	2.000	2.000	3.0	1.0	9428	8000	-1428	खनिज मात्रा कम हुई है एवं अकांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 9428 के स्थान पर 8000 है)
20.	पर्वती	शहपुरा	नमंदा	483	13.240	4.500	0.5	0.5	32784	4000	-28784	पुल होने से प्रतिबंधित दूरी काटने पर रक्का 13.240 हेक्टर के स्थान पर 4.500 अकांश-देशांश में परिवर्तन हुआ है तथा खनिज मात्रा भी कम हुई है। (खनिज मात्रा 32784 के स्थान पर 4000 है)



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



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

21.	रमधिरिया	शहपुरा	नर्मदा	300	3.300	2.150	1.0	0.5	11392	5000	-6392	5000	-18615	+13000	-12115	4000	-5208
22.	खेणी	शहपुरा	नर्मदा	151	4.000	4.000	1.0	1.0	23615	5000	-18615	5000	-13000				
23.	बैतखेड़ी	शहपुरा	नर्मदा	339	13.450	13.450	2.0	1.0	60000	73000							
24.	कूड़ा	शहपुरा	नर्मदा	558	10.000	10.000	0.5	0.5	32115	20000							
25.	पोडीकला																

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

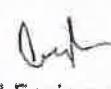
State Level Environment Impact
Assessment Authority, M.P.
(EPCA)
Paryavaran Parivar
E-5, Arera Colony, Bhopal (M.P.)

26.	मालांचुर्द	पाटन	हिस्से नदी	1	2.000	2.000	1.0	0.75	10392	4000	-6392	खनिज मात्रा कम हुई है एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 10392 के स्थान पर 4000 है)
27.	पोड़ी खुर्द	पाटन	हिस्से नदी	188 नदा (पुराना 229)	4.000	4.000	1.0	0.5	10178	4000	-6178	खसरा क्रमांक 229 की जगह 188 होना पाया। खनिज मात्रा कम हुई है एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 10178 के स्थान पर 4000 है)
28.	कंमोरी	पाटन	हिस्से नदी	87	2.000	2.000	1.0	0.5	10808	2000	-8808	खनिज मात्रा कम हुई है एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है। तथा खसरा हटाया गया है। (खनिज मात्रा 10808 के स्थान पर 2000 है) खसरा क्र. 181 एवं 87 के स्थान पर सिर्फ 87 लिया गया है खसरा क्र. 181 से रेत नहीं होने से खसरा हटाया गया है।
29.	छितुरहा	पाटन	हिस्से नदी	1	2.000	2.000	2.0	1.5	20783	10000	-10783	केवल खनिज मात्रा कम हुई है तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 20783 के स्थान पर 10000 है)

30.	गाड़ाधार	पाटन	हिरन नदी	1	2.000	2.000	1.0	1.0	5250	4000	-1250	खनिज मात्रा कम हुई है एवं अक्षांश-देशांश का परिवर्तन हुआ है। (खनिज मात्रा 5250 के स्थान पर 4000 है)
31.	महाआखेड़ा	पाटन	हिरन नदी	42	2.000	2.000	2.0	2.0	15800	8000	-7800	खनिज मात्रा कम हुई है एवं खसरा हटाया गया है। (खनिज मात्रा 15800 के स्थान पर 8000 है) खसरा क्र. 42 एवं 01 के स्थान पर सिर्फ 42 लिया गया है खसरा क्र. 01 में रेत नहीं होने से खसरा हटाया गया है।
32.	आमाखेड़ा	पाटन	हिरन नदी	1	0.800	0.800	3.0	1.25	5163	4500	-663	खनिज मात्रा कम हुई है एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 5163 के स्थान पर 4500 है)
33.	जूरीकला	पाटन	हिरन नदी	2	6.000	6.000	0.5	0.5	5138	5000	-138	केवल खनिज मात्रा कम हुई है। (खनिज मात्रा 5138 के स्थान पर 5000 है)
34.	भड़वा	पाटन	हिरन नदी	86	2.000	2.000	1.0	0.5	15000	4000	-11000	खनिज मात्रा कम हुई है एवं अक्षांश-देशांश तथा गहराई में परिवर्तन हुआ है। (खनिज मात्रा 15000 के स्थान पर 4000 है)



 State Level Env.
 Assessment Authority, M.P.
 (EPCA)
 Paryavaran Parivar
 E-5, Arera Colony, Bhopal (M.P.)



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

35.	घोरकोनी	सिहोरा	हिस्त नदी	48	2.000	2.000	1.0	0.5	9688	4000	-5688		
36.	मढा	सिहोरा	हिस्त नदी	1	1.000	1.000	2.0	1.25	5563	4000	-1563		
37.	देवरी	सिहोरा	हिस्त नदी	782	2.000	2.000	3.0	0.5	8500	2000	-6500		
38.	बिदुली	मझौली	हिस्त नदी	180	1.000	1.000	2.0	1.7	15000	10000	-5000		
39.	गारकटा	मझौली	हिस्त नदी	191	1.000	1.000	2.0	1	10808	3000	-7808		
40.	मंडला	मझौली	हिस्त नदी	91/274	1.000	1.000	2.0	2	18000	10000	-8000		

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

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

41.	खदान	मर्जीती	हिस्से नंदी	201	2.000	2.000	1.0	1.0	10428	5000	-6428	खनिज मात्रा कम हुई है एवं अकांश-देशांश का परिवर्तन हुआ है। (खनिज मात्रा 10428 के रथान पर 5000 है)
42.	पातला	भाग्युता	मर्मा	397	14.920	14.920	0.5	0.5	37438	20000	-17438	खनिज मात्रा कम हुई है एवं अकांश-देशांश का परिवर्तन हुआ है। (खनिज मात्रा 37438 के रथान पर 20000 है)

नोट:- जिले में 05 रेत खदानें कम हुई हैं, जिसका विवरण निम्नानुसार है-

1. रेत खदान खिन्नी का खसरा निजी भूमि होने तथा नदी क्षेत्र नहीं होने से समाप्त हुई है।
2. रेत खदान भगड़ा में मौका जाँच अनुसार खदान पर रेत उपलब्ध नहीं होने तथा वन विभाग की आपत्ति होने से समाप्त की गई।
3. रेत खदान सनकुही वन भूमि में होने तथा मौका जाँच अनुसार खदान पर रेत उपलब्ध नहीं होने से समाप्त की गई।
4. रेत खदान पथरिया एवं ऐपुरा में पुल निर्मित होने के कारण समाप्त की गई।

इस प्रकार जिले में खीकूत/आवंटित कुल 47 खदानों में से अंतिम रूप से 42 रेत खदानें शेष हैं।


खुशी अधिकारी
जिला जबलपुर (म.प्र.)


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


Assessment Authority, M.P.
(EPCA)
Paryavaran Parishad
E-5, Arera Colony, Bhopal (M.P.)