

MUKESH SHARMA
RIVER BED SAND (MINOR MINERAL) MINE
TEHSIL - PIDAWA, DISTRICT - JHALAWAR (RAJASTHAN)

Date: 25.03.2022

To,
The Director -IA.II (M)
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhawan, Aliganj, Jor Bagh Road
New Delhi - 110003

Sub: Regarding relisting & Environmental Clearance of our proposed project "River Bed Sand (Minor Mineral) mine of lessee Mukesh Sharma situated near village(s) of Tehsil - Pidawa, District- Jhalawar, and Rajasthan for an area of 905.206 Hectares.

Ref: 1. Reconsidered in 47th Meeting of the Reconstituted Expert Appraisal Committee (Non-Coal Mining) on dated 08.03.2022.

4. Proposal No.: IA/RJ/MIN/25369/2014

Respected Sir,

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

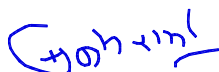
S. No.	Information/Clarification	Compliance Status
1.	DSR as per 2018 notification	The DSR as desired in sync with MoEF&CC Notification Gazette Notification dated 25th July 2018 is enclosed as Annexure-I
2.	Undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota.	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 same by Project Proponent is enclosed as Annexure-II .

We request you to kindly consider the same and accord us Environmental Clearance at the earliest.

Thanking You,

Yours Faithfully,

For River Bed Sand Mine, Jhalawar



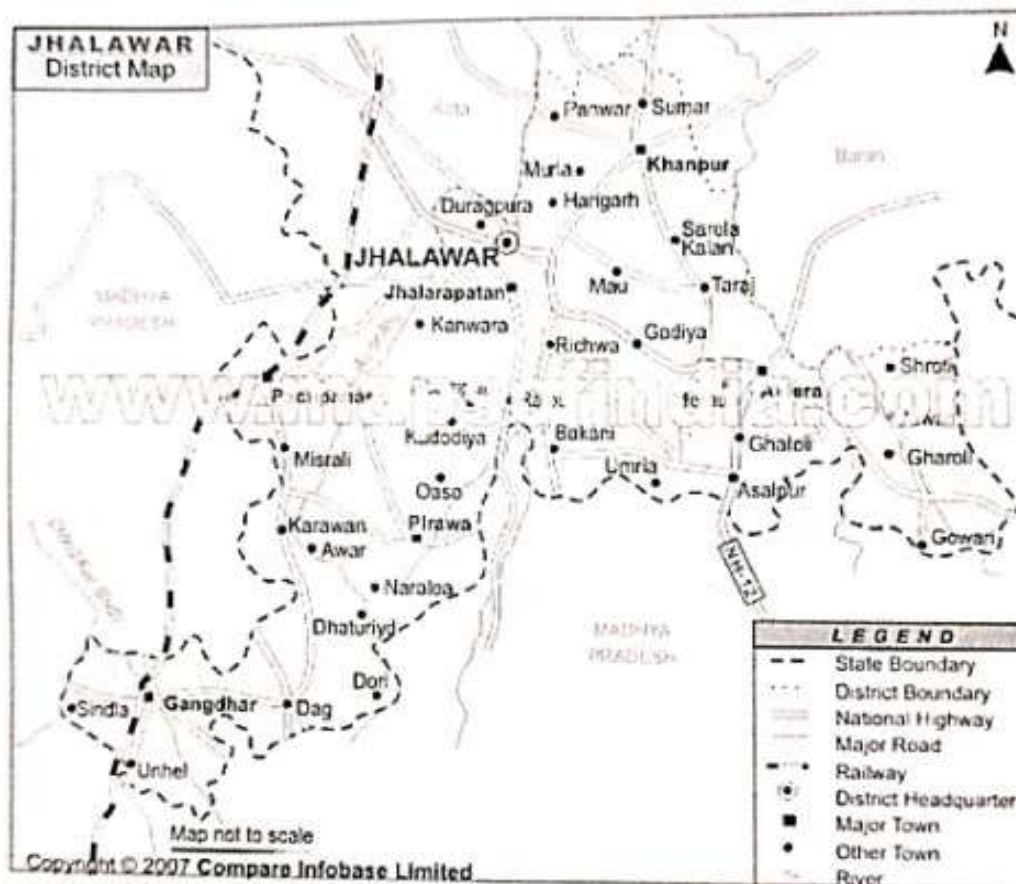
(Mukesh Sharma)

Applicant

DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DISTRICT SURVEY REPORT OF JHALAWAR DISTRICT (RAJASTHAN)



2021-22

AS PER GAZETTE NOTIFICATION (EXTRAORDINARY) NO. S.O. 2827, NEW DELHI, WEDNESDAY, JULY-25, 2018 OF MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, GOVT. OF INDIA (MoEF&CC) GUIDELINES 2016 & 2020

Department of Mines and Geology

Rajasthan

Al
सहायक खनि अभियन्ता
खान एवं भू-विज्ञान विभाग
जालावाड़ 1



DISTRICT SURVEY REPORT, JHALAWAR

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PREFACE

Sustainable Development is built on three pillars - environmental, social and economic. Sustainable development cannot be achieved if the environment is protected but poverty is prevalent in a significant part of the population. Similarly, sustainable development cannot be achieved through inappropriate economic growth, if it undermines the environment in which people and businesses exist. So equilibrium is maintained between environment, society and economics. Sand/gravel has long been used as aggregate for construction of roads and building. Today, the demand for these materials continues to rise. In Rajasthan, the main sources of sand are river flood plain, paleo channel sand, and sand from agricultural fields.

The Ministry of Environment, Forests & Climate Change (MOEFCC), Government of India, made Environmental Clearance (EC) for mining of minerals mandatory through its Notification of 27th January, 1994 under the provisions of Environment Protection Act, 1986. Keeping in view the experience gained in environmental clearance process over a period of one decade, the MoEF&CC came out with Environmental Impact Notification, SO 1533 (E), dated 14th September 2006. It has been made mandatory to obtain environmental clearance for different kinds of development projects as listed in Schedule-1 of the Notification.

Further, In pursuance to the order of Hon'ble Supreme Court dated 27th February, 2012 in I.A. No.12- 13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease; And also in view of the Hon'ble National Green Tribunal, order dated the 13th January, 2015 in the matter regarding sand mining has directed for making a policy on environmental clearance for mining leases in cluster for minor Minerals,

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

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

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

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

The DEIAA and DEAC will scrutinize and recommend for EC of mining of on the basis of DSR. This will a model and guiding document which is a compendium of available mineral resources, geographical set up, environmental and ecological set up and replenishment of minerals is based on data of various departments, published reports, journals and websites.



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The minerals found in the district are Lime stone (Cement Grade), Lime stone and Sand stone as building Dimensional and decorative stone, Silica sand, Laterite, Bauxite, etc.

Need of DSR

As per Gazette notification of MOEF & CC a survey shall be carried out by the District Environment Impact Assessment Authority (DEIAA) with assistance of irrigation department, Forest department, Mining department, Ground Water Boards, Remote Sensing Department and Revenue department in the district at regular interval to for preparation of District Survey Report as per the sustainable Sand mining guidelines, 2016 & 2020 to ensure identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

As per notification it is essential to prepare a survey document mapping the status of sand sources and other minerals in a district. This survey should be conducted and report be prepared for each district. Though it is an acceptable fact that rivers cut across districts and States and every river is an ecosystem in itself. But, keeping in view the fact that the district is the most established unit of administration at which this kind of survey, planning and monitoring can be ensured effectively. So, every district will prepare this document taking the river stretch in that district as an ecological unit and inventorying other sources of sand in the district.

The natural resources must be utilized in environment friendly manner in scientific and systematic way and with the objective of sustainable development the policy on the subject should have provisions for protection of environment & ecology. These factors can be accounted for in a most efficient manner at district level. The sustainable mining plan needs to be dynamic.

DSR OF JHALAWAR

District survey report of Jhalawar was prepared based on identification of the potential threats to the river / stream beds in the district. Besides, the production of aggregate in a particular district is a function of availability of natural resources, the size of the population, the economy of the area and various developmental and infrastructural works being undertaken in the district.

Effort have been made to cover sand mining locations, areas & overview of Mining activity in the district with all its relevant features pertaining to Geology & Mineral Wealth in replenishable areas of rivers, stream and other sand Sources. The area for removal of the mineral in a river or stream is decided depending on geo-morphology & other factors, it can be 50% to 60% of the area of a particular river or stream. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

This DSR shall form the basis for application for environment clearance, preparation of reports and appraisal of projects.



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1. INTRODUCTION:-

The word Jhalawar literally means "land of the Jhalas" this being the name of the ruling clan of the former state. Jhalawar district has a rich history and natural wealth. It features ancient forts and pre-historic cave paintings. This delightful little town, surrounded by orange groves and poppy fields, are dominated by a 19th century fort, the seat of the erstwhile princes of Jhalawar. It now houses government offices. An incongruous yet charming part of the fort is the Bhavani Natya Shala Theatre, which was modeled on the grand opera houses the maharaja had seen on his European tours. The old walled town of Jhalrapatan, 6 km south of the fort, has a splendid cluster of 11th century temples. The main industries of Jhalawar are mineral based, agriculture based, and textiles. Jhalawar is also known for the Production of Citrus (Oranges). The area around Bhawani Mandi and the surrounding rural belt have got huge orchards and fields of oranges, that's why it's called as "The Orange City". Jhalawar District has a well-developed Education infrastructure Department of Primary Education and Department of Secondary Education is providing their services through the Primary Schools, Middle Schools, and Secondary & Senior Secondary Schools. Healthcare facilities at Jhalawar are sufficient for the people of the town. Many Govt. and private hospital even medical colleges operating in the district. In the 2011 Indian census, Jhalawar had a population of 14, 11,129. Males constitute 725143 in the population and females 685986. Jhalawar has an average literacy rate of 61.5% .The district is known for its Sand Stone, Lime Stone, Masonry Stone, Bentonite mineral wealth.

1.1 LOCATION AND EXTENT:-

Jhalawar is located in the south east corner of Rajasthan at the edge of the Malwa plateau. The State of Madhya Pradesh borders in the south west of Jhalawar and in the east of Jhalawar district, while to the north west, north and north east are Ramganj Mandi, Sangod tehsils of Kota district and north east are Atru and Chhipabarod tehsils of Baran district. To the north the Mukandara Range, running from north-west to east. From a rough boundary between the two districts but Khanpur is beyond the main range. Jhalawar district lies in the south eastern corner of Rajasthan between 23°45'20" and 24°2'17" north latitudes and 75°27'35" and 76°56'48" east longitudes occupying an area of 6219 Sq. Kms. The district head quarter Jhalawar is situated on the National highway No. 12 about 85 Kms. from Kota. The Rail head, Jhalawar Road on the Kota-Nagda section of the Western Railway, is about 27 Kms. away. Metalled roads link important places within the district and outside in the neighboring Madhya Pradesh.



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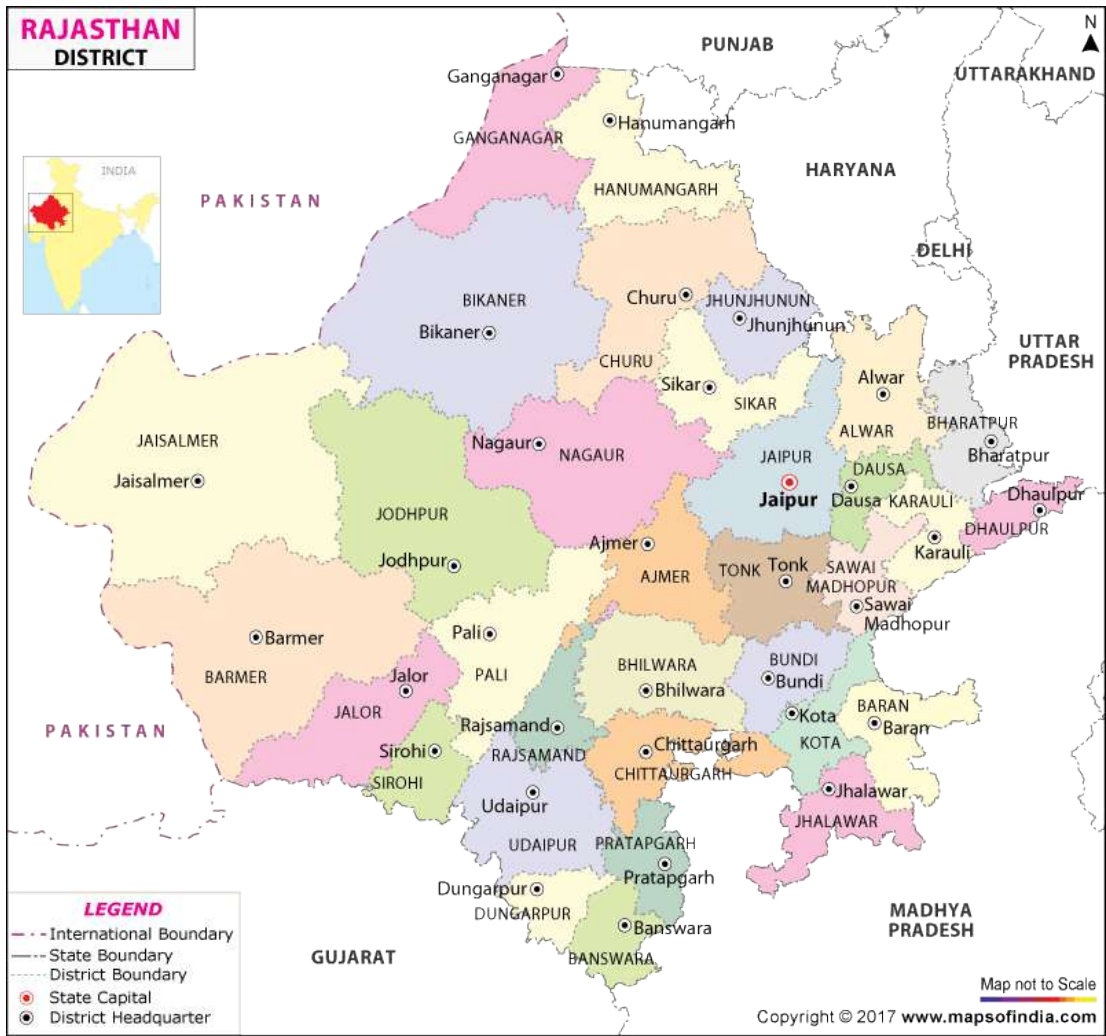


Fig. 1. Location Map

1.2 BRIEF HISTORY OF THE DISTRICT:-

Jhalawar is the 'land of the Jhalas' - a clan of brave Chauhan Rajput warriors. It has a valiant past, and the unexplored treasures of history in this region are a great attraction for the adventure and scholar of history. The city of Jhalawar (once known as Brijnagar) was founded by Jhala Zalim Singh (First), who was the then Dewan of Kota state (1791 A.D.). He established this township, then known as Chaoni Umedpura, as a cantonment. The township was surrounded with dense green forests and wild animals. Jhala Zalim Singh often came here for hunting and he liked the place so much that he wanted to develop it as a township. The objective to develop this place as a military cantonment was due to the fact that Maratha invaders passed through this central place from Malwa towards Kota to capture Hadoti states. Legendary Jhala Zalim Singh recognized the importance of this place and started to develop it as a military cantonment and township, so that he could use



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this place to attack and stop Maratha invaders before they can reach to Kota state. Chaoni Umedpura got developed as a cantonment and township around 1803-04 A.D. Colonel Todd, who visited the region in December, 1821 described this area as the cantonment established by Jhala Zalim Singh plus a well-established township with large houses, havelis, and surrounding walls. In 1838 A.D., English rulers separated Jhalawar state from Kota state and gave it to Jhala Madan Singh, the grandson of Jhala Zalim Singh. He developed his administration services to develop the state of Jhalawar. He resided in Jhalara Patan for a long time and started to build The Garh Palace (1840 - 1845 A.D.). He was the first ruler of Jhalawar state and made his great contribution in the history of Jhalawar. Jhala Madan Singh ruled Jhalawar from 1838 to 1845. After his death, Jhala Prithvi Singh became the ruler of Jhalawar, and ruled for around 30 years. Rana Bhawani Singh Ji, who ruled Jhalawar state from 1899 to 1929 A.D., did remarkable work in the development of Jhalawar state. His active involvement was in the fields of social activities, public works (construction), education, administration, etc. During his time, a number of genius personalities of Jhalawar gave their active hand in these activities. The 19th century kingdom of Jhalawar (south of Kota) is placed in one of the most picturesque and unexplored part of Rajasthan. In 1838, the state of Kota was converted into a new principality of Jhalawar by the British for descendants of Zalim Singh. Madan Singh, who acknowledged British supremacy, became the first ruler of this new principality and was vested with the title of Maharaj Rana. The 13-gun salute is accorded to the Maharaja Rana Jhalawar. Jhalawar is better known as a temple town because of Jhalrapatan in its suburbs. Many of these temples date back several centuries.

1.3 ADMINISTRATIVE SETUP:-

There are eight tehsils viz Jhalrapatan, Khanpur, Pirawa, Aklera, Bhawanimandi, Manoharthana, Dug and Bakani. There are five towns and 1619 villages in the district. Out of these 1615 villages, the number of inhabited villages were recorded 1503 and the remaining 132 found uninhabited. The following table gives tehsil-wise position of village in Jhalawar district along with number of towns in each tehsil.



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S.NO	TEHSIL	NO. OF VILLAGES	UNHABITED	TOTAL	NO. OF TOWNS
1.	Jhalrapatan	275	24	299	2
2.	Asnawar	83	16	99	-
3.	Pirawa	206	14	220	1
4.	Pachpahar	142	9	151	1
5.	Gangdhar	186	9	195	-
6.	Aklera	231	38	269	1
7.	Manoharthana	187	8	195	
8.	Khanpur	193	14	207	
Total		1503	132	1635	5

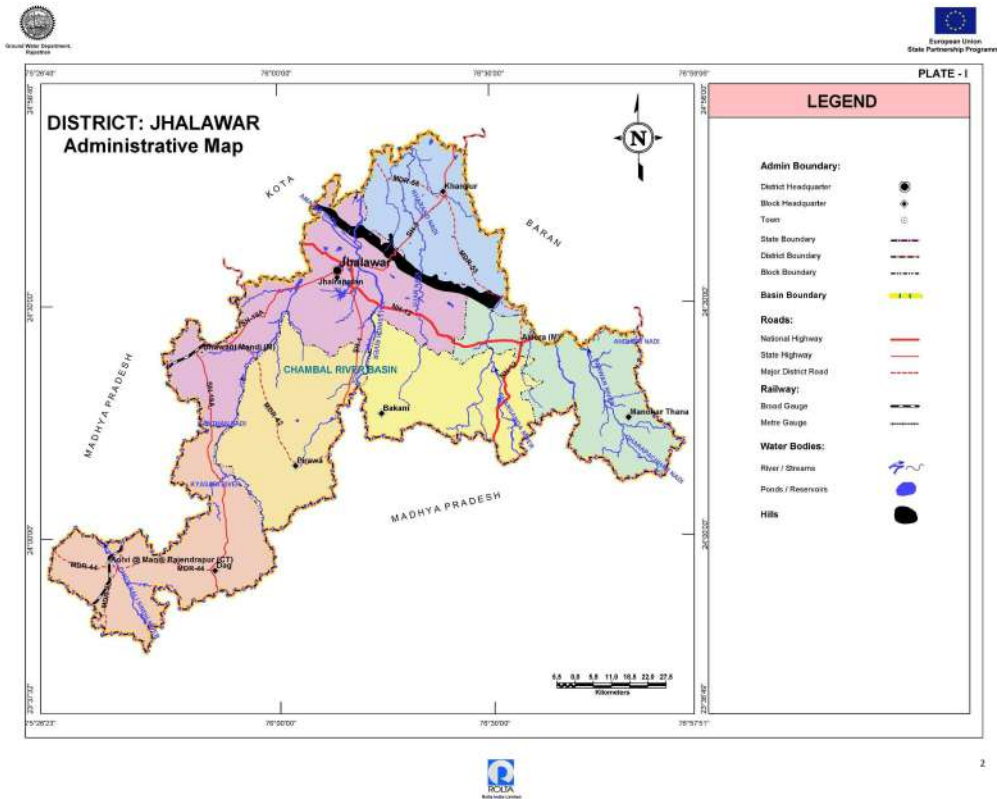
S.NO	SUB-DIVISION	TEHSIL	NAGARPALIKA
1.	Jhalawar	Jhalrapatan	Jhalawar, Nagarparishad Jhalrapatan Nagarpalika
2.	Aklera	Aklera	Aklera
3.	Bhawani Mandi	Pachpahar	Bhawanimandi
4.	Khanpur	Khanpur	--
5.	Pirawa	Pirawa	Pirawa
6.	Manoharthana	Manoharthana	-
7.	Gangdhar	Gangdhar	-
8.	Asnawar	Asnawar	-

Source: Industrial Potential Survey of Jhalawar 2019-20



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1.4 CLIMATE AND RAINFALL:-

Jhalawar has a semi-arid climate with high temperatures throughout the year. Summers are long, hot and dry, starting in late March and lasting - through the end of June. The monsoon season follows with comparatively lower temperatures, but higher humidity and frequent, torrential downpours. The average annual rainfall in the Jhalawar district is 900 mm. Most of the rainfall can be attributed to the southwest monsoon which has its beginning in the last week of June and May last till mid-September. Pre-monsoon showers begin towards the middle of June with post-monsoon rains occasionally occurring in October. The monsoons subside in October and temperatures rise again. The brief, mild winter starts in late November and lasts until the last week of February. Temperatures hover between 26.7 °C (max) to 12 °C (min). The winter is largely dry, although some rainfall does occur as a result of the Western Disturbance passing over the region. This can be considered the best time to visit Jhalawar because of intense heat in the summer.

1.5 TRANSPORT AND COMMUNICATION:-

Jhalawar is well connected with road and rail to all major cities within Rajasthan as well as those located outside the state. Jhalawar town lies on National Highway No. 12. A good network of road connections exists. It is well connected from Kota, Jaipur, Bhopal, Ujjain, and Indore. Many government



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buses goes all district and outside. And private buses also available for travel. You can reach Jhalawar from Kota in about 2 hrs, by road. The distance of different cities from Jhalawar are Kota: 85 Kms, Bundi: 123 Kms., Jaipur: 335 Kms., Delhi: 590 Kms., Ujjain: 163 Kms., Indore : 235 Kms. Bhopal: 265 Kms., Udaipur: 360 Kms. Almost all the towns and most of the important places are well connected with the district HQ. The Jaipur, Jabalpur National Highway also passes through Jhalawar, road length which was 1047km in the year 1999-2000 has now increased to 3483.60kms by recording a growth of 7.73 percent similarly in the year 1985-86 roads connected only 86 villages, which now have increased to 475 villages in 2013-14 registering the growth of 553.32 percent. During the year 2015-16 the total length of different category of roads in the district was recorded at 3483.60 kms. The break up to which is given as under.

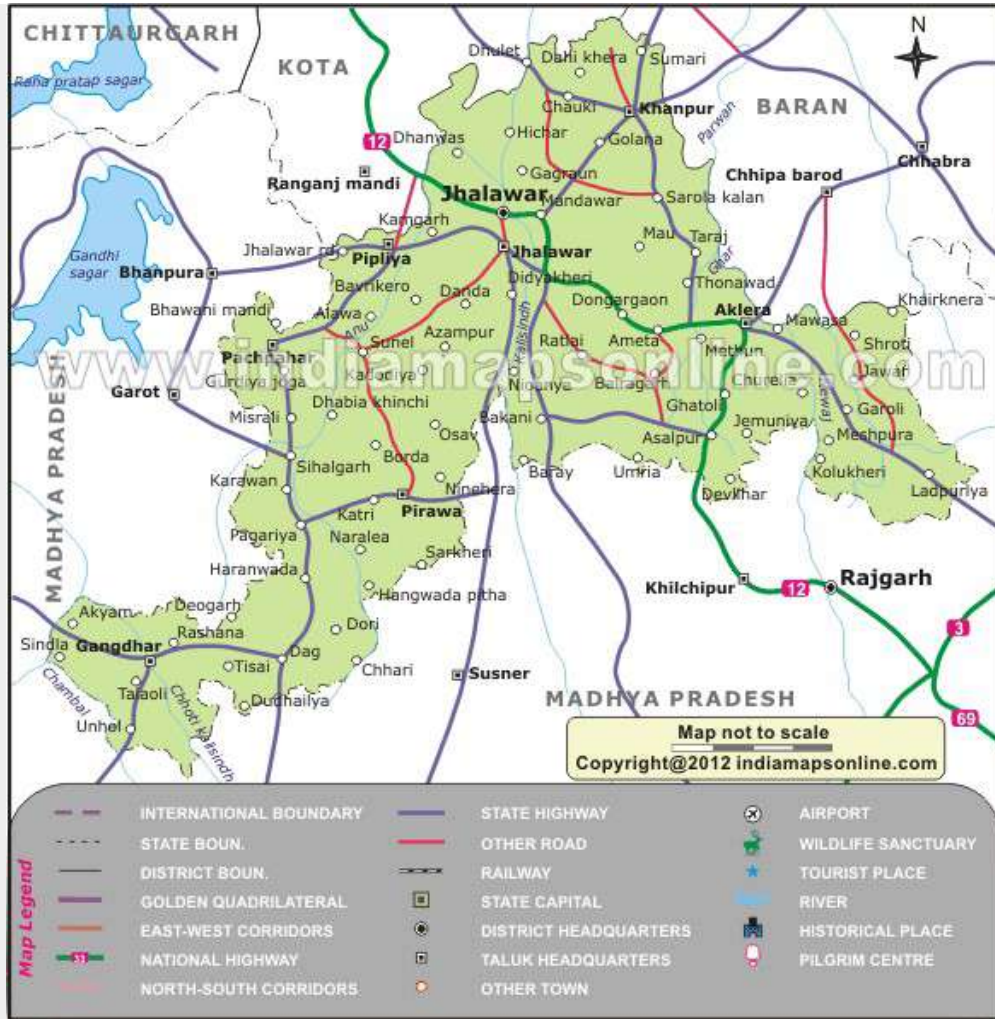
Nearest major railhead is Kota Junction (85 Kms.). Jhalawar has a newly constructed railway station named "Jhalawar City". At present you can reach "Jhalawar City" station from Kota Junction station in about 0.45 hrs by 'Jhalawar-Kota' trains. Nearest airport is located in Kota, you can reach Jhalawar in about 2 hrs by road. Another international airport is proposed near Kolana at Jhalawar.

Ramganjmandi - Bhopal via Jhalawar broad gage railway has been sanctioned and work is in progress.



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*Source: District Plan

Fig.3: Road Map of the District.

1.6 FLORA & FAUNA OF THE DISTRICT:-

About 20.74 percent of the total geographical area for land utilization was under forest in year 2015-16 .During the year 2015-16. The forest are largely of Dhonk (Anogeissus Pendula) subtype. Anogeissus pendula generally occupied the lower and gentle slope of hills but also extends to the tops of small hill rocks ridges particularly if the soil is good. As regards flora, the district falls into two man Sub-Division Southern. Tropical dry deciduous forest and the subsidiary edaphic type of dry tropical forest. The occurs in the Manoharthana and Aklera forest ranges. The common associated fo teak found in the area are Dhokra, Tendu, Gurjan, Khair, Bahera, Salar. The grasses found in the area are Ratada, Khhas Plad and sum. In Mukandra range of hills, Panttars are fairly



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common throughout the forest area. Other/Specials found (In this area are Sambhar, Cheetal, Wild bear Blue Bull) and Chinkara. Bull) and Chinkara. There are no birds' peculiar to the areas except the Gagraun and parrot.

1.7 SOCIO ECONOMIC PROFILE OF THE DISTRICT:-

Jhalawar district is an expanse of fertile plain having rich black-cotton soil and is watered by several rivers, giving it a verdant look. The Arawali hills cross the region roughly dividing the plains of Hadoti from the Malwa plateau. These hills and the surrounding areas provide the district exotic flavor with its diverse range of flora and fauna. Jhalawar district is known for the highest rainfall in Rajasthan. An average of 89 cm. of rainfall along with rich soils provides adequate support to the agriculture of the district

Economically, agriculture is main source of income for the people of the district. It is one of the districts which are receiving Backward Region Grant Fund (BRGF). Tourism is also a main industry in the district. A number of small scale industries are available here. The GDDP or Gross District Domestic Product during 2016-17 (AE) was Rs 14,55,430 lakh at Current Price and Rs 10,03,963 lakh at Constant (20 11-12) Prices. The NDDP, or Net District Domestic Product during 2016-17 (AE) was Rs 13,17,548 lakh at Current Price and Rs 9,04,857 lakh at Constant (20 11-12) Prices. The Per Capita Income or NDDP, at factor cost during 2016-17 (AE) was Rs. 86,187 at Current Price and Rs 59,191 at Constant (2011-12) Prices. Rajasthan District Factbook™ Jhalawar District Education wise, according to 2011 census, the percentage of literate persons is 61.5% with 75.75% are males and 46.53% are females. The total literate population of the district is 7,39,792 including 4,66,815 are males and 2,72,977 are females. There are a number of Government and Private higher educational institutions, schools and P.G. Colleges in the district.

1.8 GROUND & SURFACE WATER SCENARIO OF DISTRICT:-

The rivers in Jhalawar District have deep beds, with the result that the water level in below from surrounding sided, so canals' can not be dug, of irrigation. The difficulty has been overcome by sinking a large number of wells on river banks and taking the water into channels by lift method. A large number of wells have also been constructed in plan areas away from the rivers the ground water is easily available at a depth of 15 to 20 meters & drinkable. The



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principal source of recharge to ground water is through percolation of rainfall, return flow from irrigation water seepage from surface water resources and influent seepage from the streams, the annual average rainfall in the district is recorded at 900mm.

A few numbers of medium size irrigation projects are also existing such projects are:

BHIM SAGAR PROJECT Bhimsagar dam is located at Ujjar River of Khanpur tehsil with a gross storage capacity of 76.6 million cubic meters of water (i.e. 2703.00 million cubic ft.) Two canals having 45.62 kms Length with 57.05 kms. Distributors provides and additional 9986 hectare of irrigated land. **14 CHHAPI DAM PROJECT** The Dam is complete. An amount of Rs. 6252.94 lacs has been capitalized so far.

HARISH CHANDRA SAGAR PROJECT it is also one of the main irrigation projects. After completion of this project is envisaged to increase the irrigated land by 4400 hectares. Sarola Kyassra, Raipur, Aminkheri, Samankhera and Jumakhera and some important a large minor irrigation project. Chanwali, Gilundi, Kanwari, Takli, Newaj, Bhanwarari, Large & Miner, Projects are under construction. **OTHER RESOURCES:** Presently the wells are main sources of irrigation in the district. Total irrigated area by sources means are shown in the table.

S.No.	Sources	Irrigated Area (in Hectares)	Percentage of Total Irrigated Area
1	CANALS	15911	8.7
2	TANKS	0.2	3
3	WELLS	84.6	4
4	TUBEWELL	139797	5.0
5	OTHERS	95367	1.5
TOTAL		235454	100

During the year 2015-16 the irrigation facility extended through diesel/electrified pump sets has remained as given under-

	2014-15	2015-16
A Tube well (in numbers)	5105	B
Diesel Pump (in numbers)	51715	91694
C Electrified Tube well (in numbers)	26985	128065
D Open well	290	TOTAL 83805
		220049



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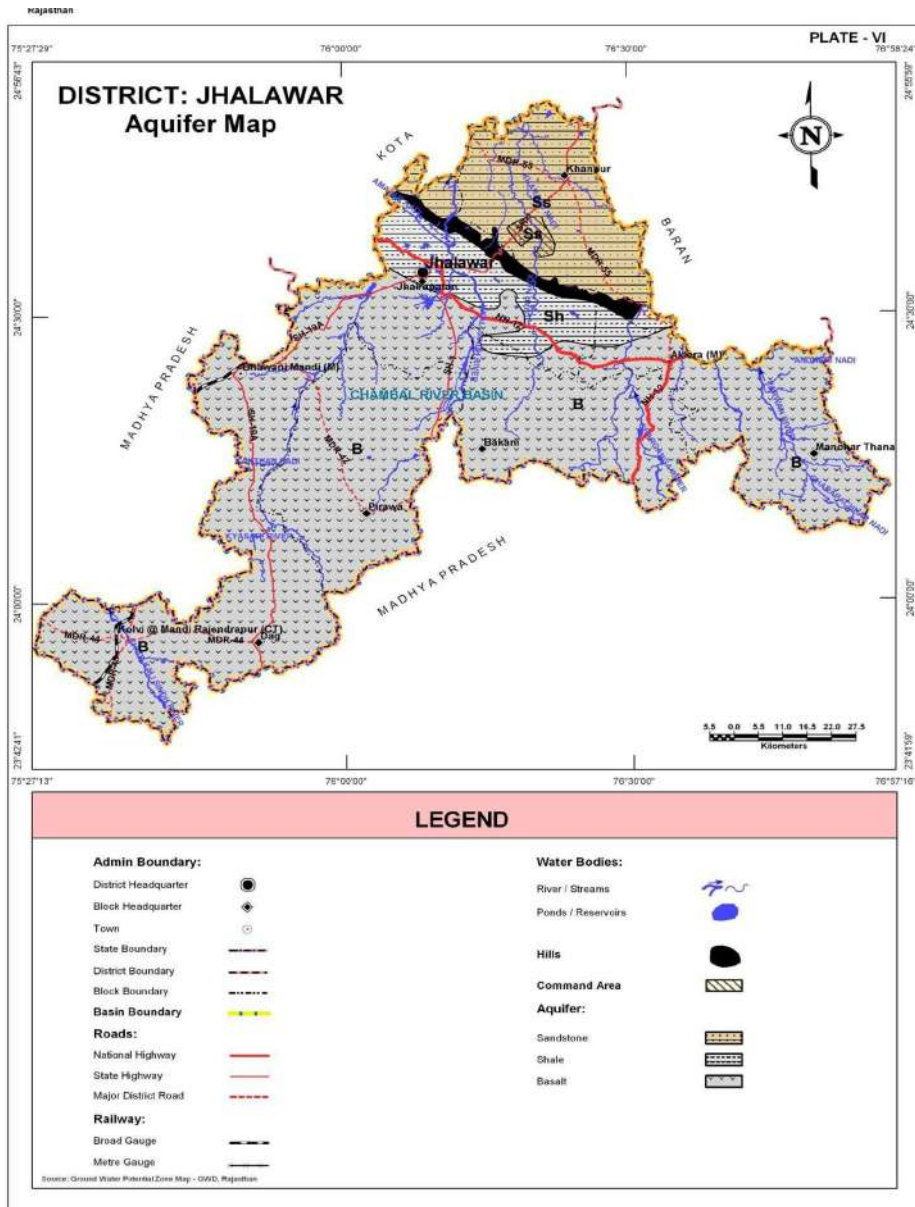


Fig.4: Aquifer Map of the Jhalawar District.

1.9 SEISMICITY:-

As per seismic zoning map of India IS 1893 (Part-I): 2002, Figure 5, the major part of Rajasthan lies in Zone – II and Western parts of the districts of Barmer and Sirohi as well as northern sections of Alwar district lie in Zone IV, where the maximum intensity could reach VIII (MSK). The remaining areas of Barmer and Sirohi districts, as well as the districts of Bikaner, Jaisalmer and Sirohi lie in Zone III. The north-eastern districts of Jhunjhunu, Sikar, Bharatpur and the rest of Alwar also lie in Zone III. The rest of the state, including the capital,



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Jaipur, lie in Zone II, where the maximum intensity expected would be around MSK VI, as is evident from the Seismic Zone Map of Rajasthan shows that some portion of district Barmer, Jalore, Alwar and Bharatpur lie under Zone – IV.

MAP OF SEISMIC ZONES OF INDIA & RAJASTHAN

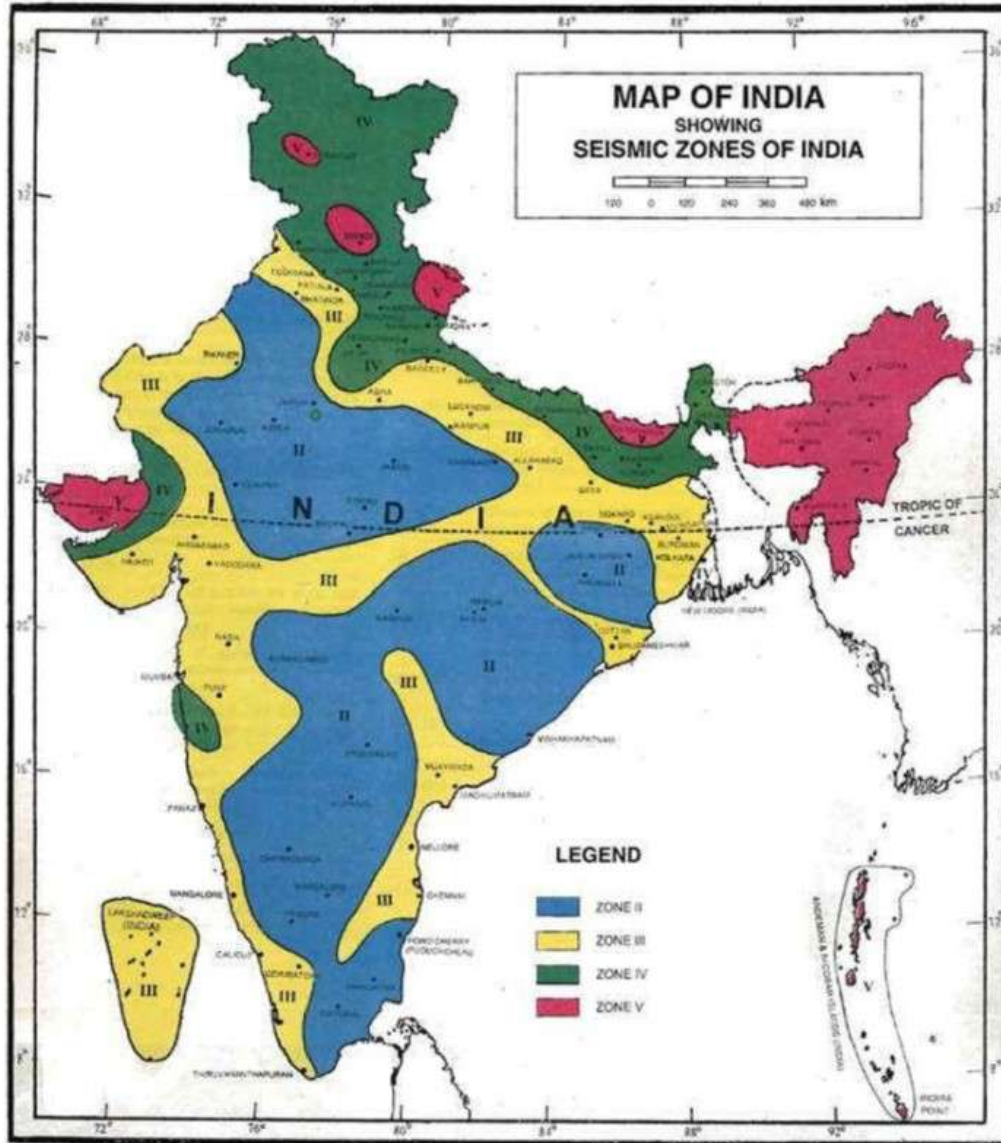


Fig.5:Map Showing Seismic zones of India & Rajasthan



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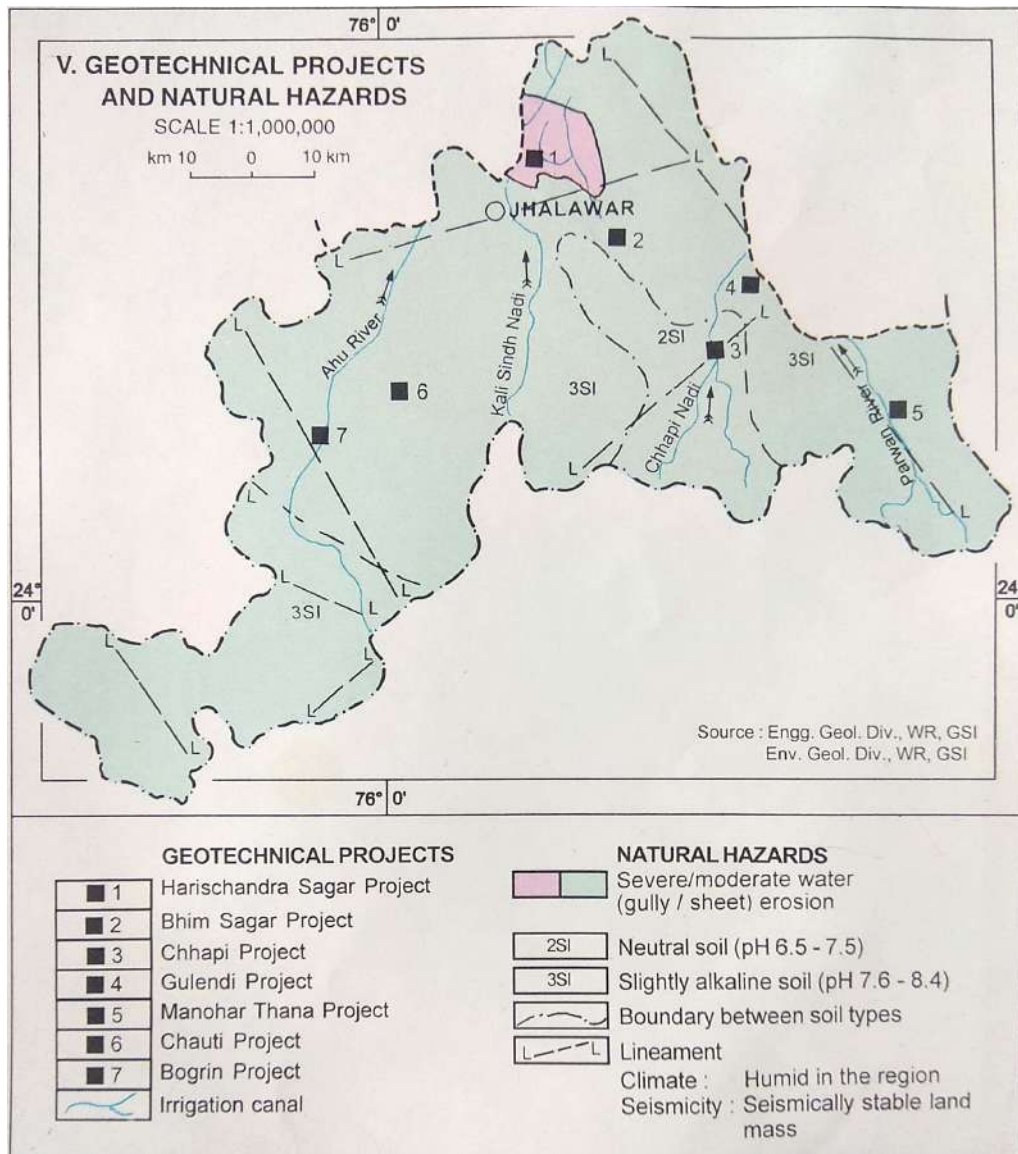


Fig.6: Map showing Geotechnical Projects and Natural Hazards



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2. OVER VIEW OF MINING ACTIVITY IN THE DISTRICT:-

Most of the part of Jhalawar district is occupied by rocks of Vindhyan Super Group with the availability of mineral sandstone, limestone, bentonite and flaggy limestone.

The sandstone of the district is known for its durability and acid proof nature with attractive red and white colors and due to susceptibility to carving and polishing it is mined out with large no of mines in the district but the main deposits and leases are falls under forest land are not in force today.

The flaggy limestone belonging to Suket shale of Lower Vindhyan is famous with the popular trade name as "Kota Stone" are mined out in tehsil Pachpahar and Pirawa

The fractured sandstone and unsplitable sand stone are produced for masonry stone purposed in the district.

The Lithomargic clays associated with laterite cappings are found near Sarod, Dag, Gunavi etc. villages

Departmental Administration

Department:- Mines & Geology Department Govt. of Rajasthan

Directorate:- Director, Mines & Geology Department Udaipur (Raj.)

Mining Administration

Zone:- Additional Director (Mines), Mines & Geology Department Kota

Circle:- Supt. Mining Engineer, Mines & Geology Department Kota (Raj.)

Division:- Mining Engineer, Mines & Geology Department Ramganjmandi (Raj.)

Sub Division:- Assistant Mining Engineer, Mines & Geology Department Jhalawar (Raj.)

Geological Administration

Zone:- Additional Director (Geology), Mines & Geology Department Kota

Circle:- Supt. Geologist, Mines & Geology Department Kota (Raj.)

Division:- Sr.Geologist, Mines & Geology Department Kota (Raj.)



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

List of mining lease in Bajri

S.No.	Lease No.	Lease Name	Address	Mineral Name	Near Village	Tehsil	District	Lease Period
1	34/2012	Shri Inderjeet Singh Jhala S/o Arjun Singh Jhala	C-3 Kanchan city, Jhalawar	Bajri	Gangdhar	Gangdhar	Jhalawar	19.12.2013 to 18.12.2018

List of LOI in Bajari

S.No.	Lease No.	Lease Name	Address	Mineral Name	Near Village	Tehsil	District	LOI Date
1	33/2012	Shri Inderjeet Singh Jhala S/o Arjun Singh Jhala	C-3 Kanchan city, Jhalawar	Bajri	Jhalrapatan & Ramganjmandi	Jhalrapatan & Ramganjmandi	Jhalawar & Kota	19.12.2013
2	22/2013	Shri Mukesh Sharma S/o Suresh Chand Sharma	Plot No. 7 Anand Puri Colony, Kalwar Road Jhotwara, Jaipur	Bajri	Pirawa	Pirawa	Jhalawar	25.09.2013



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4. DETAILS OF ROYALTY AND REVENUE RECEIVED IN LAST THREE YEARS:-

There was no sand/bajri mining lease under operation for last three years in the district. Hence the revenue and production of sand/bajri for three years is given below:

Year	Revenue from bajri/sand (Rs.)	Production (Tones)
2018-19	0	0
2019-20	0	0
2020-21	0	0

5. DETAILS OF PRODUCTION OF SAND OR BAJARI OR MINOR MINERALS IN LAST THREE YEARS:-

Table –No. of Minor Mineral Bajari Leases with Area, Production, Sale Value, Revenue and Employment in District (Year 2018-19)

S.No.	Mineral	Leases	Area	Production	Sale value	Revenue	Employment
			(Hect.)	(Tons)	(Lac Rs)	(Lac Rs)	(Nos)
1	Nil						

Table –No. of Minor Mineral Bajari Leases with Area, Production, Sale Value, Revenue and Employment in District (Year 2019-20)

S.No.	Mineral	Leases	Area	Production	Sale value	Revenue	Employment
			(Hect.)	(Tons)	(Lac Rs)	(Lac Rs)	(Nos)
1	Nil						

Table –No. of Minor Mineral Bajari Leases with Area, Production, Sale Value, Revenue and Employment in District (Year 2020-21)

S.No.	Mineral	Leases	Area	Production	Sale value	Revenue	Employment
			(Hect.)	(Tons)	(Lac Rs)	(Lac Rs)	(Nos)
1	Nil						



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

The loose boundary (consisting of movable material) of an alluvial channel deforms under the action of flowing water and the deformed bed with its changing roughness (bed forms) interacts with the flow. The resulting movement of the bed material (sediment) in the direction of flow is called sediment transport and a critical bed shear stress must be exceeded to start the particle movement. Such a critical shear stress is referred as incipient (threshold) motion condition, below which the particles will be at rest and the flow is similar to that on a rigid boundary. Some sediment particles roll or slide along the bed intermittently and some others saltate (hopping or bouncing along the bed). The material transported in one or both of these modes is called 'bed load'. Finer particles (with low fall velocities) are entrained in suspension by the fluid turbulence and transported along the channel in suspension. This mode of transport is called 'suspended load'. Sometimes finer particles from upland catchment (sizes which are not present in the bed material), called 'wash load', are also transported in suspension. The combined bed material and wash load is called 'total load'.

There is a large amount of uncertainty in the process of calculating annual rates of bed load transport. How much coarse material is moved, how long it remains in motion as also how far it moves depends on the size, shape & packing of the material and the characteristics of the river flow.

It has been reported that in past, when sand/bajri mining was permissible in Jhalawar district, during monsoon season the pits formed by the excavation of sand/bajari in rivers gets filled up by sediments and as such the excavated area gets replenished with new harvest of mineral sand.

6.1 DISTRICT WISE DETAILS OF RIVER OR STREAM AND OTHER SAND SOURCE:-

District wise details of river:

The main rivers flowing in Jhalawar district are Kalisindh, Parwan, Ahu, Chhoti Kalisindh, Ujad, Kalikhar, Rewa, Kyasari, Dharganga, Chhapi and Chanwli. The water storage capacity and flow capacity of all the rivers is good. Large area of water storage area of most of the rivers is located in Madhya Pradesh.



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क्र.स.	नदी का नाम	लम्बाई(कि०मी०)	जिले में Entrance point
1	कालीसिंध	171	सोयतकलॉ (धनोदा)
2	परवन	161	बोरखेडी (मनोहरथाना)
3	नेवज	33	हनोतिया
4	उजाड	93	बोरदा
5	छोटी कालीसिंध	30	चौमहला (सुनारी)
6	कालीखार	20	धोडा खेडा
7	रेवा	17	बुढनपुर
8	अमझार	3	घाटी
9	क्यासरी	25	क्यासरा (गंगधारी)
10	धारगंगा	36	बालनपुर (म.प्र.सीमा)
11	छापी (अरनिया)	43	खेरखेडी (म.प्र.सीमा)
12	चंवली	32	पांचपछवा (तह.पिडावा)
13	आहू	106	हरनावदा (तह.पिडावा)
14	गुलेण्डी	16	मदनपुरा

Available Water :-

On the basis of 30 years average rainfall in Jhalawar district, annual surface water is 1626.73 million cubic meters and the average rainfall of the district is 900 mm.

The rivers of Jhalawar may be divided in to two groups: the western group and eastern group. The western rivers are Ahu, Piplaj, Kyasri, Kantli, Rawa, Kalisindh and Chandrabhaga. The eastern rivers are Parwan, Andheri, Newaj, Ghar and Ujar.

Generally rivers have deep bed with the result the water level is below that of the surrounding



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area. The Rivers include the famous rivers of Kali Sindh, Parvati, Choti Kali Sindh and Niwaz. Among these Rivers of Jhalawar, the most important ones are the Kalisindh River and the Parwati River. The point of origin of the Kali Sindh River is the northern slopes of the hills of Vindhya. The Kali Sindh rivers a large stretch of land in the state of Madhya Pradesh before it enters the state of Rajasthan in India. The place where one of the famous Jhalawar Rivers, that is, the Kali Sindh River enters Rajasthan is the Soyatkalan (Dhanoda) village. The total distance covered by the Kali Sindh River in district is 171 kilometers. The Kali Sindh River later merges into the Chambal River, which is located in the Kota district of the Nonera village.

The Jhalawar Rivers which are the tributaries of the Kali Sindh River include the Amjhar, Ahu and the Parwan .

Drainage system with description of main rivers:-

Drainage system with description of main rivers			
S. No.	Name of River	Area Drained (sq km)	% Area Drained
1	Parvan River	3.978	0.138
2	Ainar River	0.6656	
3	Ghar Ganga River	1.8104	
4	Chhapi River	19.652	
5	Kali Sindh River	15.7664	0.033
6	Ahu River	17.0016	1.474
7	Gulendi River	0.498	
8	Choti Kali Sindh River	3.484	0.427
9	Chambal River	2.66	0.002



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Salient Features of Important Rivers and Streams

S. No.	Name or River	Total Distance in the district (in km)	Place of Origin	Altitude at Origin
1	Parvan River	161	Borekhedi (Manoharthana)	319
2	Dhar Ganga River	36	Balanpur (M.P. Border)	343
3	Chhapi River	43	Kherkhedi (M.P. Border)	357
4	Kali Sindh River	171	SoyatKalan (Dhnoda)	338
5	Ahu River	106	Harnawda (tehsil Pirawa)	436
6	Gulendi River	16	Madanpura	381
7	Choti Kali Sindh River	30	Choumhla (Sunari)	428
8	Uzad	93	Borda	341
9	Kyasari	25	Kyasra (Gangdhar)	420
10	Rewa	17	Budhanpur	
11	Newaj	33	Hanotiya	
12	Kalikhar	20	Dhoda Kheda	
13	Amjhar	3	Ghati	
14	Chanwali	32	Panchpachwa(tehsil Pirawa)	
15	Shipra	22	Unhel	420



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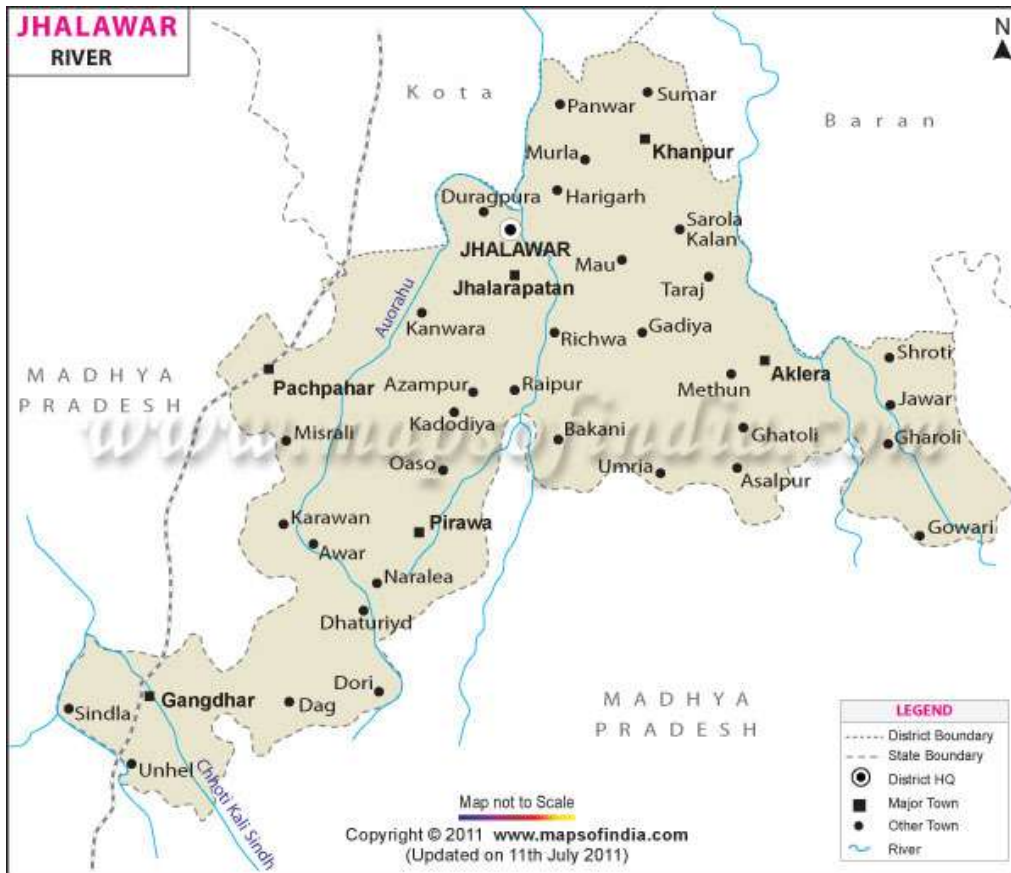


Fig.7: Map showing River of the District

6.2 DISTRICT WISE AVAILABILITY OF SAND AND GRAVELS OR AGGREGATE RESOURCES:-

For the calculation of total reserves of sand available in the river bed, length, average width and depth of the river bed for which the exploitation is to be carried out /allowed under rule / prevailing instructions of the Govt. was taken into consideration. The volume thus obtained is multiplied with the bulk density which has been assumed as 2.25. Reserves up to particular datum line i.e 1.5 meter below the surface have been calculated.

- Total reserves of Minor Minerals (Ton) = Length x Width x Height i.e Depth x Density.
- Total Sand Reserved = Area X Depth X 2.25 (Bulk density of sand/gravel. Boulder)



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Sr. No.	Portion of the recommended area for mineral concession	Length of the recommended area for mineral concession (in m.)	Average width of the recommended area for mineral concession (In mt.)	Area recommended for mineral concession (in Sq. Mtr.)	Mineable mineral Potential (in metric tonne) (60% of total mineral Potential)
1.	Parvan River & Its nalas/River	161000	206	33166000	67161150
2.	Kali Sindh River & Its nalas/River	171000	225	38475000	77911875
3.	Ahu River & Its Nalas	106000	151	16006000	32412150
4.	Shipra River	22000	146	3212000	6504300
5.	Choti Kalisindh River	30000	105	3150000	6378750

Resources calculated of bajri in Rivers(Parvan, Kali Sindh, Ahu And Shipra)and its nallah section assuming the 1.5 m. Depth.

District's built irrigation project:

क्रं.	विवरण	भराव क्षमता (मि.घन.मी.)	सृजित सिंचाई क्षमता(हे०)
1	मध्यम सिंचाई परियोजना		
	भीमसागर	76.55	9986.00
	छापी	82.57	9375
	चंवली	53.50	7794.00
	पिपलाद	24.14	4688.00
	गागरीन	52.60	9999
	राजगढ	58.29	6827
	योग	347.65	48669
2	लघु सिंचाई परियोजना		
	गुराडिया	4.493	1704
	रोशनबाडी	9.80	2860



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रेवा	12	1811
कनवाडा	9.47	1949
भीमनी	12.11	1948
घाटी	0.74	276
सारनखेडी	6.23	1377
मुण्डलियाखेडी	4.42	591
बोरदा	2.58	414
माथनिया	1.76	333
सारौला	4.70	928
गणेशपुरा	3.85	585
कंवरपुरा	1.63	302
राजपुरा	1.96	310
भीमली पिक अपवियर	0.00	326
कदीला	4.08	344
गोरधनपुरा	2.58	419
मोगरा	3.18	446
जसवन्तपुरा	2.83	375
ठीकरिया	1.91	370
बिनायगा	2.61	440
बिस्तुनिया	1.66	312
पाडलिया	0.61	101
कंवरियाखेडी	0.47	96
तलावडा	0.743	140
गुलेडी	13.372	1950



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	चाइलिया	2.19	408
	कालीखार	14.65	1622
	पृथ्वीपुरा	0.58	110
	योग	127.20	22847

(Source : Water Resource Department, Jhalawar)



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6.3 ANNUAL DEPOSITION OF SAND/SEDIMENTS (REPLENISHMENT) IN CATCHMENT AREA IN JHALAWAR DISTRICT:-

There are large no. of rivers and streams in the district but in most of them the supply of water diminishes rapidly or fails entirely soon after end of the rains. The landscape being undulating and abnormally sloping, the nullas, revaluates and rivers rising from the hillocks and hills send out torrential currents during the rains which generally run to waste cutting deep ravines and gorges in the basin traces. The carrying capacity of the river decreases as a result of which all the load carrying by the river is deposited. This stream has developed a high flood plain near the confluence of river as during flood season the velocity of this stream is checked by the water of river and most of sand sediments load is deposited near the confluence point.

The annual replenishment in the river depends upon the amount of precipitation, velocity of the river, catchment area etc. Annual replenishment is depending upon the period of rainy season and rainfall and surface run off at different places of the flow of river.

6.4 DATA COLLECTION ANALYSIS AND ESTIMATION OF REPLENISHMENT:-

Preliminary study with field data collection was done. During the field visit, the installation of marked observation rods was undertaken in every Block (Stretch) in the Pre -Monsoon period. While installing the marked observation rods, it was also kept in mind that depends on the intensity of the rainfall and duration. The replenishment study is carried out in the Blocks (stretch) with the instrument GNSS Model Spectra Precision 60. The study is carried out in the Block(stretch) with GNSS instrument by taking about 500 m interval is taken along length of the river and about 25m interval is taken across to the width of river in the Blocks.

The pre monsoon replenishment survey report was carried out by AME office Jhalawar are given below:-



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Table: Description of the blocks (Stretch) where replenishment study was carried out in Pre-Monsoon season.

Sr. no.	Block (Stretch)	Name of the River	Tehsil/District	Area of the Block(Hect.)	Date of Survey
1.	Stretch-1	Shipra River	Gangdhar/Jhalawar	276.937	22.06.2020- 11.07.2020
2.	Stretch-2	Shipra River	Gangdhar/Jhalawar	342.832	22.06.2020- 11.07.2020
3.	Stretch-3	Chhoti Kali Sindh River	Gangdhar/Jhalawar	408.554	22.06.2020- 11.07.2020
4.	Stretch-4	Chhoti Kali Sindh River	Gangdhar/Jhalawar	404.421	22.06.2020- 11.07.2020
5.	Stretch-5	Ahu River	Jhalrapatan and Pachpahar/ Jhalawar	690.560	22.06.2020- 11.07.2020
6.	Stretch-6	Kali Sindh River	Gangdhar/Jhalawar	1143.332	22.06.2020- 11.07.2020

The details of the replenishment study carried out on the Shipra, Chhoti Kali Sindh , Kali Sindh & Ahu Rivers in Pre-Monsoon season are given below:



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GOVERNMENT OF RAJASTHAN
OFFICE OF THE ASSISTANT MINING ENGINEER, MINES & GEOLOGY
DEPARTMENT
ROOM NO 156, MINI SACHIVALYA, JHALAWAR (RAJ.)

FIELD BOOK
REPLENISHMENT STUDY
BLOCK (STRETCH)-1

1. Name of River :- Shipra Teh. Gangdhar District-Jhalawar
2. Date of Survey:- 22.06.2020 To 11.07.2020
3. Surveyed And Report prepared By :-(i) P. L. Saroya, Mines Forman Gr-I
(ii) Kalu Ram Jat, Mines Forman Gr-II
4. Detail of Instruments use in Survey:
 - A- Name of Instrument :- GNSS
 - B- Model of instruments :-Spectra Precision 60
5. Surveying Setting in Instruments:-
 - A- Azimuth type :- North Azimuth
 - B- Grid direction :- North and East
 - C- Region :- UTM
 - D- Zone :- 43 North
 - E- Datum :- WGS 84
6. Area:- 276.937 Hectors
7. Details of Intervening points of survey including type of data collected:-

PRE-MONSOON DATA

SECTION 0-0						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 52' 24.70136"	75° 32' 22.61619"	2640329.1673	554938.9374	408.829	POINT A
2	23° 52' 23.89690"	75° 32' 22.48921"	2640304.4131	554935.4406	408.258	POINT B
3	23° 52' 23.17590"	75° 32' 22.00665"	2640282.1874	554921.8777	408.054	POINT C
4	23° 52' 22.42008"	75° 32' 21.78027"	2640258.9182	554915.5637	408.022	POINT D
SECTION 1-1						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 52' 30.46847"	75° 32' 6.08649"	2640504.7563	554470.7831	408.329	POINT A
2	23° 52' 40.06891"	75° 32' 6.00230"	2640800.0020	554467.2862	407.746	POINT B
3	23° 52' 28.94300"	75° 32' 5.47700"	2640457.7763	554453.7233	407.534	POINT C
4	23° 52' 28.29342"	75° 32' 5.28959"	2640437.7790	554448.4986	407.522	POINT D
SECTION 2-2						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 52' 36.34893"	75° 31' 49.60389"	2640683.8512	554003.9594	407.823	POINT A

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2

2	23° 52' 35.57407"	75° 31' 49.33666"	2640659.9925	553996.4913	407.243	POINT B
3	23° 52' 34.94491"	75° 31' 49.01308"	2640640.6089	553987.4127	407.032	POINT C
4	23° 52' 34.56000"	75° 31' 48.85112"	2640628.7542	553982.8765	407.022	POINT D

SECTION 3- 3

Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 52' 47.96776"	75° 31' 38.85179"	2641040.0433	553698.5505	407.320	POINT A
2	23° 52' 47.40676"	75° 31' 38.22261"	2641022.7240	553680.8216	406.743	POINT B
3	23° 52' 46.98308"	75° 31' 37.44526"	2641009.6121	553658.8867	406.530	POINT C
4	23° 52' 46.62695"	75° 31' 37.00292"	2640998.6130	553646.4179	406.520	POINT D

SECTION 4- 4

Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 53' 00.00296"	75° 31' 26.95316"	2641408.9269	553360.6862	406.825	POINT A
2	23° 52' 59.44634"	75° 31' 26.30889"	2641391.7410	553342.5300	406.239	POINT B
3	23° 52' 58.83978"	75° 31' 25.34999"	2641372.9863	553315.4820	406.023	POINT C

SECTION 5- 5

Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 53' 10.18337"	75° 31' 11.84743"	2641720.4421	552932.3565	406.325	POINT A
2	23° 53' 9.43922"	75° 31' 11.49164"	2641697.5194	552922.3792	405.769	POINT B
3	23° 53' 8.74949"	75° 31' 11.01462"	2641676.2576	552908.9677	405.513	POINT C
4	23° 53' 7.97424"	75° 31' 10.73420"	2641652.3862	552901.1253	405.460	POINT D
5	23° 53' 7.33156"	75° 31' 10.25675"	2641632.5714	552887.6962	405.430	POINT E

SECTION 6- 6

Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 53' 14.02919"	75° 30' 54.66811"	2641836.9402	552446.1177	405.805	POINT A
2	23° 53' 13.29192"	75° 30' 54.32315"	2641814.2307	552436.4453	405.279	POINT B
3	23° 53' 12.59884"	75° 30' 53.79352"	2641792.8608	552421.5459	405.011	POINT C
4	23° 53' 11.78937"	75° 30' 53.59087"	2641767.9453	552415.9057	404.930	POINT D
5	23° 53' 10.84459"	75° 30' 52.99460"	2641738.8282	552399.1497	404.930	POINT E

SECTION 7- 7

Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 53' 15.34867"	75° 30' 35.91819"	2641875.5991	551915.7536	405.305	POINT A
2	23° 53' 14.53764"	75° 30' 35.97578"	2641850.6622	551917.4720	405.010	POINT B
3	23° 53' 13.72659"	75° 30' 35.79794"	2641825.7009	551912.5328	404.815	POINT C
4	23° 53' 12.91021"	75° 30' 35.94816"	2641800.6090	551916.8713	404.530	POINT D
5	23° 53' 12.37802"	75° 30' 35.87853"	2641784.2348	551914.9614	404.430	POINT E

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3

GOVERNMENT OF RAJASTHAN
OFFICE OF THE ASSISTANT MINING ENGINEER, MINES & GEOLOGY
DEPARTMENT
ROOM NO 156, MINI SACHIVALYA, JHALAWAR (RAJ.)

FIELD BOOK
REPLENISHMENT STUDY
BLOCK (STRETCH)-2

1. Name of River :- Shipra Teh. Gangdhar District-Jhalawar
2. Date of Survey:- 22.06.2020 To 11.07.2020
3. Surveyed And Report prepared By :-(i) P. L. Saroya, Mines Forman Gr-I
(ii) Kalu Ram Jat, Mines Forman Gr-II
4. Detail of Instruments use in Survey:
C- Name of Instrument :- GNSS
D- Model of instruments :-Spectra Precision 60
5. Surveying Setting in Instruments:-
F- Azimuth type :- North Azimuth
G- Grid direction :- North and East
H- Region :- UTM
I- Zone :- 43 North
J- Datum :- WGS 84
6. Area:- 342.832 Hectors
7. Details of Intervening points of survey including type of data collected:-

PRE-MONSOON DATA

SECTION 8-8						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 50' 09.01023"	75° 34' 48.80928"	2636172.4277	559090.5938	410.858	POINT A
2	23° 50' 08.99147"	75° 34' 47.92582"	2636171.7483	559065.6031	410.270	POINT B
3	23° 50' 08.99489"	75° 34' 47.04196"	2636171.7512	559040.5984	410.059	POINT C
4	23° 50' 09.04436"	75° 34' 45.96441"	2636173.1480	559010.1086	410.032	POINT D
SECTION 9-9						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 52.69709"	75° 34' 44.16522"	2635670.1918	558961.2626	411.364	POINT A
2	23° 49' 52.87261"	75° 34' 43.29875"	2635675.4900	558936.7275	410.780	POINT B
3	23° 49' 53.14366"	75° 34' 42.48000"	2635683.7312	558913.5305	410.573	POINT C
4	23° 49' 53.18992"	75° 34' 42.05205"	2635685.1047	558901.4178	410.536	POINT D
SECTION 10-10						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 39.44833"	75° 34' 30.94074"	2635261.2139	558588.7849	411.882	POINT A

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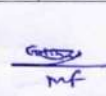
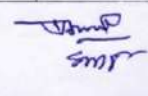


DISTRICT SURVEY REPORT, JHALAWAR

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2	23° 49' 40.22005"	75° 34' 30.66309"	2635284.9157	558580.8335	411.369	POINT B
3	23° 49' 40.86902"	75° 34' 30.08148"	2635304.8075	558564.2982	411.094	POINT C
4	23° 49' 41.29881"	75° 34' 29.99998"	2635318.0161	558561.9388	411.042	POINT D
SECTION 11-11						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 46.28912"	75° 34' 11.46456"	2635469.3724	558036.9285	412.391	POINT A
2	23° 49' 46.72477"	75° 34' 12.21060"	2635482.8554	558057.9810	411.872	POINT B
3	23° 49' 47.33824"	75° 34' 12.81466"	2635501.7909	558074.9947	411.586	POINT C
4	23° 49' 48.00840"	75° 34' 13.90206"	2635522.5249	558105.6755	411.539	POINT D
SECTION 12-12						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 54.31512"	75° 33' 58.72195"	2635714.7615	557675.4402	412.843	POINT A
2	23° 49' 55.12975"	75° 33' 58.72778"	2635739.8154	557675.5050	412.387	POINT B
3	23° 49' 55.91875"	75° 33' 59.02741"	2635764.1144	557683.8849	412.073	POINT C
4	23° 49' 56.64397"	75° 33' 58.92882"	2635786.4070	557681.0067	412.042	POINT D
SECTION 13-13						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 51.51110"	75° 33' 43.11826"	2635626.7698	557234.3439	413.331	POINT A
2	23° 49' 52.11884"	75° 33' 42.51254"	2635645.3925	557217.1336	412.857	POINT B
3	23° 49' 52.91852"	75° 33' 42.23356"	2635669.9548	557209.1437	412.526	POINT C
4	23° 49' 53.52883"	75° 33' 41.58490"	2635688.6517	557190.7184	412.537	POINT D
SECTION 14-14						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 39.07721"	75° 33' 34.98295"	2635243.4654	557005.6989	413.821	POINT A
2	23° 49' 39.17095"	75° 33' 34.10519"	2635246.2503	556980.8545	413.327	POINT B
3	23° 49' 39.28165"	75° 33' 33.06851"	2635249.5394	556951.5118	413.031	POINT C
SECTION 15-15						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 22.99661"	75° 33' 34.91990"	2634748.9131	557005.8667	414.362	POINT A
2	23° 49' 23.08216"	75° 33' 34.04119"	2634751.4461	556980.9954	413.832	POINT B
3	23° 49' 23.02384"	75° 33' 33.09841"	2634749.5473	556954.3289	413.528	POINT C
SECTION 16-16						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 49' 06.78937"	75° 33' 35.56793"	2634250.5456	557026.1684	414.847	POINT A
2	23° 49' 06.84064"	75° 33' 34.68599"	2634252.0239	557001.2089	414.347	POINT B
3	23° 49' 06.72632"	75° 33' 34.05353"	2634248.4376	556983.3283	414.035	POINT C
SECTION 17-17						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 48' 53.65347"	75° 33' 43.55447"	2633847.4560	557253.7358	415.325	POINT A
2	23° 48' 53.06801"	75° 33' 42.97506"	2633829.3857	557237.4131	414.836	POINT B
3	23° 48' 52.63284"	75° 33' 42.17169"	2633815.9124	557214.7352	414.542	POINT C
4	23° 48' 52.16923"	75° 33' 41.81338"	2633801.6142	557204.6535	414.221	POINT D
SECTION 18-18						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation	Description



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					(mRL) In mts.	
1	23° 48' 41.08215"	75° 33' 55.49772"	2633462.1785	557593.2019	415.833	POINT A
2	23° 48' 40.57648"	75° 33' 54.80133"	2633446.5484	557573.5593	415.329	POINT B
3	23° 48' 40.28025"	75° 33' 53.95808"	2633437.3433	557549.7357	415.058	POINT C
4	23° 48' 39.64583"	75° 33' 53.04638"	2633417.7295	557524.0168	414.634	POINT D

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

GOVERNMENT OF RAJASTHAN
OFFICE OF THE ASSISTANT MINING ENGINEER, MINES & GEOLOGY
DEPARTMENT
ROOM NO 156, MINI SACHIVALYA, JHALAWAR (RAJ.)

FIELD BOOK
REPLENISHMENT STUDY
BLOCK (STRETCH)-3

1. Name of River :- Chhoti Kali Sindh, Teh. Gangdhar, District-Jhalawar
2. Date of Survey:- 22.06.2020 To 11.07.2020
3. Surveyed And Report prepared By :-(i) P. L. Saroya, Mines Forman Gr-I
(ii) Kalu Ram Jat, Mines Forman Gr-II
4. Detail of Instruments use in Survey:
 - E- Name of Instrument :- GNSS
 - F- Model of instruments :-Spectra Precision 60
5. Surveying Setting in Instruments:-
 - K- Azimuth type :- North Azimuth
 - L- Grid direction :- North and East
 - M- Region :- UTM
 - N- Zone :- 43 North
 - O- Datum :- WGS 84
6. Area:- 408.554 Hectors
7. Details of Intervening points of survey including type of data collected:-

PRE-MONSOON DATA

SECTION 19- 19						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 57' 49.69976"	75° 36' 28.59290"	2650352.5949	561852.5469	406.845	POINT A
2	23° 57' 49.21096"	75° 36' 27.88612"	2650337.4760	561832.6367	406.629	POINT B
3	23° 57' 48.87768"	75° 36' 27.06661"	2650327.1261	561809.5197	406.384	POINT C
4	23° 57' 48.32076"	75° 36' 26.40424"	2650309.9175	561790.8733	406.197	POINT D
5	23° 57' 47.89200"	75° 36' 25.65190"	2650296.6395	561769.6676	405.985	POINT E
6	23° 57' 47.44792"	75° 36' 24.91094"	2650282.8919	561748.7852	405.845	POINT F
7	23° 57' 47.01887"	75° 36' 24.15921"	2650269.6049	561727.5963	405.635	POINT G
8	23° 57' 46.65053"	75° 36' 23.36507"	2650258.1803	561705.2008	405.839	POINT H
9	23° 57' 46.04835"	75° 36' 22.73723"	2650239.5840	561687.5362	405.978	POINT I
10	23° 57' 45.66637"	75° 36' 21.95102"	2650227.7407	561665.3668	406.367	POINT J
11	23° 57' 45.34370"	75° 36' 21.12459"	2650217.7169	561642.0525	406.678	POINT K
12	23° 57' 45.00117"	75° 36' 20.53734"	2650207.1110	561625.5007	406.932	POINT L
SECTION 20- 20						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 57' 35.73802"	75° 36' 37.07865"	2649924.2387	562094.2291	407.329	POINT A

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2	23° 57' 35.18492"	75° 36' 36.43047"	2649907.1490	562075.9833	406.769	POINT B
3	23° 57' 34.78762"	75° 36' 35.64338"	2649894.8338	562053.7905	406.543	POINT C
4	23° 57' 34.18241"	75° 36' 35.03509"	2649876.1464	562036.6789	406.321	POINT D
5	23° 57' 33.75888"	75° 36' 34.27146"	2649863.0277	562015.1527	406.564	POINT E
6	23° 57' 33.19478"	75° 36' 33.68712"	2649845.6073	561998.7126	407.812	POINT F
7	23° 57' 32.78766"	75° 36' 33.27876"	2649833.0366	561987.2251	407.829	POINT G
SECTION 21- 21						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 57' 24.17741"	75° 36' 49.44716"	2649570.2098	562445.3458	407.832	POINT A
2	23° 57' 23.62432"	75° 36' 48.79896"	2649553.1201	562427.0992	407.283	POINT B
3	23° 57' 23.24802"	75° 36' 48.01197"	2649541.4502	562404.9064	407.054	POINT C
4	23° 57' 22.62184"	75° 36' 47.40358"	2649522.1175	562387.7948	406.810	POINT D
5	23° 57' 22.19833"	75° 36' 46.63996"	2649508.9988	562366.2686	407.078	POINT E
6	23° 57' 21.56921"	75° 36' 46.05532"	2649489.5783	562349.8285	408.341	POINT F
7	23° 57' 21.38042"	75° 36' 45.69677"	2649483.7282	562339.7198	408.662	POINT G
SECTION 22- 22						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 57' 10.74425"	75° 37' 00.24052"	2649158.4047	562752.2109	408.417	POINT A
2	23° 57' 10.32760"	75° 36' 59.49619"	2649145.4987	562731.2286	407.643	POINT B
3	23° 57' 10.08075"	75° 36' 58.59471"	2649137.7957	562705.7820	407.279	POINT C
4	23° 57' 9.51544"	75° 36' 57.96505"	2649120.3320	562688.0609	407.534	POINT D
5	23° 57' 9.36198"	75° 36' 57.03775"	2649115.4980	562661.8718	407.589	POINT E
6	23° 56' 36.49828"	75° 36' 56.41554"	2648104.7029	562648.6940	409.101	POINT F
SECTION 23- 23						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 56' 54.28334"	75° 37' 04.97235"	2648652.7365	562888.1704	408.921	POINT A
2	23° 56' 54.27636"	75° 37' 04.10457"	2648652.4147	562863.6431	408.172	POINT B
3	23° 56' 54.05039"	75° 37' 03.24140"	2648645.3582	562839.2756	407.764	POINT C
4	23° 56' 54.14267"	75° 37' 02.30445"	2648648.0804	562812.7799	408.016	POINT D
5	23° 56' 53.83603"	75° 37' 01.44874"	2648638.5439	562788.6341	408.327	POINT E
6	23° 56' 53.84349"	75° 37' 00.36683"	2648638.6398	562758.0523	409.452	POINT F
SECTION 24- 24						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 56' 38.47036"	75° 37' 08.54195"	2648166.8527	562991.1994	409.216	POINT A
2	23° 56' 38.44152"	75° 37' 07.65808"	2648165.8561	562966.2193	408.531	POINT B
3	23° 56' 38.10140"	75° 37' 06.81924"	2648155.2919	562942.5543	408.251	POINT C
4	23° 56' 38.18559"	75° 37' 05.90680"	2648157.7682	562916.7516	408.107	POINT D
5	23° 56' 37.78914"	75° 37' 05.08273"	2648145.4736	562893.5115	408.718	POINT E
6	23° 56' 37.98906"	75° 37' 04.19588"	2648151.5123	562868.4163	409.429	POINT F

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GOVERNMENT OF RAJASTHAN
OFFICE OF THE ASSISTANT MINING ENGINEER, MINES & GEOLOGY
DEPARTMENT
ROOM NO 156, MINI SACHIVALYA, JHALAWAR (RAJ.)

FIELD BOOK
REPLENISHMENT STUDY
BLOCK (STRETCH)-4

1. Name of River :- Chhoti Kali Sindh, Teh. Gangdhar District-Jhalawar
2. Date of Survey:- 22.06.2020 To 11.07.2020
3. Surveyed And Report prepared By :-(i) P. L. Saroya, Mines Forman Gr-I
(ii) Kalu Ram Jat, Mines Forman Gr-II
4. Detail of Instruments use in Survey:
G- Name of Instrument :- GNSS
H- Model of instruments :-Spectra Precision 60
5. Surveying Setting in Instruments:-
P- Azimuth type :- North Azimuth
Q- Grid direction :- North and East
R- Region :- UTM
S- Zone :- 43 North
T- Datum :- WGS 84
6. Area:- 404.421 Hectors
7. Details of Intervening points of survey including type of data collected:-

PRE-MONSOON DATA

SECTION 25- 25						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 58.06183"	75° 38' 08.57754"	2645086.3435	564702.0895	412.424	POINT A
2	23° 54' 58.08239"	75° 38' 07.69358"	2645086.8636	564677.0949	412.213	POINT B
3	23° 54' 57.76729"	75° 38' 06.83832"	2645077.0640	564652.9581	411.947	POINT C
4	23° 54' 57.97186"	75° 38' 05.92662"	2645083.2398	564627.1537	411.631	POINT D
5	23° 54' 57.67679"	75° 38' 05.06546"	2645074.0556	564602.8473	411.864	POINT E
6	23° 54' 57.89606"	75° 38' 04.16002"	2645080.6840	564577.2177	412.321	POINT F
7	23° 54' 57.72012"	75° 38' 03.70757"	2645075.2157	564564.4502	412.631	POINT G
SECTION 26- 26						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 42.34136"	75° 38' 10.59588"	2644603.1206	564761.3294	413.046	POINT A
2	23° 54' 41.99026"	75° 38' 09.79840"	2644592.2209	564738.8306	412.413	POINT B
3	23° 54' 41.94365"	75° 38' 08.88119"	2644590.6708	564712.9042	412.036	POINT C
4	23° 54' 41.47164"	75° 38' 08.11769"	2644576.0571	564691.3826	412.834	POINT D
5	23° 54' 41.35144"	75° 38' 07.28703"	2644572.2548	564667.9136	413.152	POINT E
SECTION 27- 27						

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Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 27.25757"	75° 38' 16.96226"	2644140.0329	564943.4231	413.532	POINT A
2	23° 54' 26.87089"	75° 38' 16.18452"	2644128.0416	564921.4866	412.962	POINT B
3	23° 54' 26.78323"	75° 38' 15.27084"	2644125.2291	564895.6649	413.524	POINT C
4	23° 54' 26.24065"	75° 38' 14.55135"	2644108.4503	564875.3971	413.12	POINT D
5	23° 54' 26.05903"	75° 38' 13.63596"	2644102.7480	564849.5400	413.641	POINT E
SECTION 28- 28						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 12.98980"	75° 38' 25.16031"	2643702.2788	565177.2056	414.024	POINT A
2	23° 54' 12.48066"	75° 38' 24.47107"	2643686.5321	565157.7880	413.562	POINT B
3	23° 54' 12.38916"	75° 38' 23.51712"	2643683.5958	565130.8273	413.234	POINT C
4	23° 54' 11.80302"	75° 38' 22.56518"	2643665.4475	565103.9925	414.102	POINT D
SECTION 29- 29						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 53' 58.86341"	75° 38' 33.75468"	2643268.9273	565422.1884	414.533	POINT A
2	23° 53' 58.30919"	75° 38' 33.10791"	2643251.7992	565403.9777	414.032	POINT B
3	23° 53' 58.12416"	75° 38' 32.17981"	2643245.9894	565377.7604	413.321	POINT C
4	23° 53' 57.57112"	75° 38' 31.50535"	2643228.8944	565358.7663	414.144	POINT D
5	23° 53' 57.18491"	75° 38' 30.83311"	2643216.9302	565339.8120	414.610	POINT E
SECTION 30- 30						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 53' 45.28569"	75° 38' 43.49613"	2642852.6021	565699.5446	415.021	POINT A
2	23° 53' 44.91183"	75° 38' 42.71439"	2642841.0033	565677.4918	414.414	POINT B
3	23° 53' 44.36904"	75° 38' 42.07625"	2642824.2275	565659.5232	414.232	POINT C
4	23° 53' 44.02284"	75° 38' 41.22217"	2642813.4701	565635.4210	415.145	POINT D
SECTION 31- 31						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 15.71100"	75° 38' 31.96322"	2643786.8411	565369.1795	415.024	POINT A
2	23° 54' 15.06857"	75° 38' 31.46720"	2643767.0195	565355.2443	414.612	POINT B
3	23° 54' 14.62335"	75° 38' 31.02569"	2643753.2704	565342.8226	415.093	POINT C
SECTION 32- 32						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 29.44853"	75° 38' 31.47347"	2644209.2730	565353.4129	415.831	POINT A
2	23° 54' 28.68968"	75° 38' 31.72015"	2644185.9665	565360.4938	415.146	POINT B
3	23° 54' 27.86076"	75° 38' 31.72812"	2644160.4743	565360.8350	415.124	POINT C
4	23° 54' 26.75963"	75° 38' 32.10477"	2644126.6576	565371.6384	415.582	POINT D
SECTION 33- 33						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	23° 54' 16.06985"	75° 38' 41.84123"	2643799.1488	565648.4310	416.323	POINT A
2	23° 54' 15.28792"	75° 38' 41.80869"	2643775.0966	565647.6208	415.654	POINT B
3	23° 54' 14.43703"	75° 38' 41.97447"	2643748.9490	565652.4276	415.631	POINT C
4	23° 54' 13.96273"	75° 38' 41.94122"	2643734.3577	565651.5539	416.067	POINT D

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DISTRICT SURVEY REPORT, JHALAWAR

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GOVERNMENT OF RAJASTHAN
OFFICE OF THE ASSISTANT MINING ENGINEER, MINES & GEOLOGY
DEPARTMENT
ROOM NO 156, MINI SACHIVALYA, JHALAWAR (RAJ.)

FIELD BOOK
REPLENISHMENT STUDY
BLOCK (STRETCH)-5

- Name of River :- Ahu Teh. Jhalrapatan & Pachpahar District-Jhalawar
- Date of Survey:- 22.06.2020 To 11.07.2020
- Surveyed And Report prepared By :-(i) P. L. Saroya, Mines Forman Gr-I
(ii) Kalu Ram Jat, Mines Forman Gr-II
- Detail of Instruments use in Survey:
 - I- Name of Instrument :- GNSS
 - J- Model of instruments :-Spectra Precision 60
- Surveying Setting in Instruments:-
 - U- Azimuth type :- North Azimuth
 - V- Grid direction :- North and East
 - W-Region :- UTM
 - X- Zone :- 43 North
 - Y- Datum :- WGS 84
- 6.Area:- 690.560 Hectors.
7. Details of Intervening points of survey including type of data collected:-

PRE-MONSOON DATA

SECTION 34- 34						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 32' 16.17876"	76° 02' 30.23705"	2714172.0051	605514.5728	323.256	POINT A
2	24° 32' 15.74012"	76° 02' 30.98501"	2714158.6716	605535.7203	322.756	POINT B
3	24° 32' 15.07324"	76° 02' 31.53972"	2714138.2768	605551.4835	322.553	POINT C
4	24° 32' 14.72318"	76° 02' 32.37537"	2714127.6868	605575.0781	322.549	POINT D
5	24° 32' 14.07212"	76° 02' 32.94379"	2714107.7814	605591.2234	322.524	POINT E
6	24° 32' 13.63387"	76° 02' 33.70038"	2714094.4618	605612.6138	322.542	POINT F
7	24° 32' 13.16222"	76° 02' 34.42550"	2714080.1086	605633.1267	322.558	POINT G
8	24° 32' 12.61590"	76° 02' 35.08570"	2714063.4445	605651.8302	322.858	POINT H
9	24° 32' 12.10691"	76° 02' 35.77836"	2714047.9357	605671.4386	323.224	POINT I
10	24° 32' 11.67001"	76° 02' 36.53349"	2714034.6575	605692.7879	323.313	POINT J
11	24° 32' 11.05542"	76° 02' 37.13406"	2714015.8808	605709.8296	323.352	POINT K
12	24° 32' 10.65579"	76° 02' 37.92217"	2714003.7564	605732.0984	323.407	POINT L
13	24° 32' 09.99861"	76° 02' 38.48478"	2713983.6616	605748.0820	323.539	POINT M
14	24° 32' 09.43604"	76° 02' 39.41301"	2713966.5551	605774.3312	323.981	POINT N

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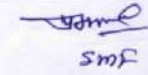


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SECTION 35- 35						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 31' 59.80167"	76° 02' 24.99979"	2713667.1440	605371.0079	323.743	POINT A
2	24° 31' 59.42309"	76° 02' 23.31164"	2713655.1408	605323.5936	323.214	POINT B
3	24° 31' 59.23952"	76° 02' 24.22816"	2713649.6887	605349.4257	323.042	POINT C
4	24° 31' 58.91854"	76° 02' 24.99251"	2713639.9777	605371.0079	323.048	POINT D
5	24° 31' 58.60319"	76° 02' 25.80165"	2713630.4495	605393.8490	323.021	POINT E
6	24° 31' 58.19828"	76° 02' 26.60000"	2713618.1641	605416.4074	323.035	POINT F
7	24° 31' 57.96103"	76° 02' 27.46188"	2713611.0495	605440.7145	323.008	POINT G
8	24° 31' 57.60585"	76° 02' 28.26861"	2713600.2955	605463.4972	323.178	POINT H
9	24° 31' 57.25873"	76° 02' 29.05265"	2713589.7849	605485.6398	323.342	POINT I
10	24° 31' 56.91398"	76° 02' 29.83840"	2713579.3476	605507.8296	323.727	POINT J
11	24° 31' 56.67783"	76° 02' 30.74820"	2713572.2770	605533.4851	323.831	POINT K
12	24° 31' 56.32980"	76° 02' 31.53720"	2713561.7394	605555.7673	323.861	POINT L
13	24° 31' 55.97868"	76° 02' 32.31930"	2713551.1054	605577.8564	323.824	POINT M
14	24° 31' 55.65866"	76° 02' 33.13596"	2713541.4355	605600.9105	323.865	POINT N
15	24° 31' 55.32715"	76° 02' 33.98195"	2713531.4183	605624.7927	323.995	POINT O
SECTION 36- 36						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 31' 43.39211"	76° 02' 20.43247"	2713161.4280	605246.2911	324.253	POINT A
2	24° 31' 43.04618"	76° 02' 21.23639"	2713150.9580	605268.9931	323.527	POINT B
3	24° 31' 42.36408"	76° 02' 21.80879"	2713130.0981	605285.2583	323.513	POINT C
4	24° 31' 42.12641"	76° 02' 22.71045"	2713122.9788	605310.6857	324.321	POINT D
5	24° 31' 41.43435"	76° 02' 23.26945"	2713101.8099	605326.5761	324.329	POINT E
6	24° 31' 41.09224"	76° 02' 23.99257"	2713091.4401	605347.0038	324.421	POINT F
SECTION 37- 37						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 31' 33.01208"	76° 02' 07.38653"	2712839.3864	604881.5804	324.741	POINT A
2	24° 31' 32.44756"	76° 02' 08.02564"	2712822.1571	604899.6953	324.033	POINT B
3	24° 31' 31.71971"	76° 02' 08.46417"	2712799.8616	604912.2036	324.024	POINT C
4	24° 31' 31.23439"	76° 02' 09.21059"	2712785.0911	604933.3202	324.837	POINT D
5	24° 31' 30.50408"	76° 02' 09.64753"	2712762.7193	604945.7843	324.846	POINT E
6	24° 31' 29.92164"	76° 02' 10.33718"	2712744.9497	604965.3259	324.897	POINT F
SECTION 38- 38						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 31' 22.65751"	76° 01' 53.07801"	2712517.8724	604481.3173	325.233	POINT A
2	24° 31' 22.08075"	76° 01' 53.70396"	2712500.2634	604499.0645	324.521	POINT B
3	24° 31' 21.82951"	76° 01' 54.60696"	2712492.7252	604524.5333	324.525	POINT C
4	24° 31' 21.14060"	76° 01' 55.16454"	2712471.6523	604540.3826	324.321	POINT D
5	24° 31' 20.72600"	76° 01' 55.93629"	2712459.0617	604562.1956	324.351	POINT E
6	24° 31' 20.47612"	76° 01' 56.30606"	2712451.4535	604572.6587	325.186	POINT F
SECTION 39- 39						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 31' 08.54772"	76° 01' 43.11049"	2712081.7727	604204.0582	325.723	POINT A
2	24° 31' 08.38998"	76° 01' 43.98194"	2712077.1035	604228.6183	325.033	POINT B



 S.M.F.



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3	24° 31' 07.88140"	76° 01' 44.73104"	2712061.6170	604249.8157	324.838	POINT C
4	24° 31' 07.88133"	76° 01' 45.67405"	2712061.8129	604276.3535	324.844	POINT D
5	24° 31' 07.35007"	76° 01' 49.07702"	2712046.1861	604372.2408	325.679	POINT E
SECTION 40- 40						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 30' 53.01627"	76° 01' 37.52601"	2711602.8672	604050.4561	326.235	POINT A
2	24° 30' 52.85853"	76° 01' 38.39743"	2711598.1979	604075.0162	325.624	POINT B
3	24° 30' 52.34996"	76° 01' 39.14651"	2711582.7115	604096.2136	325.521	POINT C
4	24° 30' 52.34991"	76° 01' 40.08949"	2711582.9074	604122.7513	325.341	POINT D
5	24° 30' 52.09730"	76° 01' 40.89493"	2711575.3062	604145.4764	325.328	POINT E
6	24° 30' 51.96742"	76° 01' 41.37108"	2711571.4109	604158.9062	326.184	POINT F
SECTION 41- 41						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 30' 36.77305"	76° 01' 34.75061"	2711102.6583	603976.0627	326.742	POINT A
2	24° 30' 36.64784"	76° 01' 35.62227"	2711098.9891	604000.6228	326.130	POINT B
3	24° 30' 36.40631"	76° 01' 36.48337"	2711091.7400	604024.9125	326.018	POINT C
4	24° 30' 36.28177"	76° 01' 37.35347"	2711088.0915	604049.4287	325.837	POINT D
5	24° 30' 36.09753"	76° 01' 38.32956"	2711082.6288	604076.9417	326.697	POINT E
SECTION 42- 42						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 30' 21.77724"	76° 01' 28.96670"	2710640.1907	603816.7053	327.232	POINT A
2	24° 30' 21.61953"	76° 01' 29.83806"	2710635.5215	603841.2654	326.642	POINT B
3	24° 30' 21.12456"	76° 01' 30.55944"	2710620.4475	603861.6812	326.523	POINT C
4	24° 30' 20.81885"	76° 01' 31.41312"	2710611.2224	603885.7773	326.321	POINT D
5	24° 30' 20.36181"	76° 01' 32.21111"	2710597.3310	603908.3409	327.148	POINT E
SECTION 43- 43						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 30' 06.66006"	76° 01' 22.37857"	2710173.8247	603634.7293	327.745	POINT A
2	24° 30' 06.50235"	76° 01' 23.24991"	2710169.1554	603659.2894	327.135	POINT B
3	24° 30' 06.00740"	76° 01' 23.97127"	2710154.0815	603679.7052	327.078	POINT C
4	24° 30' 05.70169"	76° 01' 24.82492"	2710144.8563	603703.8013	326.889	POINT D
5	24° 30' 05.51213"	76° 01' 25.26760"	2710139.1179	603716.3039	327.678	POINT E

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GOVERNMENT OF RAJASTHAN
OFFICE OF THE ASSISTANT MINING ENGINEER, MINES & GEOLOGY
DEPARTMENT
ROOM NO 156, MINI SACHIVALYA, JHALAWAR (RAJ.)

FIELD BOOK
REPLENISHMENT STUDY
BLOCK (STRETCH)-6

- Name of River :- Kali Sindh, Teh. Gangdhar District-Jhalawar
- Date of Survey:- 22.06.2020 To 11.07.2020
- Surveyed And Report prepared By :-(i) P. L. Saroya, Mines Forman Gr-I
(ii) Kalu Ram Jat, Mines Forman Gr-II
- Detail of Instruments use in Survey:
K- Name of Instrument :- GNSS
L- Model of instruments :-Spectra Precision 60
- Surveying Setting in Instruments:-
Z- Azimuth type :- North Azimuth
AA- Grid direction :- North and East
BB- Region :- UTM
CC- Zone :- 43 North
DD- Datum :- WGS 84
- Area:- 1143.332 Hectors.
- Details of Intervening points of survey including type of data collected:-

PRE-MONSOON DATA

SECTION 44- 44						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 34' 30.76406"	76° 11' 43.93052"	2718438.2598	621058.4728	292.107	POINT A
2	24° 34' 31.55864"	76° 11' 44.18029"	2718462.7624	621065.2866	291.987	POINT B
3	24° 34' 32.22081"	76° 11' 44.74647"	2718483.2697	621081.0365	291.718	POINT C
4	24° 34' 32.93871"	76° 11' 45.13597"	2718505.4477	621091.8013	291.632	POINT D
5	24° 34' 33.76798"	76° 11' 45.28935"	2718530.9939	621095.8946	291.814	POINT E
6	24° 34' 34.42235"	76° 11' 45.86479"	2718551.2634	621111.9068	292.089	POINT F
7	24° 34' 35.64126"	76° 11' 46.30445"	2718588.8653	621123.9489	292.771	POINT G
SECTION 45- 45						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 34' 23.63288"	76° 11' 59.63659"	2718222.7419	621502.1972	292.689	POINT A
2	24° 34' 24.42746"	76° 11' 59.88638"	2718247.2448	621509.0110	292.389	POINT B
3	24° 34' 25.08961"	76° 12' 00.45257"	2718267.7518	621524.7609	292.242	POINT C
4	24° 34' 25.80750"	76° 12' 00.84209"	2718289.9298	621535.5257	292.311	POINT D
5	24° 34' 26.49167"	76° 12' 01.52117"	2718311.1419	621554.4452	292.521	POINT E
6	24° 34' 27.63945"	76° 12' 02.06068"	2718346.5806	621569.3141	293.231	POINT F

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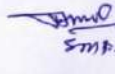


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SECTION 46- 46						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 34' 16.60909"	76° 12' 16.01181"	2718010.7052	621964.7310	293.132	POINT A
2	24° 34' 17.40365"	76° 12' 16.26163"	2718035.2078	621971.5448	293.003	POINT B
3	24° 34' 18.06579"	76° 12' 16.82783"	2718055.7151	621987.2947	292.897	POINT C
4	24° 34' 18.78480"	76° 12' 17.07508"	2718077.8931	621994.0565	292.854	POINT D
5	24° 34' 19.65849"	76° 12' 17.24443"	2718104.8100	621998.5855	292.766	POINT E
6	24° 34' 20.36520"	76° 12' 17.79004"	2718126.6833	622013.7438	292.815	POINT F
7	24° 34' 21.17239"	76° 12' 17.98299"	2718151.5602	622018.9545	292.922	POINT G
8	24° 34' 21.90374"	76° 12' 18.37988"	2718174.1549	622029.9225	293.056	POINT H
9	24° 34' 22.57736"	76° 12' 18.91203"	2718195.0067	622044.7110	293.189	POINT I
10	24° 34' 23.25807"	76° 12' 18.98562"	2718215.9640	622046.5980	293.742	POINT J
SECTION 47- 47						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 34' 13.25748"	76° 12' 35.56712"	2717912.4278	622515.7480	293.611	POINT A
2	24° 34' 13.94478"	76° 12' 35.79425"	2717933.6257	622521.9519	293.510	POINT B
3	24° 34' 14.74331"	76° 12' 35.88175"	2717958.2105	622524.1976	293.388	POINT C
4	24° 34' 15.56025"	76° 12' 35.91521"	2717983.3485	622524.9183	293.358	POINT D
5	24° 34' 16.32219"	76° 12' 36.30701"	2718006.8830	622535.7340	293.332	POINT E
6	24° 34' 17.12526"	76° 12' 36.45139"	2718031.6219	622539.5788	293.302	POINT F
7	24° 34' 17.94777"	76° 12' 36.48064"	2718056.9301	622540.1792	293.413	POINT G
8	24° 34' 18.71844"	76° 12' 36.80378"	2718080.7161	622549.0613	293.571	POINT H
9	24° 34' 19.54124"	76° 12' 36.83331"	2718106.0335	622549.6695	293.613	POINT I
10	24° 34' 20.35648"	76° 12' 37.07039"	2718131.1695	622556.1185	294.202	POINT J
SECTION 48- 48						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 34' 10.02945"	76° 12' 52.15757"	2717817.2374	622983.3346	294.122	POINT A
2	24° 34' 10.81240"	76° 12' 52.39577"	2717841.3807	622989.8232	293.418	POINT B
3	24° 34' 11.42728"	76° 12' 53.06452"	2717860.4606	623008.4694	293.332	POINT C
4	24° 34' 12.24824"	76° 12' 53.26256"	2717885.7631	623013.8178	293.302	POINT D
5	24° 34' 12.90660"	76° 12' 53.81211"	2717906.1511	623029.0988	293.007	POINT E
6	24° 34' 13.71156"	76° 12' 54.03687"	2717930.9681	623035.2031	293.813	POINT F
7	24° 34' 14.29009"	76° 12' 54.48098"	2717948.8741	623047.5397	294.202	POINT G
SECTION 49-49						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 34' 01.75556"	76° 13' 07.48513"	2717566.5339	623416.7735	294.618	POINT A
2	24° 34' 02.53850"	76° 13' 07.72335"	2717590.6772	623423.2621	294.317	POINT B
3	24° 34' 03.15336"	76° 13' 08.39210"	2717609.7571	623441.9083	293.924	POINT C
4	24° 34' 03.97432"	76° 13' 08.59016"	2717635.0596	623447.2567	293.612	POINT D
5	24° 34' 04.63266"	76° 13' 09.13972"	2717655.4475	623462.5377	293.817	POINT E
6	24° 34' 05.43761"	76° 13' 09.36450"	2717680.2645	623468.6420	293.502	POINT F
7	24° 34' 06.08180"	76° 13' 09.94490"	2717700.2245	623484.7942	294.312	POINT G
8	24° 34' 06.85693"	76° 13' 10.23814"	2717724.1411	623492.8325	294.477	POINT H
9	24° 34' 07.47598"	76° 13' 10.63939"	2717743.2836	623503.9519	294.762	POINT I



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
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SECTION 50-50						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 33' 55.19340"	76° 13' 22.75979"	2717368.4842	623848.2733	295.109	POINT A
2	24° 33' 55.85817"	76° 13' 23.24241"	2717389.0535	623861.6690	294.822	POINT B
3	24° 33' 56.33136"	76° 13' 24.03776"	2717403.8081	623883.9151	294.437	POINT C
4	24° 33' 57.05061"	76° 13' 24.46170"	2717426.0385	623895.6451	294.365	POINT D
5	24° 33' 57.54587"	76° 13' 25.18929"	2717441.4549	623915.9785	294.311	POINT E
6	24° 33' 58.20733"	76° 13' 25.73470"	2717461.9382	623931.1414	294.017	POINT F
7	24° 33' 58.89108"	76° 13' 26.21044"	2717483.0897	623944.3385	294.837	POINT G
8	24° 33' 59.39281"	76° 13' 26.93187"	2717498.7037	623964.4968	294.987	POINT H
9	24° 34' 00.08845"	76° 13' 27.51251"	2717520.2472	623980.6414	294.217	POINT I

SECTION 51-51						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 33' 43.57043"	76° 13' 34.04765"	2717013.7746	624169.0102	295.623	POINT A
2	24° 33' 44.10580"	76° 13' 34.71618"	2717030.4104	624187.6716	295.502	POINT B
3	24° 33' 44.62555"	76° 13' 35.39948"	2717046.5693	624206.7529	295.341	POINT C
4	24° 33' 45.06701"	76° 13' 36.15210"	2717060.3374	624227.8056	294.921	POINT D
5	24° 33' 45.66932"	76° 13' 36.76185"	2717079.0178	624244.7949	294.902	POINT E
6	24° 33' 46.14954"	76° 13' 37.48097"	2717093.9696	624264.8943	294.811	POINT F
7	24° 33' 46.69317"	76° 13' 38.14247"	2717110.8579	624283.3555	294.513	POINT G
8	24° 33' 47.10712"	76° 13' 38.91969"	2717123.7861	624305.1075	295.271	POINT H
9	24° 33' 47.69699"	76° 13' 39.54098"	2717142.0867	624322.4247	295.411	POINT I
10	24° 33' 48.18246"	76° 13' 40.25475"	2717157.1991	624342.3721	295.610	POINT J
11	24° 33' 48.85914"	76° 13' 41.16547"	2717178.2426	624367.8080	295.987	POINT K

SECTION 52-52						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 33' 32.49736"	76° 13' 44.62668"	2716675.8093	624469.6703	296.180	POINT A
2	24° 33' 32.49012"	76° 13' 45.51521"	2716675.8093	624494.6703	296.014	POINT B
3	24° 33' 32.73030"	76° 13' 46.38547"	2716683.4158	624519.0883	295.823	POINT C
4	24° 33' 32.67318"	76° 13' 47.28545"	2716681.8847	624544.4238	295.442	POINT D
5	24° 33' 32.88151"	76° 13' 48.15606"	2716688.5116	624568.8603	295.437	POINT E
6	24° 33' 32.81988"	76° 13' 49.05552"	2716686.8417	624594.1825	295.321	POINT F
7	24° 33' 33.00688"	76° 13' 49.92892"	2716692.8136	624618.7034	295.047	POINT G
8	24° 33' 33.04352"	76° 13' 50.81794"	2716694.1637	624643.7051	295.733	POINT H
9	24° 33' 33.06683"	76° 13' 51.70792"	2716695.1046	624668.7373	295.821	POINT I
10	24° 33' 33.12735"	76° 13' 52.59409"	2716697.1889	624693.6522	296.144	POINT J
11	24° 33' 33.24637"	76° 13' 53.11773"	2716700.9816	624708.3515	296.210	POINT K

SECTION 53-53						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 33' 16.76897"	76° 13' 47.02606"	2716192.5936	624541.4908	296.522	POINT A
2	24° 33' 16.67542"	76° 13' 47.90870"	2716189.9376	624566.3493	296.347	POINT B
3	24° 33' 16.94505"	76° 13' 48.79276"	2716198.4534	624591.1484	295.972	POINT C
4	24° 33' 16.71074"	76° 13' 49.69092"	2716191.4715	624616.4824	295.912	POINT D
5	24° 33' 16.88575"	76° 13' 50.57793"	2716197.0778	624641.3902	295.843	POINT E
6	24° 33' 16.90279"	76° 13' 51.46635"	2716197.8249	624666.3813	295.511	POINT F
7	24° 33' 16.78498"	76° 13' 52.35727"	2716194.4248	624691.4796	296.247	POINT G


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16.

8	24° 33' 17.00072"	76° 13' 53.24068"	2716201.2832	624716.2749	296.341	POINT H
9	24° 33' 16.87985"	76° 13' 54.03170"	2716197.7642	624738.5636	296.653	POINT I
SECTION 54-54						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 33' 00.64678"	76° 13' 47.08326"	2715696.6769	624547.5236	297.017	POINT A
2	24° 33' 00.55323"	76° 13' 47.96586"	2715694.0210	624572.3822	296.826	POINT B
3	24° 33' 00.82227"	76° 13' 48.84989"	2715702.5187	624597.1812	296.427	POINT C
4	24° 33' 00.58855"	76° 13' 49.74802"	2715695.5548	624622.5152	296.402	POINT D
5	24° 33' 00.76357"	76° 13' 50.63500"	2715701.1611	624647.4230	296.321	POINT E
6	24° 33' 00.78060"	76° 13' 51.52339"	2715701.9082	624672.4141	296.007	POINT F
7	24° 33' 00.66279"	76° 13' 52.41428"	2715698.5081	624697.5125	296.711	POINT G
8	24° 33' 00.87854"	76° 13' 53.29765"	2715705.3666	624722.3078	296.821	POINT H
9	24° 33' 00.50350"	76° 13' 54.18480"	2715694.0532	624747.3715	296.899	POINT I
10	24° 33' 00.65876"	76° 13' 54.84667"	2715698.9954	624765.9511	297.157	POINT J
SECTION 55-55						
Sr. no.	Latitude	longitude	Northing	EASTING	Elevation (mRL) In mts.	Description
1	24° 32' 44.26449"	76° 13' 48.02345"	2715192.9814	624578.4720	297.507	POINT A
2	24° 32' 44.17095"	76° 13' 48.90603"	2715190.3255	624603.3306	297.346	POINT B
3	24° 32' 44.43999"	76° 13' 49.79002"	2715198.8232	624628.1296	297.239	POINT C
4	24° 32' 44.23877"	76° 13' 50.68844"	2715192.8593	624653.4637	297.101	POINT D
5	24° 32' 44.38128"	76° 13' 51.57506"	2715197.4656	624678.3715	296.844	POINT E
6	24° 32' 44.39832"	76° 13' 52.46342"	2715198.2128	624703.3625	297.038	POINT F
7	24° 32' 44.28137"	76° 13' 53.24767"	2715194.8126	624725.4609	297.226	POINT G
8	24° 32' 44.49625"	76° 13' 54.23762"	2715201.6711	624753.2562	297.437	POINT H
9	24° 32' 44.34448"	76° 13' 55.10158"	2715197.2198	624777.6071	297.643	POINT I

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mf

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S.M.F.



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The Replishment study carried out by other agencies in the Jhalawar district is given below-

S. No.	Name of the lease holder	Lease Area (In Hect.)	Village/Tehsil/ District	Replenishment study Block	Area of the Block (In Hect.)	Name of the river	Geological Reserves	Mineable Reserves
							Tonnage of Mineral (Replenished)	Tonnage of Mineral (Replenished)
1	Sh. Indrajeet Singh Jhala, Nala Mohalla, Khari Kuliya, P.O. Jhalawar, Tehsil- Jhalrapatan, Distt. Jhalawar	1179.84	n/v Tonkra, tehsil Gangdhar, Distt. Jhalawar	Block -A	29.2288	Shipra	255583.568	224785.6649
			n/v Unhel, tehsil Gangdhar, Distt. Jhalawar	Block -B	27.0752	Shipra	197271.92	140154.5
			n/v Golkheri, tehsil Gangdhar, Distt. Jhalawar	Block -C	31.9077	Chhoti Kali Sindh	130896.794	111913.9183
			n/v Pipakheri & Uncha Bardiya, tehsil Gangdhar, Distt. Jhalawar	Block -D	24.3925	Chhoti Kali Sindh	145720.29	136164.3
			n/v Borkheri Anjna, tehsil Gangdhar, Distt. Jhalawar	Block -E	13.6953	Chacha rni	94835.84	79609.02
2	Sh. Indrajeet Singh Jhala, Nala Mohalla, Khari Kuliya, P.O. Jhalawar, Tehsil- Jhalrapatan, Distt. Jhalawar	1695.06	n/v Guwari Kalan, tehsil Jhalrapatan, distt. Jhalawar and tehsil Ramganjmandi, distt. Kota	Block-A	54.44	Kali sindh	650526.1437	584886.4680
			n/v Nayagaon & Dawal, tehsil Jhalrapatan, distt. Jhalawar and tehsil Ramganjmandi, distt. Kota	Block-B	62.86	Kali sindh	198978.8017	681254.9278
			n/v Aroliya & Paroliya, tehsil Jhalrapatan, distt. Jhalawar and tehsil Ramganjmandi, distt. Kota	Block-C	20.25	Ahu	198978.8017	171761.5565

Source:- (Replishment study based on Topographical Survey record provided by Assistant Mining Engineer, Jhalawar)



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6.5 MINERAL POTENTIAL OF MINERAL BAZRI

River or Stream	Boulders (MT)	Bajari/Sand (MT)	Total Mineable Mineral
Aahu	0.00	171761.5565	171761.5565
Shipra	0.00	364940.1649	364940.1649
Choti Kalisindh	0.00	248078.2183	248078.2183
Chacharni	0.00	79609.02	79609.02
Kalisindh	0.00	1266141.396	1266141.396

*(60%) of Total Mineral Potential)

*The Potential of the Mineral Bajri will be Ascertained every Pre-monsoon and Post-monsoon Based on Actual Replenishment.

6.6 METHODOLOGY ADOPTED FOR CALCULATION OF MINERAL:

The rivers in the district are monsoon fed rivers. These rivers flow only in rainy season and carry some load of sediments which are produced due to erosion of the country rocks in the catchment. The running water transports the sediments in river beds occasionally and deposited the same at suitable locci. The quantum of deposition of sediments varies from stream to stream, depending upon numbers of factors such as rainfall in catchment area, lithology of catchment, discharge velocity, river profile and geomorphology of the river course. Sand replenishment in monsoon fed river is governed with a dynamic process which depends mainly on monsoon rains and other factors mentioned above, therefore area specific long term study need to be carried out for reaching average figures of quantity of sand/bajri replenishment in the rivers of the district.

Exact figures of replenishment will be calculated by project proponent at the time of preparing mining plan and getting EC. However, it has been reported that in past when sand/bajri mining was permissible in the district (since year 2013 sand mining has been prohibited by the Government), during monsoon season the pits formed by the excavation of sand/bajari in rivers occasionally gets filled up by sediments and as such the excavated area sometimes gets replenished with new harvest of mineral (sand). Tentative mineral potential of sand in important rivers of the district is estimated with the help of Survey of India Toposheets and through local information and is tabulated above. The mineral resources have been calculated upto 1.50 metre depth.

6.7 GENERAL RECOMMENDATION / CONCLUSIONS:

During the preparation of the present report prominent rivers/ streams has been studied, as the rest of the streams/rivers either have very insignificant annual replenishment/ approachability



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problem or are very narrow at most of the places and as such are not fit for grant of mineral concession for mining of river sand, however it is also important to mention here that because of the regular demand of sand, stone and bajri for the developmental activities in the respective areas, such streams are prone to illegal mining, It is suggested that the auctions of quarries be done regularly to meet out the local demand subject to the approval from competent authority as per RMMCR 2017. These mineral concessions shall also reduce demand load and will be helpful to minimize illegal extraction of minerals, failure of which may result in to illegal mining at odd hours and shall be haphazard and more detrimental to the local ecology. Irrespective of it following geo-scientific considerations is also suggested to be taken into account during the river bed mining in a particular area:

1. Promotion of manufactured sand (M-Sand), artificial sand and alternative technologies in construction materials and processes are required for reducing the dependence and demand on naturally occurring sand and gravel. Development of slag sand, sand from stone chips and there certification under BIS is an important step in this direction.
2. Stream should not be diverted to form inactive channel.
3. Mining below subterranean water level shall not be allowed as a safeguard against environmental contamination and over exploitation of resources.
4. Large rivers and streams whose periodic sediment replenishment capacities are larger, may be preferred than smaller rivers, however there no such rivers in the district.
5. Segments of braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.
6. Mining at the concave side of the river channel shall not be allowed to prevent bank erosion. Similarly meandering segment of a river shall be selected for mining in such a way as to avoid natural eroding banks and to promote mining on naturally building (aggrading) meander components.
7. Continued riverbed material mining in a given segment of the river will induce seasonal scouring and intensify the erosion activity within the channel. This will have an adverse effect not only within the mining area but also both in upstream and downstream of the river course. Hazardous effects of such scouring and enhanced erosion due to riverbed mining should be evaluated periodically and avoided for sustainable mining activities.
8. The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures.



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9. Mining shall not be undertaken in a mining lease located in 200-500 meter of bridge, 200 meter upstream and downstream of water supply / irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the edge of other roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.

Project proponent will fulfill conditions of Sustainable Sand Mining Management Guidelines 2016 as:

- a. The Project Proponent shall report monitoring data on replenishment, traffic management, and levels of production, River Bank erosion and maintenance of Road etc. The annual replenishment report shall be certified by an authorized agency
- b. Mining should be done only in area / stretch identified in the District Level Survey Report suitable for mining and so certified by the Sub Divisional Level Committee after site visit.
- c. Restoration of flora affected by mining should be done immediately. Lessee will preferably plant twice the number trees destroyed by mining of indigenous species. Each EC holder should plant and maintain for lease period at least 5 trees per hectare in area near lease or area demarcated by administration.
- d. Project Proponent shall implement the Disaster Management Plan if the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.
- e. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health checkups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted.
- f. Use of alternate material such as M-sand in place of natural River sand shall be encouraged in order to reduce stress on natural eco-system.



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6.8 DISTRICT WISE DETAILS OF EXISTING MINING LEASES OF SAND AND AGGREGATE:-

Presently there is one sand/bajri mining lease and two LOI is existed in the district

List of mining lease in Bajri

S.No.	Lease No.	Lease Name	Address	Mineral Name	Near Village	Tehsil	District	Lease Period
1	34/2012	Shri Inderjeet Singh Jhala S/o Arjun Singh Jhala	C-3 Kanchan city, Jhalawar	Bajri	Gangdhar	Gangdhar	Jhalawar	19.12.2013 to 18.12.2018

List of LOI in Bajari

S.No.	Lease No.	Lease Name	Address	Mineral Name	Near Village	Tehsil	District	LOI Date
1	33/2012	Shri Inderjeet Singh Jhala S/o Arjun Singh Jhala	C-3 Kanchan city, Jhalawar	Bajri	Jhalrapatan & Ramganj mandi	Jhalrapatan & Ramganjmandi	Jhalawar & Kota	19.12.2013
2	22/2013	Shri Mukesh Sharma S/o Suresh Chand Sharma	Plot No. 7 Anand Puri Colony, Kalwar Road Jhotwara, Jaipur	Bajri	Pirawa	Pirawa	Jhalawar	25.09.2013



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7. GENERAL PROFILE OF THE DISTRICT:-

S.No	Particular	Year	Unit	Statistics
1	Geographical features			
(A)	Geographical Data			
	i) Latitude		23°45'20N	24°52'17 0°N
	ii) Longitude		75°27'35 °E	76°56' 48°E
	iii) Geographical Area		Hectares	6322.35Sq. Kms
(B)	Administrative Units			
	i) Sub divisions	2017-18	Nos.	8
	ii) Tehsils	“	Nos.	8
	iii) Sub-Tehsil	“	Nos.	-
	iv) Patwar Circle	“	Nos.	-
	v) Panchayat Simitis	“	Nos.	8
	vi)Nagar nigam	“	Nos.	-
	vii) Nagar Palika	“	Nos.	5
	viii) Gram Panchayats	“	Nos.	252
	xi) Revenue villages	“	Nos.	1619
	x) Assembly Area	“	Nos.	4
2.	Population			
(A)	Sex-wise			
	i) Male	2011	Nos.	725667
	ii) Female	2011	Nos.	685660
(B)	Rural Population	2011	Nos.	1012081 (85.75%)
	Urban Population	2011	Nos.	168242 (14.25%)
3.	Agriculture			
A.	Land utilization			
	(I) Total Area	2017-18	Hectare	632235
	(II)Net Area Sown			309010
	(III) Forest cover	“	“	127328
	(IV) Other Non Cultivated Land	“	“	332033
	(V)Land put on Non agriculture			28745
	(VI) Baren & Fallow Land	“	“	26844
4.	Forest			
	(i) Forest	2017-18	Hectare.	127328
5.	Livestock & Poultry			
A.	Cattle			
	i) Cows	2012	Nos.	381075
	ii) Buffaloes	2012	Nos.	310613
B.	Other livestock			
	i) Goats	2012	Nos.	313475



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ii) Pigs	2012	Nos.	7096
iii) Sheep's	2012	Nos.	11329
iv) Railways			
i) Length of rail line	2017-18	Kms	-
V) Roads			
(a) National Highway	2017-18	Kms	98.60
(b) Painted Road	"	Kms	3246.19
(c) WBM Road	"	Kms	137.81
(d) Other district & Rural Roads	"	Kms	-
(e) Rural road/ Agriculture Marketing Board Roads	"	Kms	-
(f) Kachacha Road	"	Kms	-
(VI) Communication			
(a) Telephone connection	"		-
(b) Post offices	"	Nos.	250
(c) Telephone Exchange	"	Nos.	33
(d) Density of Telephone	"	Nos./1000 person	-
(e) Density of Telephone	"	No. per KM.	-
(f) PCO	"	No.	34
(g) HSG	"	No.	0
(h) LSG	"	No.	0
(VII) Public Health			
(a) Allopathic Hospital	2017-18	No.	15
(b) Beds		No.	1390
(c) Ayurvedic Dispensaries		No.	81
(d) Community health centers		No.	14
(e) Primary health centers		No.	42
(f) Sub Health Centers		No.	324
(VIII) Banking commercial	2017-18		
(a) Commercial Bank	"	Nos.	66
(b) rural Bank Products	"	Nos.	27
(c) Co-Operative bank products	"	Nos.	23
(d) PLDB Branches	"	Nos.	7
(IX) Education	"		
(a) Primary school	"	Nos.	883
(b) Middle schools	"	Nos.	901
(c) Secondary & senior secondary schools	"	Nos.	123
(d) Colleges	"	Nos.	3



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(e) ITI	“	Nos.	34
(f) Medical College		Nos.	01
(g) Engineering College		Nos.	01
(h) Polytechnic College		Nos.	01

Source: DIPR Jhalawar 2020-21

7.1 DEMOGRAPHIC PROFILE:-

According to the 2011 census Jhalawar district has a population of 1,411, 129. The district has a population density of 227 inhabitants per square kilometre (590/sq mile) . Its population growth rate over the decade 2001-2011 was 19.57%.Jhalawar has a sex ratio of 945 females for every 1000 males,and a literacy rate of 62.13%.

S.No.	TEHSIL	POPULATION		TOTAL POPULATION
		MALE	FEMALE	
1.	AKLERA	92070	86501	178571
2.	ASNAWAR	31428	29526	60954
3.	GANGDHAR	85544	81942	167486
4.	JHALRAPATAN	152171	143582	295753
5.	KHANPUR	89958	83235	173193
6.	MANOHARTHANA	73213	69862	143075
7.	PACHPAHAR	91844	87574	179418
8.	PIRAWA	108915	103764	212679
TOTAL		725143	685986	1411129

Total Population	Absolute	Percentage
Persons	Total : 1411129 Rural : 1181838 Urban : 229291	Total: 100.00 Rural: 83.75 Urban: 16.25
Males	Total :725143 Rural : 606533 Urban : 118610	Total: 100.00 Rural: 83.64 Urban: 16.36
Females	Total : 685986 Rural : 575305 Urban : 110681	Total: 100.00 Rural: 83.87 Urban: 16.13



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

AGRICULTURAL RESOURCES

Agricultural is the main occupation of the people of Jhalawar and provides live hood to maximum number of people in the district. To access the potential industries for Jhalawar district it would be of worth to explore the land use pattern, irrigation facilities, occupation pattern, livestock population, dairy and cattle development etc. which will provide a broad spectrum of resources inventories and resource base on which the foundation of the individuals growth is generally laid down.

LAND PATTERN

The total geographical area of Jhalawar district was recorded at 6, 32,235 hectare. The classification of land-use pattern found in the district during the year 2017-18 and 2018- 19 has remained as given under-

LAND USE PATTERN JHALAWAR DISTRICT

S.NO	DISCRIPTION	2017-18	2018-19
1.	Total Geographical Area	632335	632235
2.	Area under forest	126120	127328
3.	Land put on non agriculture use	61897	28745
4.	Other non cultivated land	16873	332033
5.	Barren and uncultivated land	82690	26844
6.	Fallow land	57197	2676
7.	Net sown area	317060	309010
8.	Double crop Area	328582	337719

Source: Industrial Potential Survey of Jhalawar (2019-20)

9. PHYSIOGRAPHY OF THE DISTRICT:-

The district stands at the range of the Malwa Plateau. An area of low hill and shallow plains. However, in places sharp geophysical disturbances in edge long past thrown up hills which are in ready and extension of Vindhyan range. As a result the district falls into following broad physical division.

1. The Mukandra range which enters the district from the South-East to bridges passing close to Jhalra Patan and continuing North-East wards formal Chechat tehsil of Kota district and another forming the boundary of Khanpur with Chhipabarod tehsil of Baran district.
2. The hills of Dag extending up to Pirawa.



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3. The plateau region with low rounded hills covering most of the southern half of the district.
4. The central plain of Pachpahar and Jhalra Patan extending up to the plain of Khanpur is between two areas Mukandra Village of Aklera and Manoharthana across the ridges.
5. The plain of Khanpur is between two areas of the Mukandra.

Source: Industrial Potential Survey of Jhalawar (2019-20)



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10. RAINFALL: MONTH-WISE:-

DAILY RAINFALL DATA FOR YEAR 2018

STATION :	AKLERA		DISTRICT :		JHALAWAR		STATE :		RAJASTHAN			
CATCHMENT NO. :	405		LATITUDE :		24° 25' N		LONGITUDE :		76° 34' E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	83.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	20.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.0	1.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	13.0	11.0	4.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	41.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	45.0	1.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	1.0	0.0	0.0	0.0	32.0	2.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	4.0	3.0	38.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	25.0	68.0	21.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	34.0	44.0	3.0	6.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	63.0	20.0	6.0	7.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	62.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	1.0	0.0	4.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	18.0	0.0	1.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	18.0	0.0	6.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	0.0	1.0	0.0	0.0	213.0	339.0	192.0	212.0	0.0	0.0	0.0
RAINYDAYS	0	0	0	0	0	7	13	12	9	0	0	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2018 WAS						86.0	mm ON	19-Jul				
ANNUAL RAINFALL -	957.0		ANNUAL RAINY DAYS -	41		ANNUAL NO OF OBSERVATIONS -	365					

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : ASNAWAR																	
CATCHMENT NO. : 405																	
		DISTRICT : JHALAWAR						STATE : RAJASTHAN									
		LATITUDE : 24° 28' N						LONGITUDE : 76° 20' E									
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0					
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0					
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0					
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0	0.0					
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0					
7	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	16.0	0.0	0.0	0.0					
8	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	114.0	0.0	0.0	0.0					
9	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.0	45.0	0.0	0.0	0.0					
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0					
11	0.0	0.0	0.0	0.0	0.0	20.0	6.0	20.0	0.0	0.0	0.0	0.0					
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
13	0.0	0.0	0.0	0.0	0.0	0.0	43.0	0.0	0.0	0.0	0.0	0.0					
14	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0					
15	0.0	0.0	0.0	0.0	0.0	0.0	27.0	10.0	0.0	0.0	0.0	0.0					
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0					
17	0.0	0.0	0.0	0.0	0.0	0.0	49.0	10.0	0.0	0.0	0.0	0.0					
18	0.0	0.0	0.0	0.0	0.0	0.0	9.0	11.0	0.0	0.0	0.0	0.0					
19	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0	0.0	0.0	0.0					
20	0.0	0.0	0.0	0.0	0.0	2.0	43.0	36.0	0.0	0.0	0.0	0.0					
21	0.0	0.0	0.0	0.0	0.0	0.0	17.0	20.0	0.0	0.0	0.0	0.0					
22	0.0	0.0	0.0	0.0	0.0	0.0	35.0	55.0	40.0	0.0	0.0	0.0					
23	0.0	0.0	0.0	0.0	0.0	0.0	105.0	5.0	18.0	0.0	0.0	0.0					
24	0.0	0.0	0.0	0.0	0.0	24.0	131.0	25.0	7.0	0.0	0.0	0.0					
25	0.0	0.0	0.0	0.0	0.0	0.0	15.0	3.0	0.0	0.0	0.0	0.0					
26	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0					
27	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0					
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
29	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	0.0	0.0	0.0	0.0					
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0					
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
<hr/>																	
MONTHLY RAINFALL	0.0	0.0	0.0	0.0	0.0	90.0	562.0	263.0	325.0	0.0	0.0	0.0					
RAINYDAYS	0	0	0	0	0	4	16	13	11	0	0	0					
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31					
<hr/>																	
HIGHEST DAILY RAINFALL FOR 2018 WAS						131.0 mm ON 24-Jul											
<hr/>																	
ANNUAL RAINFALL -			1240.0			ANNUAL RAINY DAYS -			44			ANNUAL NO OF OBSERVATIONS -			365		

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : BAKANI													
CATCHMENT NO. : 405													
		DISTRICT : JHALAWAR						STATE : RAJASTHAN					
		LATITUDE : 24° 18' N						LONGITUDE : 76° 14' E					
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	11.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	36.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	83.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	2.0	38.0	40.0	99.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	38.0	63.0	0.0	10.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	36.0	100.0	30.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	1.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	52.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	2.0	0.0	0.0	95.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	106.0	15.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	28.0	5.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	77.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	22.0	64.0	6.0	41.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	65.0	0.0	8.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	85.0	0.0	0.0	1.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	33.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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MONTHLY RAINFALL	0.0	0.0	0.0	1.0	2.0	252.0	624.0	340.0	405.0	0.0	0.0	0.0	
RAINYDAYS	0	0	0	0	0	8	15	9	12	0	0	0	
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31	
<hr/>													
HIGHEST DAILY RAINFALL FOR 2018 WAS					106.0 mm ON 17-Jul								
<hr/>													
ANNUAL RAINFALL -			1624.0		ANNUAL RAINY DAYS -			44		ANNUAL NO OF OBSERVATIONS -			365

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : DUG												
CATCHMENT NO. : 404												
		DISTRICT : JHALAWAR						STATE : RAJASTHAN				
		LATITUDE : 23° 56" N						LONGITUDE : 75° 50" E				
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	43.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	35.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	52.0	18.0	55.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0	11.0	11.0	11.0	0.0
11	0.0	0.0	0.0	0.0	0.0	21.0	43.0	11.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	26.0	4.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	65.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	78.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	5.0	7.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	85.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	8.0	7.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	2.0	24.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	12.0	101.0	55.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	4.0	23.0	70.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	73.0	0.0	29.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	8.0	8.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	135.0	0.0	11.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
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MONTHLY RAINFALL	0.0	0.0	0.0	0.0	0.0	246.0	607.0	214.0	262.0	11.0	11.0	0.0
RAINYDAYS	0	0	0	0	0	6	17	10	7	1	1	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
<hr/>												
HIGHEST DAILY RAINFALL FOR 2018 WAS					135.0 mm ON 29-Jun							
<hr/>												
ANNUAL RAINFALL -	1351.0		ANNUAL RAINY DAYS -	42				ANNUAL NO OF OBSERVATIONS -	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION CATCHMENT NO. :	GANGDHAR 404			DISTRICT LATITUDE :	JHALAWAR 23° 57' N			STATE LONGITUDE :	RAJASTHAN 75° 37' E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	6.0	3.0	3.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	22.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	40.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	20.0	21.0	3.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	5.0	0.0	5.0	26.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	103.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	27.0	4.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	10.0	6.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	45.0	4.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	1.0	17.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	3.0	0.0	60.0	25.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	66.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	43.0	0.0	9.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	12.0	6.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	8.0	0.0	7.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	0.0	0.0	5.0	0.0	73.0	328.0	151.0	180.0	3.0	3.0	0.0
RAINYDAYS	0	0	0	1	0	5	14	8	8	1	1	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2018 WAS	103.0 mm ON 13-Jul											
ANNUAL RAINFALL -	743.0			ANNUAL RAINY DAYS -	38			ANNUAL NO OF OBSERVATIONS -	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

225



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : JHALAWAR													
CATCHMENT NO. : 405													
		DISTRICT : JHALAWAR				STATE : RAJASTHAN							
		LATITUDE : 24° 36" N				LONGITUDE : 76° 09" E							
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	2.0	0.0	0.0	0.0	10.0	82.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	28.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	11.0	1.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	3.0	14.0	9.0	1.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	9.0	2.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	60.0	8.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	15.0	3.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	15.0	38.0	12.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	27.0	2.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	7.0	48.0	35.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	10.0	46.0	0.0	5.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	85.0	64.0	32.0	3.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	14.0	0.0	1.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<hr/>													
MONTHLY RAINFALL	0.0	0.0	0.0	2.0	0.0	135.0	358.0	187.0	180.0	0.0	0.0	0.0	
RAINYDAYS	0	0	0	0	0	7	16	9	6	0	0	0	
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31	
<hr/>													
HIGHEST DAILY RAINFALL FOR 2018 WAS					85.0 mm ON 24-Jun								
<hr/>													
ANNUAL RAINFALL -			862.0		ANNUAL RAINY DAYS -			38		ANNUAL NO OF OBSERVATIONS -			365

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : JHALRAPATAN													
CATCHMENT NO. : 405													
		DISTRICT : JHALAWAR				STATE : RAJASTHAN							
		LATITUDE : 24° 33' N				LONGITUDE : 76° 10' E							
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	9.0	0.0	0.0	0.0	5.0	60.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	43.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	4.0	5.0	6.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	5.0	18.0	5.0	1.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	93.0	89.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	14.0	17.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	17.0	4.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	99.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	15.0	17.0	11.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	27.0	33.0	26.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	9.0	47.0	3.0	9.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	41.0	9.0	21.0	3.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	9.0	0.0	1.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<hr/>													
MONTHLY RAINFALL	0.0	0.0	0.0	9.0	0.0	99.0	386.0	243.0	189.0	0.0	0.0	0.0	
RAINYDAYS	0	0	0	1	0	8	15	13	8	0	0	0	
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31	
<hr/>													
HIGHEST DAILY RAINFALL FOR 2018 WAS					99.0 mm ON 19-Jul								
<hr/>													
ANNUAL RAINFALL -	926.0			ANNUAL RAINY DAYS -	45				ANNUAL NO OF OBSERVATIONS -	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : CATCHMENT NO. :	KHANPUR 405			DISTRICT : LATITUDE :	JHALAWAR 24° 44" N			STATE : LONGITUDE :	RAJASTHAN 76° 23" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	14.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	87.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	10.0	1.0	28.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	25.0	37.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	35.0	17.0	14.0	2.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	127.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	36.0	17.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	22.0	5.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	13.0	46.0	22.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	3.0	50.0	5.0	4.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	39.0	8.0	3.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	10.0	53.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	6.0	0.0	5.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<hr/>												
MONTHLY RAINFALL	0.0	0.0	0.0	0.0	0.0	119.0	456.0	165.0	213.0	0.0	0.0	0.0
RAINYDAYS	0	0	0	0	0	6	14	11	10	0	0	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
<hr/>												
HIGHEST DAILY RAINFALL FOR 2018 WAS					127.0 mm ON 13-Jul							
<hr/>												
ANNUAL RAINFALL -	953.0			ANNUAL RAINY DAYS -	41			ANNUAL NO OF OBSERVATIONS -	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : CATCHMENT NO. :	MANOHARTHANA 405			DISTRICT : LATITUDE :	JHALAWAR 24° 14" N			STATE : LONGITUDE :	RAJASTHAN 76° 48" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	39.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	32.0	0.0	6.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	8.0	14.0	50.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	14.0	12.0	12.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	6.0	3.0	0.0	3.0	0.0	0.0	0.0
11	0.0	1.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	8.0	2.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	20.0	6.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	64.0	1.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	4.0	13.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	11.0	6.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	71.0	98.0	37.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	32.0	13.0	5.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	4.0	90.0	2.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	11.0	3.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	71.0	0.0	2.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
<hr/>												
MONTHLY RAINFALL	0.0	1.0	0.0	0.0	0.0	150.0	432.0	189.0	184.0	0.0	0.0	0.0
RAINYDAYS	0	0	0	0	0	7	18	10	9	0	0	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
<hr/>												
HIGHEST DAILY RAINFALL FOR 2018 WAS					98.0 mm ON 22-Aug							
<hr/>												
ANNUAL RAINFALL -	956.0			ANNUAL RAINY DAYS -	44			ANNUAL NO OF OBSERVATIONS -	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : PACHPAHAR													
CATCHMENT NO. : 405													
		DISTRICT : JHALAWAR						STATE : RAJASTHAN					
		LATITUDE : 24° 23' N						LONGITUDE : 75° 49' E					
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	20.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	29.0	45.0	76.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	26.0	27.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	1.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	13.0	4.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	5.0	13.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	2.0	23.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.0	30.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	16.0	21.0	18.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	49.0	24.0	0.0	15.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	32.0	2.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	95.0	0.0	1.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	
<hr/>													
MONTHLY RAINFALL	0.0	0.0	0.0	0.0	0.0	193.0	236.0	243.0	214.0	0.0	0.0	0.0	
RAINYDAYS	0	0	0	0	0	4	12	9	8	0	0	0	
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31	
<hr/>													
HIGHEST DAILY RAINFALL FOR 2018 WAS	95.0 mm ON 29-Jun												
<hr/>													
ANNUAL RAINFALL -	886.0		ANNUAL RAINY DAYS -	33				ANNUAL NO OF OBSERVATIONS -	365				

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : PIRAWA													
CATCHMENT NO. : 405													
		DISTRICT : JHALAWAR				STATE : RAJASTHAN							
		LATITUDE : 24° 10' N				LONGITUDE : 76° 02' E							
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0	45.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	15.0	4.0	50.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	77.0	3.0	25.0	1.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	23.0	11.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	5.0	29.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	39.0	5.0	12.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	26.0	14.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	2.0	62.0	46.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	5.0	57.0	20.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	39.0	4.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	23.0	0.0	12.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	
<hr/>													
MONTHLY RAINFALL	0.0	0.0	0.0	0.0	0.0	209.0	264.0	206.0	170.0	0.0	0.0	0.0	
RAINYDAYS	0	0	0	0	0	7	17	11	6	0	0	0	
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31	
<hr/>													
HIGHEST DAILY RAINFALL FOR 2018 WAS					77.0 mm ON 10-Jun								
<hr/>													
ANNUAL RAINFALL -			849.0		ANNUAL RAINY DAYS -			41		ANNUAL NO OF OBSERVATIONS -			365

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2018

STATION : CATCHMENT NO. :	SUNEL 405		DISTRICT : LATITUDE :		JHALAWAR 24° 36" N		STATE : LONGITUDE :		RAJASTHAN 76° 32" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	3.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	4.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	37.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	1.0	52.0	46.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	35.0	10.0	6.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	29.0	12.0	29.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	38.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	5.0	28.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	14.0	4.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	6.0	21.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	15.0	2.0	33.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	10.0	30.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	26.0	53.0	37.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	18.0	7.0	14.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	104.0	0.0	3.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	0.0	0.0	0.0	0.0	224.0	222.0	289.0	175.0	0.0	3.0	0.0
RAINYDAYS	0	0	0	0	0	5	15	13	7	0	1	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2018 WAS	104.0 mm ON 29-Jun											
ANNUAL RAINFALL -	913.0		ANNUAL RAINY DAYS -	41		ANNUAL NO OF OBSERVATIONS -	365					

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION : AKLERA													
CATCHMENT NO. : 405													
						DISTRICT : JHALAWAR							
						LATITUDE : 24° 25' N							
						STATE : RAJASTHAN							
						LONGITUDE : 76° 34' E							
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	17.0	14.0	8.0	6.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	2.0	9.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	42.0	12.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	34.0	23.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	29.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	6.0	29.0	20.0	1.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	42.0	2.0	16.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	22.0	20.0	11.0	0.0	5.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	50.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	49.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	24.0	0.0	0.0	0.0	
14	0.0	15.0	0.0	0.0	0.0	0.0	0.0	49.0	40.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.0	109.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	15.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	23.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	20.0	0.0	10.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	3.0	1.0	19.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	15.0	4.0	28.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	35.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	15.0	40.0	93.0	30.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	5.0	41.0	3.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	32.0	9.0	25.0	0.0	0.0	0.0	
29	0.0		0.0	0.0	0.0	0.0	15.0	16.0	16.0	0.0	0.0	0.0	
30	0.0		0.0	0.0	0.0	0.0	32.0	3.0	10.0	0.0	0.0	0.0	
31	0.0		0.0		0.0		39.0	0.0		0.0		0.0	
<hr/>													
MONTHLY RAINFALL	0.0	15.0	0.0	23.0	0.0	38.0	348.0	593.0	619.0	16.0	5.0	0.0	
RAINYDAYS	0	1	0	1	0	3	14	21	23	2	1	0	
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31	
HIGHEST DAILY RAINFALL FOR 2019 WAS					109.0 mm ON 15-Sep								
ANNUAL RAINFALL =		1657.0		ANNUAL RAINY DAYS =			66			ANNUAL NO OF OBSERVATIONS =			365

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	ASNAWAR				DISTRICT	JHALAWAR			STATE	RAJASTHAN		
CATCHMENT NO. :	405				LATITUDE :	24° 28" N			LONGITUDE :	76° 20" E		
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	7.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	5.0	12.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	25.0	65.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	25.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	5.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	92.0	15.0	8.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	3.0	45.0	0.0	0.0	3.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	10.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	28.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	85.0	0.0	0.0	0.0
14	0.0	28.0	0.0	0.0	0.0	0.0	0.0	40.0	55.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.0	5.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.0	5.0	0.0	0.0	0.0
17	0.0	0.0	0.0	50.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	4.0	0.0	18.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	3.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	30.0	5.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	10.0	8.0	60.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	12.0	39.0	23.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	5.0	5.0	20.0	34.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	16.0	35.0	33.0	25.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	11.0	30.0	5.0	4.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	8.0	25.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	30.0	27.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	28.0	0.0	50.0	0.0	84.0	311.0	765.0	506.0	7.0	3.0	0.0
RAINYDAYS	0	1	0	1	0	7	14	21	19	1	1	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS					180.0	mm ON	16-Aug					
ANNUAL RAINFALL =	1754.0			ANNUAL RAINY DAYS =	65			ANNUAL NO OF OBSERVATIONS =	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	: BAKANI			DISTRICT	: JHALAWAR			STATE	: RAJASTHAN			
CATCHMENT NO. :	405			LATITUDE :	24° 18" N			LONGITUDE :	76° 14" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	30.0	0.0	5.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	25.0	36.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	25.0	80.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	32.0	0.0	0.0	0.0
6	0.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	8.0	13.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	35.0	30.0	5.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	15.0	32.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.0	34.0	0.0	3.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	93.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	0.0	0.0	0.0
13	0.0	3.0	0.0	0.0	0.0	0.0	0.0	10.0	49.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	86.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	36.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.0	24.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	30.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	10.0	0.0	8.0	5.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	20.0	0.0	25.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	20.0	0.0	5.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	40.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	44.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	22.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	8.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	50.0	10.0	30.0	31.0	0.0	0.0	0.0
29	0.0		0.0	0.0	0.0	0.0	9.0	0.0	5.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	8.0	5.0	2.0	0.0	0.0	0.0
31	0.0		0.0		0.0		20.0	0.0		0.0		0.0
MONTHLY RAINFALL	0.0	8.0	5.0	30.0	0.0	115.0	234.0	655.0	676.0	54.0	3.0	0.0
RAINYDAYS	0	2	1	1	0	5	10	22	20	3	1	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	105.0 mm ON 16-Aug											
ANNUAL RAINFALL =	1780.0	ANNUAL RAINY DAYS =	65	ANNUAL NO OF OBSERVATIONS =	365							

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION : DUG												DISTRICT : JHALAWAR	STATE : RAJASTHAN	
CATCHMENT NO. : 404												LATITUDE : 23° 56" N	LONGITUDE : 75° 50" E	
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0.0	0.0	0.0	0.0	0.0	0.0	29.0	4.0	0.0	52.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	7.0	6.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	31.0	103.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	60.0	14.0	84.0	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	105.0	0.0	15.0	21.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	11.0	85.0	13.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	7.0	82.0	0.0	0.0	4.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	55.0	0.0	10.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	52.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	0.0	0.0	0.0		
14	0.0	42.0	0.0	0.0	0.0	0.0	0.0	72.0	224.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.0	8.0	0.0	205.0	195.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	210.0	22.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	47.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.0	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	36.0	0.0	35.0	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	81.0	11.0	0.0	7.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	12.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	47.0	0.0	23.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	4.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	31.0	65.0	4.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	43.0	88.0	113.0	27.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	17.0	27.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	28.0	9.0	0.0	0.0	0.0	0.0		
MONTHLY RAINFALL														
	0.0	42.0	0.0	47.0	0.0	215.0	474.0	1215.0	900.0	106.0	14.0	0.0		
RAINYDAYS														
	0	1	0	1	0	5	14	20	20	4	2	0		
NO.OFOBS-OBSERVATION														
	31	28	31	30	31	30	31	31	30	31	30	31		
HIGHEST DAILY RAINFALL FOR 2019 WAS														
	224.0 mm ON 14-Sep													
ANNUAL RAINFALL =														
	3013.0													
ANNUAL RAINY DAYS =														
	67													
ANNUAL NO OF OBSERVATIONS =														
	365													

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	GANGDHAR			DISTRICT : JHALAWAR			STATE : RAJASTHAN					
CATCHMENT NO. :	404			LATITUDE : 23° 57' N			LONGITUDE : 75° 37' E					
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	2.0	20.0	0.0	10.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	4.0	0.0	1.0
3	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	2.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	25.0	36.0	0.0	5.0	0.0	0.0
5	0.0	0.0	0.0	0.0	2.0	0.0	30.0	3.0	47.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	26.0	11.0	32.0	17.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	7.0	80.0	8.0	8.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	6.0	0.0	1.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	118.0	62.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	64.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	23.0	0.0	0.0	0.0
14	0.0	20.0	0.0	0.0	0.0	0.0	0.0	31.0	138.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	224.0	0.0	0.0	0.0
16	0.0	0.0	0.0	3.0	0.0	0.0	0.0	160.0	37.0	0.0	0.0	0.0
17	0.0	0.0	0.0	7.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	28.0	0.0	2.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	21.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	24.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	16.0	1.0	14.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	46.0	0.0	26.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	50.0	35.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	47.0	8.0	37.0	0.0	0.0	0.0
29	0.0		0.0	0.0	0.0	0.0	32.0	0.0	2.0	2.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0		0.0		7.0	2.0		0.0		0.0
MONTHLY RAINFALL	0.0	20.0	0.0	10.0	2.0	96.0	281.0	743.0	795.0	48.0	1.0	1.0
RAINYDAYS	0	1	0	2	0	4	12	16	17	5	0	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	224.0 mm ON 15-Sep											
ANNUAL RAINFALL =	1997.0			ANNUAL RAINY DAYS =	57			ANNUAL NO OF OBSERVATIONS =	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	: JHALAWAR			DISTRICT	: JHALAWAR			STATE	: RAJASTHAN			
CATCHMENT NO. :	405			LATITUDE :	24° 36" N			LONGITUDE :	76° 09" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	2.0	9.0	0.0	2.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	4.0	26.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	28.0	2.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	25.0	58.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	30.0	2.0	22.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	26.0	6.0	11.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	7.0	13.0	5.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	5.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.0	18.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	7.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	28.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	5.0	0.0	4.0	45.0	0.0	0.0	0.0
14	0.0	2.0	0.0	0.0	0.0	0.0	0.0	20.0	47.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0	46.0	0.0	0.0	0.0
16	0.0	0.0	0.0	2.0	0.0	0.0	0.0	74.0	10.0	0.0	0.0	0.0
17	0.0	0.0	0.0	23.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	28.0	0.0	11.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	2.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	2.0
25	0.0	0.0	0.0	0.0	0.0	16.0	1.0	32.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	46.0	0.0	22.0	28.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	50.0	14.0	13.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	47.0	3.0	21.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	32.0	2.0	2.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	7.0	5.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	2.0	0.0	25.0	0.0	96.0	281.0	442.0	342.0	28.0	5.0	2.0
RAINYDAYS	0	0	0	1	0	4	12	21	16	1	1	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS						74.0	mm ON	16-Aug				
ANNUAL RAINFALL =	1223.0			ANNUAL RAINY DAYS =	56			ANNUAL NO OF OBSERVATIONS =	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	JHALRAPATAN				DISTRICT	JHALAWAR			STATE	RAJASTHAN		
CATCHMENT NO. :	405				LATITUDE :	24° 33' N			LONGITUDE :	76° 10' E		
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	33.0	11.0	7.0	3.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	1.0	21.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	0.0	1.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	27.0	54.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	7.0	2.0	31.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	19.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	66.0	22.0	3.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	21.0	21.0	0.0	0.0	25.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	2.0	41.0	17.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	12.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	30.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	38.0	0.0	0.0	0.0
14	0.0	10.0	0.0	0.0	0.0	0.0	0.0	27.0	62.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	44.0	0.0	0.0	0.0
16	0.0	0.0	0.0	3.0	0.0	4.0	0.0	113.0	8.0	0.0	0.0	0.0
17	0.0	0.0	0.0	32.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	36.0	0.0	14.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	6.0	0.0	7.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	9.0	10.0	37.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	1.0	32.0	27.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	3.0	17.0	7.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	22.0	19.0	3.0	24.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	1.0	8.0	3.0	8.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	9.0	6.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	10.0	0.0	35.0	0.0	69.0	215.0	552.0	387.0	25.0	25.0	0.0
RAINYDAYS	0	1	0	2	0	4	12	24	17	2	1	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	113.0 mm ON 16-Aug											
ANNUAL RAINFALL =	1318.0			ANNUAL RAINY DAYS =	63			ANNUAL NO OF OBSERVATIONS =	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	KHANPUR			DISTRICT	JHALAWAR			STATE	RAJASTHAN			
CATCHMENT NO. :	405			LATITUDE :	24° 44" N			LONGITUDE :	76° 23" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	38.0	73.0	0.0	1.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	0.0	38.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	26.0	64.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	70.0	16.0	38.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	55.0	11.0	45.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	32.0	5.0	9.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	14.0	16.0	0.0	0.0	18.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	38.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	10.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	13.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	26.0	0.0	0.0	0.0
14	0.0	15.0	0.0	0.0	0.0	5.0	0.0	39.0	32.0	0.0	0.0	0.0
15	0.0	0.0	0.0	6.0	0.0	0.0	0.0	65.0	14.0	0.0	0.0	0.0
16	0.0	0.0	0.0	73.0	0.0	0.0	0.0	174.0	14.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	2.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	24.0	1.0	37.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	5.0	0.0	6.0	1.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	9.0	0.0	0.0	0.0
22	1.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	8.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	5.0
25	0.0	0.0	0.0	0.0	0.0	0.0	10.0	65.0	7.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	3.0	3.0	58.0	2.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	1.0	53.0	19.0	1.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	3.0	22.0	31.0	60.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	16.0	21.0	12.0	5.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	15.0	66.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	1.0	15.0	0.0	79.0	2.0	57.0	366.0	823.0	474.0	39.0	18.0	5.0
RAINYDAYS	0	1	0	2	0	6	13	22	19	1	1	1
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	174.0 mm ON 16-Aug											
ANNUAL RAINFALL =	1879.0											
ANNUAL RAINY DAYS =	66											
ANNUAL NO OF OBSERVATIONS =	365											

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION :	MANOHARTHANA			DISTRICT :	JHALAWAR			STATE :	RAJASTHAN			
CATCHMENT NO. :	405			LATITUDE :	24° 14" N			LONGITUDE :	76° 48" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	13.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	57.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	2.0	30.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	3.0	16.0	12.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	3.0	41.0	16.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	7.0	32.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	78.0	0.0	41.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	6.0	26.0	5.0	0.0	6.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	28.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	19.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	44.0	0.0	0.0	0.0
14	0.0	6.0	0.0	0.0	0.0	0.0	0.0	49.0	63.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	33.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0	3.0	0.0	0.0	0.0
17	0.0	0.0	0.0	13.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	11.0	2.0	7.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	13.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	23.0	48.0	20.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	8.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	17.0	0.0	0.0	2.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	21.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	2.0	5.0	6.0	6.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	40.0	0.0	54.0	1.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	39.0	4.0	21.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	28.0	121.0	0.0	41.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	6.0	28.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	20.0	2.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	6.0	0.0	13.0	0.0	87.0	343.0	522.0	439.0	70.0	6.0	2.0
RAINYDAYS	0	1	0	1	0	4	12	22	21	2	1	0
NO.OFOBS- -ERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	121.0 mm ON 29-Jul											
ANNUAL RAINFALL =	1488.0			ANNUAL RAINY DAYS =	64			ANNUAL NO OF OBSERVATIONS =	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION :	PACHPAHAR			DISTRICT :	JHALAWAR			STATE :	RAJASTHAN			
CATCHMENT NO. :	405			LATITUDE :	24° 23" N			LONGITUDE :	75° 49" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	23.0	26.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	17.0	9.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	43.0	9.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	1.0	0.0
7	0.0	0.0	0.0	4.0	0.0	0.0	0.0	5.0	26.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	55.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	117.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	4.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	81.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	26.0	0.0	0.0	0.0
14	0.0	6.0	0.0	0.0	0.0	0.0	0.0	77.0	191.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.0	6.0	0.0	0.0
16	0.0	0.0	0.0	15.0	0.0	0.0	0.0	51.0	17.0	0.0	0.0	0.0
17	0.0	0.0	0.0	35.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	30.0	0.0	8.0	3.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	15.0	0.0	13.0	23.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	5.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	3.0	3.0	1.0	29.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	33.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	4.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	26.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	22.0	2.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.0	11.0	23.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	7.0	14.0	0.0	3.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	40.0	13.0	5.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	31.0	5.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	6.0	0.0	54.0	3.0	98.0	397.0	647.0	669.0	27.0	0.0	0.0
RAINYDAYS	0	1	0	3	1	6	13	21	21	1	0	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	191.0 mm ON 14-Sep											
ANNUAL RAINFALL =	1901.0			ANNUAL RAINY DAYS =	67			ANNUAL NO OF OBSERVATIONS =	365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION	RAJASTHAN											
PIRAWA	RAJASTHAN											
CATCHMENT NO. :	RAJASTHAN											
405	RAJASTHAN											
DISTRICT :	RAJASTHAN											
JHALAWAR	RAJASTHAN											
LATITUDE :	RAJASTHAN											
24° 10" N	RAJASTHAN											
LONGITUDE :	RAJASTHAN											
76° 02" E	RAJASTHAN											
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	15.0	10.0	7.0	37.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	27.0	14.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	22.0	1.0	0.0	10.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	35.0	10.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	15.0	10.0	27.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	56.0	3.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	30.0	34.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	18.0	5.0	1.0	0.0	9.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.0	34.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0	20.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	20.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	32.0	0.0	0.0	0.0
14	0.0	5.0	0.0	0.0	0.0	0.0	0.0	76.0	191.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	43.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	112.0	72.0	0.0	0.0	0.0
17	0.0	0.0	0.0	27.0	0.0	0.0	0.0	5.0	1.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	36.0	0.0	24.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	9.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	116.0	0.0	14.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.0	10.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	41.0	0.0	5.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	11.0	1.0	26.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	8.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	4.0	28.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	57.0	17.0	12.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	4.0	13.0	0.0	7.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	1.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	28.0	4.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	5.0	0.0	27.0	0.0	62.0	418.0	613.0	628.0	64.0	9.0	0.0
RAINYDAYS	0	1	0	1	0	4	15	22	20	4	1	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	191.0 mm ON 14-Sep											
ANNUAL RAINFALL =	1826.0 ANNUAL RAINY DAYS = 68 ANNUAL NO OF OBSERVATIONS = 365											

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2019

STATION :	SUNEL		DISTRICT :		JHALAWAR		STATE :		RAJASTHAN			
CATCHMENT NO. :	405		LATITUDE :		24° 36" N		LONGITUDE :		76° 32" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	38.0	4.0	2.0	15.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	47.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	53.0	16.0	0.0	17.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	64.0	0.0	4.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	3.0	0.0	0.0	53.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	18.0	22.0	2.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	3.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	5.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	30.0	0.0	0.0	0.0
14	0.0	21.0	0.0	0.0	0.0	0.0	0.0	14.0	111.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0	55.0	0.0	0.0	0.0
16	0.0	0.0	0.0	6.0	0.0	0.0	0.0	122.0	34.0	0.0	0.0	0.0
17	0.0	0.0	0.0	33.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	38.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	33.0	55.0	42.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	17.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	5.0	1.0	4.0	37.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	20.0	17.0	2.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	29.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	5.0	0.0	19.0	13.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	12.0	16.0	1.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	34.0	18.0	24.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	7.0	8.0	0.0	6.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	21.0	0.0	42.0	0.0	50.0	381.0	534.0	453.0	79.0	0.0	0.0
RAINYDAYS	0	1	0	3	0	4	12	20	16	3	0	0
NO.OFOBS-OBSERVATION	31	28	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2019 WAS	122.0 mm ON 16-Aug											
ANNUAL RAINFALL =	1560.0		ANNUAL RAINY DAYS =		59		ANNUAL NO OF OBSERVATIONS =		365			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION	AKLERA			DISTRICT			JHALAWAR			STATE			RAJASTHAN		
CATCHMENT NO. :	405			LATITUDE :			24° 25' N			LONGITUDE :			76° 34' E		
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC			
1	0.0	0.0	0.0	0.0	0.0	0.0	14.0	4.0	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	50.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	32.0	10.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0			
6	0.0	0.0	0.0	0.0	0.0	6.0	17.0	25.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	15.0	0.0	4.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	2.0	0.0	0.0	0.0	0.0	13.0	20.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	5.0	0.0	6.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	2.0	13.0	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	3.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	20.0	2.0	11.0	0.0	0.0	0.0	0.0			
16	9.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.0	4.0	13.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	14.0	0.0	7.0	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	5.0	0.0	18.0	6.0	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	27.0	0.0	35.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	7.0	0.0	12.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	6.0	4.0	1.0	5.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	8.0	0.0	0.0	70.0	0.0	0.0	10.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	8.0	45.0	50.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0			
MONTHLY RAINFALL	9.0	0.0	10.0	0.0	3.0	189.0	172.0	382.0	97.0	0.0	0.0	0.0			
RAINYDAYS	1	0	1	0	1	12	8	19	6	0	0	0			
NO.OFOBS-OBSERVATION	31	29	31	30	31	30	31	31	30	31	30	31			
HIGHEST DAILY RAINFALL FOR 2020 WAS						70.0	mm ON 27-Jun								
ANNUAL RAINFALL -	862.0		ANNUAL RAINY DAYS -		48		ANNUAL NO OF OBSERVATIONS -						366		

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION : CATCHMENT NO. :	ASNAWAR 405				DISTRICT : LATITUDE :	JHALAWAR 24° 28' N			STATE : LONGITUDE :	RAJASTHAN 76° 20' E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	45.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	8.0	9.0	15.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	14.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	66.0	18.0	75.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	2.0	35.0	12.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	4.0	10.0	0.0	35.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	16.0	0.0	25.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	8.0	22.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	5.0	6.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	70.0	0.0	6.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	75.0	0.0	98.0	40.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	8.0	0.0	62.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	7.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	7.0	0.0	5.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	7.0	0.0	0.0	60.0	7.0	0.0	5.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	90.0	36.0	56.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	
MONTHLY RAINFALL	0.0	0.0	7.0	0.0	4.0	346.0	220.0	539.0	146.0	0.0	0.0	0.0	
RAINY DAYS	0	0	1	0	1	9	10	23	6	0	0	0	
NO. OF OBSERVATION	31	29	31	30	31	30	31	31	30	31	30	31	
HIGHEST DAILY RAINFALL FOR 2020 WAS					98.0	mm ON		20-Aug					
ANNUAL RAINFALL -			1262.0	ANNUAL RAINY DAYS -			50	ANNUAL NO OF OBSERVATIONS -					366

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

225



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION : BAKANI													
CATCHMENT NO. : 405													
		DISTRICT : JHALAWAR						STATE : RAJASTHAN					
		LATITUDE : 24° 18' N						LONGITUDE : 76° 14' E					
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	2.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	19.0	0.0	17.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	4.0	0.0	22.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	1.0	63.0	3.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	7.0	0.0	0.0	7.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	34.0	1.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	6.0	45.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	14.0	0.0	3.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	93.0	0.0	4.0	3.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.0	5.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	6.0	0.0	1.0	8.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	4.0	15.0	1.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	2.0	0.0	0.0	41.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	2.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	23.0	3.0	33.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	
MONTHLY													
RAINFALL	5.0	0.0	2.0	0.0	0.0	191.0	153.0	343.0	46.0	0.0	0.0	7.0	
RAINYDAYS	1	0	0	0	0	8	7	14	5	0	0	1	
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31	
HIGHEST DAILY RAINFALL FOR 2020 WAS					99.0	mm ON	23-Aug						
ANNUAL RAINFALL -			747.0	ANNUAL RAINY DAYS -			36	ANNUAL NO OF OBSERVATIONS -					366

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

226



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	DUG 404		DISTRICT : JHALAWAR		STATE : RAJASTHAN		LATITUDE : 23° 56" N		LONGITUDE : 75° 50" E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	13.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	6.0	10.0	14.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	46.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	2.0	0.0	0.0	16.0
12	0.0	0.0	0.0	0.0	0.0	0.0	9.0	24.0	6.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	5.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	35.0	18.0	9.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	75.0	0.0	5.0	23.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	3.0	0.0	172.0	6.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	55.0	59.0	14.0	5.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	4.0	27.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
27	0.0	0.0	13.0	0.0	0.0	17.0	3.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	92.0	30.0	188.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	10.0	37.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	5.0	0.0	13.0	0.0	0.0	275.0	227.0	628.0	67.0	0.0	0.0	16.0
RAINYDAYS	1	0	1	0	0	10	10	14	7	0	0	1
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2020 WAS	188.0 mm ON 30-Aug											
ANNUAL RAINFALL -	1231.0		ANNUAL RAINY DAYS -	44		ANNUAL NO OF OBSERVATIONS -	366					

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	GANGDHAR 404				DISTRICT :	JHALAWAR			STATE :	RAJASTHAN			
					LATITUDE :	23° 57' N			LONGITUDE :	75° 37' E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	1.0	0.0	6.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	4.0	52.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	4.0	0.0	3.0	0.0	2.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	1.0	30.0	16.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	2.0	0.0	20.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	6.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	5.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	
16	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	3.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.0	13.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	20.0	0.0	5.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	13.0	0.0	105.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	32.0	15.0	13.0	35.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	13.0	6.0	105.0	6.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	0.0	0.0	0.0	0.0	
MONTHLY RAINFALL	11.0	0.0	4.0	0.0	4.0	93.0	87.0	436.0	54.0	13.0	1.0	5.0	
RAINYDAYS	1	0	1	0	1	5	7	14	4	1	0	1	
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31	
HIGHEST DAILY RAINFALL FOR 2020 WAS	105.0 mm ON 23-Aug & 30-Aug												
ANNUAL RAINFALL -	708.0		ANNUAL RAINY DAYS -		35		ANNUAL NO OF OBSERVATIONS -						366

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	JHALAWAR 405			DISTRICT :	JHALAWAR 24° 36" N			STATE :	RAJASTHAN 76° 09" E				
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	7.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	20.0	8.0	41.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	1.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	3.0	2.0	4.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	1.0	0.0	4.0	2.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.0	2.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	3.0	0.0	22.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	1.0	0.0	12.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	3.0	7.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	17.0	1.6	5.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	5.1	2.0	0.0	0.0	0.0	0.0	
16	2.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	2.0	0.0	4.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	53.0	0.0	17.0	15.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.5	4.0	8.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	5.0	26.0	2.0	14.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	1.0	0.0	13.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	17.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	23.0	53.0	33.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0	
MONTHLY RAINFALL													
	2.0	0.0	17.0	0.0	1.0	120.0	122.3	271.7	81.0	0.0	0.0	0.0	
RAINY DAYS													
	0	0	1	0	0	7	8	18	4	0	0	0	
NO. OF OBSERVATION													
	31	29	31	30	31	30	31	31	30	31	30	31	
HIGHEST DAILY RAINFALL FOR 2020 WAS													
						53.0	mm ON	20-Jun	&	30-Jul			
ANNUAL RAINFALL -													
	615.0		ANNUAL RAINY DAYS -				38	ANNUAL NO OF OBSERVATIONS -					366

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	JHALRAPATAN 405			DISTRICT :	JHALAWAR			STATE :	RAJASTHAN			
				LATITUDE :	24° 33' N			LONGITUDE :	76° 10' E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	17.0	10.0	50.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	7.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	3.0	12.0	5.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.0	0.0	0.0	6.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	3.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	24.0	11.0	2.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	3.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	5.0	0.0
20	0.0	0.0	0.0	0.0	0.0	83.0	0.0	18.0	12.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	3.0	0.0	5.0	37.0	5.0	31.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	2.0	0.0	12.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	26.0	0.0	0.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	59.0	41.0	41.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	1.0	30.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	0.0	26.0	3.0	0.0	245.0	131.0	324.0	99.0	0.0	5.0	9.0
RAINYDAYS	0	0	1	1	0	9	7	18	4	0	1	2
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2020 WAS	83.0 mm ON 20-Jun											
ANNUAL RAINFALL -	842.0		ANNUAL RAINY DAYS -	43		ANNUAL NO OF OBSERVATIONS -	366					

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	KHANPUR 405		DISTRICT :	JHALAWAR 24° 44' N		STATE :	RAJASTHAN 76° 23' E					
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	60.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	3.0	0.0	9.0	41.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	2.0	6.0	2.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0	1.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	8.0
14	0.0	0.0	0.0	0.0	0.0	13.0	15.0	20.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
16	12.0	0.0	0.0	0.0	0.0	0.0	4.0	1.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	1.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	48.0	0.0	18.0	29.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	8.0	0.0	10.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	22.0	16.0	2.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
26	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	20.0	0.0	0.0	1.0	0.0	0.0	33.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	8.0	0.0	1.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	9.0	11.0	29.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	12.0	0.0	22.0	3.0	3.0	124.0	80.0	319.0	146.0	0.0	0.0	9.0
RAINYDAYS	1	0	1	0	1	8	8	14	5	0	0	1
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2020 WAS	84.0 mm ON 23-Aug											
ANNUAL RAINFALL -	718.0		ANNUAL RAINY DAYS -		39		ANNUAL NO OF OBSERVATIONS -		366			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	MANOHARTHANA 405				DISTRICT :	JHALAWAR			STATE :	RAJASTHAN		
					LATITUDE :	24° 14' N			LONGITUDE :	76° 48' E		
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	22.0	8.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	5.0	4.0	19.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	1.0	10.0	4.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	1.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	2.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	11.0	6.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	1.0	1.0	3.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	3.0	8.0	10.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	2.0	2.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	1.5	0.0	8.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	12.0	12.0
20	0.0	0.0	0.0	0.0	0.0	14.0	0.0	35.0	1.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	13.0	0.0	5.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	10.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	3.0	4.0	12.0	19.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	4.0	0.0	0.0	52.0	0.0	0.0	12.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	74.0	12.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	1.0	0.0	110.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	0.0	5.0	0.0	0.0	116.5	147.0	419.0	60.0	0.0	14.0	14.0
RAINYDAYS	0	0	1	0	0	9	10	21	6	0	1	1
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2020 WAS	110.0 mm ON 30-Aug											
ANNUAL RAINFALL -	775.5		ANNUAL RAINY DAYS -	49		ANNUAL NO OF OBSERVATIONS -	366					

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	PACHPAHAR 405			DISTRICT :	JHALAWAR			STATE :	RAJASTHAN			
				LATITUDE :	24° 23' N			LONGITUDE :	75° 49' E			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	5.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.0	21.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	6.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.0	8.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0	0.0
16	3.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	1.0	78.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	8.0	2.0	1.0	23.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	1.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	47.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	3.0	0.0	0.0	0.0	0.0	36.0	75.0	244.0	32.0	0.0	0.0	6.0
RAINYDAYS	1	0	0	0	0	6	8	12	2	0	0	1
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2020 WAS	78.0 mm ON 23-Aug											
ANNUAL RAINFALL -	396.0			ANNUAL RAINY DAYS -	30			ANNUAL NO OF OBSERVATIONS -	366			

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	PIRAWA 405		DISTRICT : JHALAWAR		STATE : RAJASTHAN		LATITUDE : 24° 10' N		LONGITUDE : 76° 02' E				
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	10.0	0.0	4.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	55.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	9.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	13.0	0.0	77.0	32.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	41.0	7.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	15.0	0.0	5.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	3.0	0.0	0.0	1.0	1.0	29.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	2.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	33.0	5.0	39.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	
MONTHLY RAINFALL	0.0	0.0	5.0	0.0	0.0	212.0	31.0	274.0	98.0	0.0	0.0	0.0	
RAINYDAYS	0	0	1	0	0	8	4	14	3	0	0	0	
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31	
HIGHEST DAILY RAINFALL FOR 2020 WAS	77.0 mm ON 23-Aug												
ANNUAL RAINFALL -	620.0		ANNUAL RAINY DAYS -		30		ANNUAL NO OF OBSERVATIONS -						366

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

DAILY RAINFALL DATA FOR YEAR 2020

STATION CATCHMENT NO. :	SUNEL 405	DISTRICT :	JHALAWAR	STATE :	RAJASTHAN							
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	11.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	12.0	10.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	6.0	0.0	8.0	30.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	9.0
13	0.0	0.0	0.0	0.0	0.0	0.0	1.0	10.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	5.0	3.0	3.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	11.0	12.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	36.0	0.0	1.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	60.0	19.0	4.0	16.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	15.0	0.0	8.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	8.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	12.0	20.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	8.0	40.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MONTHLY RAINFALL	0.0	0.0	8.0	0.0	6.0	140.0	97.0	327.0	27.0	0.0	0.0	9.0
RAINYDAYS	0	0	1	0	1	6	9	15	2	0	0	1
NO.OFOBS- -ERVATION	31	29	31	30	31	30	31	31	30	31	30	31
HIGHEST DAILY RAINFALL FOR 2020 WAS	101.0 mm ON 23-Aug											
ANNUAL RAINFALL -	614.0		ANNUAL RAINY DAYS -	35		ANNUAL NO OF OBSERVATIONS -	366					

RAINY DAY : IF DAILY RAINFALL > 2.4 mm

RAINFALL IN mm

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DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

11. GEOLOGY AND MINERAL WEALTH:-

GEOLOGY:-

Most of the part of Jhalawar district is occupied by rocks of Vindhyan Supergroup which is the part of Great-Vindhyan basin, extending from Rohtas in Bihar to the Chittorgarh area of Rajasthan. On the basis of different rock-units the Vindhyan of the area have been divided into Semri, Kaimur, Rewa and Bhandar Group is separated from Kaimur by conglomerates horizon which marks the break in sedimentation before the deposition of Kaimur-group.

The limestone of Sirbu shale horizon, at places shows the evidence of algal life in the form of arch shaped structures known as "stromatolites". Occurrence of sandstone at different stratigraphic horizons indicates fluctuation of the sea-level due to transgression & regression of the sea several times during the Vindhyan period. The general stratigraphic succession of rock types exposed in Jhalawar district i.e. as under -

Recent to Quarternary		Alluvium
Deccan Traps		Basalt
Vindhyan Supergroup	Bhandar Group	Sirbu shale with siltstone sandstone and cherty stromatolitic limestone Lower Bhandar (Bundi Hill) sandstone with shale Samaria Shale Lakheri Limestone Ganurgarh Shale
	Rewa Group	Upper Rewa (Govindgarh) Sandstone Jhiri Shale Lower Rewa (Indergarh) Sandstone Panna Shale
	Kaimur Group	Kaimur Sandstone
	Khorip Group (Semri Group)	Upper Jhalrapatan (Suket) shale/limestone Upper Jhalrapatan (Suket Sandstone)
Bhilwara Super Group	Hindoli Group	Bhadesar shale ,slate & phyllite



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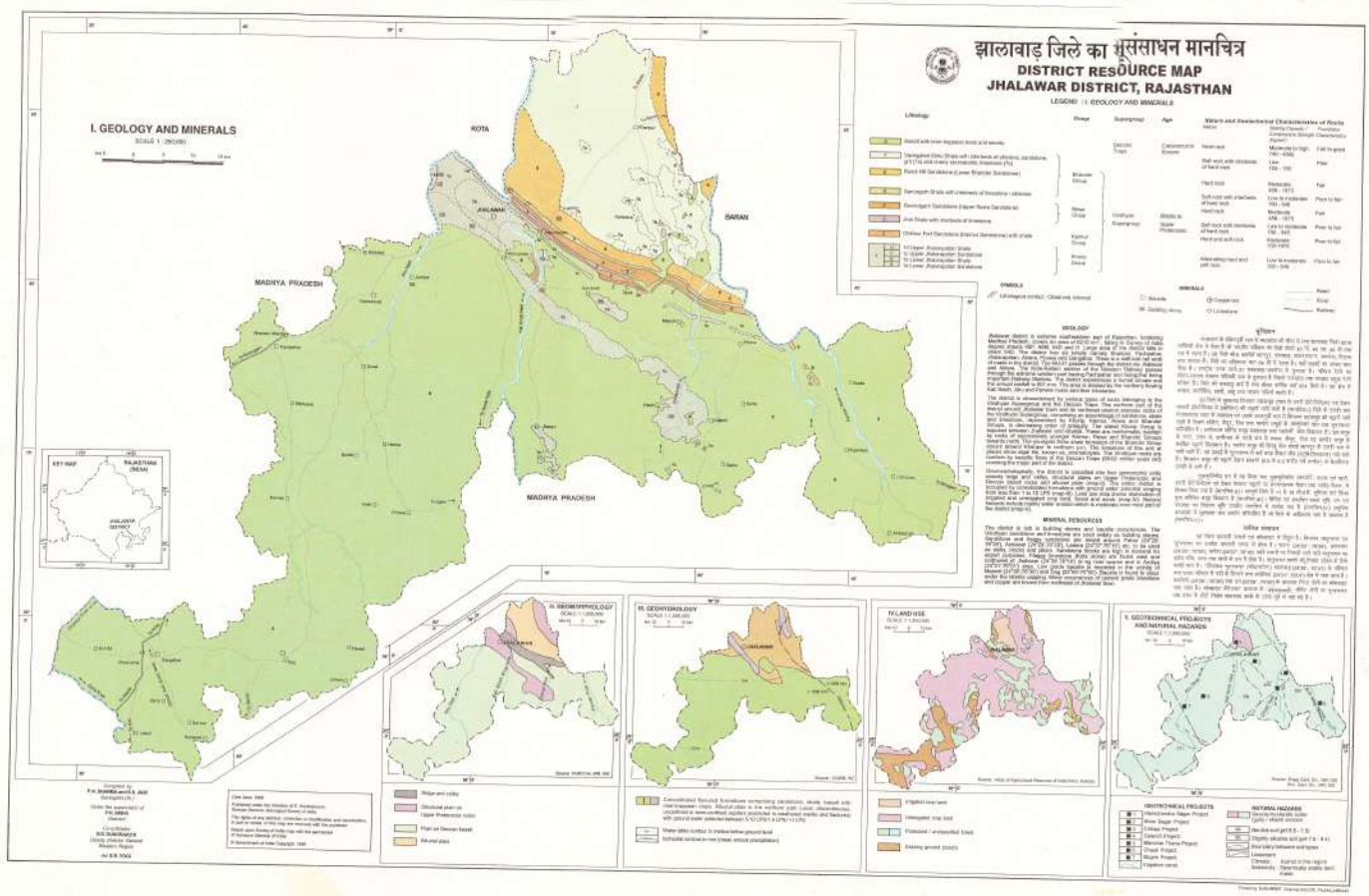


Fig 8: Geological Map of Jhalawar District.

ECONOMIC IMPACT OF MINING:

The mining will generate direct and indirect employment during mining operations and most of the people and labour will be engaged in mining operation purpose and they will be get paid more than minimum wages prescribed by State Govt. In general there will be no adverse effect on human health as no blasting or handling of toxic material is involved. All the safety measures will be strictly followed to prevent occupational risk during excavation, loading and transportation. This will be a good source of revenue generation for the government as after getting the Environment Clearance the minor mineral concessioner will have to pay the Royalty Price, DMFT and GST which will be exchequer the revenue of the State and Central Government which ultimately enhance the economy of the state as well as to the country.



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Mineral Wealth of district:

A-Metallic Minerals:

Due to absence of metamorphic rocks to which most of the metallic minerals are associated, no major metallic mineral of economic importance is found in Jhalawar district. However, small occurrences of copper are found around Jhalawar.

Copper:

There are few old workings of copper just 1 Km. north of Jhalawar town where Malachite and Azurite are present in Jhalrapatan sandstone of Lower Vindhyan.

Chalcopyrite was noted in a well cutting along shear and breccia zone. Selective samples from this well have shown good copper values. Surface indications, geophysical and geochemical prospecting by the department indicated encouraging results. However, further work is yet to be taken up.

B- None-metallic Minerals:

Bentonite:

Bentonite is a variety of clay possessing inherent bleaching properties. It is of great commercial importance especially in chemical industries, oil drilling, decolourising, vegetable oils, rubber industry, foundries etc.

There are various bentonite deposits in Jhalawar district but so far these have not been put to any industrial use because these are mainly non-swelling type and will necessarily require activation. Owing to poor infrastructural facilities and because of its low cost, no serious efforts have been made for its industrial utilization.

The department of Mines and Geology has carried out intensive survey to locate and prospect bentonite deposits in various parts of the district. There are large numbers of occurrences spread over in Pirawa, Pachpahar and Jhalrapatan tehsils.

1. Mathniya-Bhandar Tehsil Pirawa.
2. Khetakheda, Tehsil Pirawa.
3. Chandi kheri, Teh. Jhalrapatan
4. Karodiya-Quadir nagar-Chhoti sunel, Teh. Pirawa.
5. Azampur, Semlikham etc., Teh. Pirawa.
6. Low grade bentonites found in various parts of the district.

The bentonite responds much to acid activation and can be utilised in chemical industries, decolorising vegetable oil, foundries, rubber, ceramics etc. after activation.

Khetakheda:

The area has been investigated by pitting calcium trenching followed by drilling. The based bentonite is found spread over an area of about 2 sq kms. A reserve of 13 million tonnes were



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calculated on the basis of drilling. Bentonite occurs at a depth of 0.50 to 14.70 mts. under an overburden of soil, traps and calcareous chert. Its thickness varies from 0.25 to 5.95 mts. The swelling index varies from 21 and gel value from 7 to 11.

The bentonite is non swelling type and does not respond to acid activation but may respond to alkali activation to some extent. Moreover, in most of the bore holes, it was found at a depth of more than 5 mts. So the working of this deposit may not be economical presently.

Chandi Kheri:

About 0.57 million tonnes of grey bentonite and 4.536 million tonnes of grey mixed with red bentonite found in area of 2.75 sq. kms. were proved by pitting trenching. It was found that these are calcium based non-swelling type requires pretreatment (activation) before marketing.

Karodiya-Quadir nagar- Chhoti-Sunel :

The grey bentonite mixed with red variety similar to that of that of Mathniya has been found near Karodiya, Quadir nagar. Chhoti-Sunel, Kundlapratap, Charelia Kesharpura etc. Extensive pitting trenching was carried out in Quadir nagar, Chhoti sunel area. The bentonite zone is found in all the hill slopes around these villages. The width of the zone varies from 5 to 10 mts. and thickness 2 to 5 mts. Reserves of more than 5 million tonnes are expected from these area.

Low Grade Bentonite:

Huge deposits of reddish pink bentonite are widespread in Jhalawar district. It is poor in quality, important localities are: -

1. Near village Chauki, 20 M. T. of reserves are inferred.
2. Near Gurariya Joga, about 20 M. T. of poor grade bentonite are available.

In addition to the above occurrences red bentonite is found near Jhalawar road, Guraria Jhala, Pagariya, Semlikham Gurara etc. areas.

Though large deposits available in Jhalawar district, of bentonite are but no serious efforts have been made so far for its industrial utilisation. However recently some parties have shown interest in these deposits and it is hoped that mining operations will start soon.

Limestone:

High Grade Limestone:

There are number of intertrappean high grade limestone patches in Jhalawar district having limited extent, both on surface as well as in depth. Most of the patches are associated with varying amount of chert ranging from 10% to as much as 70%. The limestone when manually separated from chert is of high grade containing more than 50 % CaO and can be utilized as sweetener in cement industry.

Aragonite is also found associated with high grade limestone The thickness of the cherty limestone varies between 0.5 m. to 1.5 mts. only.

As a result of the investigations carried out by the department about 30 cherty limestone patches scattered in different parts of the district have been located near Jhalawar road, Jhinkhriya, Kotri, Kishanpura, Karmakheri, Napaniya etc. The dimensions of these patches vary from 30 X 20 mt. to 1200 X



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500 mts. but most of the patches have limited extent (about 200 X 200 m.) and contain about 50% of chert. However few patches are promising which have comparatively less amount of chert and have reasonably good extent. These are near Jhalawar road, Kotri-Gardhankheri, Jhinkhriya and Kotrikhurd. After discarding chert manually, some bands of limestone have following variable chemical composition.

But the high grade limestone containing more than 50% CaO can only be available after selective mining which may not be more than 60% of the limestone part of the rock.

About 1.5 million tonnes of limestone may be available in these three areas.

Most of the mining leases are also actively operating in these localities. In addition to this, a reserve of about 1.00 million tonnes of limestone is also expected from rest of the occurrences.

From the above it may be said that the intertrappean limestone of Jhalawar are not of much importance because of their limited extent, erratic nature with cherty bands. Therefore the limestone after selective mining can only be utilised either as sweetener in cement industry or for making lime.

Low Grade Limestone:

The low grade limestone belonging to Suket shales of lower Vindhyan and Sirbhu shales of upper Vindhyan is widespread near Gagraun and Sarola kalan respectively. The limestone is generally of low grade siliceous, dolomitic and shaly contents.

Gagraun Limestone:

A limestone band having 8 Kms. strike length and 60 to 130 mts. width is exposed near Gagraun. Probable reserves of about 30 million tonnes of limestone may be available. But the limestone is intercalated with shaly limestone and shales. It is highly erratic in calcium carbonate percentage and only small cement grade limestone bands are available having thickness of less than a meter to maximum 4 mts.

Laterite:

Laterite occurs as capping over Deccan trap hills in south western part of Jhalawar district. Extensive deposits are found near Sarod, Mishroli, Kolvi, Gunavi, Binayaga, Kysara and around Dag, varying in thickness from less than a meter to over 10 mts. This rock was excavated locally due to its soft nature to build temples and caves during the Buddhist period such constructions are seen in Kolvi, Binayaga etc. One area near Sarod is taken on lease by Mis Manglam cement but presently there is no production.

Investigations are continued in the area to assess the laterite deposits.

Chert, Agate Chalcedony:

The trap rocks are store-house of chalcedony chert, agate etc. In Jhalawar district occurrences of agate and associated crypto-crystalline silica products are found spread in many localities. They are found scattered in plains as well as in hill slopes.

Important occurrences are:-

1. Near village Nasirabad on Richwa-Bakani road.
2. Mundlya Kheri south of Jhalarapatan.
3. Diwallkhera, Borband, Donda, Semli Bhawani etc. Thesil Pirwa.



DISTRICT SURVEY REPORT, JHALAWAR

(Under Ministry of Environment, Forest & Climate Change, New Delhi, Notification Date 25-07-2018.)

4. Mariavada Goverdhanpura, Khokhariya etc, between-Bhawanimandi and Dag.
5. Near Garnawad.
6. Near Ruparel

In addition to these areas such abrasive stones are found as scattered pieces almost in every locality of Deccan trap in Jhalawar distt. No regular mining is being done for these minerals but the mineral can be utilised in abrasive industry and some part of it having variegated colours is of Semi-precious nature.

Lithomergic Clays:

The lithomergic clays associated with laterite cappings are found near Sarod, Dag, Gunavi etc. villages but the draw back with these clays is higher iron content which is not separable by washing and electromagnetic separation.

Building Stones:

Flaggy Limestone(Kotastone)

Flaggy limestone yielding slabs similar to that of Ramganjmandi has been located in Jhalawar. Mining has already commenced near Aroliya, Paroliya, Biriyaakheri, Nandiyakehri, Jhinjhni, Pipliya, Runji villages.

The limestone belonging to lower Vindhya is found below Deccan traps at a depth of about 25 mts. Indications of similar limestone have been found in two scout bore holes, wells and handpump sections between Aroliya and Kishanpura near Mangal, Chandloi, Kishanpura, Piplod, Khanpuriya etc. villages at a depth of 15 to 25 mts. The entire area is covered with Deccan trap not much is known about the underlying limestone.

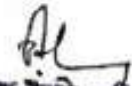
Initially a comprehensive scheme of exploration in 154 sq. km. area between, Aroliya and Mangal was proposed. Recently, department has delineated few plots for mining leases in these areas. The flaggy limestone of greenish grey colour has been encountered between depth of 28 and 47 mts.

Flaggy Sandstone:

sandstone in the form of slabs and pillars are mined, on large scale in Jhalawar district. There it is associated with two horizons with (i) Jhalrapatan sandstone of lower Vindhya and (ii) Lower Bhandar sandstone of upper Vindhya. The important mining areas are: Loharia-ki-Dhani, Manak chauk, Bagdhar, Bakaspura, Asnawar Bhanwrasa, Bhalta, etc. all belonging to Jhalrapatan sandstone. The Bhandar sandstone quarries exist near Ambala and Laxmipura.

Masonry Stones:

There are huge deposits of sandstone in the district. The non flaggy sandstone is quarried and used as masonry stone at number of places around Jhalawar, Asnawar, Jhalrapatan etc. In most of the flaggy sandstone areas, masonry stone is found as overburden. In addition to this, trap rock, limestone, laterite etc. are also produced as masonry stone by local villagers.

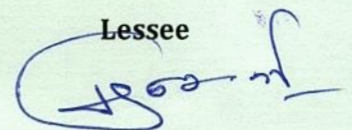

सहायक खनि अभियन्ता
खान एवं भू-विज्ञान विभाग
झालावर



UNDERTAKING

I **Mukesh Sharma S/o Suresh Chand Sharma, R/o Plot No. 7 Anandpuri Colony, Kalwar Road, Jhotwara, Jaipur** lessee/owner for River Bed Mining Project of Minor Mineral Sand (Bajri), **Lease Area 905.206 Hect. ML No. 22/2013 located at near village(s) of Tehsil - Pidawa, District- Jhalawar, and Rajasthan**, hereby undertake that only scrapers will be used for mining and mining depth will be maintained as 1.0 meter (max.) from Original Ground Level (OGL) and no other heavy machineries like Bucket Excavators, JCB Machine etc. will be used which any adversely impact the aquatic biota.

Date: 30.12.2021

Lessee


(Mukesh Sharma)

ATTESTED

NOTARY PUBLIC
GOVT. OF INDIA, JAIPUR

31 DEC 2021

31 DEC 2021

राज. प्रस्ताव 1392 ब्लॉक
 क्रेता का नाम आशा मिश्रा
 पिता का नाम S/O सुधीर चण्डेश्वर
 निवास स्थान 43 बंगला 912/1 (प्लॉट 2011 नंबर 243)
 मुद्रांक शुल्क 100/-
 अधिभार 1998 कि (धारा 3-क) विकास शुल्क 10%
 (धारा 3-ख) गौ संरक्षण 10%

प्लॉट 2011 नंबर 243
 S/O सुधीर चण्डेश्वर

31 DEC 2021

आशा मिश्रा
 ला. स्टाम्प विक्रेता आ. नं. 57/20
 15-सी, श्री गणेश मंदिर, झोटवाड़ा
 जयपुर

राजस्थान स्टाम्प अधिनियम, 1998 व अन्तर्गत स्टाम्प रशि पर प्रभाविता अधिभार	
1. आधारभूत आवश्यकता सुविधाओं हेतु (धारा 3-क)- 10% रु. 10	10
2. गौ और उसकी नस्ल के संरक्षण और संवर्धन हेतु / प्राकृतिक आपदाओं एवं मानव निर्मित आपदाओं के निवारण हेतु (धारा 3-ख)- 20% रु. 20	20
कुल राशि 30	30
आशा मिश्रा हरदाभार स्टाम्प विक्रेता आशा मिश्रा आ. नं. 57/20	

(Signature)

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