RIVER BED SAND (MINOR MINERAL) MINE

APPLICANT - MUKESH SHARMA

TEHSIL – BARAN & KISHANGANJ, DISTRICT – BARAN (RAJASTHAN)

To,

Date: 23.05.2018

The Director- IA.II (M)

Ministry of Environment, Forests & Climate Change,

Indira Paryavaran Bhawan, Aliganj, Jor Bagh Road,

New Delhi-110003.

Sub: Regarding Environmental Clearance of our proposed project "River Bed Sand (Minor Mineral) Mine" of lessee Mukesh Sharma situated near Village(s) - Kagla Bamori, Mehrawata & Rani Badaud, Tehsil - Kishanganj & Village(s) - Ulthi, Majwata, Kalyanpura Ghata, Ghinsri, Hanotiya, Koyla And Shahgrah in Tehsil -Baran, District – Baran, Rajasthan for an area of 360.97 hectare.

Ref: Minutes of Meeting of 29th Meeting of Reconstituted Expert Appraisal Committee (Non- Coal Mining) held on 22nd March'2018 (Item No. 2.8)

Respected Sir,

With reference to above mentioned subject, kindly consider our point-wise reply, as below:

S. No.	Particular	Reply
i.	DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/ bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department.	That the demarcated river stretch through latitudes and longitudes based on Original Ground Level (OGL) and reserves with each cross section duly authenticated by Office of Department of mines & Geology, Baran is enclosed as **Annexure – I.**
ii.	PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate	That the latitudes and longitudes of cross section used for replenishment study have been done. Copy of duly authenticated map is enclosed as **Annexure – II.**
iii.	PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No	That the mining will be undertaken using Scrapers only and the mining depth will be maintained as 1.0 meter (max.) from Original Ground Level. Undertaking for the

	other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota	same by Project Proponent is enclosed as **Annexure-III.**
iv.	State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that leveled cross section is made before the onset of next rainfall season; and	The same has been communicated.
v.	State Government of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.	Duly signed cover letter of District Survey Report from SME, Kota is enclosed as **Annexure – IV.**

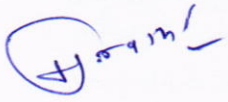
We have applied for extension for validity of the LOI, which is under active consideration. We request Receipt of submitted letter is enclosed as **Annexure-V.** Meanwhile, we request MoEF&CC to grant us EC subjected to validity of LOI. The time taken for completion of EC formalities has taken over 2 years.

In lieu of this, we request your good self to kindly consider our reply and accord us environment clearance at the earliest.

Thanking You,

Yours Faithfully,

For River Bed Sand Mine, Baran



(Mukesh Sharma)

Applicant

ANNEXURE - I

राजस्थान सरकार
कार्यालय सहायक खनि अभियन्ता, खान एवं भू विज्ञान विभाग, बारां

101, 102, मिनी सचिवालय नवीन विस्तार भवन, कलेक्ट्रेट परिसर, बारां (राज.)
Email id:-ame.baran@rajasthan.gov.in

क्रमांकः सखअ/बारां/ई.सी./बजरी/2018/1102 दिनांकः 16/5/18

प्रेषितिः—

श्रीमान सुरेन्द्र कुमार,
सलाहकार/वैज्ञानिक "जी"
भारत सरकार का वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय, (इम्पेक्ट असेसमेन्ट डिविजन)
तीसरी मंजिल, वायु विंग, इन्द्रा पर्यावरण भवन, जोरबाग रोड़,
अलीगंज, नई दिल्ली 110003

विषयः— Minutes of 29th EAC Meeting held during Dated March 22-23.2018 के कम में चाही गई कमी/पूर्ति कार्यवाही सूचना बाबत्।

प्रसंगः— आपका पत्र दिनांक 18.04.2018 के कम में।

महोदय,

उपरोक्त विषयान्तर्गत प्रासंगिक पत्र के सन्दर्भ में निवेदन है कि इस कार्यालय के अधिकार क्षैत्र में आने वाले खनिज बजरी का एल.ओ.आई. खनन संख्या 1/2013 क्षैत्र 360.97 हैक्टर तहसील बारां व किशनगंज जिला बारां के संबंध में ई.सी. प्राप्ति हेतु चाहे गए अक्षांश व देशान्तर नक्शे एवं डिस्ट्रिक्ट सर्वे रिपोर्ट, रिप्लेशमेन्ट स्टडी तैयार करवा कर प्रमाणित कर इस पत्र के साथ संलग्न कर भिजवाई जा रही है, जिसका उक्त प्रासंगिक पत्र का सन्दर्भ निम्न प्रकार से है—

(2.8). Mining Of Sand (Minor Mineral) with production capacity of 0.42 MTPA by M/s Mukesh Sharma, located at near revenue villages of Tehsil Baran and Kishanganj District Baran, Rajasthan (MLA : 360.97 ha.) (F. No. J-11015/408/2015-IA.II(M); Proposal No. IA/RJMIN 32677/2015) (Consultant : Enkay Enviro Service Pvt. Ltd.) - Consideration of Environmental Clearance.

भवदीय

सहायक खनि अभियंता, बारां

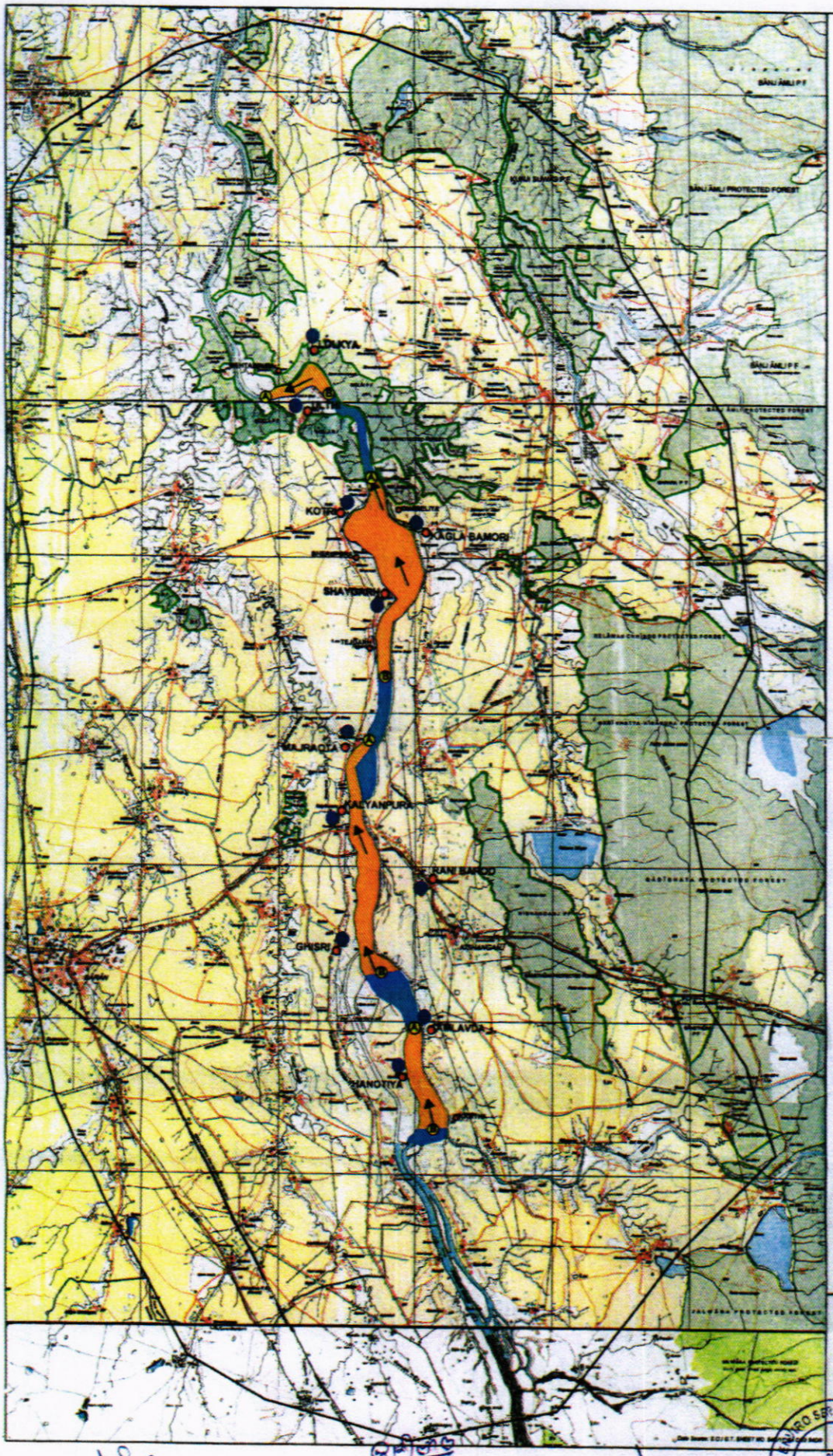
क्रमांकः सखअ/बारां/ई.सी./बजरी/2018/ दिनांकः

प्रतिलिपि :—

1. श्रीमान अतिरिक्त निदेशक (खान) महोदय कोटा—जोन, कोटा।
2. श्रीमान अधीक्षण खनि अभियन्ता महोदय कोटा वृत कोटा

सहायक खनि अभियंता, बारां

ANNEXURE - I



TOPOGRAPHICAL MAP

SHREE MUKESH SHARMA
NEAR VILLAGE HANOTIYA TO ULTHI
TEHSIL :- BARAN & KISHANGANJ
DISTRICT-BARAN, RAJASTHAN

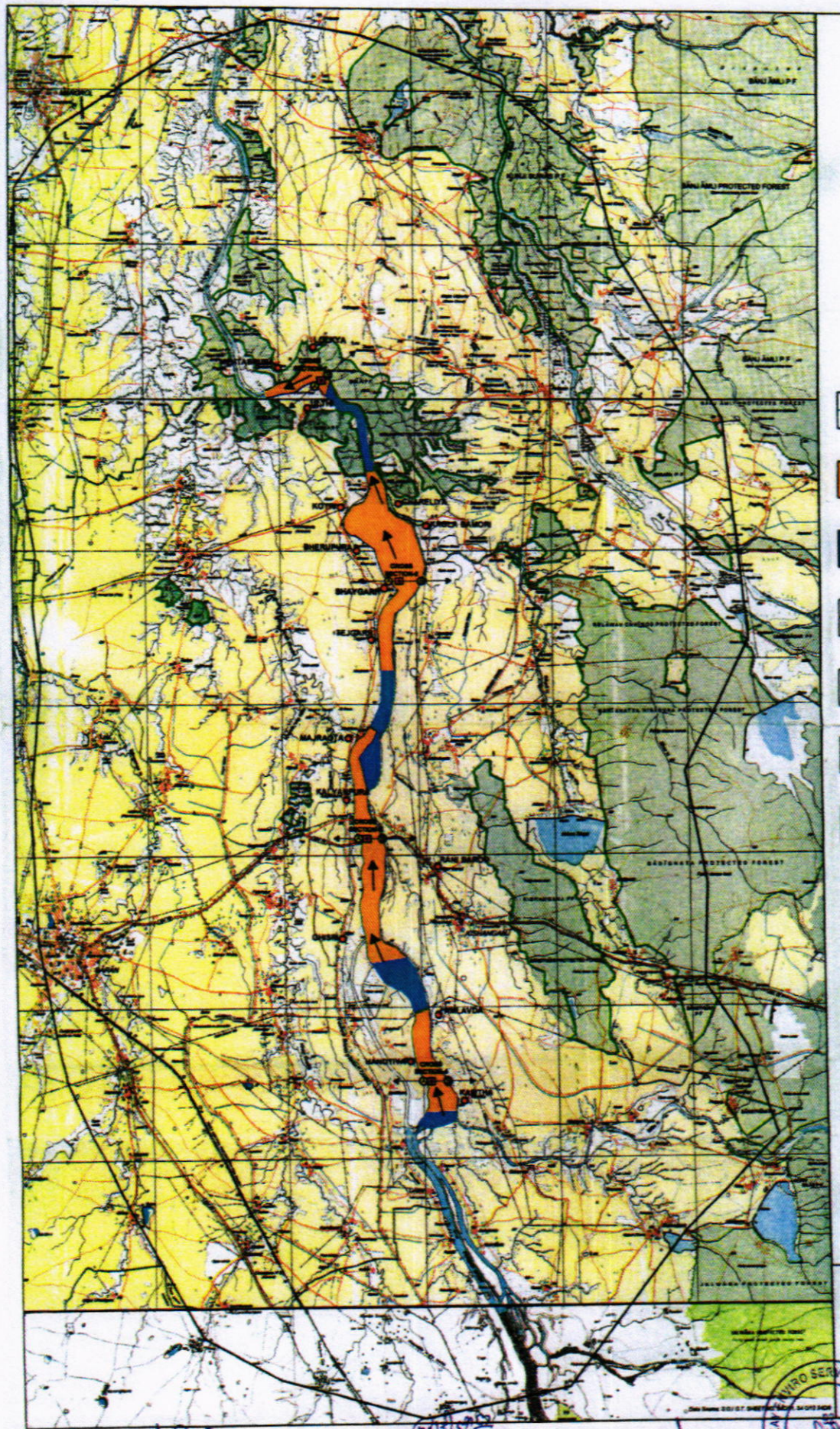
ENKAY ENVIRO SERVICES PVT. LTD. JAIPUR

सहायक अभियन्ता
एवं संसाधन खण्ड तृतीय, बारां

सहायक खनि अभियन्ता
खान एवं भू-विज्ञान विभाग
बांरा (राज.)

मनोज कुमार गोयल
अधिशासी अभियन्ता
जल संसाधन खण्ड तृतीय, बारां

ANNEXURE - II



LATITUDE & LONGITUDE OF CROSS SECTION IDENTIFIED

SHREE MUKESH SHARMA
NEAR VILLAGE HANOTIYA TO ULTHI
TEHSIL :- BARAN & KISHANGANJ
DISTRICT-BARAN, RAJASTHAN

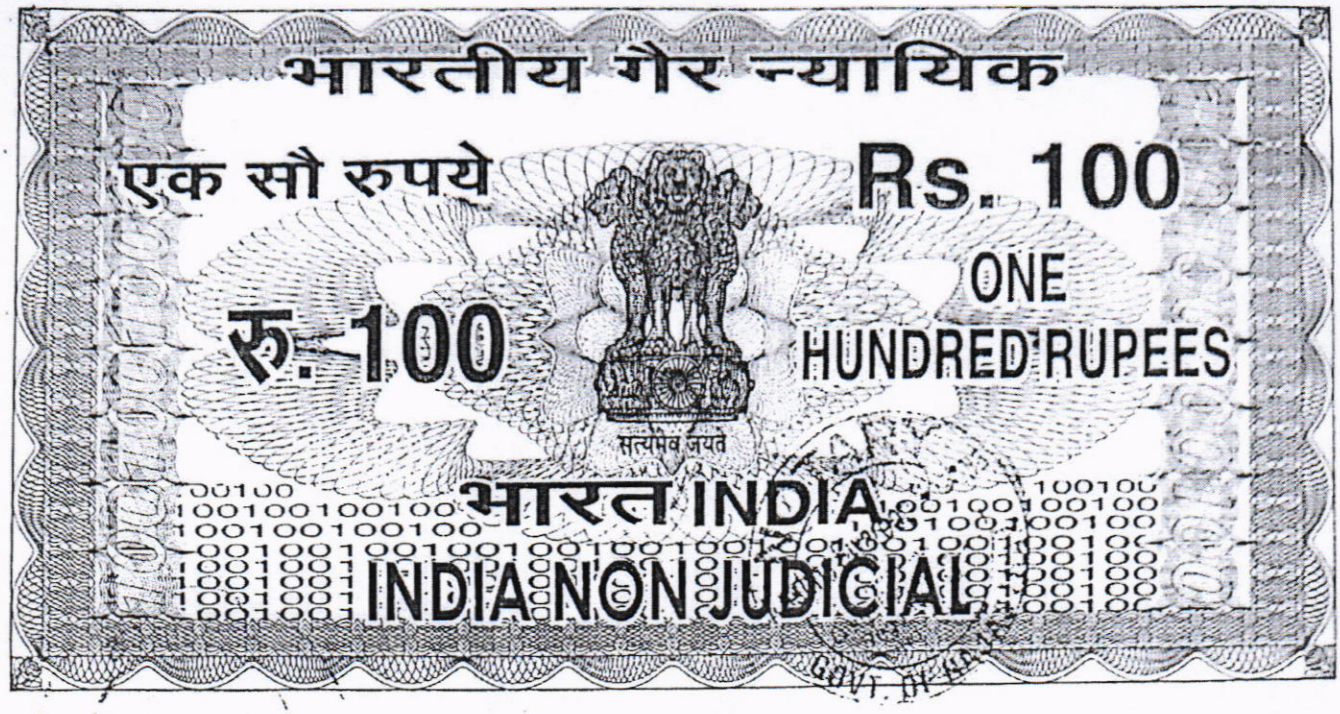
ENKAY ENVIRO SERVICES PVT. LTD. JAIPUR

सहायक अभियन्ता
खान एवं भू-विज्ञान विभाग
बारां (राज.)

सहायक खनि अभियन्ता
खान एवं भू-विज्ञान विभाग
बारां (राज.)

मनोज कुमार गोयल
अधिशाषी अभियन्ता
जल संसाधन खण्ड तलौड़ा बारां

ANNEXURE - III



राजस्थान RAJASTHAN

AM 412031

UNDERTAKING

Mukesh Sharma S/o Suresh Chand Sharma, R/o Plot No. 7 Anandpuri Colony, Kalvad Road Jhotwara, Jaipur Lessee/owner for River bed mining project of minor mineral sand (Bajri), Lease Area 360.97 Hect. ML No. 1/2013 located at revenue villages of Tehsil Baran & Kishanganj of District Baran, State-Rajasthan, hereby undertake that only scrapers will be used for mining and mining depth will be maintained as 1.0 meters (max.) from Original Ground Level and no other heavy machinery like bucket excaators, JCB machines etc. will used which any adversely inpact the aquatic biota.

Date : 09 May, 2018

Lessee

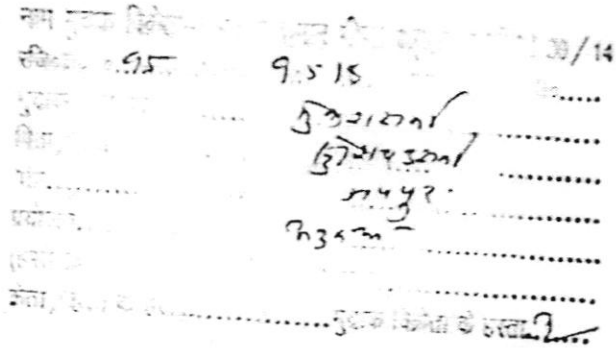
(Mukesh Sharma)

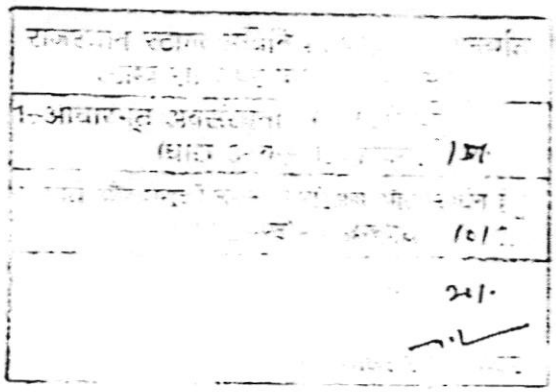
सहायक खनि अभियन्ता
खान एव भू–विज्ञान विभाग
बांरा (राज.)

Signature/Thumb impression

ATTESTED

Krishna Swarnap Sharma
NOTARY Kishanganj (Baran)





ANNEXURE - IV

DISTRICT SURVEY REPORT

DISTRICT-BARAN, RAJASTHAN

AS PER NOTIFICATION NO. S.O. 141(E) NEW DELHI, THE 15 JANUARY,2016 OF MINISTRY OF ENVIORNMENT, FOREST AND CLIMATE CHANGE. GOVT. OF INDIA

सीताबाड़ी

शेरगढ किला अटरू (बारॉ)

Office of the Senior Geologist,
Department of Mines and Geology, Kota

डिस्ट्रेक्ट सर्वे रिपोर्ट पृष्ठ 1 से 50 तक प्रमाणित किया जाता है।

सहायक खनि अभियन्ता
खान एवं भू-विज्ञान विभाग

1. INTRODUCTION

1.1 ORIGIN OF THE NAME :-

Baran District was covered out of east whole Kota district of Rajasthan state on 10th April, 1991 through Government order dated 31st March, 1991. The district is named after the town of Baran which is also the district headquarters.

The Baran town is said to have been founded by Solanki Rajputs during the 14th or 15th century and is believed to be called by its present name because it was populated by the inhabitants of twelve (Baran) adjacent villages. The area now forming part of Baran District was part of the east while princely state of Kota and Tonk which ha joined the former Rajasthan in 1948 and later merged into United States of Rajasthan in 1949. The major part of the district was under Kota state. However, Chhabra area formed part of Tonk state.

1.2 LOCATION :-

The district lies between 24˚24' to 25˚26’ N latitude and 76˚12' to 77˚26’ E longitude. It is situated in the south-eastern part of Rajasthan and is bounded in the east, south-east and north-west by Kota district and in the south-west by Jhalawar district of Rajasthan. The maximum extent of the district and in the south is about 110 kms and form west to east about 120 kms.

1.3 AREA AND POPPULATION:-

Total area of Baran district is about seven thousand sq kmd, mostly covered by rural area with 6856.38 sq kms of area and rest is of urbon area.

The total population of the district as per 2011 census was 12.22 lacs out of which 6.34 lacs are male and 5.88 lacs are females. The decade growth of population (2011) was 19.68 percent. The density of population per sq. km in Baran district is 175 (2011). There are 929 females per 1000 males (2011). There are

about 80,000 saheria's lives in 283 villages of Tehsil Kishanganj, Shahbad, Atru and Mangrol. The 90 percent sherias lives in tehsil Kishanganj and Shahbad.

1.4 ADMINISTRATION :-

As per year 2014-15 the district Baran is devided into eight sub divisions, eight tehsils, five sub tehsils, one nagar parishad, three nagar palika, seven panchayat samities, 242 patwar mandal, 221 gram panchayat and 1221 villages (2011 census) with four MLA areas.

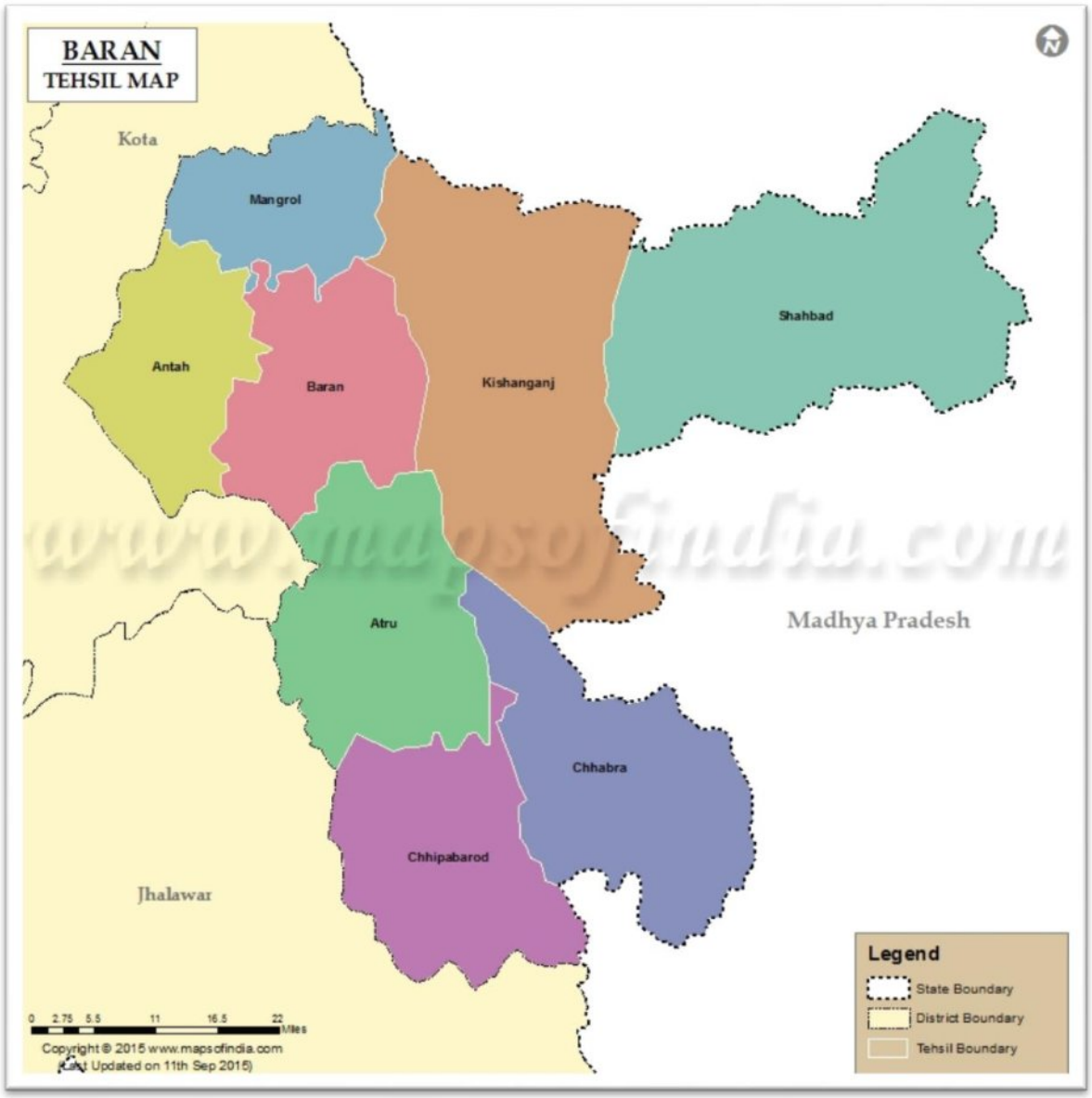
The details are as under:-

S.No.	Sub division/Tehsils	Urban area	Villages No.		Total	Population 2011
			Inhabited	Uninhabited		
1.	Baran	1	102	4	106	213555
2.	Mangrol	1	73	7	80	106963
3.	Anta	1	82	3	85	120038
4.	Atru	-	146	2	148	149959
5.	Chhabra	1	187	9	196	152429
6.	Chhipabarod	-	175	8	183	170886
7.	Shabad	-	178	58	236	142061
8.	Kishanganj	-	186	27	213	166864
	Total	4	1129	118	1247	1222755

1.5 CONNECTIVITY :-

The district is well connected with other cities of the state and country of India. The district is traversed by National High way NH 27. There is good network of state Highways, major and minor district roads for the inter district connectivity. The district head quarter has function station with Broad Gauge line of Western Railway of Kota-Bina line, connecting central part of India. The air connectivity is furnished by Jaipur Airport is at 320 km. from Kota and by Udaipur Airport is at 370 km. from Baran connected with four lane Naional highways.

Map Showing Tehsilwise Distribution Area.



Map Showing the Route of the Destict Connectivity.

2. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT

Major part of Baran district is occupied by shale-sandstone-Limestone sequence belonging to Vindhyan Super Group. The Deccan Trap, represented chiefly by basaltic rocks occupies the southern and eastern corners. Baran district, in general, has very limited mineral occurrences. Some of the industrial minerals like limestone (Lime burning grade), silica sand of marginal grade, Laterite, agate, cherts and lithomergic clays are found in Baran district. Small occurrances of bauxite are also seen. As the availability of mineral in the district area are not fulfilling the commercial viability hence there is no major mining activities are there. The mineral sandstone and DeccanTraps are utilized as building stones for masonry purposes. Mineral Bajari is found mainly in the rivers Kali Sindh, Parvati and Parwan and their tributaries. Presently the mineral wise leases exists in the district are as under-

S.No.	Mineral	No. of Leases
1	Bazri	3 (LOI)
2	Masonry Stone	39
3	Sandstone and Masonry Stone	2

Mining Adminstration

Department:- Mines & Geology Deparetment
Govt. of Rajasthan
Directorate: - Director, Mines & Geology Deparetment
Udaipur (Raj.)
Zone: - Additional Director, Mines & Geology Deparetment
Kota (Raj.)
Circle: - Supt. Mining Engineer, Mines & Geology Deparetment
Kota (Raj.)
Division: - Mining Engineer, Mines & Geology Deparetment
Kota (Raj.)
Sub Division: - Assitant Mining Engineer , Mines & Geology Deparetment
Baran (Raj.)

3. The List of Mining Leases in the District with location, area and period of validity:-

(Baran District Except)

Sr. No.	LEASE NO	Lessee name	Address (Office)	Mineral Name	Village	Tehsil	District	Total Area	Registration Date	Expiry Date
1	Minor/ML/37/2012	Manoj Jain	Manoj jain S/O Nem Kumar jain R/O- Vill- kunjair Teh- Atru Dist- Baran , Rajasthan	Bajri	Atru	Atru	Baran	159.27	LOI	LOI
2	Minor/ML/2/2013	Pramod Meena	Pramod Meena s/o Brajendra Meena R/O-1-Tha -1 Dadabari Dist- Kota , Rajasthan	Bajri	Mangrol & kishanganj	Mangrol & kishanganj	Baran	329.29	LOI	LOI
3	Minor/ML/1/2013	Mukesh Sharma	Mukesh Sharma s/o Suresh Sharma ,R/O 7, Jhotwara, Dist-Jaipur , Rajasthan	Bajri	Baran & kishanganj	Baran & kishanganj	Baran	360.97	LOI	LOI
4	Minor/ML/411/1991	Chaturbhuj Koli	Chaturbhuj Koli s/o Babulal ,R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	10- Dec - 92	9-Dec-22
5	Minor/ML/112/1992	Devlal Koli	Devlal Koli S/O Surajmall Koli R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	8-Sep-94	7-Sep-24
6	Minor/ML/7/1993	Smt. Dhakha Bai	Smt. Dhakha Bai W/O Madan Lal Koli R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	16-Sep-94	15-Sep-24
7	Minor/ML/39/2000	Smt. Kalawati	Smt. Kalawati W/O Prem Narayan Koli R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	16-May-08	15-May-28
8	Minor/ML/147/1999	Premchand Kushwaha	Premchand Kushwaha S/O Pannalal R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	10-Oct-2000	9-Oct-20
9	Minor/ML/80/2001	Premchand Kushwaha	Premchand Kushwaha S/O Pannalal R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	28-Feb-92	27-Feb-22
10	Minor/ML/60/1999	Murlidhar Kushwaha	Murlidhar S/O Pannalal Kushwaha R/O – Vill-Sushawan ,Teh & Dist.- Baran,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	22-jan-04	21-Jan-24
11	Minor/ML/84/2000	Mahaveer Kushwaha	Mahaveer Kushwaha S/O Gajjanan R/O – Vill-Dhakarkheri ,Teh – Ladpura Dist.- Kota,Rajasthan	Mesonary Stone	Baran Barda	Baran	Baran	1.0	22-jan-04	21-Jan-24
12	Minor/ML/19/2002	M/S Pawan sut Cruser Prop. Pawan Kumar Gupta	M/S Pawan sut Cruser Prop. Pawan Kumar Gupta S/O Madanmohan Gupta R/O-205 C Talwandi The- Ladpura Dist- Kota,Rajasthan	Mesonary Stone	Gisari	Baran	Baran	1.0	22-Mar-07	21-Mar-27
13	Minor/ML/4/2012	Ashok Kumar Batra	Ashok Kumar Batra S/O Ram Kumar Batra R/O – Krishna Colony Hospital Road Dist- Baran,Rajasthan	Mesonary Stone	Hanotiya	Baran	Baran	1.0	18-Apr - 13	17-Apr-43
14	Minor/ML/1/2012	Harpal Sahariya	Harpal Sahriya S/O Bishana Ram R/O –Vill- Khandelakheri Teh- Kishanganj Dist- Baran,Rajasthan	Mesonary Stone	Khandela kheri	Kishanganj	Baran	1.0	15-Apr-13	14-Apr-43
15	Minor/ML/1/2013	Shekhar Chand	Shekhar Chand S/O Lalchand R/O –214 Ward no.-7 Krishna Colony Dist-Baran,Rajasthan	Mesonary Stone	Mehrawata	Kishanganj	Baran	1.0	19-Jun-13	18-Jun-43
16	Minor/ML/2/2013	Jaiyesh Galav	Jaiyesh Galav S/O Prem Narayan R/O –8 , Galav Mohalla Sorkhand Khurd Teh- Anta Dist-Baran,Rajasthan	Mesonary Stone	Mehrawata	Kishanganj	Baran	1.0	19-Jun-13	18-Jun-43

17	Minor/ML/61/2010	Chand Singh	Chand Singh S/O Govardhan Singh R/O –Vill & Teh- Kishanganj Dist-Baran,Rajasthan	Mesonary Stone	Kishanganj	Kishanganj	Baran	1.0	27-Aug-13	26-Aug-43
18	Minor/ML/88/1999	Mukhtar Ahmad	Mukhtar Ahmad S/O Bajruddinn R/O –Vill-Baldara Teh- Anta Dist-Baran,Rajasthan	Mesonary Stone	Baldara	Anta	Baran	1.0	06-Jun-01	05-Jun-21
19	Minor/ML/108/1999	Miss. Gunnaj Bai	Miss. Gunnaj Bai D/O Nur Mohammad R/O –Vill-Baldara Teh- Anta Dist-Baran,Rajasthan	Mesonary Stone	Baldara	Anta	Baran	1.0	11-Jun-01	10-Jun-21
20	Minor/ML/109/1999	Abdul Kalam	Abdul Kalam S/O Bajruddin R/O –Vill-Baldara Teh- Anta Dist-Baran,Rajasthan	Mesonary Stone	Baldara	Anta	Baran	1.0	6-Jun-01	05-Jun-21
21	Minor/ML/100/1999	Smt. Anuradha Singh	Smt. Anuradha Singh W/O Madhusudan R/O –Vill-Maujagir ,Area-Sorsan , Teh- Anta Dist-Baran,Rajasthan	Mesonary Stone	Maujagir	Anta	Baran	1.0	3-Jan-2000	02-Jan-20
22	Minor/ML/101/1999	Smt. Anuradha Singh	Smt. Anuradha Singh W/O Madhusudan R/O –Vill-Maujagir ,Area-Sorsan , Teh- Anta Dist-Baran,Rajasthan	Mesonary Stone	Maujagir	Anta	Baran	1.0	3-Jan-2000	02-Jan-20
23	Minor/ML/171/1995	Smt. Shanti Bai	Smt. Shanti Bai W/O Dalchand Yadav R/O –3-P- Talwandi Teh-Ladpura Dist-Kota ,Rajasthan	Mesonary Stone & Sand Stone	Khan Ki Jhopariya	Anta	Baran	1.0	21-Jan-97	20-Jan-17
24	Minor/ML/03/2002	Ajanta Stone Crusur Prop. Madhu Goyel	Ajanta Stone Crusur Prop. Madhu Goyel R/O- !33-B-Talwandi Dist- Kota. ,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	21-Sep-02	20-Sep-22
25	Minor/ML/4/2002	Himmat Singh Singhvi	Himmat Singh Singhvi S/O Kanhiya Lal Singhvi R/O –Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	17-Aug-02	16-Aug-22
26	Minor/ML/5/2006	Narendra Singh Gurjar	Narendra Singh Gurjar R/O –Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	21-Nov-06	20-Nov-26
27	Minor/ML/49/2010	Pawan Gera	Pawan Gara S/O Sewa Ram Gera R/O –Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	04-Jan-12	03-Jan-42
28	Minor/ML/11/2006	Pawan Gera	Pawan Gara S/O Sewa Ram Gera R/O –Ward No- 04 Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	08-Nov-06	07-Nov-26
29	Minor/ML/9/2010	Reliable Stone company Prop. Chetan Maheswari	Reliable Stone company Prop. Chetan Maheswari MaheshwariChorha Bazar, Near Laxminath ji Mandir , Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	13-Sep-10	12-Sep-30
30	Minor/ML/10/2010	Reliable Stone company Prop. Chetan Maheswari	Reliable Stone company Prop. Chetan Maheswari MaheshwariChorha Bazar, Near Laxminath ji Mandir , Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	13-Sep-10	12-Sep-30
31	Minor/ML/48/2010	Rewati Gera	Rewti Gara S/O Sewa Ram Gera R/O –Main Market, Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	04-Jan-12	03-Jan-42
32	Minor/ML/3/2007	Shakuntala Mittal	Shakuntala Mittal W/O Satyanarayan Mittal R/O-4-P-24 Talwandi ,Dist- Kota , Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	5-May-07	4-May-27
33	Minor/ML/2/2005	Sunita Singhvi	Sunita Singhvi W/O Mahendra Singh Singhvi R/O- Hanuman Gali, Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Morli	Chhabra	Baran	1.0	27-Sep-05	26-Sep-25
34	Minor/ML/29/2006	Ramchand Dhanoriya	Ramchand Dhanoriya S/O Shyam lal Dhanoriya R/O- Hospital Raod, Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Rehron	Chhabra	Baran	1.0	27-Feb-07	26-Dec-22
35	Minor/ML/30/2006	Ramchand Dhanoriya	Ramchand Dhanoriya S/O Shyam lal Dhanoriya R/O- Hospital Raod, Chabra,	Mesonary Stone	Rehron	Chhabra	Baran	1.0	1-Mar-07	28-Feb-27

			Teh- Chabra Dist-Baran,Rajasthan							
36	Minor/ML/10/2012	Harish Kumar Yadav	Harish Kumar Yadav S/O Hansraj Yadav R/O-Salpura Road, Chabra, Teh- Chabra Dist-Baran,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	04-May-15	03-May-45
37	Minor/ML/07/2013	M/S Gritts & Building Matrial Suppliers Bapcha	M/S Gritts & Building Matrial Suppliers Bapcha Sanvi R/O-A-68 New Jawahar Nagar Dist-Kota,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	04-Jun-15	3-Jun-45
38	Minor/ML/08/2013	M/S Gritts & Building Matrial Suppliers Bapcha	M/S Gritts & Building Matrial Suppliers Bapcha Sanvi R/O-A-68 New Jawahar Nagar Dist-Kota,Rajasthan	Mesonary Stone	Bapcha	Chhabra	Baran	1.0	04-Jun-15	3-Jun-45
39	Minor/ML/57/2005	Chail Bihari Nagar	Chail Bihari Nagar S/O Jagdish Prasad Nagar R/O-Vill- Badora , Teh- Atru Dist-Baran,Rajasthan	Mesonary Stone	Badora	Atru	Baran	1.0	20-Sep-05	19-Sep-25
40	Minor/ML/01/1996	Neeraj Yadav	Neeraj Yadav R/O-Vill- Chtrapura , Teh- Atru Dist-Baran,Rajasthan	Mesonary Stone	Chatrapura	Atru	Baran	1.0	27-Feb-97	26-Feb-17
41	Minor/ML/67/2005	Surendra Kumar Meena	Surendra Kumar Meena S/O Laxmichand Menna R/O – Raghunathpura Post- Badora Teh- Atru , Dist- Baran,Rajasthan	Mesonary Stone	Narayanpura	Atru	Baran	1.0	1-Feb-06	31-Jan-26
42	Minor/ML/09/1998	Pawan Kumar Gupta	Pawan Kumar Gupta S/O Madan Mohan Gopta C/O Dayanamic EP R/O –E-20 Infront of Multimetal End Area , Dist- Kota,Rajasthan	Mesonary Stone & Sand Stone	Dara Nimoda	Atru	Baran	1.0	01-Jun-2000	31-May-20
43	Minor/ML/12/2006	Govind Murari Garg	Govind Murari Garg S/O Mohanlal Garg R/O –Vill & Post- Harnawadashah Ji ,Teh- Chipabarod , Dist- Baran,Rajasthan	Mesonary Stone	Bhilkera	Chipabarod	Baran	1.0	16-Nov-06	15-Nov-26
44	Minor/ML/56/2005	Vinod Kumar Garg	Vinod Murari Garg S/O Shyam Bihari Garg R/O –Hart Chowk ,Teh- Chipabarod , Dist- Baran,Rajasthan	Mesonary Stone	Pitpur	Chipabarod	Baran	1.0	24-Oct-05	23-Oct-25

4. Details of Royalty or Revenue received in last three years and Production:

MAJOR MINERALS

FINANCIAL YEAR 2013-14

Sr. No.	Name of Mineral	REVENUE COLLECTION (IN LACS)	PRODUCTION IN MT.
Nil	**Nil**	**Nil**	**Nil**

FINANCIAL YEAR 2014-15

Sr. No.	Name of Mineral	REVENUE COLLECTION (IN LACS)	PRODUCTION IN MT
Nil	**Nil**	**Nil**	**Nil**

FINANCIAL YEAR 2015-16

Sr. No.	Name of Mineral	REVENUE COLLECTION (IN LACS)	PRODUCTION IN MT
Nil	Nil	Nil	**Nil**

MINOR MINERALS

FINANCIAL YEAR 2013-14

Sr. No.	Name of Mineral	Revenue collection in Lac Re.	Production in M.T.
1	MASONARY STONE	2.67	11610
2	SAND STONE	0	0

FINANCIAL YEAR 2014-15

Sr. No.	Name of Mineral	Revenue collection in Lac Re.	Production in M.T.
1	MASONARY STONE	64.74	544525
2	SAND STONE	0.39	6135

FINANCIAL YEAR 2015-16

Sr. No.	Name of Mineral	Revenue collection in Lac Re.	Production in M.T.
1	MASONARY STONE	114.02	858784
2	SAND STONE	0.18	1485

5. Details of Production of Sand or Bajri or Minor Minerals in last three years:

BAZRI OR SAND MINERALS

FINANCIAL YEAR 2013-14

Sr. No.	Financial year	Production of Sand Or Bajri in Cum	Revenue in Rupees Lac
1.	2013-14	0	0
2.	2014-15	30000	2.83
3.	2015-16	65200	19.56

6. PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVERS OF THE DISTRICT

6.1 PROCESS

Sediment is a naturally occurring material that is broken down by processes of weathering and erosion, and is subsequently transported by the action of wind, water and/or by the force of gravity acting on the particles. Sediments are most often transported by water. Sediment is transported based on the strength of the flow that carries it and its own size, volume, density and shape. Stronger flows will increase the lift and drag on the particle, causing it to rise, while larger of denser particles will be more likely to fall through the flow.

If the upwards veolocity approximately equal to the setting velocity, sediment will be transported downstream entirely as suspended load. If the upwards velocity is much less than the setting velocity, but still high enough for the sediment to move, it will move along the bed as bed load by rolling, sliding, and salting (jumping up into the flow, being transported a short distance then settling again). If the upward velocity is higher than the settling velocity, the sediment will be transported high in the flow as wash load. As there are generatly a range of different particle sizes in the flow, it is common for material of different sizes to move through all areas of the flow for given stream conditions. Sand mining is critical to infrastructure development around the globe. Sand is an essential minor mineral used extensively across the country as a useful construction constituent and variety of other uses in sports, agriculture, glass making (a form of sand with high silica content) etc. The river are the most important source of Sand. It acts as source of transportation and deposition of sand and bajari etc. The various factors governing the occurrence and deposition of sand is country rock i.e. geological disposition, climate, rainfall, water load physical parameters of river and velocity of water current.

The Baran is served by the subbasins of Chambal river, these subbasins include river Kalisindh , Parvati ,Parwan & Kuno. The other small rivers are Andheri,Lhasi ,Sukar ,Ghadavat , Khadela ,Kelwara ,Bagardi ,Kori etc. are the main source of mineral Bazri (Sand) . The main rivers flows in the district area are a part of sedimentary rocks of Vindhyan Supergroup. The fragments of sedimentary rocks are the main source of framing the mineral sand (bazri). The mineral like sand as times elements flows to down stream and deposited at the sites of river where flow of water is slow or at the sites where river is turns.

It is common knowledge that minerato are non-renewable but this form of mineral naturally gets repienished from time to time in a given river system and is very much interrelated to the hydrological cycle in a river basin. Riverine environmental systems are unique in them and provide environmental services, natural resources to meet variety of needs of urban and rural communities.

6.2 SEDIMENTATION YIELD AND PRODUCTION :-

The Universal Soil Loss Equation (USLE) is a widely used mathematical model to compute sedimentation yield from a river bed. Soil erosion within watersheds results in sedimentation which gets deposited along the river course. The rainfall energy interacts with terrain parameters and results in water induced soil erosion. It comprises of sequential actions viz. detachment of particles from soil mass, transportation of soil particles. The parameters like soil characteristics, as given below in the empirical equation (source: Auckland Regional Council Landfacts-05, " Estimating Sedimentation Yield Using Universal Coil Loss Equation (USLE)".

A=R X K X TO X C X P X SD X SE

Where,

A= Sedimentation Yield, (tons/annum)

B= Rainfall Erosion Index (J/ha)

K= Soil Erodibility Factor (tons/unit of R)

TO= Slope Length and Steepness Factor

C= Ground Cover Factor\

P= Roughness Factor

SD= Sediment Delivery Ratio

SE= Sediment Control Efficiency

6.3 CALCULATION OF SEDIMENTATION YIELD FOR PROPOSED PROJECT SITE :-

Using USLE, Year-wise Sedimentation Yield is calculated. All the parameters for the USLE and Sedimentaion Yield is given below in Table.

Parameters for the USLE and Sedimentation Yield
Parameters
Rainfall Erosion Index (J/ha)
Soil Erodibility Factor (tons/unit of R)
Slope Length and Steepness Factor
Ground Cover Factor
Roughness Factor
Study Area (ha)
Time (Years)
Sediment Delivery Ratio
Sediment Control Efficiency
Sedimentation Yield, (tons/annum)
Drainage Area (ha)
Lease Area (ha)
Sedimentation Yield for the site

After extraction of the mineral from the Reserve, the remaining Reserve as well as sediment replacement of that year will be available for extraction every next year, As the sediment control efficiency will gradually increase every year due, to increase in mining activity, the sedimentation yields will atoo increase every year depended on velocity and yield of river water flow.

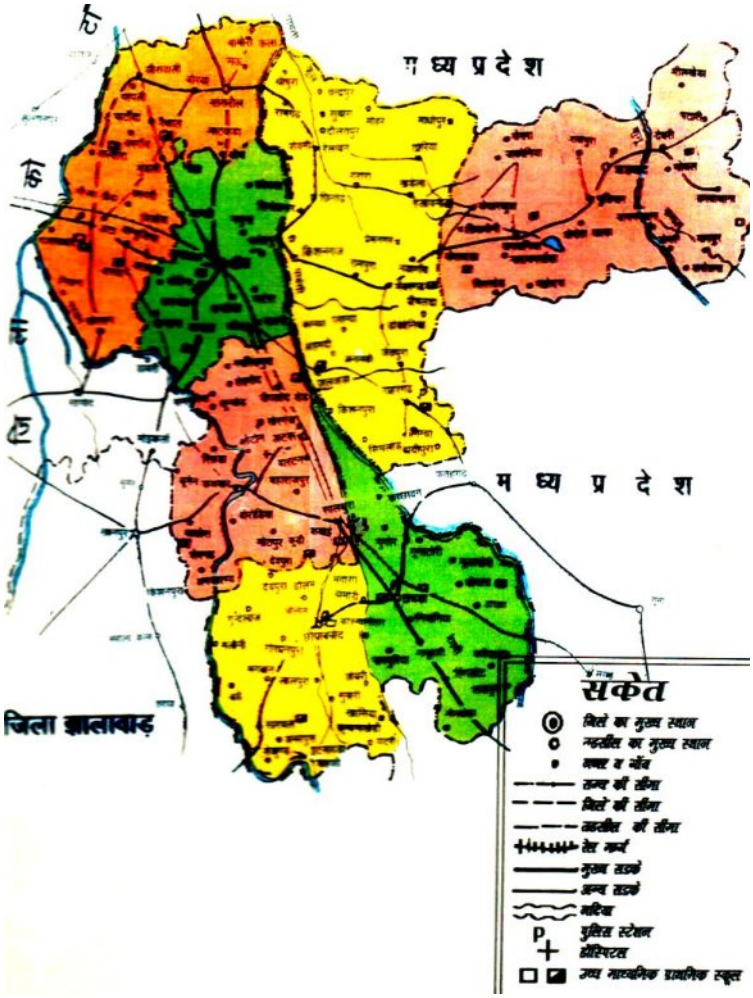
Map Showing Major rivers In the District Area.

7. Genral Profile of The District.

सत्यमेव जयते

DISTRICT PROFILE

BARAN



DISTRICT: BARAN

7.1 INTRODUCTION WITH GEOGRAPHICAL AREA, CULTIVABLE AREA, NET CROPPED AREA, IRRIGABLE AREA, ETC. ABOUT DISTRICT:

District Baran was carved out of erstwhile Kota District on 10th April 1991. The district got the name from the town Baran which is also the district headquarter. District comes under parliamentary constituency Jhalawar-Baran and is divided in four assembly constituencies namely Anta, Kishanganj, Baran-Atru & Chhabra. The total area of the District is 6992 Sq.Km. out of which only 135.62 Sq.Km. is urban. The total forest area in the district is 2.14 Lacs Hect. The total population of the distirct is around 10,21,653 (as per 2001 population). Main dialect is Hadoti. The district Hqts. Baran city falls in the 'C'Class category. The District has a tremendous scope for the rapid industrialization, especially among agro-based industries. There are eight tehsils in the district namely Baran, Anta, Atru, Mangrol, Chhabra, Chhipabarod, Kishanganj & Shahabad. Best climate to visit the district is between September to November. The district is well connected with rail & road network. The Computerized reservation facility is available at Railway station in Baran city. ATM facilities and all Mobile Networks are available in the district.

7.2 CLIMATE

The district has a dry climate except in the monsoon seasons. The winter season runs from mid of November to February and summer season runs from March to mid of June. The period from mid of June to September is the monsoon season followed by the months October to mid of November constitutes the post monsoon or the retreating monsoon. The average rainfall in the district is 824.31 mm. January is the coldest month with the average daily maximum temperature of 24^0C and the average daily minimum temperature of 10^0 C.

7.3 FOREST, FLORA & FAUNA:

The forest covers an area of 2.14 lacs hectare of the district. These are mainly concentrated in the south-western and central portion of the Mukundra hills having rich forest belt. The main forests found of the district are Sagavan, Kher, Salan, Gargsari. Local wild animals are Panther, Sloth, Bear, Chital, Wild Bear, Chinkara, Samber, Langoor, Jackal etc. Birds found in the district are Bulbul, Sparrow, Peacock, Saras, Teetar etc. Among the poisonous snakes, Cobra, Passel and Viper are common. Water snakes are also seen near the tanks. Crocodiles are sometimes seen in the big tanks and in certain pools in Chambal & Kalisindh Rivers.

7.4 GENERAL PROFILE OF THE DISTRICT

Items		Statistics	
General Information			
i)	Geographical Area	6992 Sq Km	
ii)	Sub Division/ Number of Tehsil/Panchayat Samity /Gram Panchayat /Nagar Parishad	8/8/7/221/1	
iii)	Population (2011)	633945M/588810F	Total 1222755
iv)	Average rainfall	824.31MM(2014-15)	
v)	Temprature	10- 45 DC	
Geomorphology			
Major Geographical Units	1- Soil and allurium 2- Sand Stone/Mesonary stone 3- Lime Stone		
Major Drainage	Parwan, Kalisindh and Parvati and its tributries		
Land used (2014-15)			
i) Forest area	214088.41 Hect (2014-15)		
ii)Average crop grains			
iii)Posture land and other grass land	33544 Hect. (2014-15)		
iv)Actual sown area	353008 Hect. (2014-15)		
v)more than once sowed area	306031 Hect. (2014-15)		
vi)Gross sown area	659039 Hect. (2014-15)		
Major soil type			
Irrigation by different sources (CGWD record 2010-11)	**No.**	**No. Year 2013-14**	**Area irrigated (in hectares) Year 2013-14**
	Dug welto	35495	33580

	Tube welto/ bore welto	28270	205034
	Tanks/ ponds	98	11026
	Canal		69898
	Other sources		21225
	Net irrigated area		332524
	Gross irrigated area		340763

Number of Ground water Monitoring wells of GWD (as on 2013)

Number of dug wells	**103**
Number of Piezometers	**61**

Principal Crops

Kharif

S.N.	Crop	Area (in Hect)		Production (M. Ton)	
		2012-13	2013-14	2012-13	2013-14
1	Chawal	3698	6023	12489	19436
2	Makka	9206	5972	31543	4260
3	Jwar	203	23	325	19
4	Bajra	2221	559	4340	401
5	Mung	219	205	122	4
6	Udad	5429	1214	4898	857
7	Arhar	14	-	21	-
8	Til	4463	756	3018	264
9	Soyabean	276189	307778	382441	157194
10	Mungfali	522	280	1051	358

Rabi

S.N.	Crop	Area (in Hect)		Production (M. Ton)	
		2012-13	2013-14	2012-13	2013-14
1	Gehu	167037	162852	766277	445443
2	Chana	9450	9162	26214	5312
3	Jaw	316	207	946	364
4	Masur	7	4	8	6
5	Matar/Tuwar	27	23	57	32
6	Alsi	126	39	150	31
7	Rai Sarso	89736	95202	163604	76693
8	Others	0	0	0	0

Pre dominant Geological formation	**Vridhyan Super Group**

GROUND WATER SCENARIO
BARAN DISTRICT

S.No.	Item	Inoformation
1	**GENERAL INFORMATION**	
	Geographical area (sq. km)	**6992**
	Administrative Devision	
a.	No. of tehsils /blocks	**08/07**
b.	No. of villages	**1114 inhabited** **126 non habited**
c.	No. of towns	**4**
d.	No. of municipalities	**4**
	Population (as per 2011 censes)	**1222755**
	Average annual rainfall (mm) (2001-2011)	**707**
2	**GEOMORPHOLOGY**	
	Major physiographical unit	Hill ranges of Vindhyans in the northeast and low rounded hills of Malwa plateau in the south bound the region. Sedimentary rocks of Vindhyan Supergroup occupy northwestern part.
	Major Drainage	The Drainage system is well developed and represented by Chambal ,which is perennial in nature.
3	**LAND USE (ha) (2010-11)**	
	Forest area	214088.41
	Net sown area	353008
	Cultivable area (net sown area fallow land)	306031
4	**MAJOR SOIL TYPES**	1. Deep black clayey soil 2. Deep brown loamy soil 3. Red gravelly loam hilly soli
5	**AREA UNDER PRINCIPAL CROPS (ha) (2013-14)**	
	Food grains	Bajra :- 559 Jowar:- 23 Wheat:- 162852 Rice:- 6023 Maize 5972
	Total Pulses	10608
	Total Oil seeds	404016
6	**IRRIGATED BY DIFFERENT SOURCES (ha) (2013-14)**	Net Area irrigated
	Canal	69898
	Tank	11026
	Tubewells	205034
	Other wells	33580
	Other sources	21225
	Total	332524

S.No.	Item	Inoformation
7	**NUMBER OF GROUND WATER MONITORING WELLS OF GWD**	
		No. of dug wells 103
		No. of piezometers 61
8	**PREDIOMINENT GEOLOGICAL FORMATIONS**	Upper Vindhyan , Bhandar Group Ganurgarh shales , Bhandar limestone and Bhandar sandstone overlain by Deccan traps and allvium of Quaternary age.
9	**HYDROGEOLOGY**	The main water bearing formations are alluvium of Quaternary age and limestone /sandstone of Vindhyan Super Group
	Depth of water level (Pre-monsoon,2016) (mbgl)	7.20 to 25.90 m
	Depth of water level (Post-monsoon,2015) (mbgl)	3.12 to 16,75 m
	Long term water level during 2002 -2011	33.3% wells monitored recorded rise from 0-2m ,11.1% from 2-5 m & 11.1% from 5-10 m and remaining 33.3 % wells recorded fall of the order of 0-2 m
10	**GROUND WATER EXPLORATION**	
	No. of wells drilled	EW-7 , OW -2 ,PZ-3 , Total-12
	Depth range (mbgl)	25.5 -175
	Dishcharge (litre per minute)	72 – 550
	Transmissivity (m^2 /day)	78 – 403
11	**GROUND WATER QUALITY**	
	Presence of chemical constituents (EC in µS/cm at 25º C ,F,Fe and NO_3 in mg/l)	EC : 630 – 3550 F : 0 - 0.5 Fe : 0.04 - 0.12 NO_3 : 2 - 280
	Type of water	Alkaline in nature
12	**DYNAMIC GROUND WATER RESOURCES (March ,2013) in MCM**	
	Annual replenishable ground water resources	561.71
	Net annual ground water aviailability	505.54
	Net annual ground water draft	606.06
	Stage of ground water development	119.88 %
13	**AWARENESS AND TRAINING ACTIVITIES**	
	Mass awereness programmes	NIL
	Water manamgment training programmes	NIL
14	**EFFORT OF ARTIFICIAL RECHARGE AND RAIN WATER HARVESTING**	
	Projects completed by CGWB (number and amount spent)	NIL
15	**GROUND WATER CONTROL AND REGULATION**	
	Number of OE blocks	4
	Number of crtical blocks	0
	Number of semi critical blocks	3
	Number of safe block	0
	Number of notified blocks	None
16	**MAJOR GROUND WATER PROBLEMS AND ISSUES**	
	Declining water level and increasing draft due to increase in irrigation and domestic darft as well.	

7.5 Hydrogeology

The availability, occurrence and movement of ground water depends upon the rock formations present in the area. In Baran district, alluvium, limestone, sandstone, shale and inter-trappeans are the main hydrolith units. Among these formations, alluvium is the most potential among different hydrogeological formations. The ground water in these formations occurs under water table conditions. At places, semi-confined conditions also exist. Ground water in hard rocks viz. Vindhyan limestone, sandstone, shale and Deccan basalt occurs in secondary porosity developed by weathering and/ or fracturing. The ground water potential of these rocks depends upon the intensity of joints and fracture systems and their interconnection. These formations are known to be water bearing down to more than 100 mbgl. These deeper zones are tapped by bored wells mostly for irrigation purpose. Exploratory drilling in the district has revealed that the hard rock forms the main aquifer over large parts of the district. The depth of tubewells ranges from 90m to 150m.Yield of tube wells ranges from meagre to 2000 lpm.

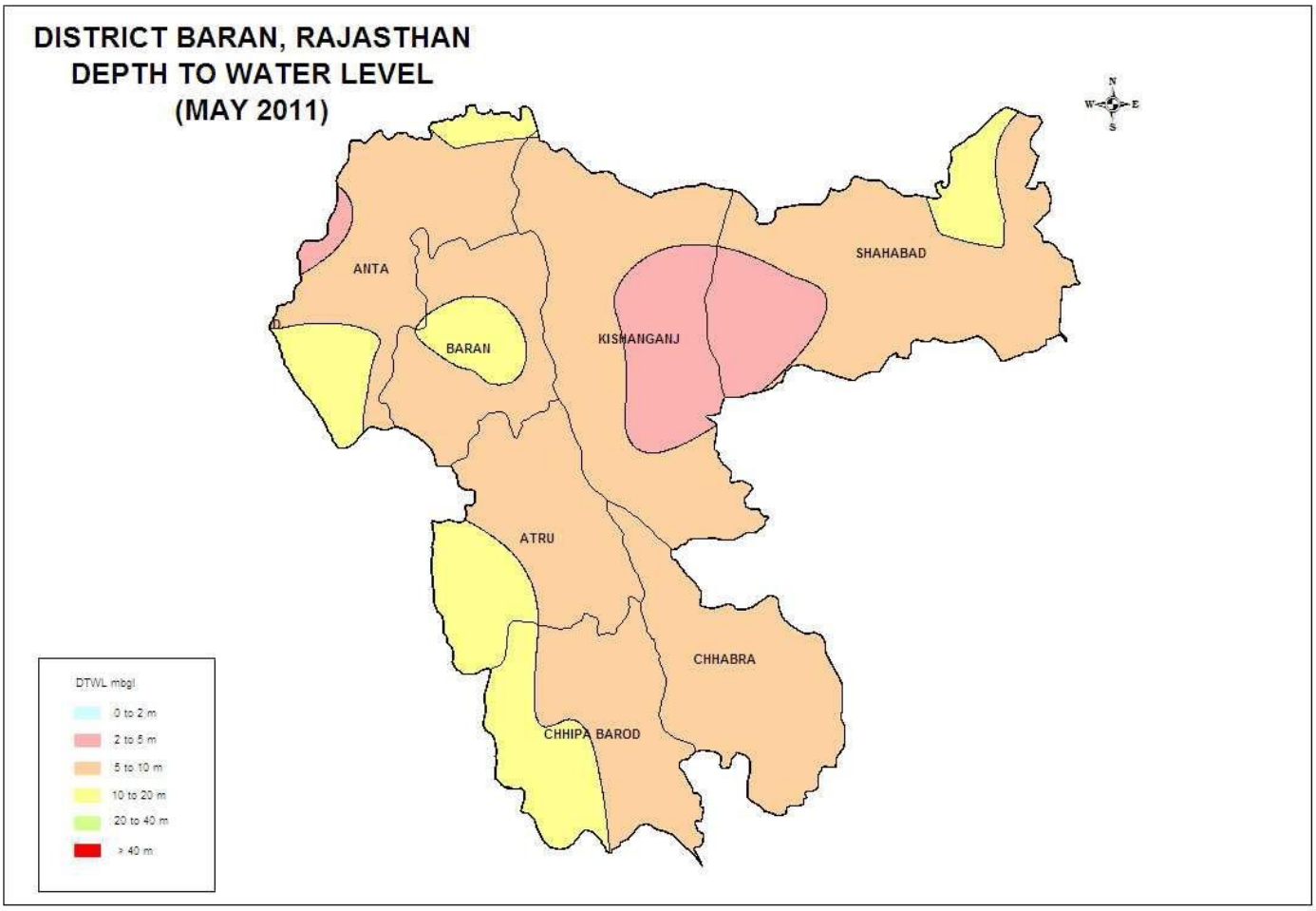


fig:- Depth to water level map (May, 2011)

7.6 Ground Water Quality

Water Quality in Shallow Aquifer

The range of chemical constituents of groundwater in Baran district during premonsoon' 2011 is furnished in following Table.

Table -:- Range of chemical constituents in ground water

Sr. No.	Chemical Consitituent	Range
1	pH	7.1 to 7.9
2	Chloride	35 to 710 ppm
3	Specific conductivity	630 to 3550 µS/cm at 25 C
4	Total hardness as $CaCo_3$	200 to 980 mg/l

5	Calcium	52 to 290 mg/l
6	Magnesium	14.6 to 153.2 mg/l
7	Iron	00.4 to 0.12 mg/l
8	Nitrate	2 to 280 mg/l
9	Fluride	0.0 to 0.5 mg/l

Shallow ground water of dug well zone is alkaline in nature with pH ranging from 7.1 to 7.9. The Chloride content in ground water has been found to vary from 35 to 710 mg/l. The specific conductance (EC) of ground water in the district is within 3550 µS/cm at 25°C. Quality of ground water is generally fresh with EC below 3000 µS/cm at 25°C in major parts of the district. EC above 3000 µS/cm at 25°C has been observed in localised pockets in Anta and Baran blocks.

7.7 Ground Water Resources

Central Ground Water Board and Rajasthan Ground Water Department (RGWD) have jointly estimated the ground water resources of Baran district (as on 2013) based on GEC-97 methodology. Ground Water Resource estimation was carried out for 6892.21 sq km area, out of which 871.23 sq km area falls under command and remaining 6020.98 sq km area falls under non-command area. Major part of the command area is irrigated by Chambal canals (665.84 sq km) and remaining area (205.39 sq km) by other medium irrigation projects viz. Parbati pickup weir, Parwan and Bilas irrigation projects etc.

The total annually replenishable resource of the district has been assessed to be 561.71 MCM and net annual ground water availability has been estimated to be 505.54 MCM. Gross annual ground water draft for all uses has been estimated to be 606.06 MCM. The overall stage of ground water development in the district is 119.88%. Four blocks viz. Atru, Baran, Chhabra & Chippabarod have been categorised as Over Exploited & Three Blocks Anta, Kishanganj & Shahbad as Semi Critical. The block wise details of replenishable ground water resource assessment in the district is given in the following Table.

Table :- Block wise ground water resources (As on 31-03- 2013)

Block	Area Of Block Sq. Km.	Potential Zone Area Sq. Km.	Total Normal Annual Ground Water Rechage (Mm3)	Net annual Ground water Avilabillty (Mm3)	Existing Gross ground water Draft for all Usese (Mm3)	Stage of ground water Devolepment %	Category
Anta	949.01	949	115.3047	103.7742	91.9321	88.59	Semi Critical
Atru	860.30	846.47	68.2245	61.402	91.2516	148.61	Over-exploited
Baran	626.21	626.21	85.6228	77.0604	128.8203	167.17	Over-exploited
Chhabra	790.79	773.37	63.3746	57.0372	74.0406	129.81	Over-exploited
Chippabard	828.76	804.5	63.4963	57.1466	96.0096	168.01	Over-exploited
Kishanganj	1430.98	1268.06	78.3036	70.4732	72.0878	102.29	Semi Critical
Shahbad	1469.26	1462.94	59.7749	53.7974	43.0163	79.96	Semi Critical
District	**6955.31**	**3471.36**	**561.7178**	**505.5458**	**606.0625**	**119.88**	

7.8 Status of Ground Water Development

Rainfall in the district is the main source of ground water recharge. Due to less rainfall and increased ground water withdrawals, the groundwater levels are declining in some parts of the district. Irrigation in the area is mainly done by ground water i.e. dug wells and tube wells. The stage of ground water development for the district as a whole has reached 119.88% as on 31.03.2013. Out of 7 blocks, Four blocks viz. Atru, Baran, Chhabra & Chipabarod fall under over-exploited category, Three block each viz. Anta, Kishanganj & Shahbad fall under semi-critical categories respectively. There is practically no scope left for further ground water development in over-exploited blocks. Caution needs to be exercised in critical and semicritical blocks so as to prevent over-exploitation of ground water.

7.9 Ground Water Related Issues & Problems

Out of seven blocks in the district, four are over-exploited, where stage of ground water development has exceeded 100 % leaving no further scope for ground water

development. Three blocks fall under semi critical category. These blocks also require judicious development of ground water. Quality of ground water is generally potable, except for a few pockets, where excess nitrate has been reported.

7.10 Ground Water Management Strategy

Due to pressure of population and improvement in the standard of living, the demand of fresh water for both agriculture and domestic use has substantially increased. This has led to a sharp increase in ground water withdrawal. The top layer of fresh ground water is also reducing every year. Artificial recharge serves as a means for restoring the depleted ground water storage, slow down the quality deterioration and put back into operation many groundwater abstraction structures.

7.11 Water Conservation and Artificial Recharge

Precious Groundwater resources have to be conserved for sustainable availability.There is a need to reduce/ avoid wastage of water in various uses. Ground water should be used judiciously taking into account modern agriculture water management techniques by cultivating crops demanding less water and use of sprinkler system & drip irrigation should be encouraged.

Alluvial aquifer is the principal aquifer in the district, which supports maximum ground water extraction through dug wells, dug cum bore wells and tube wells. Over-exploitation of ground water resources has led to declining trend in ground water levels. It is recommended that increasing number of ground water structures should not be encouraged and artificial ground water recharge through various schemes like check dams, bunds, anicuts etc., should be constructed at appropriate hydrogeological locations to augment the ground water regime.

Surface water reservoirs like ponds/ tanks etc. should be constructed, which would serve dual purpose i.e supply of water during lean period on one side and recharge to the groundwater body on the other hand. Also water shed development projects and soil

conservation project should be encouraged. Sandstone is the next important aquifer in the district. Extraction of ground water in this aquifer is through large diameter dug wells and dug cum bore wells and tube wells. The draft is mainly f or agriculture, which is more than 80% of the total draft in most of the area. The stage of ground water development in this aquifer varies from 35.82 to 209.98%. Ground water storage capacity in this hard rock aquifer is very less hence during summer season, dug wells either go dry or yield is reduced. Therefore, it is recommended that deepening of the dug wells should be carried out to have good storage during pumping so that these don't go dry during lean period. Also the number of ground water structures in Shahbad block may be increased.

7.12 Recommendations

- Only very restricted and planned ground water development can be taken up in critical and semi-critical areas to avoid becoming overexploited.
- Ground water should be used judiciously taking into account modern agriculture water management techniques by cultivating crops that need less watering.
- Use of sprinkler system & drip irrigation should be encouraged.
- Small farmers in the area should be encouraged to use common groundwater structures for optimum use of ground water resources for irrigation purposes.
- Cultivators should also be made aware and encouraged to adopt suitable cropping pattern using modern techniques by extension services for getting maximum agriculture production through minimum ground water withdrawal.
- Suitable artificial recharge structures like subsurface barriers across the river beds should be constructed so that the ground water runoff can be arrested and impounded in the subsurface reservoir for meeting out various sectoral demands.
- There is a need for regulation of ground water development in overexploited areas.
- Awareness about the consequences in the near future caused by the impact of sharply declining water levels and need of judicious use of water and rain water harvesting, artificial recharge needs to be created among the users.

7.13 IRRIGATION:

The irrigation facilities available in the district are mainly in the form of Canals, Tubewells and Wells. The rivers namely Parvati, Kalisindh and Parwan provide an important source of canal irrigation. In addition to above rivers, Minor Irrigation Projects have been constructed on Local Nallahs / Rivers to provide irrigation facilities to farmers.

AVAILABILITY OF WATER RESOURCES –

	Abstract of IWRM Plan	District:		**Baran**
1. Surface Water Availability				
a	***Inflows into the District (Estimated)***			**Remarks**
	i From river flows	**1107.00**	MCM	From WRD
	ii From Canal sources (like Interstate/ Inter District)	**120.00**	MCM	From CAD/WRD
	iii From schemes (Transported water from outside district)	**0.00**	MCM	From PHED/ WRD
	Sub Total Inflows	**1227.00**	MCM	
b	***Outflows from the District***			
	i From river flows	**1438.00**	MCM	From WRD
	ii Through Canal sources (like Interstate/ Inter District)	**0.00**	MCM	From CAD/WRD/IGNP/Narmada
	iii Through schemes (Transported water outside district)	**0.00**	MCM	From PHED/ WRD
	Sub Total Outflows	**1438.00**	MCM	

c	Surface Runoff Available from Rainfall within district [Generated Run-off] accounting for all losses as per Strange Table	**993.73**	MCM	From Compute Surface water worksheet or Rainfall-Runoff
d	Committed Run-off for surface water structure outside the district	**0.00**	MCM	From WRD based on proportionate catchment in the district
d1	Net Surface Water available	**782.73**		
e	Estimated Evaporation losses [20% of (d1)]	**156.55**	MCM	
f	Total Surface Water Availability in the District [a-b+c-d-e]	**626.18**	MCM	
g	**Available Surface Water Storage Capacity within the district**			
	i. Major Irrigation Projects	**178.00**	MCM	From Tapped SW worksheet based on WRD data
	ii. From Medium Irrigation Projects	**174.91**	MCM	From Tapped SW worksheet based on WRD data
	iii. From Minor Irrigation Projects	**77.24**	MCM	From Tapped SW worksheet based on WRD data
	iv Transferred toPRIs	**44.33**		
	v. From Village Ponds	**8.51**	MCM	From Tapped SW Worksheet based on PRRD & District Statistical Office
	vi. Anicuts/ Water Harvesting Structures	**31.85**	MCM	From Tapped SW Worksheet based on Watershed and PR departments
	vii. Other Surface Water Harvesting Structures-Tankas, Khadin, others	**0.42**		
	Total Available Surface Water Storage Capacity within the district	**515.26**	MCM	
h	**Net Surface Water Available in the District [f-g] for further development**	**110.92**	MCM	

2. Groundwater Availability				
a	Total Groundwater Recharge as per GWD 2009 *(see Note below)*	545.38	MCM	From Compute GW worksheet
	Saline	0.00	MCM	From Compute GW worksheet
	Total Ground Water available	**545.38**	MCM	
b	Gross Ground Water Draft	475.89	MCM	From Compute GW worksheet
c	Net Ground Water deficit/surplus	**69.49**	MCM	
3	**IWRM Plan**			
	Freshwater Demand-Supply Gap	312.82	MCM	From Demand-Supply worksheet
	Gap reduction due to mitigation measures	53.06	MCM	From IWRM Activities worksheet
b	**Water Availability for future**			
	Surface Water available for future development	110.92	MCM	
	Dynamic Ground Water resources available for future development	**69.49**	MCM	
	Total Static GW Resources to be considered/used only in crisis situation as of 2008	721.95	MCM	Data from CGWB
	Static GW Resources currently used up per annum	NA	MCM	Net GW Withdrawal minus net GW recharge
	With current rate of GW development, number of YEARS the Static Reserves would last	**NA**	Years	

ftyk ckjka 33 ty lalk/ku foHkkx ls LfkkukUrfjr iapk;rjkt ds v/khuLFk lapkfyr flpkabZ ifj;kstuk,s ,oa ifj;kstukokj flfpar {ks= es vkus okys jdcs dk fooj.k

S. No.	Name of Scheme	Tehsil	C.C.A. in Ha.	Year of Constructed	Remark
1	2	3	4	5	6
1	Batawada	Baran	207.22	1948	Transfer to Panchayat vide No. 6717 Dated 10.09.03
2	Doulatpura	Baran	190.36	1984	
3	Sorkhand	Mangrol	240.00	1985	
4	Sahoral Talhati	Shahabad	100.00	State Time	
5	Kelwara	Shahabad	120.00	State Time	
6	Hatwari	Shahabad	108.00	1956	
7	Semliphatak	Shahabad	121.00	State Time	
8	Bagdev	Shahabad	254.00	1984	
9	Sirsipura	Shahabad	180.00	1956	
10	Rampura	Shahabad	156.00	1984	
11	Balda Saran	Shahabad	168.67	State Time	Natural flow --- do ---
12	Amar Saran	Atru	150.60	State Time	Natural flow --- do ---
13	Ratanpura Saran	Atru	104.81	State Time	Natural flow --- do ---
14	Sunda Saran	Atru	99.00	State Time	Natural flow --- do ---
15	Haripura Saran	Atru	119.67	State Time	Natural flow --- do ---
16	Lhasi Saran	Atru	168.67	State Time	Natural flow --- do ---
17	Budh Sagar	Atru	130.00	State Time	Natural flow --- do ---
18	Bhanwargarh	Kishanganj	210.00	State Time	Transfer vide No. 6717 Dated 10.09.2003
19	Bilas Tank	Kishanganj	288.00	State Time	
20	Patchkui	Chhipabaord	102.00	1984	

21	Badipura	Kishanganj	105.00	State Time	vide No. 8014 Dt. 17.11.03
22	Anant pura Saran	Atru	84.00	State Time	vide No. 654 Dt 04.02.04
23	Chattarpura saran	Atru	244.00	State Time	vide No.9548-52 Dt. 9.1.04
24	Motpur Tank	Atru	80.00	State Time	vide No. 662 Dt 04.02.04
		Total :-	3731.00		

List of Existing Irrigation Projects (Department)

S.No	Name of Project	Distt.	C.C.A (Ha.)	Year of Completion
I	Major Project			
1	Right main canal of Chambal project	Baran	26647	1958-59
II	Medium Project			
1	Parwati Pick Up Weir	Baran	12250	State Time
2	Parwan Pick Up Weir	Baran	7464	State Time
3	Bilas	Baran	5863	1996
4	Gopalpura	Baran	5458	1980
5	Ummed Sagar	Baran	2968	State Time
6	Bethali	Baran	5026	2005
7	Parwan Lift	Baran	9531	2005
Total			48560	
III	Minor Project			
1	Eklera Sagar	Baran	1858	State Time
2	Nahar Garh	Baran	319	1982
3	Kalisot	Baran	875	1978
4	Mahodari	Baran	421	1982
5	Chhatrapura	Baran	1012	1984
6	Ratai	Baran	1576	1979

7	Khatka	Baran	620	1980
8	Bedra	Baran	118	2004
9	Utawali	Baran	710	2004
10	Phaliya	Baran	343	2005
11	Akawad	Baran	494	2005
12	Narayankhera	Baran	900	2008
13	Khiriya	Baran	172	.....
14	Semliphatak	Baran	448	.....
Total			9866	
III	Lift Project			
1	Ganeshganj Lift	Baran	6960	1992
2	Kachari Lift	Baran	1788	1996
3	Sorkahand Lift	Baran	1138	1995
4	Anta Lift (Delahedi)	Baran	1587	1981
5	Anta Lift (Chak Shahbad	Baran	462	1981
6	Pachel Lift	Baran	324	1981
7	Digod Lift	Baran	2972	1986
Total			15231	
Grand Total			73657	

DETAILS OF RIVER –

S. No.	Name	Entry Point	Exit Point	Length in KM.
1	Kalisindh	Enters in Jhalawar Distt. near village Binda	It merges in the Chambal River near Nonera Village Distt. Kota.	35.00
2	Parvan	Southern part of the Harnavda shaha ji kasba	South-Western border of the Chhipabarod, Atru, Baran and Mangrol tehsils and merged into the Kalisindh River	110.00
3	Parvarti	Enters in Baran from the Kariyahat kasba of Chhabra Tehsil from Madhya Pradesh.	This partitioned the Kishanganj Tehsil from Chhabra, Atru, Baran and Mangrol Tehsils	113.00
4	Andheri	This river enters in Baran from	it merges in the Parvati river near	81.00

		nearby Chhipabarod. About 15 Km. bordering to Madhya Pradesh and Rajasthan,	Atru.	
5	Ban-Ganga	This is the rainy river which passes through Bamla and Sehrod in the southern part of Baran.	It merges into the Parvati river after passing through the east of Baran city and west of Bohat & Mangrol Kasba.	50.00
6	Lhasi	Originate from hills of Arawali near village Dehri, Kumbhakhera Teh. Chhipabarod	It merges into the Andheri River near village Kolhukhera Teh. Chhipabarod	29.00
7	Retili	Originate from M.P. near village Gopalgarh	It merges into the Andheri River near village Ganeshpura Teh. Chhipabarod	51.00
8	Bethli	Originate from M.P. near village Nathu ka pura	It merges into the Parwati River near village Janchroda Teh. Chhipabarod	40.00
9	Bilas	Originate from M.P. near village Dhenukhera.	It merges into the Parwati River near village Kamtha Teh. Kishanganj.	26.00
10	Karai	Originate from M.P. near village Badarwas.	It merges into the Kunnu River near village Nonera Kasba Teh. Shahabad.	23.00
11	Cool	Originate from Dence Forest village Dhikwani, Semliphatak Teh. Shahabad.	It merges into the Kosam River near village Asawar Teh. Kishanganj.	45.00
12	Barani	Originate from M.P.	It merges into the Parwati River near village Jalwara Teh. Kishanganj.	26.00

DETAIL OF TAPPED WATER POTENTIAL WITH LIST OF TANKS C.C.A., G.S., L.S., ICA & BENEFICIARY VILLAGES-IRRIGATION DONE

S. No.	Name of Tank	Tehsil	C.C.A.	Gross Storage	Live Storage	I.C.A.	Beneficiary Villages
1	Parwan Pick up weir	Artu	7464	diversion	diversion	8434	
2	Parwati Pick up weir	Artu	12550	diversion	diversion	7530	
3	Parwan Lift	Artu	9531	22.50	19.90	9135	
4	Gopal pura	Kishanganj	5458	32.66	32.01		
5	Ummed sagar	Kishanganj	2968	18.60	18.614		
6	Bilas	Kishanganj	5863	28.883	26.76	-	
7	Bethali	Chabbra	5026	31.610	29	5026	

8	Ratai	Kishanganj	1576	9.75	9.58	1118	
9	Eklera Sagar	Kishanganj	1858	10.76	9.74	1719	
10	Kalisot	Kishanganj	875	7.46	7.02	810	
11	Chattarpura	Kishanganj	1012	6.16	5.74	940	
12	Mahodari	Kishanganj	421	2.50	2.20	252	
13	Khatka	Shahabad	620	3.256	3.01	418	
14	Nahargarh	Kishanganj	319	1.50	1.50	230	
15	Utawali	Chhipabarod	710	4.78	4.45	638	
16	Phaliya	Chhipabarod	343	1.80	1.617	-	
17	Bedara	Shahabad	118	0.62	0.537	-	
18	Akawad	Khanpur	494	5.33	5.33	558	
19	Narayankhera	Kishan ganj	900	4.084	3.93	815.00	
20	Kheriya	Shahabad	172	0.68	0.667	154.08	
21	Semli Phatak	Shahabad	448	2.36	2.22	407.05	

TYPE OF SOIL AVAILABLE & SOIL CLASSIFICATION:–

Mainly Black-Kachari soil is found in the Baran and Mangrol tehsils which is highly fertile. Stony soils are found in the Southern & Eastern part of the district. Jwar, Wheat, Maize, Grams, Coriander Mustard, Soybeans and pulses are the main crops sown in the district.

8. LAND UTILIZATION PATTERN IN THE DISTRICT : FOREST, AGRICULTURE, HORTICULTURE, MINING ETC.

Total Area= 699461 hect.

Area for land utilization statistics	Area in hectares
Area under mining activities	41 (leases) ,849.53 (LOI, Bazri)
Area under Forest	215308
Area under Non Agriculture	63971
Area under Horticulture	46759
Area under Barren Land	12697
Area under Charagahah	33544
Area under Agriculture	659039

9. PHYSIOGRAPHY OF THE DISTRICT.

9.1 Natural Divisions :-

The area forms an extention of the uplands of Madhya Pradesh which is part of Malwa plateau. The area broadly comprises low hills and undulating plains. The land has a general northerly slope as indicated by the direction of flow of the rivers that drain the area.

A major part of the district is a flat plain with an average elevation of 250m. above mean sea level. The Mukandara hill ragesm flat topped, trending north-west to south-east and rising to 492m above mean sea level in the south-eastern and eastern parts of the district , form a prominent geomorphologic feature. The western and central parts of the area are drained by northerly flowing Parvati river and its numerous tributaries.

9.2 Hills :-

The hills or hillocks generally belong to Vindhyan range. A line of ranges in the form of semicircle which comes from Madhya Pradesh passes through the lower middle part of Chhipabarod tahsil to its south and goes towards the north-west corner joining with the hill ranges of adjoining area of Jhalawar district and goes upto Dara right down to Chambal. These ranges also pass through Chhabra and Atru areas. Small hillocks are also found in Rampura tori and Ramgarh villages of Kishanganj tahsil. The height of Ramgarh in Kishanganj tahsil is 463 m. and that of Mamoni in Shahbad tahsil is 546 m.

9.3 Rivers :-

The district is served by the sub-basins of Chambal river These sub-basins include Kali sindh, Parvati, Parwan and Kuno.

Kalisindh, a tributary of Chambal, on being joined by Parwan river flows northward forming western boundary of Mangrol tahsil for about 40 kms. from Rajgarh to Dheepari and joins Chambal at pipalda in Kota district. The important villages en route are Palaitha, Nonera, Dip Singh Kotra, Barod and Patonda.

Parvati, a tributary of Chambal. originates from Vindhyan ranges. It enters the district in the south near village Karaihat. It first forms the district's boundary with Madhya Pradesh and then traverse through the central parts of the district.

Parwan originates from Vindhyan ranges, enters the district near Harnawada Shahji and flowing through the central parts of the Atru tahsil, joins Kali Sindh near Rajgarh.

Kuno enters Shahhad tahsil in the south from Madhya Pradesh and after flowing northward and passing about 9 km east of Shahhbad, re-enters Madhya Pradesh.

Andheri river enters Chhipabarod tahsil from Madhya Pradesh and joins Parvati, about 6 kms. east of Atru.

Banganga river originates in the south of Baran somewhere from Bamla and Shrod and joins Parvati near Mithod.

Other small rivers and Lhasi, Sukar,Ghadavat, Khadela, Kelwara, Bangardi, Bilas, Barni, Kori, Retri, Kol etc.

Point No. 12

Rain fall of last 20 Years

Water Resources Circle Baran

क्र.स	नाम रेन गेज स्टेशन	कुल वर्षा (एम.एम)																			
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	जल संसाधन खण्ड, बारां				660	894	1015			-	883	985	663	768	525	553	1648	713	16310	1056	784
2	बैथली डेम					530	704			750	856	650	808	864	469	487	1509	678	1507	874	1048
3	गोपालपुरा					790	862			554	712	670	690	998	540	395	1315	858	7462	1105	780
4	उम्मेद सागर				768	616	936			602	785	581	606	1176	493	418	1334	864	1617	1013	787
5	भँवरगढ कालोनी				985	831	696			679	997	685	485	555	406	390	1330	895	1364	1031	824
6	परवन पिक-अप-वियर (शेरगढ)										904	986	452	885	654	757	1903	593	1802	971	1114
तहसील रेन गेज स्टेशन																					
1	तहसील बारां	797	691	645	782	814	772	264	532	692	919	860	582	689	520	560	1501	743	1668	1014	715
2	तहसील अन्ता	1372	1117	813	1291	737	964	330	721	816	1011	1219	539	980	724	503	1414	699.09	1644	1178	651
3	तहसील अटरु	1079	1050	836	810	591	664	216	735	856	632	650	836	808	611	617	1630	764	1682	1074	1046
4	तहसील छबडा	1277	1116	956	869	916	679	425	962	932	802	811	707	913	654	530	1499	755	1627	957	1192
5	तहसील छीपाबडौद	1072	1131	898	1081	967	686	295	750	858	936	659	599	1032	786	730	1918	703	1280	872	1062
6	तहसील किशनगंज	1070		758	993	656	663	250	570	4740	994	524	654	557	589	541	1419	690	1598	987	649
7	तहसील शाहबाद	132		881	646	705	648	296	697	530	956	659	599	915	450	541	1365	931	1107	1045	1183
8	तहसील मॉंगरोल	966		652	859	503	874	366	470	771	756	679	454	1007	410	571	1418	734	1673	1045	734

11. GEOLOGY AND MINERAL WEALTH OF BARAN DISTRICT

11.1 GEOLOGY :-

Major part of Baran district is occupied by shale sandstone-limestone sequences belonging to Vindhyan Supergroup of middle to upper Peroterozoic age and Deccan traps and laterite of Cretaceous to Eocean age. The oldest rock type of Vindhyan Supergroup belongs to Upper Rewa are overlane by Bhander group followed by Deccan traps and laterite. Geological succession of Baran district is as under :-

Supergroup	Group	Lethology
	Recent	Younger alluvium and river terraces
	Unconfirmity	
Vindhyan Supergroup (about 900 million years old)	Deccan traps (65 million years old)	laterite, Basalt flows with intertrapean beds. sandstone and limestone (infratrapean bed)
	Unconfirmity	
	Bhander Group	Sirbu shale with siltstone , sandstone, grit and cherty limestone. Bundi hill sandstone (Lower Bhander Sandstone) Samria shale. Lakheri limestone (Lower Bhander limestone) Ganurgarh shale
	Rewa Group	Govindgarh Sandstone (Upper Rewa Sandstone)

The Rewa group is represented by Govindgarh sandstone is well exposed north of Thanakasba in the northeast. This is conformable overlain by

Bhander Group comprising Ganurgarh Shale. Lakheri limestone (Lower Bhander Limestone), Samaria Shale, Bundi Hill sandstone and sirbu shale formations in ascending order of succession of these, the Bundi Hill Sandstone and the Sirbu Shale formations are most predominant and occupy almost the entire district.

Sirbu shale comprises limestone horizon within shale generally confined to lower and middle part of the strata. The red brown limestone occurring in the upper part of sirbu shale is stromatolitic while that occurring in basal part is non- stromatolitic. Limestone is exposed near Balunda, Bhavgarh, magrol, Anta etc. The southern part of the district is occupied by Deccan traps flows. Small outcrops of basalt and laterite are also seen in the eastern part around Dhikwani, Mamoni, Barara and Thanakasba. Intratrappean Chert, Silicasand, Sandstone and Limestone occur around Thanakasba, Chhabra, Hnuman-Khera etc. Laterite occurs as capping over basalt around Mamoni, Barara and Rajpur. Quaternary deposits occur as terraces and are extensively dissected to form ravines.

11.2 Mineral Occurences :-

General:

Baran district in general, is having very limited mineral occurrences. Some of the industrial mineral like limestone (lime burning grade), Silica sand of marginal grade, laterite, agate, chert, lithomergic clay are the minerals found in Baran district. Small occurrences of Bauxite are also seen. The details of the mineral occurances are as below:-

Metalic :

Bauxite:

Bauxite occurrences are located near villages majola, Khanda Sahrol, Mamoni in tehsil Shahbad. Bauxite occurs in the form of cappings on the hillocks of the basaltic flow as a product of insitu alteration of Deccan traps. The length and width of the deposit are 1400m and 450m respectively and thickness is 3 to 15m as reported by Geological Survey of India (G.S.I.). GSI has also estimated prabable reserve of anout 0.57 million tones in Mamoni area, containing about 49.54% Al_2O_3, 5% SiO_2, 31.1% Fe_2O_3 and 6.99% TiO_2. The Department of Mines and Geology has also carried out geological reconnsissance in the area. Samples were collected and analysed which indicated poor results.

Laterite:

Occurrances of laterite capping above the trap rocks is common features near Mamoni, Khanda Sahrol, and Rajpur etc in tehsil Shahbad.

Non-Metalic:

Lithomergic Clays:

Lithomergic clays are found associated with traps and laterite near Mamoni and Sherolkhera in Shahbad tehsil, these are of low grade.

Silica Sand:

Silica sand or glass sand is found in Atru and Chhabra tehsil of Baran district.

CHHABRA TEHSIL :

Silica Sand occurrences have been noted from Ancholi, Kankarwa, Banjari, Kishorepura, Maheshpura, Richhri, Khatoli, Hanuwant-khera, Buakhera, Bilwara, Bilwari etc in tehsil Chhabra, Mostly silica sand is found in agriculture field below 5-7 m. depth. Preliminary assessment carried out by the department of Mines and Geology in Hanuwantkhera area indicated silica sand deposits below shallow soil cover of 5 to 7 mts, mostly in the agriculture fields. The crude sample indicated about 92% Sio_2 2 to 4% Al_2O_3 and 3.6% Fe_2O_3 and 0.46% Feo. This silica sand may be suitable for making coloured glasses.

ATRU TEHSIL :

Silica Sand deposits are available around Kundi, Devpura area of tehsil Atru. At places, silica sand horizon is about 10 mts. thick occurring below Deccan traps and is under lain by shales and silicesous limestone of Sirbu shale formation. Prelimnary assessment indicated a reserve of 5.3 million tones of inferred category in Dhologhati Ki Bar, Motipura, Malya, Bala Ji Ki Khati etc. The washed samples indicated 92 to 97 % Sio_2 with 0.21 to 0.58% Fe_2O_3. This deposit is to be used for glass making industries but can not be worked out as most of the area falls in Reserve Forest.

LIMESTONE (LIME BURINING GRADE) :

As an KharKhara area of tehsil atru is the major limestone occurrences found in the river bed of Parwan.The top caverneous layer is rich in Cao content, and individual samples have also indicated around 85% $CaCo_3$

content, but in general limestone seems to be suitable for lime burning purpose only. Presently area is being mined and caters to the needs of few lime kilns working at Baran district head quarter. Apart from this, minor low grade limestone is also found in Bapaur, Kunjer Tapriya, Anta, Badawakhan, Sangod, Gadepan, Talchi, Balakera Patna etc. These are mostly low grade limestone deposits and do not find much industrial use, however they are good as masonry stone.

MASONRY STONE :

Masonry stone or building stone in general are available from sandstone, low grade limestone and deccan traps.

SANDSTONE :

The major sandstone deposits are in Badora, Salpura, Dara Nimoda, Uchawad etc. Badora area of tehsil Atru is Known for splittable sandstone. Some mines are in operation for splittable sandstone in the area. Salpura, Dara Nimoda deposits are in the river bed of Andheri, Goverdhanpura (tehsil Kishanganj), Kawai & Chhatrapura of Atru tehsil are available for splittable sandstone in Billanam Govt. land.

Other sandstone deposits are near Atru, Bapawar, Katawar etc. village are of masonry type from where only building stones are worked out by local villagers. Most of the sandstone deposits of Baran district fall under forest bounderies so the further development is not possible unless they are freed from forest.

There are very few leases granted for splittable sandstone in Baran district.

LOW GRADE LIMESTONE :

Low grade limestone is also used as masonry stone. The deposits of low grade limestone is Baran district are near Kunjar, Tapriya, Anta, Bada Khan, Bala Khera, Patna etc.

DECCAN TRAP :

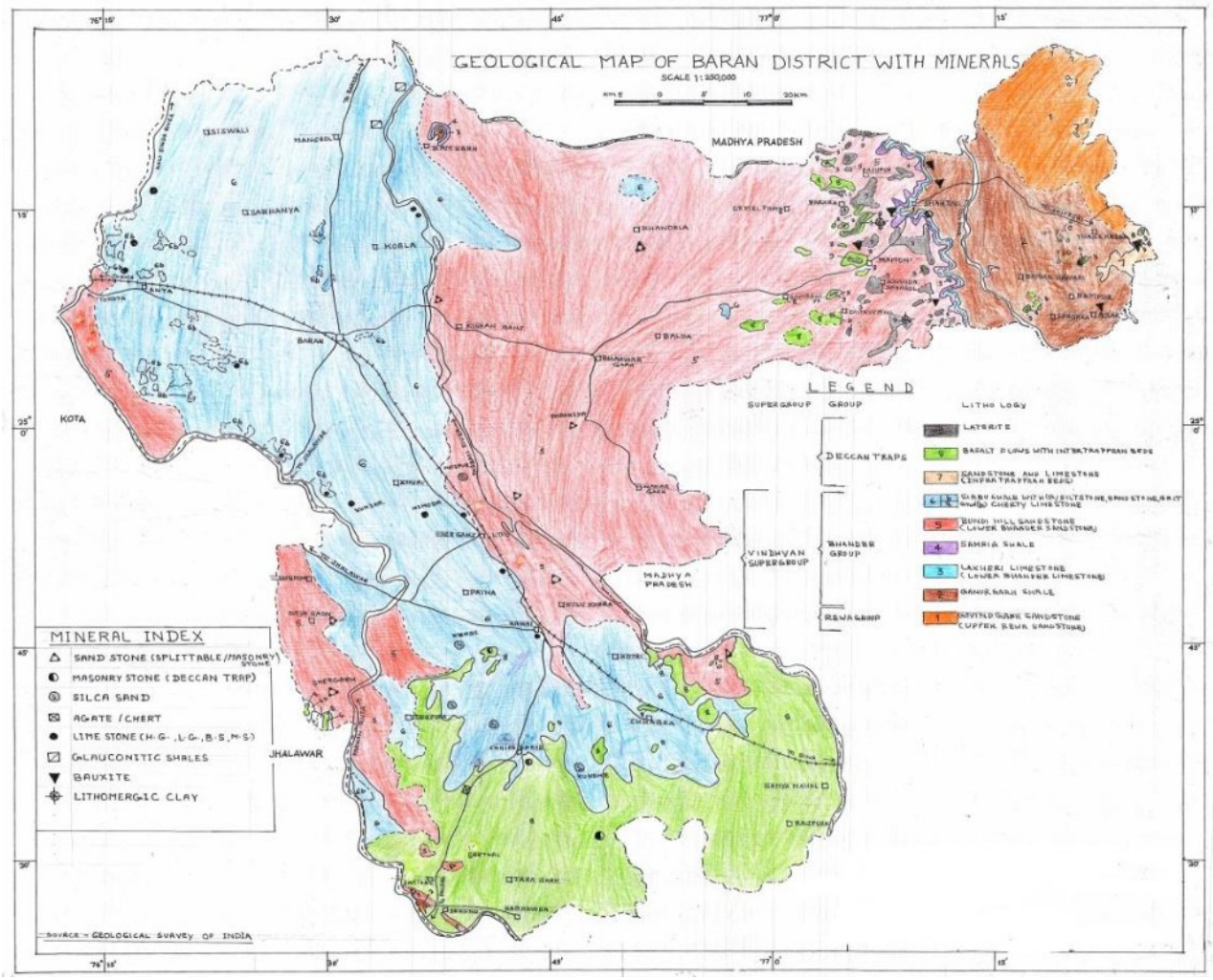
Deccan trap flows are scattered around Shahbad, Chhabra, Chipabrarod etc. Nassive deccan trape can be used as building stone.

GLAUCONITIC SHALES :

Green shales (glauconitic) have been observed near Mangrol, Bislei, Papalda in Mangrol tehsil and Majhari, Devri, Kasba and Nonera in Shahbad tehsil.

AGATE, CHERT :

Agate, Chert of different colours (red, green, brown etc.) are found scattered in trap country in Shahbad, Chhipabarod area. However no major deposit of commercial grade is found.



12. IN ADDITION TO THE ABOVE, THE REPORTS AND CONTAIN THE FOLOWING.

(A) District wise detail of river or streams and other sand sources:-

The district is served by the sub-basins of Chambal river These sub-basins include Kali sindh, Parvati, Parwan and Kuno, Kali Sindh, a tributary of Chambal, on being joined by Parwan river flows northward forming western boundary of Mangrol tahsil for about 40 kms. from Rajgarh to Dheepari and joins Chambal at pipalda in Kota district. The important villages en route are Palaitha, Nonera, Dip Singh Kotra, Barod and Patonda.Parvati, a tributary of Chambal. originates from Vindhyan ranges. It enters the district in the south near village Karaihat. It first forms the district's boundary with Madhya Pradesh and then traverse through the central parts of the district.Parwan originates from Vindhyan ranges, enters the district near Harnawada Shahji and flowing through the central parts of the Atru tahsil, joins Kali Sindh near Rajgarh.Kuno enters Shahhad tahsil in the south from Madhya Pradesh and after flowing northward and passing about 9 km east of Shahhbad, re-enters Madhya Pradesh.Andheri river enters Chhipabarod tahsil from Madhya Pradesh and joins Parvati, about 6 kms. east of Atru.

Banganga river originates in the south of Baran somewhere from Bamla and Shrod and joins Parvati near Mithod.Other small rivers and Lhasi, Sukar, Ghadavat, Khadela, Kelwara, Bangardi, Bilas, Barni, Kori, Retri, Kol etc.

(B) Availability of sand or gravel or aggregate resources of the district:-

The Availability of sand or gravel or aggregate resources in the Dist- Baran so for Calculated in presnt sanacrio in different rivers & its tributaries & Nalas in Tehsil-Kishanganj ,Mangrol,Baran & Atru is as under .

1. Atru tehsil-

Total Sand reserve = Minaralize Zone Area Sq.mt. x Depth x Bulk Density of Mineral
= 973916x 3x1.4
= 4090447 tonnes

2. Mangrol & Kishanganj tehsil-

Total Sand reserve = Minaralize Zone Area Sq.mt. x Depth x Bulk Density of Mineral
= 2474250x 2x1.4
= 6927900 tonnes

3. Baran & Kishanganj tehsil-

Total Sand reserve = Minaralize Zone Area Sq.mt. x Depth x Bulk Density of Mineral
= 5338690 x 3x1.4
= 22422500 tonnes

(C) District wise detail of existing mining leases of sand and aggregates:-

There are 3 mining lease recomnnded for sand in the district which applied by Sh. Manoj jain S/O Nemi Chand jain R/O –Vill- kunjer Teh- Atru Dist- Baran Pramod Meena s/o Brajendra Meena R/O-1-Tha -1 Dadabari Dist- Kota , Mukesh Sharma s/o Suresh Sharma ,R/O 7, Jhotwara, Dist-Jaipur , As per the information received from Ame Baran ,Presntaly ML-37/2012 is under working permission which fetched a royalty of 19.56 Lacs. in the financial year 2015-16.

Sr. No.	LEASE NO	Lessee name	Address (Office)	Mineral Name	Village	Tehsil	District	Total Area	Registration Date	Expiry Date
1	Minor/ML/37/2012	Manoj Jain	Manoj jain S/O Nem Kumar jain R/O- Vill- kunjair Teh- Atru Dist- Baran , Rajasthan	Bajri	Atru	Atru	Baran	159.27	LOI	LOI
2	Minor/ML/2/2013	Pramod Meena	Pramod Meena s/o Brajendra Meena R/O-1-Tha -1 Dadabari Dist- Kota , Rajasthan	Bajri	Mangrol & kishanganj	Mangrol & kishanganj	Baran	329.29	LOI	LOI
3	Minor/ML/1/2013	Mukesh Sharma	Mukesh Sharma s/o Suresh Sharma ,R/O 7, Jhotwara, Dist-Jaipur , Rajasthan	Bajri	Baran & kishanganj	Baran & kishanganj	Baran	360.97	LOI	LOI

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

Drainage system with description of main rivers :-

S.N.	Name of the River	Area drained (Sq Km)	% Area drained in the District
1	Kalisindh	35.00	
2	Parvan	110.00	
3	Parvarti	113.00	
4	Andheri	81.00	
5	Ban-Ganga	50.00	
6	Lhasi	29.00	
7	Retili	51.00	
8	Bethli	40.00	
9	Bilas	26.00	
10	Karai	23.00	
11	Cool	45.00	
12	Barani	26.00	

Salient Features of Important Rivers and Streams :-

S.N.	Name of the River or stream	Total Length in the District (in sq.Km)	Place of origin	Altitude at origin
1	Kalisindh	35.00	Enters in Jhalawar Distt. near village Binda	
2	Parvan	110.00	Southern part of the Harnavda shaha ji kasba	
3	Parvarti	113.00	Enters in Baran from the Kariyahat kasba of Chhabra Tehsil from Madhya Pradesh.	
4	Andheri	81.00	This river enters in Baran from nearby Chhipabarod. About 15 Km. bordering to Madhya Pradesh and Rajasthan,	
5	Ban-Ganga	50.00	This is the rainy river which passes through Bamla and Sehrod in the southern part of Baran.	
6	Lhasi	29.00	Originate from hills of Arawali near village Dehri, Kumbhakhera Teh. Chhipabarod	
7	Retili	51.00	Originate from M.P. near village Gopalgarh	
8	Bethli	40.00	Originate from M.P. near village Nathu ka pura	
9	Bilas	26.00	Originate from M.P. near village Dhenukhera.	
10	Karai	23.00	Originate from M.P. near village Badarwas.	
11	Cool	45.00	Originate from Dence Forest village Dhikwani, Semliphatak Teh. Shahabad.	
12	Barani	26.00	Originate from M.P.	

Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
Parwan,Parvati ,Andheri & Nalas		35	1592700	2454268.2
Parvati & Nalas		35	3299000	4156740
parvati		35	3609700	13453500

Note : * Approximatly

Mineral Potential

Boulder (MT)	Bajri (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)

Note : * Approximatly

The efforts are on to identify and locate the new areas for sand mining. Moreover, the potential loci for deposits of sand and associated aggregates are within river bed or close to river banks or the areas of flood plain and the resources are dependent upon the amount of rainfall and the water load carried by the river or stream.

Annual Deposition:

Boulder (MT)	Bajri (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)
Non renewable			

Note: * Approximatly

13. Conclusion-

14. References-

1. Ground water information report by Ground water department Kota.
2. Rajasthan Govt. district brochure year 2014.
3. Sourec of Irrigation Department
4. Map Source of India.

उक्त खनिज सर्वे रिपोर्ट मुख्य रूप से निम्न प्रकार तैयार किया गया है।

सहायक खनि अभियन्ता
खान एवं भू-विज्ञान विभाग
बांरा (राज.)

ANNEXURE - V

MUKESH SHARMA
RIVER BED SAND (MINOR MINERAL) MINE
TEHSIL – KISHANGANJ & BARAN, DISTRICT – BARAN (RAJASTHAN)

Date: 26.03.2018

To,
The Principal Secretary
Department of Mines, Secretariat
Govt. of Rajasthan, Jaipur (Rajasthan)

Sub:- Request for Extension in validity of Letter of Intent (LOI) for our proposed project of "River Bed Sand (Minor Mineral) Mine" of applicant Mukesh Sharma, situated near revenue villages of Tehsil – Kishanganj & Baran, District - Baran, Rajasthan for an area of 360.97 hectare.

Reference: 1) LOI Extension Letter vide no. P.9(10)Khan/Group-2/2013 dated 13.03.2018 **(Annexure-I)**
2) Original LOI Letter vide no. P.9(10)Khan/Gr.-2/2013 dated 03.12.2014 **(Annexure-II)**

Sir,

With reference to above, we would like to submit that our project for Environment Clearance was considered (Agenda Item No. 2.8) in 29th Meeting of The Reconstituted Expert Appraisal Committee (Non-Coal Mining) on dated 22.03.2018 at Ministry of Environment, Forest & Climate Change, New Delhi. Copy of agenda enclosed as **Annexure-III.**

Hon'ble EAC committee heard the proposal at length and have in principally agreed for sanction of Environment Clearance as all the statutory requirements were fulfilled and the same will accorded shortly.

We request your goodself to kindly extend the validity of Letter of Intent for Three Months as this will take minimum 45 days in issuance of EC as per procedure.

Thanking You,

Yours Faithfully,

For River Bed Sand Mine, Baran

(Mukesh Sharma)
Applicant

Copy To: 1) Mining Engineer, Kota, DMG, Rajasthan
2) AME, Baran, DMG, Rajasthan