



Government of Jammu and Kashmir (UT)
Directorate of Geology and Mining, Jammu

4th Floor, J.L. Nehru Udhog Bhawan, Near Rail Head Complex, Jammu Pin 180006
Email: dgmjak@gmail.com Phone No. Office:- 0191-2477903, 0194-2493588

ANNUAL REPORT ON
SAND MINING IN JAMMU & KASHMIR, UT
(2022-23)

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Abstract

This report embodies the geological set up, physiographic drainage features of Jammu & Kashmir, UT in general and discusses about mineral resource planning, mineral concession, and issues related to industrial exploitation of river bed material. River bed mining for sand, silt, bajri and boulders represent an important economic activity in Jammu & Kashmir and form essential raw materials for the infrastructural development works and for the construction industry. The Mineral Concession for Minor Minerals including River Bed Material (RBM) is granted in accordance to the "The J&K Minor Mineral Concession, Storage, Transportation and Prevention of Illegal Mining Rules, 2016" and Ministry of Environment, Forest & Climate Change Notification issued vide No. S.O.141 (E) dated 15.01.2016 wherein Approved Mining Plan, Environmental Clearance and Consent to Operate from the Competent Authorities are now the statutory required formalities for extraction of minor minerals. Further the Department has taken many steps in accordance with the Sustainable Sand Mining and Management Guidelines, 2016 read with Enforcement and Monitoring Guidelines for Sand Mining, 2020 for regulating and monitoring the extraction of river bed material so that the objective of Sustainable Mining with minimum impact on the ambient environment is achieved

JAMMU REGION

INTRODUCTION

The Geology and Mining Department was established in 1960 with the objective to explore the mineral wealth of the J&K by way of Geological investigation aided with Exploratory Mining, Drilling, and Chemical/Mineral testing techniques to prove the quality and quantity of deposits to promote the mineral based industry in J&K. The establishment of mineral-based industries, leading to direct and indirect employment generation for the people of J&K.

This report is framed as per DGM office order No: 522/C-Adm/DGM/ARSM/2021/13362-67 Dated 23-12-2021 read with already submitted report vide no. Jt/DGM/Report/Sand-Mining/2022-23/297 dated 27/04/2022. It is since the direction issued dated 27-02-2012 by the Apex Court on Mining of Minor Minerals/River Borne Minerals in case of Deepak Kumar etc. versus State of Haryana & Others where under Mining Plan and Environment Clearance was made mandatory for every river stretch proposed for river bed mining. It was also a direction by the Apex Court to the States to frame the rules and incorporate its recommendation made in the judgment. Accordingly, in compliance to the directions of Court, the guidelines issued on the subject by Ministry of Mines (MoM) (GoI) 2010, Ministry of Environment & Forest & Climate Change (MOEF&CC) (GoI) 2010, and the amendments made in the basic Central Act, the Mines and Mineral Development & Regulation 1957 (MM&DR) on 12th Jan. 2015, the State Govt framed Jammu and Kashmir Minor Mineral Concession Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016. Prior to the said rules mining of minor minerals happened to be conducted under the J&K Minor Minerals Concession Rules, 1962 where under such requisite conditions of Mining Plan (MP) and Environment Clearances (EC) were not applicable. But these conditions were applicable to the minor minerals other than river beds as governed by the MM&DR Act, 1957 and the Mineral Concession rules made there under. In order to have scientific exploitation of Minor Minerals from the rivers/streams as per the guidelines of Ministry of Environment & Forest & Climate Change (MoEF&CC), GoI and the Minor Mineral Concession, Storage, Transportation & Prevention of Illegal Mining, Rules, 2016, the Department of Geology & Mining mapped the Minor Mineral Blocks across the entire UT & subsequently put to e-Auction 384 Minor Mineral Blocks including 175 numbers from Jammu Division.

GEOLOGICAL SET UP OF JAMMU REGION

The present sand mining report has been compiled as per the data available in the department and report submitted by Langeh H.L & others 2021-22 and replenishment reports submitted by the officers of the department. The geological set up of Jammu region characterises of two linear zones namely autochthonous, and paraautochthonous comprising of the rocks formation varies from Proterozoic to Recent age. The rocks of the Autochthonous zone exposing from Upper Palaeocene to Lower Pleistocene exposing mainly Tertiary sediments with the inliers of Sirban Limestone (Late Precambrian to Early Cambrian). The Para autochthonous zone lying between two thrust namely Murree and Panjal exposing the Palaeozoic Panjal Trap and Younger and older Eocene rocks. The generalized geological succession of the rocks exposed in the regions is as under:

FORMATION	LITHOLOGY	AGE
Alluvium and Terrace deposit	Alluvium, clay boulder bed and sand, silty clay	Recent to Late Pleistocene
Siwalik Group	Coarse boulder conglomerate, thick earth clay, sands and pebbly grit, massive grey sandstone, nodular shale and clay, dark hard sandstone and red and purple shale	Lower Pleistocene to Mid Miocene
Murree Group	Bright purple shale, hard purple and grey sandstone, soft pale colour sandstone, nodular clay and pseudoconglomerates	Upper Oligocene to Mid Miocene
Subathu Formation	Variiegated olive green, grey and black carbonaceous shale, nodular fossiliferous limestone, bauxite and brecciated grit	Palaeocene to mid Eocene
-----Unconformity-----		
Sirban Limestone	Light grey to dark grey, cherty & non cherty dolomitic limestone with a few bands of flaggy Limestone & black shale	Proterozoic

	beds.	
-----Murree Thrust-----		
Panjal Trap	Vesicular, amygdaloidal, massive and schistose basalt and ash bed generally green in colour	Mid Permian to lower Permian
Agglomerate Slate	Dark grey to black carbonaceous slate with plant beds, massive quartzite containing embedded agglomerate	Lower Permian to Upper Carboniferous
Baila Formation	Black carbonaceous calcareous shale with thin coal band and shaly slate with lenticular bands of limestone and hard massive nodular limestone	Proterozoic
Gambir Formation	Quartzite with carbonaceous shale, shaly limestone, agglomerate slate, carbonaceous shale and silt	Proterozoic
Sauni volcanic	Foliated and massive basic volcanic	Proterozoic
Ramban Formation	Dark grey, carbonaceous slates with lenticular bands of greywackes, grit and pebbly slates, phyllite and schist with gypsum	Proterozoic
-----Panjal Thrust-----		
Bhaderwah Formation	Light grey to dark and greyish brown slates with alternating bands of greenish grey to dark grey quartzite	Cambro-Silurian
Kaplas & Dedni Granite	Medium to coarse grained, equigranular, homogenous granite composed of quartzite, feldspar, biotite and muscovite	Proterozoic
Salkhala	Micaschist, garnetiferous schists, quartz-chlorite, Carbonaceous shale, gneiss, quartzite along with Intrusive granites and gypsum beds	Proterozoic

GEOLOGICAL STRUCTURE:

The Foreland thrust belt & the Para-autochthons zone, the tectono stratigraphic units defined by Wadia (1931), of Northwest Himalaya. The Foreland thrust belt, forming the Outer Himalaya, comprises Siwalik, Murree & Subathu Groups of the Tertiaries with Proterozoic Sirban Limestone Inliers unconformable overlain by Eocene rocks of Subathu Group within this structural unit. Structurally, the rocks of Outer Himalayan ranges depict the pictures of broad anticlines and synclines and series of thrusts. The Jhajhar-Surin-Mastgarh anticline is the immediate structural feature located southeast of Reasi besides one prominent thrust passing through along the Reasi Sirban known as Main Boundary thrust which delimits the pre-Siwalik rocks i.e. the Murree strata. Various workers who have contributed to update the geology of the area after the classical works of Medlicott (1876) and Wadia (1937) are Krishnan (1968), Pascoe (1959), Roy Chowdhury et. al (1960), Riana (1964), Ganseer (1964), Gupta and Dixit (1970), Rao and Khan (1971), Rao (1973,1976,1980) and Venkatachala and Kumar(1996,1969).

DISTRICT JAMMU

Geologically, the Jammu District is covered by the three Formations- Siwalik, Kandi & Sirowal.

The area forms a part of the Himalayan foothills, which finally merges into the plains towards south. There is a gradual increase in heights from south to north from 350m Nagrota area to 1208 m (Kalidhar range). The Tawi River, a tributary of the Chenab, forms the main drainage channel in the District. The main tributaries are Tawi river (Kishanpur Manwal), Chenab river, Kathar Khad, Chowki Chora, Jad khad and Khour Khad, etc. in the district wherein in during year mining actives is being carried out.

DISTRICT REASI

On regional scale the area has rugged and mountainous topography with NW-SE trending hills and is largely occupied by Siwaliks & Sirban Group of

rocks with the steep slopes dissected by gorges and cliffs in the north. The general physiographical slope is towards southwest. The Chenab River forms the principal drainage feature in the district. The regional pattern of Chenab River follows north to northwest and southwest trend and drains almost all the western areas of the district. The main tributaries are Pei Khad, Anji Khad, Ans river and Chenab river in the district wherein in during year mining actives is being carried out.

DISTRICT UDHAMPUR

The area is a part of the sub-Himalayan range consisting of low ridges and shallow valleys. The ridges have gentle slopes and become steep when traversed towards northward. The dominantly arenaceous units of Siwalik rocks form well-defined ridges. The main tributaries are Tawi River, Birma Nallaha, Ramnagar Khad etc. in the district wherein in during year mining actives is being carried out.

DISTRICT SAMBA

The area forms part of the foothills of sub Himalaya merging with the plains in the south and southwest with elevations ranging from 280 m to 500 m amsl Whereas the northern and north-eastern parts are hilly and mountainous having elevations roughly between 500 and 700 m amsl with intermountain valleys called as Dun belt. Major physiographic slope is towards south and south-west. The main tributaries are Devak River, Basantar River and Bein Khad etc. in the district wherein in during year mining actives is being carried out.

DISTRICT KATHUA

The area forms part of sub Himalayan region. The north and North-eastern parts form the hill slopes of Siwalik ranges while as the southern and south-western extant slopes gently merging with the Punjab plains called as Outer Plains. There is a gradual rise in height from 300 m at Jogian town to north and North eastward elevated Siwalik ranges of height between 500-800 m and the most northern and north-eastern parts are hilly and mountainous having elevations roughly between 800 and 3000 m amsl with intermountain

valleys called as Dun belt. Deep valleys and steep escarpments are the conspicuous features of the hilly terrain of the region. The major physiographic slope is towards south and south-west. The perennial Ravi River is Indus River forms the major drainage feature of the region which shares Trans borders with J&K, in Himachal and Punjab States towards east. The perennial Ravi, Ujh and Tarnah rivers form the principal drainage features of the region. The main tributaries are Ujh River and SaharKhad, Bhini river etc. in the district wherein in during year mining actives is being carried out.

DISTRICT RAJOURI

The area predominantly comprises Murree Group of rocks. While as the northern and north-eastern parts are hilly and mountainous forming metamorphic and crystalline rocks of Lesser Himalayan Range. Major physiographic slope is towards south and south-west. The Nowshera River forms the major drainage feature. The Niari Tawi, Thandapani Wali Tawi River & Nowshera river are the tributaries of Manawar Tawi, the major drainage system in the region. The main tributaries are Ans, river, Dharali, Nowshera river and Solki etc. in the district wherein in during year mining actives is being carried out.

DISTRICT POONCH

The region largely constitutes the Murree Group of rocks which lie in the southwest of Pir Panjal range and represents a very rugged topography comprising narrow valleys, steep slopes, cliff faces and gently slowing meadows. The elevation in the area ranges from 1000 amsl to 1500 amsl. Poonch River, a tributary of Jhelum River forms the major drainage feature and generally flows westerly. The Betar nalah, Rangar Nalah & Drungali Nalah joins the river Poonch from the north. Betar nalah is a perennial tributary of Poonch River and two prominent streams drain into it from the extreme north besides ephemeral nalahs.

The Mendhar River is a sub basin which approximately drains 25% of Poonch District. Generally, the River flows in westerly direction. The main

tributary Ari nala etc. in the district wherein in during year mining activities is being carried out.

OVERVIEW OF SAND MINING/RIVER BED MINING ACTIVITY IN JAMMU REGION

There is limited scope of mining activity in J&K as per topography and other environmental conditions. However due to increasing population, urbanization and the expansion in industrialization the demand for construction material has increased day to day to build complexes, private townships, flyovers, airports, increase in highway lanes and other subsequent growth in infrastructure projects the demand of Minor Mineral is more. To meet the growing demand on the way of modernization, construction materials such as sand, stone and clay are needed in large quantities and in recent time these accelerated developmental activities have imposed immense pressure on rivers which act as a treasure for the building sector. Thus there is a need of regulated law bound mining activity at places where there is scope and source of this economic commodity. The present sand Mining report has been compiled as per the data available in the department regarding Sand Mining, replenishment studies and other ancillary data available in the department submitted by Langeh H.L & others 2021-22(ESMG) and other officers of the department etc.

Exclusive river sand deposits do not occur in the Jammu region except few instances have been mapped from River Basantar and its tributary namely

S. No	District	Total No. of Block	ML Granted	Rejected/Refund/Pending for other reasons
1	Jammu	39	29	10
2	Kathua	25	14	11
3	Samba	21	17	4
4	Udhampur	5	7	0
5	Reasi	32	25	7
6	Poonch	23	15	8
7	Rajouri	30	22	8
8	Doda	2	1	1
9	Kishtwar	2	2	0
		179	130+(12pvt.)=142	49

Rui Khad in Samba district and few potential locations have been earmarked in Chenab River in Reasi district.

In compliance to Sustainable Sand Mining Management Guidelines-2016 and Enforcement & Monitoring Guidelines for Sand Mining-2020 read in sync with each other, Notifications of MoEF& CC, GOI, NGT guidelines/directions and MM(D&R) Act and rules made their under etc., during the year 2020, the Department has successfully conducted e-auction of Minor Mineral Blocks across the UT of J&K and as on date more than 175 Mining Leases have so far been granted. The detail is as under;

S. NO	Block No.	Mineral	Description	Area	Name of successful bidder	Grant of lease vide order No.& Date
			JAMMU DISTRICT			
1	I/1.	RBM	Tawi River upstream Dhar Udhampur Road Bridge, Kishanpur Manwal, District Jammu	5.10	Sh. Pavan Kumar Sharma S/o Sh. Hoti Lal, R/o 56 Krishna Lok, Rajpura. Mawana Road, Meerut, Rajpura, Uttar Pradesh-250001.	69-DGM Of 2021 Dt: 19.05.2021
2	I/2.	RBM	Tawi River downstream Railway Bridge Kishanpur Manwal District Jammu	9.21	Sh. Sahil Arora, S/o Sh. Sunil Arora, R/o H.No. 110/P, Sec-2, Ward No. 53, Jammu, Trikuta Nagar, Jammu- 180020	Order No. 42-DGM of 2021 dt 27.01.2021
3	I/3.	RBM	Tawi River downstream Railway Bridge Kishanpur Manwal District, Jammu	6.9	M/s Sai Mines Logate Tehsil & District Kathua	67-DGM Of 2021 Dt: 19.05.2021
4	I/4.	RBM	Tawi River downstream Railway Bridge Kishanpur Manwal District, Jammu	9.82	Sh. Sanchit Gautam S/o Sh. Ravi Kumar Gautam R/o Nagrota near Toll Post, Jammu	52-DGM Of 2021 Dt: 16.04.2021
5	I/5.	RBM	Tawi River Downstream Railway Bridge Kishanpur Manwal Distt. Jammu	9.86	Sh. Karanveer Singh, S/o Sh. Surinder Singh, R/o Lane No. 3, Shaheed Udham Singh Nagar, Pathankot-145001	Order No. 136-DGM of 2021 dt 18.11.2021
6	I/6.	RBM	Tawi River Downstream Kishanpur Manwal Distt Jammu	9.74	Sh. Aditiya Mahajan, S/o Sh. S. K. Gupta R/o H. No. 20 Sector 6/A W. No. 54, Trikuta Nagar, Jammu	53-DGM Of 2021 Dt: 16.04.2021
7	I/7.	RBM	Tawi River Downstream Kishanpur Manwal District Jammu	6.4	Sh. Parshotam Singh, S/o Sh. Baljit Singh, R/o H. No. 56 W. No. 3, Kamra Pati, Jaito Faridkot, Punjab	74-DGM Of 2021 Dt: 20.05.2021

8	1/8.	RBM	Tawi River Downstream Kishanpur Manwal District Jammu	8.15	Sh. Sushil Kumar S/o Sh. Tarsem Lal R/o Flat No B-13, Sector No. 1, Dream Line Society, Trikuta Nagar, Jammu-180020	Order No. 46-DGM of 2021 dt 27.01.2021
9	5/2.	RBM	Chenab river downstream old bridge akhnoor distt jammu	9.16	Zaheer choudhary S/O sh. Ghulam Mohd.R/O Madrasa Bhatthindi	Order No. 39-DGM of 2021 dt 12.01.2021
10	5/3.	RBM	Chenab River Downstream Old Bridge Akhnoor Distt. Jammu	9.94	Mr. Vipam Kumar S/o Sh. Sat Pal Mehta R/o Dhangri, Rajouri	Order No. 40-DGM of 2021 dt 12.01.2021
11	5/4.	RBM	Chenab River Downstream Old Bridge Akhnoor Distt. Jammu	9.32	Mr. Rameshwar Singh, S/o Sh. Gian Singh R/o H. No. 03, Lane No. 01, Sharika Vihar, Talab Tillo, Jammu	Order No. 41-DGM of 2021 dt 12.01.2021
12	5/9.	RBM	Kahatarwali Khad Downstream Manoh-Khathar Bridge Distt. Jammu	9.52	Sh. Sanchit Gautam S/o Sh. Ravi Kumar GautamR/o Nagrota near Toll Post, Jammu	Order No. 48-DGM of 2021 dt 22.02.2021
13	5/11.	RBM	Kahatarwali Khad Downstream Manoh-Khathar Bridge Distt. Jammu	8.59	Sh. Aditiya Mahajan,S/o Sh. S. K. GuptaR/o H. No. 20 Sector 6/A W. No. 54,Trikuta Nagar, Jammu	Order No. 49-DGM of 2021 dt 22.02.2021
14	5/12.	RBM	Khathar Khad Distt Jammu	6.29	Sh. Rahil Choudhary,S/o Sh. Rakesh Kumar R/o H.No-51 B/D, Gandhi Nagar, Jammu	Order No. 96-DGM of 2021 dt 27.08.2021
15	5/13.	RBM	Kahatarwali Khad Upstream Manoh-Khathar Bridge Distt. Jammu	8.69	Sh. Sushil Kumar S/o Sh. Tarsem Lal R/o Flat No B-13, Sector No. 1, Dream Line Society, Trikuta Nagar, Jammu-180020	Order No. 115-DGM of 2021 dt 27.08.2021
16	5/21.	RBM	Tawi River Up Stream Jad Khad Downstream Jourian Bridge District Jammu	9.35	Sh. Kuldeep SinghS/o Sh. Kaku Ram,R/o Arnas District, Reasi	79-DGM Of 2021 Dt: 09.06.2021
17	5/22.	RBM	Jad khad Downstream Jourian Bridge Distt Jammu	8.65	Harpal Singh S/O Sant SinghR/O Chatha Farm Jammu	62-DGM Of 2021 Dt: 03.05.2021
18	5/23.	RBM	Jad Khad Downstream Jourian Bridge	9.98	Kesri Nandan Mines, District Kathua	68-DGM Of 2021 Dt: 19.05.2021
19	5/24.	RBM	Jad Khad Upstream Jourian Bridge District Jammu	6.17	Sh. Karanveer Singh ,S/o Sh. Surinder Singh, R/o Lane No. 3, Shaheed Udham Singh Nagar,Pathankot-145001	71-DGM Of 2021 Dt: 19.05.2021
20	5/25.	RBM	Jad Khad Upstream Jourian Bridge District Jammu	9.43	Sh. Brinder Singh S/o Sh. Kimat LalR/o Raipur Satwari, Jammu	Order No. 50-DGM of 2021 dt 22.02.2021
21	5/26.	RBM	Jad Khad Upstream Jourian Bridge District Jammu	7.95	Sh. Parshotam Singh,S/o Sh. Baljit Singh, R/o H. No. 56 W. No. 3, Kamra Pati, Jaito Faridkot, Punjab	72-DGM Of 2021 Dt: 20.05.2021
22	5/29.	RBM	Khaur Wali Khad Upstream District.	9.89	Sh. Kimat LalS/o Sh. Kohla Ram R/o	Order No. 43-DGM of 2021

			Jammu		Raipur Satwari, Jammu.	dt 27.01.2021
23	5/30.	RBM	Khour wali Khad Upstream Distt Jammu	9.61	Singh minerals Near Kali Mata Mandir Kolluwali Gali pathankot	66-DGM Of 2021 Dt: 11.05.2021
24	5/31.	RBM	Khour Wali Khad Downstream District, Jammu	6.62	Sh. Mangal SinghS/o Sh. Om ParkashR/o Saidgarh Bishnah District Bishnah	57-DGM Of 2021 Dt: 17.04.2021
25	5/32.	RBM	Khour Wali Khad Upstream Khour Bridge District, Jammu	9.8	Mahavir Mining Lane no 03, Shaheed Udham singh Nagar Pathankot	65-DGM Of 2021 Dt: 11.05.2021
26	5/33.	RBM	Khour Wali Khad Downstream Khour Bridge District. Jammu	9.66	Sh. Rahil ChoudharyS/o Sh. Rakesh KumarR/o 51 B/D, Gandhi Nagar, Jammu.	Order No. 44-DGM of 2021 dt 12.01.2021
27	5/36.	RBM	Chauki Chaura downstream chagial Bridge, District. Jammu	5.28	Sh. Rahil ChoudharyS/o Sh. Rakesh KumarR/o 51 B/D, Gandhi Nagar, Jammu.	Order No. 45-DGM of 2021 dt 27.01.2021
28	44	RBM	Minor Mineral Block in Chhibbewali khad at village Pungali, Tehsil Nagrota, Distt. Jammu	1.23	Sh. Sahil Choudhary S/o Sh. Des Raj ChoudharyR/o Ward No: 05 Near New Era Public School, Raipur Satwari, Jammu-180003.	55-DGM Of 2021 Dt: 16.04.2021
29	49	RBM	Aik Nallah downstream Arnia Bridge	1.36	Sandeep Singh S/o Sukhvinder singh R/o khandwal, jammu	Order No. 22-DGM of 2020 dt 21.11.2020
30	5/1	RBM	Chenab River Downstream Old Bridge Akhnoor Distt. Jammu	9.57	J&K Minerals Ltd	Order No. 38-DGM of 2021 dt 12.01.2021
31	5/28	RBM	Jad Khad Upstream Jourian Bridge Distt Jammu	4.58	J&K Minerals Ltd	Order No. 07-DGM of 2020 dt 06.08.2020
				245.82		
			KATHUA DISTRICT			
1	1(28)	RBM	<u>Sahar Khad Upstream Railway Bridge (Plan-IV)</u>	7.68	Abhijeet Singh S/o Kanwarjeet Singh R/o Plot No. 08 Zila Singh Farms, 7 Park Lane Kishangarh, Vasant Kunj,	Order No. 116-DGM of 2021 dt 31.08.2021
2	02(31)	RBM	<u>Sahar Khad Downstream NHIA Bridge (Plan-IV)</u>	6.16	Sh. Karanveer Singh ,S/o Sh. Surinder Singh, R/o Lane No. 3, Shaheed Udham Singh Nagar,Pathankot-145001	Order No. 118-DGM of 2021 dt 31.08.2021
4	4	RBM	Naj Nallah Up Stream Naj Bridge, Distt. Kathua(Plan-II)	9.06	Sh. Karanveer Singh ,S/o Sh. Surinder Singh, R/o Lane No. 3, Shaheed Udham Singh Nagar,Pathankot-145001	Order No. 189-DGM of 2022 dt 31.03.2022
3	5	RBM	Naj Nallah Down Stream Naj Bridge, Distt. Kathua	8.18	Abhijeet Singh S/o Kanwarjeet Singh R/o Plot No. 08 Zila Singh Farms, 7 Park Lane Kishangarh, Vasant Kunj,	Order No. 101-DGM of 2021 dt 28.08.2021

5	6	RBM	Bhini River Down Stream Kishan Pur Road Bridge, Distt. Kathua (Plan-I)	8.94	Mr. Balvinder Singh S/o Sh. Keemat LalR/o Near Chib Resort, Raipur Satwari, Jammu	Order No. 102-DGM of 2021 dt 28.08.2021
6	8	RBM	Bhini River downstream krishanpur Road Bridge District Kathua (plan-III)	5.87	Mr. Hira Singh S/o Nirmal Singh R/o vill.Muraiwala Farm Khampur Afzalgrah Bijnor (UP)	Order No.179-DGM of 2022 dt 29.03.2022
7	9	RBM	Bhini River Down Stream Kishan Pur Road Bridge, Distt. Kathua (Plan-IV)	6.53	M/S Mahavir Mining	Order No. 153-DGM of 2021 dt 30.11.2021
8	10	RBM	Bhini River Down Stream Naj Bridge, Billawar, Distt. Kathua (Plan-V)	8.856	SH. Naresh Sharma S/o Sh. Swaran Dass Sharma, R/o Lane no: 14, H.no. 105/11 Nanak Nagar, Jammu	Order No. 89-DGM of 2021 dt 27.08.2021
9	12(55)	RBM	Bhini River Downstream Naj Bridge Billawar (Plan-VII)	9.45	Mr. Varun Choudhary, S/O Ramesh Lal R/o Khor Salarian Distt. Samba-181141.	Order No. 92-DGM of 2021 dt 27.08.2021
10	15(58)	RBM	<u>Bhini River downstream Naj Bridge Billawar(Plan - X)</u>	9.16	Kishori Lal S/O Kuldeep Singh R/O Makwal Tehsil & District Kathua	Order No. 142-DGM of 2021 dt 25.11.2021
11	16(59)	RBM	<u>Bhini River upstream painthal Bridge (plan-XI)</u>	8.92	Ravi Kumar Gautam S/o Sh. Madan mohan R/O Near Toll Plaza Nagrota Kangdel Kandoli Nagrota	Order No. 91-DGM of 2021 dt 27.08.2021
12	18	RBM	Bhini River Up Stream Painthal Bridge, Billawar Distt. Kathua (Plan-XIII)	7.893	SH. Naresh Sharma S/o Sh. Swaran Dass Sharma, R/o Lane no: 14, H.no. 105/11 Nanak Nagar, Jammu	Order No. 90-DGM of 2021 dt 27.08.2021
13	23	RBM	Johad Khad at village Johad Plan –II, Distt., Kathua	5.71	M/S Sai Mines R/O Logate Kathua	Order No. 173-DGM of 2022 dt 14.03.2022
14	24	RBM	Jothana-Di-Khad at village Janal, Plan-I Distt., Kathua	1.57	M/S Kesri Nandan Mines R/o Logate , Kathua	Order No. 216-DGM of 2022 dt 29.07.2022
				103.98		
			Private leases (Kathua)			
1		RBM	Ujh River at village Jogyian Tehsil Nagri Parole District , Kathua.	9.65	Sh.Paramjit Singh S/o Sh. Tirath Singh R/o Jarai ,Tehsil & Distt Kathua	Order No. 83-DGM of 2021 dt 16.07.2021
2		RBM	Ujh River at village Jogyian Tehsil Nagri Parole District , Kathua.	9.85	Sh.Paramjit Singh S/o Sh. Tirath Singh R/o Jarai ,Tehsil & Distt Kathua	Order No. 85-DGM of 2021 dt 16.07.2021

3		RBM	Ujh River at village Jogyian Tehsil Nagri Parole District , Kathua.	8.00	Sh.Paramjit Singh S/o Sh. Tirath Singh R/o Jarai ,Tehsil & Distt Kathua	Order No. 84-DGM of 2021 dt 16.07.2021
4		RBM	Ujh River Downstream Pandori Tehsil Nagri Parole District , Kathua.	3.98	Sh.Paramjit Singh S/o Sh. Tirath Singh R/o Jarai ,Tehsil & Distt Kathua	Order No. 84-DGM of 2021 dt 16.07.2021
5		RBM	Taaraf Tajwa ITehsil & District , Kathua.	9.98	Sh.Bhanu Partap Singh S/o Payar Singh R/o Tarrah Tehsil & Distt Kathua	order No.86-DGM of 2021 dt 17.07.2021
				41.46		
			SAMBA DISTRICT			
1	1/4.	RBM	Devak River Up Stream Railway Bridge, Distt.Samba	9.23	M/S Shiva Minerals	Order No. - DGM of 2020 dt 19.05.2021
2	1/5.	RBM	Devak River Up Stream Railway Bridge, Distt.Samba	9.51	Sh. Kimat LalS/o Sh. Kohla Ram R/o Raipur Satwari, Jammu.	Order No. 29-DGM of 2020 dt 16.12.2020
3	1/6.	RBM	Devak River Up Stream Railway Bridge, Distt.Samba	9.58	M/s Sai Mines Logate Tehsil & District Kathua	63-DGM of 2021 dt 08.05.2021
4	1/11.	RBM	Devak River Down Stream NH-IA Bridge,Distt.Samba	9.66	Sh. Brinder Singh S/o Sh. Kimat LalR/o Raipur Satwari, Jammu	Order No. 27-DGM of 2020 dt 16.12.2020
5	2/1	RBM	Basanter River Downstream NH-IA Bridge, Distt Samba	9.99	Ramesh Kapoor S/o Ram Rakha Mal Kapoor R/O Min Bazar Samba	Order No. 122-DGM of 2021 dt 04.10.2021
6	2/4.	RBM	Basantar River Down stream NH-IA Bridge,Distt.Samba	8.25	M/s Mahavir Mining Lane no 03, Shaheed Udham singh Nagar Pathankot	Order No. 119-DGM of 2021 dt 31.08.2021
7	2/5.	RBM	Basantar River Down stream NH-IA Bridge,Distt.Samba	9.17	Sh. Balvinder Singh,S/o Sh. Kimat LalR/o Raipur Satwari Jammu	Order No. 24-DGM of 2020 dt 16.12.2020
8	2/6.	RBM	Basantar River Down Stream NH-IA Bridge, Distt. Samba	9.14	Mr. Kesri Nandan,Logate Tehsil & District Kathua	Order No. 30-DGM of 2020 dt 16.12.2020
9	3/1.	RBM	Basantar River Down Stream Check Dam District Samba	8.35	Mr. Naresh SharmaS/o Swaran Dass SharmaR/o Nanak Nagar Jammu	Order No. 88-DGM of 2021 dt 24.07.2021
10	3/2.	RBM	Basantar River U/S NH-IA Bridge	9.23	M/s Mahavir Mining Lane no 03, Shaheed Udham singh Nagar Pathankot	Order No. 70-DGM of 2021 dt 19.05.2021
11	3/3.	RBM	Basantar River Up stream stream NH-IA Bridge, Distt.Samba	8.11	Mr. Amit GuptaS/o Ashok Kumar GuptaR/o 21/06 Trikuta Nagar, Jammu	Order No. 87-DGM of 2021 dt 24.07.2021
12	3/4.	RBM	Basantar River Up	9.68	Mr. Brinder SinghS/o Kimat LalR/o	Order No. 28-

			stream stream NH-IA Bridge, Distt.Samba		Raipur Satwari, Jammu	DGM of 2020 dt 16.12.2020
13	3/5.	RBM	Basantar River Up Stream NH-IA Bridge, Distt.Samba	9.98	Mr. Karanvir SinghS/o Surinder SinghR/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 64-DGM of 2020 dt 08.05.2020
14	4/1.	RBM	Bein River Up Stream NH-IA Bridge, Distt. Samba	9.72	M/S Kesri Nandan Mines R/O Logate Kathua	Order No. 47-DGM of 2021 dt 01.02.2021
15	4/2.	RBM	Bein River Up stream NH-IA Bridge,Distt. Samba	9.57	Mr. Mangal SinghS/o Om ParkashR/O Village Saidgarh Tehsil Bishnah	Order No. 26-DGM of 2020 dt 16.12.2020
16	4/3.	RBM	Bein River Up stream NH-IA Bridge,Distt. Samba	9.90	Sh. Balvinder Singh,S/o Sh. Kimat LalR/o Raipur Satwari Jammu	Order No. 25-DGM of 2020 dt 16.12.2020
17	4/4.	RBM	Bein River Up stream NH-IA Bridge,Distt. Samba	9.64	Sahil Choudhary	54-DGM of 2021 dt 16.04.2021
18	1/12	RBM	Devak River Down Stream NH-IA Bridge,Distt.Samba	9.11	J&K Minerals ltd	Order No. 23-DGM of 2020 dt 25.11.2020
19	2/3	RBM	Basantar River Down stream NH-IA Bridge,Distt.Samba	9.80	J&K PCC Pvt.Ltd	Order No. 33-DGM of 2020 dt 28.12.2020
				177.62		
			RAJOURI DISTRICT			
1	1/1.	RBM	Nowshera Tawi river Upstream Muradpur Bridge Rajouri pLan I	8.61	Wasim Dar S/o Abdul Qayoom Dar R/o H.no 67 ward no : 01 Danish Abad colony kheora Rajouri.	Order No. 113-DGM of 2021 dt 31.08.2021
2	1/2.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Rajouri plan –II	1.6	Kiran Kumar S/o Sh. Daleep Kumar Sharma R/o Rajouri.	Order No. 141-DGM of 2021 dt 23.11.2021
3	1/3.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Rajouri plan –III	2.6	Kiran Kumar S/o Sh. Daleep Kumar Sharma R/o Rajouri.	Order No. 202-DGM of 2022 dt 24.06.2022
4	1/4.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Rajouri plan –IV	3.00	Sh. Amit Gupta S/o Sh. Ashok Kumar Gupta,R/o H. No. 21, Sector- 06, W. No. 54,Trikuta Nagar, Jammu	Order No. 150-DGM of 2021 dt 30.11.2021
5	1/5.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Kallar area Rajouri plan V	8.57	Jagjeet Bali S/o Om Parkash Bali R/o Ward no 06 Jawahar nagar Rajouri	Order No. 132-DGM of 2021 dt 17.11.2021
6	1/8.	RBM	Ans River Downstream Kotranka Bridge (Kotranka area)	4.05	Umesh kumar SharmaS/o Shiv Narayan Sharma R/o Saroop Nagar Ludhiana Punjab	Order No. 197-DGM of 2022 dt

			Rajouri Plan III			31.03.2022
7	2/2.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Chatyari Rajouri plan VII	9.52	Sh. Rahil Choudhary,S/o Sh. Rakesh Kumar R/o H.No-51 B/D, Gandhi Nagar, Jammu	Order No. 97- DGM of 2021 dt 27.08.2021
8	2/3.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Naria area Rajouri plan -VIII	7.88	Mr. Karanvir SinghS/o Surinder SinghR/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 195 -DGM of 2022 dt 31.03.2022
9	2/4.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Chatyari Rajouri plan - IX	2.00	Mr. Karanvir SinghS/o Surinder SinghR/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 212 -DGM of 2022 dt 29.07.2022
10	2/5.	RBM	Nowshera Tawi River Downstream Muradpur Bridge(Naria area) Rajouri Plan X	7.88	M/S Sai Mines Logate, Kathua	Order No. 193-DGM of 2022 dt 31.03.2022
11	2/8.	RBM	Nowshera Tawi River Downstream Muradpur Bridge Rajouri Plan XIII	3.28	Sh. Mangal SinghS/o Sh. Om Parkash R/o Saidgarh Bishnah	Order No. 98- DGM of 2021 dt 28.08.2021
12	3/1.	RBM	Nowshera Tawi River Downstream (Nowshera Jabba) Bridge Rajouri Plan I	2.12	Sh. Brinder Singh S/o Sh. Kimat Lal R/o Raipur Satwari, Jammu	Order No. 100-DGM of 2021 dt 28.08.2021
13	3/2.	RBM	Nowshera Tawi River Downstream (Nowshera Jabba) Bridge (Dandesar area) Rajouri Plan II	3.93	Surjeet Kumar S/o Ishar Dass, Rajouri	Order No. 164-DGM of 2021 dt 05.02.2021
14	3/4.	RBM	Nowshera Tawi River Downstream (Nowshera Jabba) Bridge (Dandesar area) Rajouri Plan- IV	4.97	Surjeet Kumar S/o Ishar Dass, Rajouri	Order No. 165-DGM of 2021 dt 05.02.2021
15	3/5.	RBM	Nowshera Tawi River Downstream (Nowshera Jabba) Bridge (Bhaganoti area) Rajouri Plan V	1.55	Mr. Karanvir SinghS/o Surinder SinghR/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 146-DGM of 2021 dt 29.11.2021
16	3/6.	RBM	Nowshera Tawi River Downstream (Nowshera Jabba) Bridge (Bhaganoti area) Rajouri Plan VI	5.37	M/S Singh Minerals	Order No. 188-DGM of 2022 dt 31.03.2022
17	3/7.	RBM	Nowshera Tawi River Downstream (Nowshera Jabba) Bridge (Bhaganoti area)	2.12	Sanjay Mehta S/ o Sh. Ram Mehta R/o Talab Tillo Jammu	Order No. 159-DGM of 2022 dt 14.01.2022

			Rajouri Plan VII			
18	27	RBM	Nihari Tawi River at Solki Rajouri	2.12	Randhir Singh S/O Gian Singh R/o Sialsui Tehsil Kalakot Distt Rajouri	DGM Order No. 160-DGM of 2022 dt 14.01.2022
19	28	RBM	Nihari Tawi Khateni area Rajouri	5.05	Gurdev Singh S/O Balwant Singh R/o Village Badhai Tehsil Khawas Distt Rajouri	DGM Order No. 125-DGM of 2021 dt 12.10.2021
20	29	RBM	Dharli wali Nadhi Upstream Khawas Bridge at Villaghe Khawas Distt.Rajouri	2.07	Sh.Rahil Choudhary S/o Rakesh Kumar R/o H.No.51 B/D ,Gandhi Nagar, Jammu	60-DGM OF 2021 DT 17.04.2021
21	31	RBM	Dharli Nallah Downstream Ujan Bridge at Villge Choudhary nar, Rajouri	1.42	Sh. Mangal Singh S/o Sh. Om Parkash R/o Saidgarh Bishnah	Order No. 99-DGM of 2021 dt 28.08.2021
22	32	RBM	Dharli Nallah Downstream Ujan Bridge at Villge Ujan, Rajouri	6.01	Mujib Ul Rehman Dar S/o Sh. Fazal Rehman Dar, Rajouri	Order No. 161-DGM of 2022 dt 15.01.2022
				95.72		
			POONCH DISTRICT			
1	4	RBM	River Suran Downstream Sher-E-Kashmir Bridge Part-IV	8.86	Mr. Karanvir Singh S/o Surinder Singh R/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 151-DGM of 2021 dt 30.11.2021
2	8	RBM	Bater Nallah Upstream Bater Bridge (Plan-II)	6.09	Mr.Umesh Kumar Sharma S/o Narayan Sharma R/o B-33/568 Near Gurudwara Sarup Nagar Central Post Office Ludhiana, Punjab.	Order No. 180-DGM of 2022 dt 29.03.2022
3	9	RBM	Bater Nallah Upstream Bater Bridge (Plan)-III	8.41	Mr.Kirti Pal Sharma S/o YP Sharma R/o W.no 16 H.no 222 Tehsil Haveli, Distt, Poonch	Order No. 139-DGM of 2021 dt 22.11.2021
4	10	RBM	Bater Nallah Downstream Bater Bridge (Plan)-IV	4.60	Mr. Tajinder Pal Singh S/o Sh. Habhajan Singh R/o Gulpur, Tehsil Havelli Distt Poonch	Order No. 138-DGM of 2021 dt 22.11.2021
5	15	RBM	Suran River Upstream, Madana Foot Bridge Distt. Poonch	2.80	Mr. Mangal Singh S/o Om Parkash R/O Village Saidgarh Tehsil Bishnah	Order No. 104-DGM of 2021 dt 28.08.2021
6	18	RBM	Mendhar River Upstream Chajjla Bridge Part-II	4.60	M/s Kesri Nandan, R/o Logate Tehsil & District Kathua	Order No. 215 -DGM of 2022 dt 29.07.2022
7	19	RBM	Mendhar River Upstream Chajjla Bridge Part-III District	4.20	Mr. Arshdeep Singh S/o Balraj Singh R/o Faziabad Gurdaspur, Punjab.	Order No. 172-DGM of 2022 dt

			Poonch			14.03.2022
8	20	RBM	Sylhed Nallah District Poonch	4.83	Mr. Talib HussainS/o Noor Din Chashti R/o Noona Bandi Chechian, Tehsil Haveli District Poonch.	Order No. 127-DGM of 2021 dt 30.10.2021
9	22	RBM	Poonch River Upstream Sher-e-Kashmir Bridge	4.26	M/S Singh Minerals	Order No. 190-DGM of 2022 dt 31.03.2022
10	24	RBM	Poonch River Downstream Kalai Bridge Kalai Area, District Poonch	9.11	M/s Sai Mines R/o Logate, Tehsil & District Kathua	Order No. 152-DGM of 2021 dt 30.11.2021
11	25	RBM	Poonch River Downstream, Madana Bridge (Seri Chouana Area) District Poonch	4.51	Mr. Amit Gupta S/o Ashok Kumar Gupta R/o 21/06 Trikuta Nagar, Jammu	Order No. 105-DGM of 2021 dt 28.08.2021
12	28	RBM	Suran River Downstream Dhara Mohra Foot Bridge Daraba Area	2.30	Mr. Karanvir SinghS/o Surinder SinghR/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 210-DGM of 2022 dt 30.06.2022
13	30	RBM	Suran River Downstream Bafaliaz Bridge Bafliaz Area District Poonch	3.42	Mr. Arshdeep Singh S/o Balraj Singh R/o Faziabad Gurdaspur, Punjab.	Order No. 137-DGM of 2021 dt 18.11.2021
14	31	RBM	Suran River U/S Sailiana Bridge	2.26	Smt. Sahin Kousar W/o Sh. Khurshid R/o Mastan Dara, Poonch	59-DGM OF 2021 DT 17.04.2021
15	32	RBM	Ari Nallah Ari Area Mendhar	3.11	M/s Singh Minerals	Order No. 191-DGM of 2022 dt 31.03.2022
				73.36		
			UDHAMPUR DISTRICT			
1	1	RBM	Tawi River Up stream Salmaya Bridge Distt. Udhampur	4.24	J&K Minerals ltd	Order No. 06-DGM of 2020 dt 06.08.2020
2	5	RBM	Tawi River up stream Pahar Devita Bridge	8.70	J&K PCC Pvt.Ltd	
3	7	RBM	Thathi Nallah Downstream Thathi Bridge at Vill. Thathi, Distt. Udhampur	3.71	Kapil AgarwalS/o Jugesh Agarwal R/o H.no 179 Near Panjpir Mandir Anandpur Pathankot, Gurdaspur Punjab 145001	Order No. 36-DGM of 2021 dt 12.01.2021
4	8	RBM	Birma Nallah Upstream National Hightway Bridge at Village Batal Ballian, District Udhampur	4.30	Mr. Mangal SinghS/o Sh. Om Parkash R/o Vill. Saidgarh, Tehsil, Bishnah District, Jammu.	56-DGM Of 2021 Dt: 16.04.2021

5	9	RBM	Dudhar Nallah Upstream Dudhar Bridge at Vill. Mahni <u>Udhampur</u>	4.91	Mr. Ranbir Singh S/o Gulwant Singh R/o Near Govt School Sheikhpora Bagh Shaheed Bhagat Singh Nagar, Punjab	Order No. 37- DGM of 2021 dt 12.01.2021
6	10	RBM	Ramnagar wali khad Upstream Gulang Bridge at Village Gulang, Tehsil Ramnagar, District Udhampur	3.3846	Mr. Brinder Singh S/o Keemat Lal R/o Near Chib Resort Raipur, Satwari, Jammu	61-DGM Of 2021 Dt: 27.04.2021
7	11	RBM	Ramnagar Wali Khad Downstream Gulang Bridge at Village Dalsar, Tehsil Ramnagar District <u>Udhampur</u>	1.68	Mr. Umesh Kumar Sharma S/o Shiv Narayan Sharma R/o B-33/568 near Gurudwara Saroop Nagar, Central post office Ludhiana Punjab 141008	221-DGM of 2022 dt 01.09.2022
				30.92		
			REASI DISTRICT			
1	1	RBM	Tanda Seri Khad, Near Village Tanda, Plan-I	8.42	Sh. Sahil Arora, S/o Sh. Sunil Arora, R/o H.No. 110/P, Sec-2, Ward No. 53, Jammu, Trikuta Nagar, Jammu- 180020	Order No. 109-DGM of 2021 dt 28.08.2021
2	2	RBM	Tanda Seri Khad, Near Village Tanda, Plan-II	7.91	M/s Sai Mines Logate Tehsil & District Kathua	Order No. 214 -DGM of 2022 dt 29.07.2022
3	3	RBM	Anji Khad Upstream Sula Park Bridge Plan 3rd	9.02	Mr. Harish Kumar S/o Sh. Madan Mohan R/o Near Toll Post, Nagrota, Jammu	Order No. 112-DGM of 2021 dt 28.08.2021
4	4	RBM	Anji Khad, Up Stream Sula Park Bridge, Plan- IV	3.58	Mr. Karanvir Singh S/o Surinder Singh R/o 01 Lane No: 03 Shaheed Udham Singh Nagar, Pathankot.	Order No. 147-DGM of 2021 dt 29.11.2021
5	5	RBM	Tanda Anji Khad, Down Stream Kayala Bridge, Plan-V	5.04	Sh. Amritveer Sharma S/o Sh. Naresh Sharma R/o H. No. 105, Sector- 11, Lane No. 14, Nanak Nagar, Jammu	Order No. 110-DGM of 2021 dt 28.08.2021
6	6	RBM	Anji Khad, Up Stream Kayala Bridge, Plan-iv	5.52	M/S Agarwal Mines	Order No. 144-DGM of 2021 dt 29.11.2021
7	7	RBM	Anji Khad, Down Stream Sula Park Bridge, Plan-VII	9.6	Sh. Sumit Gupta, S/o Sh. Ashok Kumar Gupta, R/o H. No. 21/6, Trikuta Nagar, Jammu	Order No. 108-DGM of 2021 dt 28.08.2021
8	11	RBM	ANS River Down Stream Narloo Bridge, Plan-II	9.90	Sh. Vikesh Kumar, S/o Sh. Ayga Pal, R/o Arnas District Reasi	Order No. 77- DGM of 2021 dt 08.06.2021
9	12	RBM	ANS River Down Stream Narloo Bridge,	7.35	M/S Shiva Minerals	Order No. 219 -DGM of 2022 dt

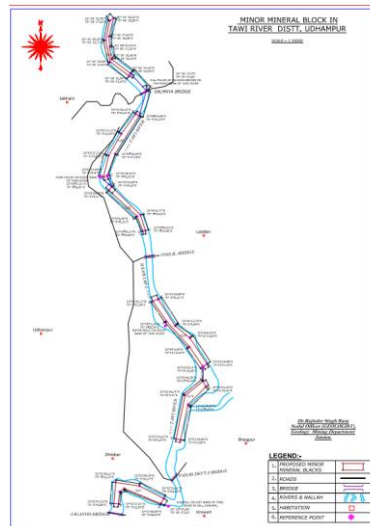
			Plan-III			08.08.2022
10	13	RBM	ANS River Down Stream Narloo Bridge, Plan-IV	9.8	Sh. Sahil Arora,S/o Sh. Sunil Arora,R/o H. No. 11, O/p Sector 2 W. No. 53, Trikuta Nagar,Jammu	Order No. 103-DGM of 2021 dt 28.08.2021
11	14	RBM	ANS River Down Stream Narloo Bridge, Plan-V	9.51	Sh. Raman Kumar,S/o Sh. Krishan Dutt,R/o Arnas Reasi	Order No. 78-DGM of 2021 dt 08.06.2021
12	15	RBM	ANS River Down Stream Narloo Bridge, Plan-VI	9.08	M/s Kesri Nandan MinesLogate Tehsil & District Kathua	Order No. 213 -DGM of 2022 dt 29.07.2022
13	17	RBM	ANS River Up Stream Narloo Bridge	8.85	M/S Singh Minerals	Order No. 218 -DGM of 2022 dt 08.08.2022
14	21	RBM	Tawi Khad downstream Matnani Bridge at Vill. Nar Block Pouni Distt.Reasi	1.88	Sh.Ranbir Singh S/o Gilwant Singh Near Govt. School Sheikhpur Bagh Shaheed Bhagat Singh Nagar Punjab	Order No. 81-DGM of 2021 dt 19.06.2021
16	22	RBM	<u>Chenab river in jerri area district reasi</u>	7.51	Jugesh Agarwal S/o Sh. Ram Chand R/O Anandpur Pathankot, Punjab	Order No. 187-DGM of 2022 dt 31.03.2022
15	23	RBM	Chenab River Upstream of its confluence with jerri nallah (near jerri Bridge)	7.43	Rattan Lal Jalla S/o Sat lal jalla R/O Roop nagar jammu	Order No. 217 -DGM of 2022 dt 08.08.2022
17	24	RBM	Chenab River downstream of its confluence with jerri nallah (near jerri Bridge)	7.54	Umesh Kumar S/o Shiv Narayan Sharma, R/o Saroop Nagar Ludhiana Punjab	Order No. 194-DGM of 2022 dt 31.03.2022
18	26	RBM	Chenab River downstream Baradari bridge (Kans Khosan area)	5.00	karanvir singh s/o surinder singh r/o pathankot punjab	Order No. 149-DGM of 2021 dt 30.11.2021
19	27	RBM	Chenab River Upstream Kanthan Bridge (Kanthan Area)	2.44	Sh. Anil KumarS/o Sh. Suraj SinghR/o Thandapani P/o Sunderbani,Kalakote, Rajouri	Order No. 31-DGM of 2020 dt 16.12.2020
20	28	RBM	Chenab River D/Stream Kanthan Bridge (Village Hemna)	6.94	Sh. Sumit Gupta,S/o Sh. Ashok Kumar Gupta,R/o H. No. 21/6, Trikuta Nagar, Jammu	Order No. 111-DGM of 2021 dt 28.08.2021
21	29	RBM	Chenab River U/Stream Baradari Bridge at Village Nambal Plan -I	8.06	Sh. Arshdeep Singh,S/o Sh. Balraj Singh,R/o Faizabad Gurdaspur, Punjab	Order No. 196-DGM of 2022 dt 31.03.2022
22	31	RBM	Anji Khad D/Stream Sula Park Bridge	3.52	Sh. Parshotam Singh,S/o Sh. Baljit Singh,R/o H. No. 56 W. No. 3, Kamra	Order No. 181-DGM of 2022 dt

					Pati, Jaito Faridkot,	29.03.2022
23	32	RBM	Pei Khad at Village Bhabber	4.43	Sh. Anju Bala Sharma W/o Sh. Kuldeep Kumar Sharma R/o H. No- 54 ,W. No-02, Opp. Amar Cinema, Kun Duroorian, Katra Reasi	Order No. 32-DGM of 2020 dt 21.12.2020
24	33	RBM	Phare Khad Kanjali at Villagh Pahri	4.36	M/S Shiva Minerals	Order No. 117-DGM of 2021 dt 28.08.2021
25	34	RBM	Thanda Seri Khad at Village Tanda	8.49	Sh. Mangal Singh,S/o Sh. Om Parkash	Order No. 107-DGM of 2021 dt 28.08.2021
				171.18		
			DODA DISTRICT			
1	III/1	Sand	Upstream under construction bridge at chenab river shivnoti Tehs., thathari Distt.Doda	2.55	MR. Riyaz Ahmed, R/o Ghat arwora, Tehsil & Distt Doda	Order No. 35-DGM of 2021 dt 12.01.2021
2		Sand	Vill., Mohalla& Jathali, Tehsil & Distt.Doda	3.13	Saleem Raza Wani S/o Kh. Gulam Qadi Wani R/o Ghat Doda .	Govt.order No 125-Ind of 2008 dt 09.04.2008
1	III/1.	RBM	<u>Upstream under construction bridge at Chenab River, Gulabgarh District Kishtwar</u>	1.35	Mr. Rahul Kumar, S/o Sh. Rummal Chand R/o Hango, Paddar Distt Kishtwar Email: rahulbodh189@gmail.com	58-DGM OF 2021 DT 17.04.2021
2	III/2.		<u>, Downstream under construction bridge at Chenab River, Gulabgarh District Kishtwar</u>	0.4	Mr. Jagdish Singh, S/o Sh.Vijay SinghR/o Malilpur, Tehsil & Distt. Pathankot Punjab Email: rahulchoudhary47172@gmail.com	Order No. 120-DGM of 2021 dt 31.08.2021
				1.75		
142				941.81		

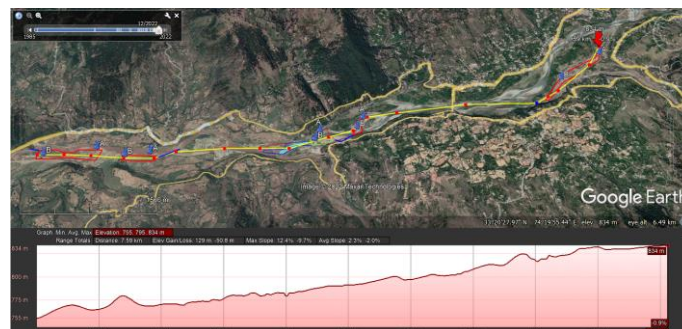
The department has conducted field survey of catchment area wise, river wise and district wise and some portion of the rivers/stream have been identified in accordance with the provision SRO-105 and clearances from other stake holder Departments and Guidelines of MOEF & NGT etc. Keeping the consideration of the above guidelines the department has identified areas in such way that in most of the cases the buffer zones

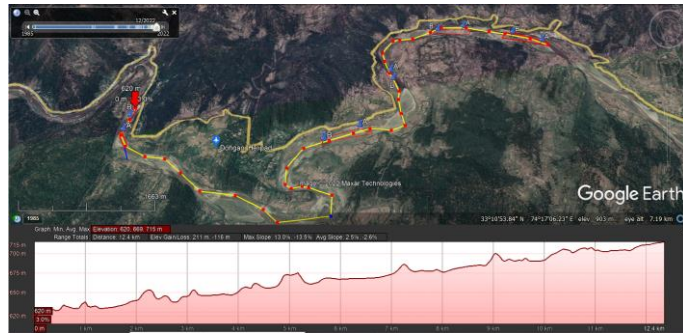
between two minor mineral block is left with the stretch of at least of 500 MTs for replenishment as shown in river wise, district wise profile images

MINOR MINERAL BLOCKS OF UDHAMPUR DISTRICT.



MINOR MINERAL BLOCKS OF RAJOURI DISTRICT.



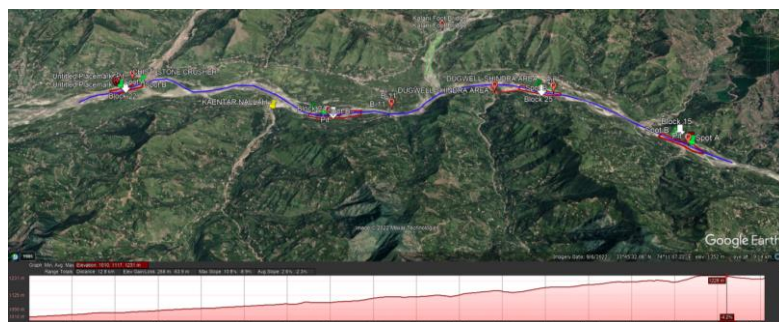


Nowshera Tawi

MINOR MINERAL BLOCKS OF POONCH DISTRICT.

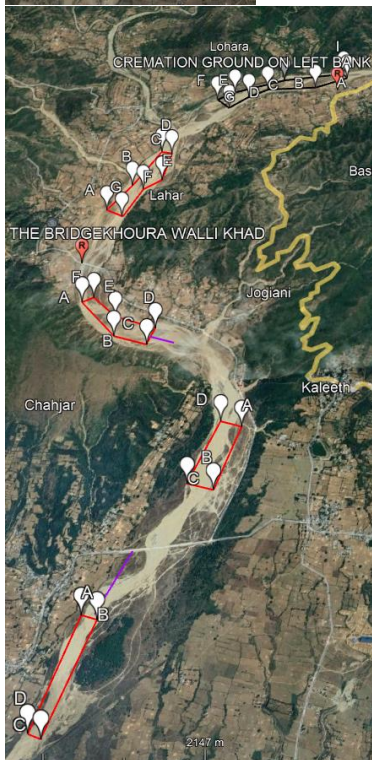


Betar Nala



Suran River

MINOR MINERAL BLOCKS JAMMU DISTRICT.



A. JAD KHAD

B. CHOWKI CHOURA

C. KHOUR KHAD

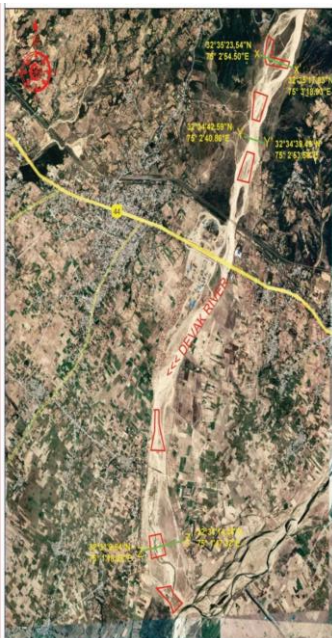


D. CHENAB RIVER



E. TAWI RIVER (KISHANPUR MANWAL)

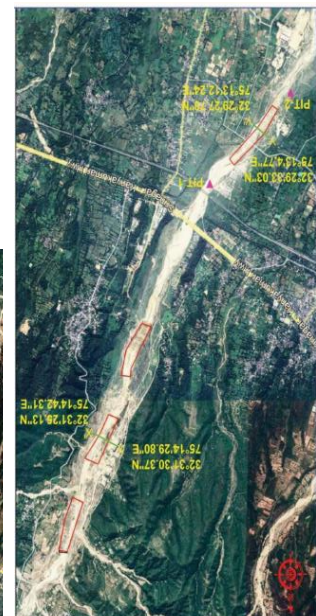
MINOR MINERAL BLOCKS SAMBA DISTRICT.



A. DEVAK RIVER

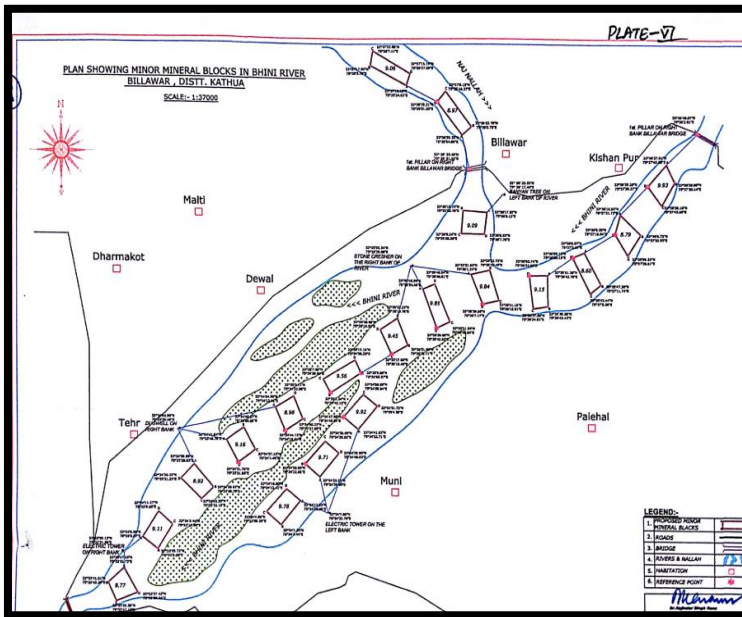


B. BASANTAR RIVER

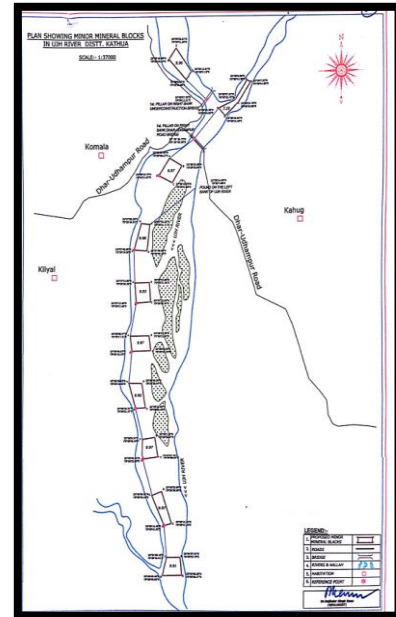


C. BEIN KHAD

MINOR MINERAL BLOCKS KATHUA DISTRICT.



A. BHINI RIVER



B. UJH RIVER

In other words, the area on rotation basis is suggested in such a way that pit of previous year will act as depository during the monsoon season by reducing the velocity and carrying capacity of the stream thus depositing the mineral being transported by the tributary. Mining will be done by open cast semi-mechanized method by scraping of sand layers with the help of excavator and loaders for loading of minerals, into the trucks, tipper and tractor/trolleys etc. For protection of aquatic life & riparian habitats mining will not be carried out in active channel and a buffer zone will be left along the active channel so that the aquatic life and the natural flow of river will not be disturbed.

- During record available and field survey it is observed that the Potential for river bed mining has widely been found in the parts of Jammu, Samba, Kathua, Reasi, Udhampur, Rajouri and Poonch districts however, the river bed mining is sporadically conducted in the Ramban, Doda and Kishtwar districts because of non-occurrences of the flood plains and limited width of the rivers and

streams. The Chenab River forms the major river in these districts. Mostly the sand blocks of limited dimension measuring 1-3 hectares are found. Only few of them are economically viable and rest are inaccessible to be exploited while as other ones do not conform to the standard procedures employed and general guidelines and the restrictions imposed in the SRO-105. As on date only two number of sand Mining Lease has been granted in district Doda beside 04 new blocks are under process for grant of mineral concessions. In Kishtwar district two blocks of RBM are operative as on date.

- No doubt due to rapid development strides and upcoming of larger number of constructional projects in the JK UT such as widening of National Highways, Ring Road, Delhi-Katra Expressway, Railway Construction Works, Border Road Organization, PMGSY road projects, the prestigious AIIMS and other projects of local importance the demand of minor minerals and other building materials has enormously been increased.
- In this regard, for making Minor Minerals readily available to the projects of national importance operating in the Union Territory, the department has granting time to time Short Term Permits/ Disposal permits to all Government works (Central/ UT) and emergent nature of works, besides bringing necessary changes in the rules governing the subject for their executing agencies of such prestigious projects subject to all statutory clearances including environmental safeguards etc.
- The Government has constituted a committee i.e. '*Multi Departmental District Level Task Force Cell*' vide Order No.1569-GAD of 2018, Dated 22.10.2018 with mandate and term of reference. (Copy enclosed).
- To prevent Black Marketing/Profiteering: Department through District Level Task Force Cell have notified the Sale Price of Minor

minerals and processed minerals excluding transportation charges in their respective Districts so that black marketing/profitereering of minerals is curbed and people get the supply of construction material at reasonable rates.

- The department has launched Online Web portal <http://geologymining.jk.gov.in> on 24-08-2022 which is developed by Geology and Mining Department for E-Market Place (i.e. for sale of minor minerals at notified rates for convenience of general public) and e-Challan (i.e. replacement of current manual challan with E-challan through which Project Proponents/Mineral Dealer License Holders/Crusher Unit Holders and Short Term Permit/Quarry/Mining Lease Holders shall apply/submit online Form-A for Transportation of Minor Minerals in J&K UT w.e.f 24.08.2022.

By implementing this digital techniques/G2B2C that the key construction material is readily available to the customers on the already approved rates. It would help removing scarcity of building materials/ overcharging in the market and in checking the illegal mining activities.

The customers can directly order the material like sand, bajri, nallah muck, stones, crushed bajri, etc from the portal from their home. The payment can be made securely online through payment gateway. The Royalty collection and taxes would also be done online without the scope for evasion of same. The main features of the E-challan are Challan Number, source, destination, allotted route, expire time and QR -code etc. The QR Code can be scanned by any person to check the authenticity by ferrying raw material.

As on date about 12000 e-challans generated through this web portal.

- To control and monitor illegal extraction and transportation of Minor minerals from the leased out areas, the department has so far

established 11 Mineral check posts with CC TV camera facilities. There are 39 more such posts in the process of being made operational

District	MCP approved by the Deptt.	No.of MCP's taken over from SIDCO
Jammu	8.0	4
Udhampur	3	1
Kathua	5	3
Samba	9	2
Reasi	2	1
Doda	6	Nil
Rajouri	2	Nil
Poonch	5	Nil
Kishtwar	5	Nil
Ramban	5	Nil
Total:-	50	11

- The Ministry of Environment, Forest and Climate Change has made it mandatory that District Survey Reports (DSRs) shall be prepared as per their guidelines 2016 and 2020 and no Environment Clearance shall be granted without duly approved DSR by the competent authority i.e. SEIAA.
- In the year 2018, the DSRs were prepared by the Department as per Notification No. S.o.141(E) New Delhi, the 15th January,2016 of Ministry of Environment, Forest and Climate Change and approved by the District Environment Impact Assessment Authorities (DEIAA) with concerned Deputy Commissioner as its chairman. But Hon'ble National Green Tribunal (NGT) vide its orders dated 13.09.2018 had dissolved the DEIAA and further vide its orders dated 14.10.2020 directed that the DSRs shall now be prepared by the NABET accredited consultant and DC shall forward the same to SEIAA for its approval. In this regard the department has initiated the process, submitted proposal to administrative department for approval. The proposal for outsourcing of

DSR as per communication of JKDIAA has been processed for appraisal of Administrative Department of Mining.

- In compliance to the Hon'ble NGT order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. Regarding Environmental Audit, the Department has also incorporated provision in the rules one **"Yearly Environment Audit.- In every lease of mine of minerals there will be independent environment audit at least once in a year by a reputed third party entity and report of such audit shall be placed in public domain' and another is: Re-Grassing the mining area.- The mining lease holder shall, after ceasing their mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora and fauna etc."**

- The replenishment study was carried out by the Department by way of survey/mapping, Pitting, and reading of reduced and raised levels by using top sheets and handheld GPS etc. The district wise detail is asunder

In Jammu district as per report submitted the average level of deposition /replenishment in the Chenab is 1.6 M and in Jad Khad, Khour Khad , Kathar Khad, and Chowki Choura area are 1.12 M and 1.2 mts is 1.14 mts and 1.2 mts. respectively In Tawi River at Kishanpur Manwal area the average thickness of the replenished River Bed Material is 1.41 mts and has also stated that area was completely replenished in the Monsoon period.

In Udhampur district the average deposition of River Bed Material at Tawi River Blocks was about 1.2 mts. Whereas in Ramnagarwali khad at Blocks the average thickness of the material deposited was 1.2 m respectively and in Birmeen Di khad, Birma nalla, and Thatthi khad, the thickness of the deposited material was 1.1mts.

In Rajouri Districts On the basis of pitting, reduced and raised level of material during the pre-monsoon and post-monsoon period and depth of water level in the river beds and interpretation of data, it has been observed that total quantity of minor mineral allowed by EC has not extracted from most of the leased out minor mineral, so it is safe to allow the extraction of Minor Minerals as per approved Mining Plans i.e. upto depth of 1.0 m (Aprx.), Since replenishment has taken place in mined out area in rivers.

In Poonch District On the basis of pitting, reduced and raised level of material during the pre-monsoon and Post-Monsoon period and depth of water level in the river beds and interpretation of data, it has been observed that total quantity of minor mineral allowed by J&K Pollution Control Committee in the Consent to operate has not extracted from most of the leased out minor mineral blocks, so it is safe to allow the extraction of Minor Minerals as per approved Mining Plans i.e. upto depth of 1.0 m (Aprx.), Since replenishment has taken place in mined out area in rivers.

In Samba District On the basis of pitting ,reduced & raised level in the pre and post monsoon period and depth of water level in the river beds .It is concluded as that total quantity of minor mineral allowed by EC has not extracted by the most of mining leases which is ranging from 19.05 to 55.07 the replenished quantity worked out on the basis field data is more than extracted as well as permitted by the JKEIAA So, it is safe to allow the extraction of Minor Minerals as per the approved Mining Plan i.e upto depth of 1.1 meter in Devak, 1.2 mtrs in the Basanter river and 1.0 mtr in the Bein nallah except block no 4/1 Since on an average replenishment has taken place in the mined out area in Devak Basanter & Bein respectively. The rate of replenishment requires recording of pre as well as post monsoon data over an undisturbed /no mining area for minimum of not less than 5 years' period. So it is recommended that field programme must be

planned in such a way that it include both pre as well as post monsoon periods.

In Kathua District the replenished quantity is more than allowed quantity as such it is safe to allow the extraction of minor minerals as per the approved Mining plan i.e upto depth of 1 mt. Further on an average more than 1m of replenishment has taken place in the mined out area in Tarnah river, Sahar Khad, Ujh river and Bhinni river respectively.

The assessment of the mineral resource has been made by taking into considerations the volumetric method with standard specific gravity factor of 2.0 with 1.0m depth factor as per recommendations made by the JKEIAA. As per the assessment made a total mineral potential from the region is worked out about 296.33 million tons and about 178.0 million tons i.e. 60% area can be taken for removal of minerals from the streams as per “**Methodology Adopted for Calculating of Mineral Potential**” cited in Sustainable Sand Mining Guidelines-2016, issued by Ministry of Environment Forest & Climate Change. The projected requirement of RBM for the completion of Mega construction Projects of National Highway Authority of India like Delhi-Katra Express is 5 lacs tons, 28 lacs tons and 15 lacs tons from Jammu, Samba and Kathua for the next 2 years. The analysis of the data on approved quantity of RBM from the present operational blocks does not suffice the additional requirement of about 50 lac tons for the prestigious NHA projects.

District wise Mineral Resource Position

DISTRICT JAMMU									
Name of River	Area in Hectares	Approximate Tonnage	Safe Recovery Limit (60%) tonnage	Leased hold area in Hectares	Utilised area in %	Approved Qty. per year in Leased hold area in MT	Production for the Financial Year 2021-22	Production for the Financial Year 2022-23	
Tawi(Kishan pur Manwal)	2858	5716000	3429600	74.53	2.608	6,63,325.00	2,37,360.00	5,93,478.80	
Chenab	3847	7694000	4616400	37.99	0.988	4,37,565.00	3,14,355.36	4,18,111.96	

Kathar Khad	311	622000	373200	33.09	10.640	3,42,580.00	1,18,924.25	3,87,758.54
Jad Khad	189	378000	226800	46.76	24.741	4,80,234.00	2,26,802.17	3,79,006.09
Khour Wali Khad	255	510000	306000	45.58	17.875	3,77,890.00	2,16,186.39	3,83,661.75
Chowki Chora	39	78000	46800	5.28	13.538	61,800.00	-	70,085.50
Sardan Nalah	174	348000	208800		0.000			
Balan Nadi	245	490000	294000		0.000			
Samawali Khad	239	478000	286800		0.000			
Mawa Khad	159	318000	190800		0.000			
Chhibbewali khad				1.23		24,600.00	19,178.50	26,434.60
Aik Nallah				1.36		25,296.00	-	-
Total	8316	16632000	9979200	245.82	70.389	24,13,290.00	11,32,806.67	22,58,537.24
DISTRICT SAMBA								
Devak	689	13780000	8268000	47.09	6.835	6,20,020.00	1,15,865.94	89,299.55
Basantar	1004	20080000	12048000	91.70	9.133	14,55,515.00	4,18,218.49	6,73,000.69
Bein	533	10660000	6396000	38.83	7.285	6,78,200.00	1,09,517.50	2,25,174.31
Total	2226	44520000	26712000					
				177.62	23.253	27,53,735.00	6,43,601.93	9,87,474.55
DISTRICT KATHUA								
Tarnah	632	12640000	7584000					
Ujh	3475	69500000	41700000	81.16	2.336	12,26,230.00	8,39,608.00	6,46,373.20
Bhini	1805	36100000	21660000	65.619	3.635	6,22,960.00	50,305.00	1,48,028.03
Sahar	424	8480000	5088000	13.84	3.264	1,72,722.00	41,210.00	1,03,953.70
Ravi	680	13600000	8160000		0.000			
Naj Nallah				17.24		2,06,860.00	12,000.00	47,437.25
Johad Khad				7.28		-	-	-
Taaraf Tajwal				9.98		1,22,928.00	1,00,018.00	46,327.23
Total	7016	140320000	84192000	195.119	9.235	23,51,700.00	10,43,141.00	9,92,119.41
DISTRICT UDHAMPUR								
Ramnagar Wali Khad	100	2000000	1200000	5.0646	5.065	60,840.00	45,520.00	57,148.00
Tawi river	400	8000000	4800000	12.94	3.235	3,19,275.00	4,334.00	7,095.50
Thathi Nallah				3.71		75,127.00	42,659.00	42,559.00
Birma Nallah				4.30		77,400.00	39,052.00	72,299.15
Dudhar Nallah				4.91		89,484.00	42,702.00	65,755.00
Total	500	10000000	6000000	30.9246	8.300	6,22,126.00	1,74,267.00	2,44,856.65

DISTRICT REASI								
Tanda seri Khad				24.82		1,88,600.00	33,377.00	90,869.00
Pei Khad	26.79	535800	321480	8.79	32.811	1,23,060.00	91,109.00	44,777.00
Anji	173.57	3471400	2082840	36.28	20.902	3,72,340.00	88,511.00	1,38,517.00
Ans	285.05	5701000	3420600	54.49	19.116	5,43,123.00	1,35,228.00	1,90,718.00
Chenab	1863.91	37278200	22366920	44.92	2.410	2,94,900.00	33,443.00	47,471.00
Tawi khad				1.88		33,840.00	25,665.00	61,641.00
Total	2349	46980000	28188000	171.18	75.239	15,55,863.00	4,07,333.00	5,73,993.00
DISTRICT RAJOURI								
Nowshera	690	13800000	8280000	75	10.870	7,32,863.00	73,785.00	1,97,772.05
Ans	105	2100000	1260000	4.05	3.857	48,600.00	-	7,282.18
Dharali	114.75	2295000	1377000	9.5	8.279	1,05,161.00	9,661.00	24,310.16
Solki	189.2	3784000	2270400	7.17	3.790	1,03,400.00	1,400.00	6,281.00
Total	1099	21980000	13188000	95.72	26.795	9,90,024.00	84,846.00	2,35,645.39
DISTRICT POONCH								
Suran River	600	12000000	7200000	19.64	3.273	97,496.00	-	10,235.00
Betar River	112.5	2250000	1350000	19.1	16.978	1,56,100.00	-	41,821.50
Poonch river				17.88		57,700.00	-	5,350.00
Sylhed Nallah				4.83		57,900.00	-	-
Mendhar River	82.5	1650000	990000	11.91	14.436	-	-	-
Total	795	15900000	9540000	73.36	34.687	3,69,196.00	-	57,406.50

REGULATION AND MONITORING OF RIVER BED MATERIAL

The regulation of river bed material is done through the integrated mechanism of the Multi Departmental District Level Task Force headed by the concerned Deputy Commissioner and by the established and Department of Geology and Mining the violation reported during the year 2020-21 ,2021-22 &2022-23 is tabulated as below:

District wise details of Compounding Offences made from 16.10.2020.

District	Fine Imposed under Section 21(4) & 5 for the year 2020-21			
	Vehicles/ Machineries seized		Quantity in Mts	Amount Realised (in Rs.)
Jammu.	1738	9	43,564	2,53,40,506
Samba	383	3	5,714	46,53,510
Kathua	197	7	17,111	1,73,07,420
Rajouri	238	5	8,485	47,91,625
Poonch	260	3	2,668	16,59,981
Reasi	113	-	1,274	17,92,235
Udhampur	22	-	2,086	8,12,030
Ramban	4	-	46	24,650
Doda	29	5	4,886	22,37,605
Kishtwar	37	3	5,296	24,62,525
Total	3,021	35	91,130	6,10,82,087

Vehicles/ Machineries seized/ St. Crusher	2021-22		2022-23		
	Qty (in MTs)	Amount Realised (in Rs.)	Vehicles/ Machineries seized/ St.Crusher	Qty (in MTs)	Amount Realised (in Rs.)
650	19424.50	3,80,83,733.50	1,589	58,587.15	3,66,53,486
163	23488.56	2,46,38,768.00	528	68,479.87	2,75,53,811
212	6072.75	43,94,947.50	234	13,421.73	58,32,520
590	6061.60	27,14,800.00	262	5,062.91	27,16,994
152	15788.30	79,07,113.00	84	8,670.16	39,68,025
136	5721.00	22,20,780.00	137	4,729.00	20,73,730
44	492.75	10,32,310.00	46	4,005.00	17,19,055
15	257.16	3,32,516.60	39	600.00	6,86,175
30	4254.00	19,83,275.00	21	2,375.04	9,67,843
140	2203.00	22,19,310.00	133	4,008.50	30,95,278
2132	83763.62	8,55,27,553.60	3,073	1,69,939.35	8,52,66,917

CONCLUSIONS:

In compliance to Sustainable Sand Mining Management Guidelines-2016 and Enforcement & Monitoring Guidelines for Sand Mining-2020 read in sync with each other, Notifications of MoEF&CC, GOI, NGT guidelines/directions and MM(D&R) Act and rules made their under etc., during the year 2020, the Department has successfully conducted e-auction of Minor Mineral Blocks across the UT of J&K and as on date more than 175 Mining Leases have so far been granted.

1. During the year 2021-22 replenishment study has been carried out in 10 district of J&K UT. Reconnaissance Mapping, carried out along the river stretches identified and Mineable Reserves were estimated for further mining activities, the reports stands submitted.
2. To control and monitor illegal extraction and transportation of Minor minerals from the leased out areas, the department has so far established 11 Mineral check posts. There are 50 more such posts in the process of being made operational.
3. The department has launched Online Web portal <http://geologymining.jk.gov.in> on 24-08-2022 which is developed by Geology and Mining Department for E-Market Place (i.e. for sale of minor minerals at notified rates for convenience of general public) and e-Challan (i.e. replacement of current manual challan with E-challan through which Project Proponents/Mineral Dealer License Holders/Crusher Unit Holders and Short Term Permit/Quarry/Mining Lease Holders shall apply/submit online Form-A for Transportation of Minor Minerals in J&K UT w.e.f 24.08.2022. As on date about more than 8 lacs e-challans generated through this web portal.

4. In compliance to the Hon'ble NGT order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. Regarding Environmental Audit, the Department has also incorporated provision in the rules one "*Yearly Environment Audit and other is Re-Grassing of the mining area.*"
5. The regulation of river bed material is done through the integrated mechanism of the Multi Departmental District Level Task Force headed by the concerned Deputy Commissioner and Department of Geology and Mining the violation reported during the year 2020-21 2021-22 & 2022-23 is Rs. 6,10,82,087, Rs. 8,55,27,553.60 and Rs. 8,52,66,917 respectively.
6. The availability of minor mineral resources in the form of sand, Bajri and boulders in the Jammu region can be planned by following the standard guidelines issued from time to time by the Ministry of Environment and Forest and Climate Change for overall development of the region. The alternative options for meeting the requirement of sand by Manufactured Sand (M-Sand) especially for the hilly districts- Ramban, Doda and Kishtwar and other Sand deficit areas for the upcoming development projects can be met by identifying the hill quarries.

KASHMIR REGION

1. INTRODUCTION

The Principal Bench, New Delhi of the National Green Tribunal headed by Justice Adarsh Kumar Goel in its order dated 26.02.2021 in Original Application No. 360/2015: National Green Tribunal Bar Association Vs Virender Singh (with other connected matters) passed a slew of directions to the States/Union Territories for strict enforcement of Sustainable Sand Mining and Management Guidelines 2016 read with Enforcement and Monitoring Guidelines for Sand Mining 2020 by evolving appropriate comprehensive monitoring mechanism, strict action against violators including assessment and recovery of compensation for violations and regular reviews at higher levels in States/UTs.

One of the directions of the Hon'ble National Green Tribunal in the aforementioned order dated 26.02.2021 is the Publication of Annual Reports by all the States/UTs on the subject to be furnished to the Environment Ministry by April 30 every year, giving the status of the issue till March 31st. Based on such reports, the Ministry shall prepare a consolidated report and publish its own report on the subject, preferably by May 31 every year.

In a meeting held under the Chairmanship of Commissioner/ Secretary Forest, Environment and Ecology, J&K UT on 22.12.2021 in his office Chamber, Civil Secretariate, Jammu regarding the implementation of Sustainable Sand Mining Guidelines 2016/2020, it was decided that the Directorate of Geology & Mining, J&K shall prepare the Annual Report on Sand/River Bed Mining in Jammu & Kashmir UT.

Subsequently in pursuance to Director, Geology & Mining, J&K vide OM No. DGM/MCC/DSR/3393-95 dated: 24.12.2021 read Joint Director, Kashmir Vide order No. JDK/DGM/AFP/2020-21/F-97-II/6747-51 dated: 27.12.2021, the Annual Sand Report for the year 2021-22 for Kashmir Province was prepared and submitted to the concerned Authorities.

The current report envisages the Annual Sand/River Bed Mining Report for the year 2022-23 for Kashmir Province which has been prepared in compliance to Director, Geology & Mining Letter No.

427/MCC/DGM/NGT/20/796-97 dated: 22.01.2023 and Joint Director, Kashmir office order No. JDK/DGM/SGR/ASR/F-283/7412-15 dated: 21.02.2023

River bed mining for sand, silt, bajri and boulders represent an important economic activity in Kashmir Region and forms essential raw materials for the infrastructural development works and for the construction industry. The Mineral Concession for Minor Minerals including River Bed Material (RBM) is granted in accordance to the "The J&K Minor Mineral Concession, Storage, Transportation and Prevention of Illegal Mining Rules, 2016" and Ministry of Environment, Forest & Climate Change Notification issued vide No. S.O.141 (E) dated 15.01.2016 wherein approved Mining Plan, Environmental Clearance and Consent to Operate from the competent authorities are now the statutory formalities for extraction of river bed minor minerals. Further the Department has taken many steps in accordance with the Sustainable Sand Mining and Management Guidelines 2016 read with Enforcement and Monitoring Guidelines for Sand Mining 2020 for regulating and monitoring the extraction of river bed material so that the objective of Sustainable Mining is achieved with minimum impact on the ambient environment and ecology.

2. PHYSIOGRAPHY, DRAINAGE & CLIMATE

2.1 PHYSIOGRAPHY

Kashmir Valley is a separate geographical entity, which is separated by the Himalayan mountain ranges from Jammu and Ladakh Regions. The oval shaped valley extending between latitudes 33°30' N to 34°40' N and longitudes 73°45' E to 75°35' E stretches over an area of 15,853 km². The surface features of the Kashmir valley have been divided into the following three broad divisions:

- i) The Greater Himalayan Range
- ii) The Pir Panjal Range
- iii) The Valley floor

2.1.1: The Greater Himalayan Range: The Great Himalayan Range, a massive topographic barrier, extends uninterruptedly for over 150 kilometers from West to East and has a maximum width of 40 kilometers. At a point near Zoji-la, the range takes a bend towards southwest and is often described as North Kashmir range. Some of the highest peaks of this stretch include Harmukh (4,876 meters), Shutiyun (4,371 meters), Kutbal (4,344 meters) and Viji (3,622 meters) etc. The Harmukh precipice is a vast snow field that feeds the Madhumati and the Erin river systems which flow into the Wular Lake. To the Northwest of Baramulla, the Kazinag ridge of the North Kashmir range describes the Western boundary of Kashmir Valley. A striking feature of the Great Himalayan range is the asymmetrical development of slopes on the two flanks in sharp contrast to the gentle slope towards Ladakh, the descent from the Zoji-la to the Kashmir Valley is very steep. The drainage of the Great Himalayan range is antecedent with remarkable development of terraces on either flank of the stream channels. These narrow upland valleys offer interesting contrasts in cultural features and human geography.

2.1.2: Pir Panjal Range: The Pir Panjal is a lofty mountain chain with many of its peaks rising above the perennial snowline. Some of them rising above 3,500 meters are capped with extensive glaciers which project their tongues down the slopes. The highest of these peaks, Tatakuti and Barhma Sakal, rise above 4,500 meters. The Pir Panjal descends through a long gentle slope towards the Valley of Kashmir as opposed to its sharp escarpment-like ascent from the plains of Jammu. Practically all Pir Panjal glaciers rest on the northern slopes. Two distinct sections are usually recognized in the Pir Panjal range, as is evident from its alignment into two different axes. In its West-East axis, the range extends for over 48 kilometers, ultimately originating in Rupri ridge. The head streams of all important left bank affluents of the Jhelum rise in this precipitous ridge. The other section of the range, having a North- North west to south-south East axis, runs for about 64 kilometers upto the Jhelum gorge at Baramulla.

2.1.2: Valley Floor: Like all sedimentary basins, the Kashmir Valley has a queer combination of depositional and erosional features. The low-lying areas which are either water-logged or subjected to the recurrent inundation go on receiving layer after layer of silt and fine sand. The numerous affluents of the Jhelum, which fall down the slopes of the bordering mountains, bring tons of detrital material to the valley floor, building levees and deltaic fans over extensive areas at their confluences.

The alluvial flats of the valley are bordered by the Karewa deposits whose denuded tops offer sharp contrast to the aggradational features of the low lying tracts. The prolonged fluvial action reduced the Karewas to a highly dissected mass with a network of ravines and intertwined gullies. The Karewa formations cover a wide area on the southern periphery of the Valley all along its longitudinal extent. The Karewas differ vastly in their surface characteristics and are divisible into two main types- the sloping Karewas and the flat topped Karewas. Their gently sloping surfaces towards the Valley floor have been cut into deep ravines, ranging from 50 to 150 meters in depth. The level-topped Karewas are few and farther apart. Along the edge of the hills from Shopian to Sopore, the sloping Karewa beds have been dissected into a multitude of steep-sided ravines, giving the landscape a typical look of immaturity. Below 1828m, The Kashmir valley has a distinctive homogeneity in the level, as evident from the line of the Jhelum, which is a placid stream all along.

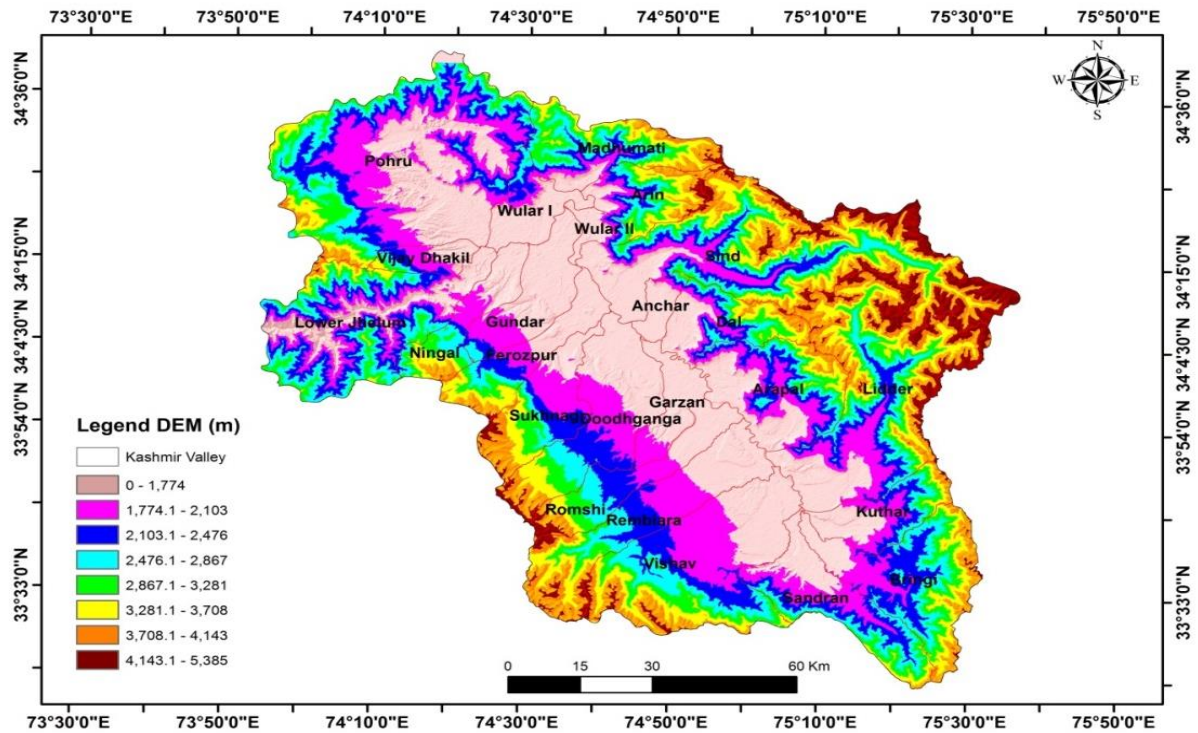


Fig.1: Slope map of Kashmir Valley.

2.2 DRAINAGE:

The River Jhelum and a host of streams that drain the bordering mountain slopes together constitute the drainage network of Kashmir Valley. The river Jhelum rises from Verinag spring in the foot hill of the Pir Panjal Range at an altitude of about 3000 meters above mean sea level and flows in loops through the valley in northwest direction till it enters the Wular Lake; where it flows out from its other side to Baramulla and enters the boundary of Pakistan and ultimately pours into Indus River. In its course from Khanabal to the Wular, the fall of the river is 18 meters in 113 kilometers or 1: 6,250 meters. The river makes some of the finest meanders over this stretch and lays down a good deal of its suspended load along its banks. The alluvial deposits of the Valley offer the best scope for such undercutting and deposition on the outer and the inner bends, which have grown into big meander loops.

The drainage network of Kashmir Valley can be classified into two main categories as the Himalayan Drainage or the Right bank tributaries of River Jhelum and the Pir Panjal or the Left bank tributaries of River Jhelum. The Himalayan Drainage includes all those tributaries which flow

from Dooru in Anantnag District to Karnah in the Kupwara District. All these tributaries meet the Jhelum from the right and are therefore also known as right bank tributaries. These include The Sandran, The Bringi, The Arapat, The Liddar, The Arapal, The Harwan, The Sind, The Erin, The Madhumati and The Pohru rivers. The drainage of Great Himalayan Slopes is dendritic, though in certain areas it tends to be linear and even irregular.

The Left bank tributaries constitutes all those streams which drain Pir Panjal chain of Mountains from Dooru Tehsil to Uri Tehsil and joins the river Jhelum from the left bank. Its main tributaries include The Vishu, The Rambiarā, The Romshi, The Doodhganga, The Sukhnag, The Ferozpore and The Ningal Rivers. The drainage of Pir Panjal offers a sharp contrast to that of the Great Himalayan Slopes. The Northern flank of the Pir Panjal Range is less extensive in width and does not seem to promote the lateral development of stream channels- the short lateral course of the Vishu being the only exception. The streams come down the mountains in parallel and often irregular lines. In the upper reaches they have a dendritic pattern, lower down their courses are aligned parallel to each other. As the streams cut across the Karewa beds, they develop braided channels- braiding and constant shifting of channels being caused by rapid deposition of sand and gravel in the stream beds.

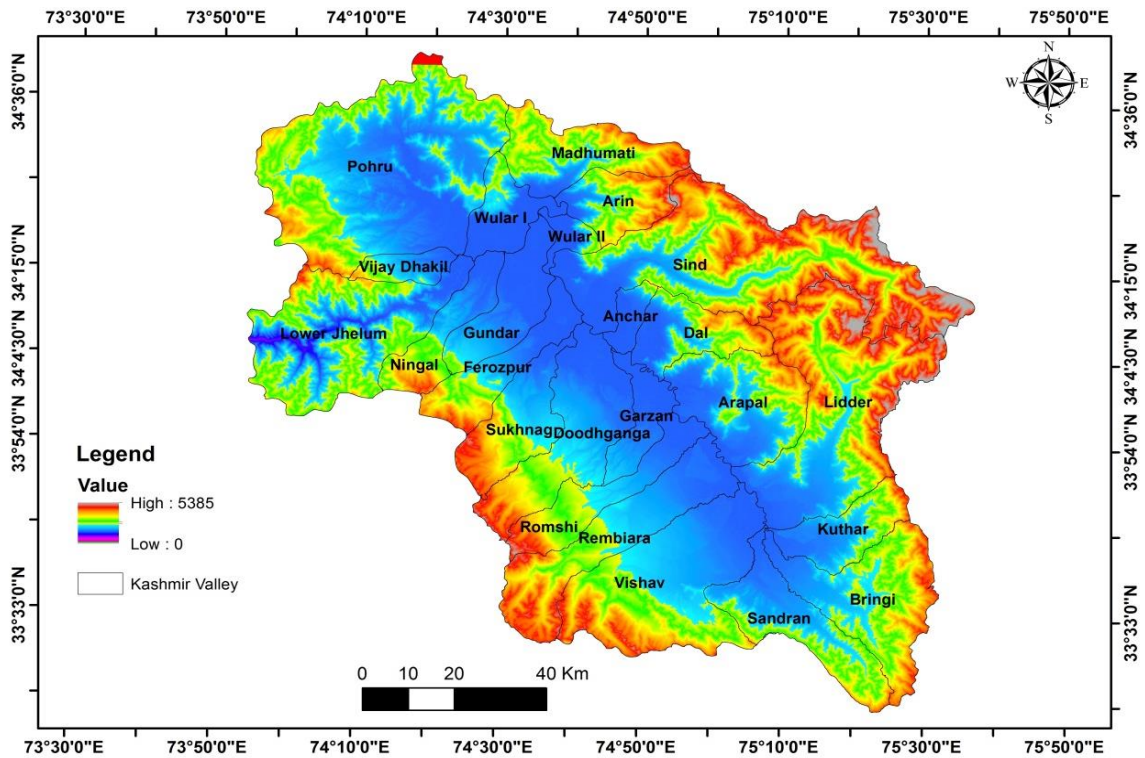


Fig. 4: Drainage/Watershed Map of Kashmir Valley

2.3 Climate

The Kashmir valley is characterized by distinct orographic features, snow-clad peaks; and resembles the mountainous and continental parts of the temperate latitudes. The uplift of the Tibetan Plateau at ~ 14 Ma is regarded as the causative factor for monsoonal system in Asia. This uplifted mountain range has resulted in a change in precipitation and monsoonal climate within the Indian region and is responsible for the strong latitudinal gradient of increasing aridity towards the central parts of the Himalaya and Tibetan Plateau. However, upliftment of the Pir Panjal Range has played locally a major role in determining the climatic changes in the Kashmir Valley. The 1400-5000 m uplift since the past ~ 4 million years in the Pir Panjal Range has effectively blocked the south western monsoon winds and changed the climatic conditions from tropical to more arid to windy in the valley. The present-day rainfall pattern in the valley is dominated by winter precipitation brought in by Western Disturbances (WD) as opposed to the south western monsoons prevalent in most of the Peninsular India. The WDs are most active during

winter and spring and decrease substantially as summer progresses. Kashmir Valley has a Mediterranean type of climate, characterized by a marked seasonality with four well developed seasons viz. spring, summer, autumn and winter. The rainfall pattern in the valley is dominated by winter precipitation brought by western disturbances and trough in the westerlies. The south-western monsoons do not mostly enter the valley because the Pir-Panjal range blocks them out. Presently, no major dust-producing wind storms occur in the valley. The average annual precipitation in the valley is 710 mm with an average temperature of about 22 °C in summer and -5°C during winter.

3. GEOLOGICAL SET UP OF KASHMIR REGION:

Kashmir valley constitutes a very important place in the Geology and Geotectonics of the Himalayas. It is a Nappe Zone representing a tectonic depression (160×40 kms), bounded by two linear mountain ranges - the Pir Panjal and the Zanaskar with NW-SE trends and contains one of the finest developments of the stratigraphic succession right from Proterozoic to Recent, witnessing a complete stratigraphic sequence of marine Paleozoics, Mesozoics and Cenozoics. The detailed stratigraphic succession witnessed in Kashmir region is described as follows:

	Age	Formation	Lithology
QUATERNARY	Holocene	Alluvium	Unconsolidated pebble, cobble, sand, silt and clay
	Neogene-Quaternary	Karewa Formation	Conglomerates, silt, sand, clay, and loess-paleosol
TERTIARY	Palaeogene (Palaeocene - Eocene)	Rajpur Formation	Nummulitic limestone,
	Jurassic	Wumuh Formation	Dark grey shale, slates, arenaceous limestone
MESOZOIC	Upper Triassic	Wuyan Formation	massive limestone/siliceous limestone and occasional quartzite

	Mid. Triassic	Khrew Formation	bedded limestone and black arenaceous shale
	Lower Triassic	Khunamuh Formation	Limestone, calcareous sandstone, shale and siltstone,
PALEOZOIC	Late Permian	Zewan Formation	dark grey to black shale
	Early Permian	Mamal Formation	Carbonaceous shale, tuffaceous shale, sandstone, Novaculite
		Panjal Volcanics	Andesite and basalt
		Nishatbagh Formation	Dark grey to black shale and tuffaceous slate, siltstone, sandstone and conglomerate
		Agglomeratic Slates	Sandstone, siltstone, diamictite and tuff
	Late Carboniferous	Fenestella Shale	Quartz arenite with lenticular conglomerate, shale and siltstone
	Early Carboniferous	Syringothyris Limestone	Limestone, sandstone, shale and quartzite
	Devonian	Aishmuqam Formation	Quartz arenite, siltstone and shale
		Muth Quartzite	Orthoquartzite with occasional lenticular bands and conglomerate
	Silurian to Ordovician	Margan Formation/ Marhaum Formation	Purple siltstone and slate, quartzite, arenite, shale, calcarenite, dolomite and conglomerate

		Watarkhai Formation	Trachy andesite, tuffaceous rhyolite and tuffaceous shale
	Upper Cambrian	Trehgam Formation	Shale, siltstone, sandstone, and lenticular limestone
	Mid. Cambrian	Nutnus Formation	laminated siltstone, shale, arenite and lenticular limestone
	Lower Cambrian	Lolab Formation	Graywacke, siltstone, quartz arenite with minor shale and dolomite
PROTEROZOIC	Neo Proterozoic (Vendian)	Machail Formation	Arenite, phyllite, slate, sandstone, graywacke, calcareous slate and lenticular limestone
		Ramsu Formation	Slate, phyllite, schist and quartzite with lenticular bands of diamictite, limestone and dolomite
	Neo Proterozoic (Pre-Vendian)	Salkhala Formation	Phyllite, schist, quartzite, limestone with gypsum and graphite lenses

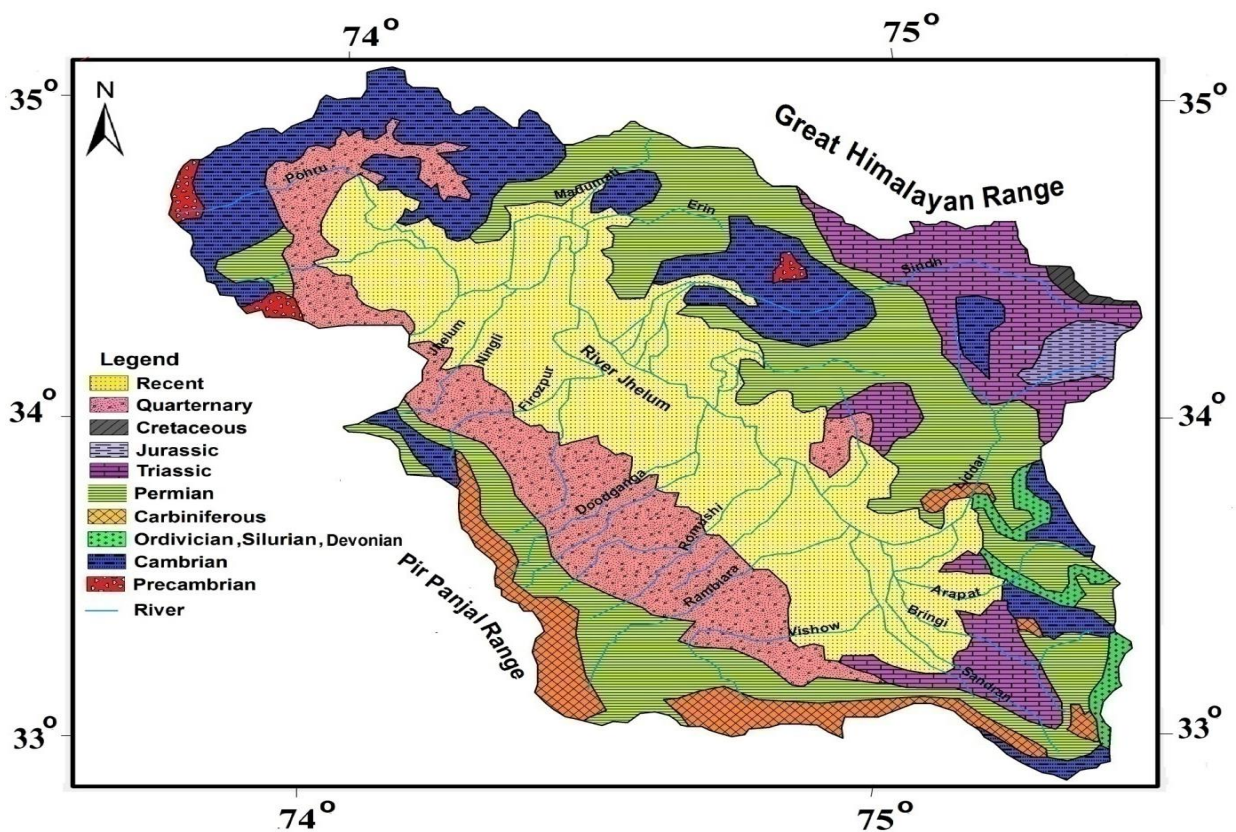


Fig: Distribution of Geological Formations in Kashmir Valley

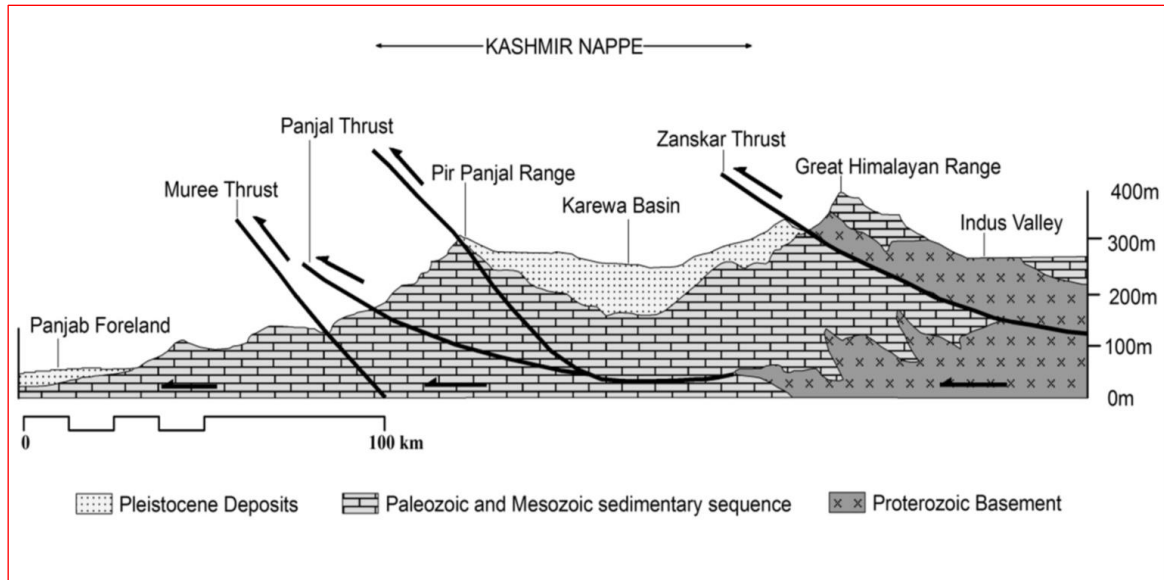


Fig.2: Geological cross section across the Kashmir Himalaya

4. MINING ACTIVITY IN KASHMIR REGION

Minerals constitute one of the most important natural resources that govern the industrial and economic development of a region. Mineral resources provide raw material to the primary, secondary and tertiary sectors of the economy. The exploitation of the minerals and their end utilisation help in infrastructural development, socio-economic upliftment of a region, besides providing employment to thousands of families and revenue to the Government exchequer.

Kashmir Valley possesses a versatile Geological set up giving rise to availability of a number of important major as well as minor minerals. Huge deposits of limestone of different grades and large reserves of good quality gypsum are noteworthy occurrences. Kashmir Valley has several other occurrences of non-metallic, metallic ores and other minerals but not of mineable abundance.

The Department of Geology & Mining, Kashmir by virtue of consistent and result oriented field investigations has identified/ established about 3,500 million tonne reserves of various minerals i.e; Limestone (major), Gypsum, Marble, Lignite, Slate, Quartzite, and Graphite. The establishment of these industrial minerals enabled the Government to grant about 51 captive and non-captive Mining leases to private and public sector undertakings.

Kashmir Valley is blessed with abundant deposits of other minor mineral resources such as building/masonry stones, sand, boulder, bajri and clay. The perennial left and right bank tributaries of Jhelum basin deposit huge quantities of minor minerals (boulder, bajri and sand) in their courses and flood plains which are extracted for meeting the requirements of the material for construction purposes and other infrastructural developmental activities. River Jhelum represents the main source of well sorted river borne sand utilized for developmental works. The extraction of clay mainly takes place on the Late Neogene-Quaternary Lacustrine Fluvial-glacial Karewa deposits and Recent Alluvium deposits for construction, filling and brick making purposes.

The exploitation of these available minerals has resulted in the modest development of mineral based industry in the Region. In Kashmir Valley, about 09 cement plants, 07 POP units, 297 brick kilns, 416 crusher/hot wet mix plants and 07 stone cutting/polishing units are sustaining on the locally available major as well as minor minerals. During the financial year 2022-23, the Kashmir Valley registered mineral production to the tune of about 121 lac metric tonnes with a collection of Rs 51.45 crore as revenue. The current direct and indirect employment generated by the mining activity in Kashmir region stands at about 1.30 lacs persons.

5. MINERAL CONCESSIONS FOR RIVER BED MATERIAL

Prior to 2016, the extraction and transportation of river bed material (boulder, bajri and sand) was governed by J&K Minor Mineral Concession Rules, 1962 where under the Short Term Permits on advance

payment of royalty were issued to local extractors for a specific period of time. However, in light of the Hon'ble Apex Court Judgment in the case titled Deepak Kumar Vs State of Haryana & Ors dated 12.02.2012 all the State Governments and Union Territories were directed to frame fresh rules in respect of Minor Minerals under Section 15 and 23(c) of Mines and Minerals (Development & Regulation) Act, 1957. The Government of J&K framed and notified the new rules titled as **"The Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016"** vide SRO-105 of 2016 dated 31.03.2016. Under these rules the main mode of the grant of Mineral Concessions/ Mining Leases/License for mining of minor minerals is by way of e- auction in respect of State land.

Accordingly in a Pre-auction process, the Department of Geology & Mining, J&K took up the identification and preparation of Geo-referenced Minor Mineral Blocks with areas not exceeding 10 hectares in light of the provisions of the said rules read with Sustainable Sand Mining Guidelines 2016.

247 number of Minor Mineral Blocks were prepared in various nallas/Rivers of Kashmir Province along with the minimum reserve bid and after approval of the State/UT Govt. were forwarded to concerned Deputy Commissioners, Chairman District Auction Committee constituted vide Govt. Order no. 175-GAD of 2016 Dated; 01-03-2016, in pursuance to Rule 53 of J&K Minor Mineral Concession, Storage, Transportation and Prevention of Illegal Mining Rules, 2016, for putting them to e- auction, besides some Minor Mineral Blocks prepared were reserved for JK Projects Construction Corporation (02 no.) and JK Minerals Limited (03 no.).

As on date, 224 number of Minor Mineral Blocks have been e-auctioned through the District E- Auction Committees headed by concerned Deputy Commissioners in various Districts of Kashmir Province as per the terms and conditions of the approved E-auction Document and 203 Letters of Intent (LOIs) have been issued in favour of the successful bidders for completing the statutory formalities viz Approved Mining

Plan, Environmental Clearances and Consent to Operate from the competent authorities before formal grant of mineral concessions.

However, out of the 72 Minor Mineral Blocks identified in River Jhelum, 58 e-auctioned mineral blocks were cancelled as the J&K Environment Impact Assessment Authority vide its circular no. JKEIAA/2020/2018/106/1697-98 dated: 18.12.2021 did not considered the Environmental Clearances for River Jhelum mining projects for being an instream mining.

The details of district wise remaining minor mineral e-auctioned blocks and mining leases granted thereof are given as under:

District Wise Status of e-auctioned Minor Mineral Blocks:

Sr. no.	District	No. of Blocks E-auctioned/reserved	No. of LOIs Issued	No. of MPs approved	No. of EC Granted	No. of CTO Granted	No. of Mining leases
1.	Shopian	37	36	36	20	19	20
2.	Anantnag	16	15	15	3	3	3
3.	Kulgam	29	29	29	20	19	19
4.	Pulwama	21	21	21	4	4	4
5.	Srinagar	0	0	0	0	0	0
6.	Budgam	3	3	3	3	3	3
7.	Ganderbal	5	5	5	2	2	2
8.	Bandipora	0	0	0	0	0	0
9.	Baramulla	23	23	23	7	6	7
10.	Kupwara	17	13	13	14	13	14
Total		151	145	145	73	69	72

After the completion of all the statutory formalities, the mineral blocks are demarcated by the subject experts and formally handed over to the project proponents in order to make the blocks operational. The extraction of the river

bed material is carried out manually with minimum application of machinery strictly as per the specific and general conditions as envisaged in Approved Mining Plan and Environmental Clearances. The production of the mineral in each leased out block is restricted as per the approved target limit prescribed in the Environmental Clearances issued by J&K Environment Impact Assessment Authority, the details of which are enclosed as **Annexure I**.

6. REGULATION AND MONITORING OF RIVER BED MATERIAL

The Government of Jammu and Kashmir with mining as one of the important sector has taken many steps for regulating and effective monitoring of extraction of river bed material so that the objective of sustainable mining with minimum impact on environment is achieved. The details of initiatives taken up by the Government are summarised as under:

6.1 E-AUCTION MODE FOR GRANT OF MINOR MINERAL CONCESSIONS:

The extraction of river bed material from River Jhelum and its tributaries was previously being allowed through Short Term Permits on advance payment of royalty for specific quantity and period under the provisions of J&K Minor Mineral Concession Rules, 1962. With the notification of the new Jammu and Kashmir Minor Mineral Rules i.e., “The J&K Minor Mineral Concession, Storage, Transportation and Prevention of Illegal Mining Rules, 2016” notified vide SRO-105 dated; 31st of March 2016, the main mode of grant of Mineral Concessions i.e., Mining Leases/Mining License for minor minerals is through e-auction mode now after identification and mapping of minor mineral blocks in an environmentally viable areas with safety zones in the proximity of public/private assets and meeting the prescribed norms as per SRO 105 read with Sustainable Sand Mining Guidelines, 2016/2020.

With an objective for sustainable mining, the e-auctioned minor mineral blocks are granted on lease to the highest successful bidders only after completion of statutory formalities i.e., Approved Mining Plan, Environmental Clearance, Consent To Operate from the competent authorities, besides No Objection Certificates from all the Stake holding

Departments. The leases holders have to operate the mining leases of sand and river bed material strictly as per the conditions envisaged in approved Mining Plan and Environmental Clearance.

6.2 DISTRICT SURVEY REPORTS AND REPLENISHMENT STUDY:

The Ministry of Environment, Forest & Climate Change vide S.O. No. 141 dated 15th January 2016 enjoined all State/UT Governments to prepare District Survey Reports which is a vital document for overview of mining activity at District level and serves as a model and guiding document for processing/consideration of the applications of the mining projects for Environmental Clearance by the Environmental Impact Assessment Authorities. The Department of Geology & Mining, Kashmir prepared the District Survey Reports of all the Districts of Kashmir Province during the year 2017-18 as per the notification of Ministry of Environment, Forest & Climate Change under reference for the then District Level Environment Impact Assessment Authorities (DEIAA) headed by District Magistrates.

The District Survey Reports thus prepared were put in the public domain for 15 days for no objection by the respective Chairman of the District Level Environment Impact Assessment Authorities. The District Level Environment Impact Assessment Authorities (DEIAA) was dissolved as per the National Green Tribunal Order dated: 11.12.2018 in OA 520/2016 and the District Survey Reports were forwarded/submitted to Jammu and Kashmir UT Environment Impact Assessment Authority (JKEIAA) who are currently processing the applications of Environment Clearances of all the mining projects based on these District Survey Reports.

As per the MoeF&CC Notification Vide S.O. No. 141 dated 15th January 2016, the District Survey Reports shall be updated once every five years. As such the validity of the District Survey Reports (DSR) is upto March 2023 and the revision of District Survey Reports shall be taken up during the field season 2023-24. However, the updation of the District Survey Reports by incorporating the detailed sediment/ replenishment

studies of various rivers/nallas was taken up during the field season 2021-22 & 2022-23 as per the approved Annual Geological Field programmes of the Department. Further the replenishment study in respect of 32 e-auctioned minor mineral blocks falling in various rivers/nallas was carried out during the year 2022-23 as per the Enforcement and Monitoring Guidelines on Sand Mining 2020 and were approved by J&K Environment Impact assessment Authority (JKEIAA). The study was mainly carried out to prescribe the safe limits for extraction of river bed material without damaging the physical characters of river/nalla, besides local environment. The status of District Survey Reports and Replenishment Study is appended as **Annexure II**.

6.3 PREVENTION AND CONTROL OF ILLEGAL MINING:

As per Section 23C of the Mines and Minerals (Development & Regulation) Act 1957, powers have been delegated to the State/UT Governments to frame rules in order to curb illegal mining, transportation, and storage of unauthorized extraction of minerals. Any orders passed by the State Governments under these Rules cannot be appealed against before the Central Government. Accordingly, like other State Governments, Jammu & Kashmir Govt. structured the Rules in this regards, titled as “**The Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016**” and notified vide SRO-105 of 2016 dated 31.03.2016 under section 23C of MMDR Act, 1957. Any unauthorized extraction and transportation of minerals are dealt under the provisions of these rules in order to stop the illegal mining activities.

6.4 FORMATION OF VARIOUS DISTRICT LEVEL COMMITTEES FOR FACILITATION AND MONITORING THE MINERAL CONCESSIONS AT DISTRICT LEVEL:

6.4.1 District Level Auction Committee: In terms of Rule 56 of Jammu and Kashmir Minor Mineral Concession Rules 2016, Government of J&K Vide Order No. 175-GAD of 2016 Dated: 01.03.2016 framed District Level Auction Committee with the composition of Dy. Commissioner/Addl. Dy. Commissioner (Chairman), Superintending Engineer, R&D (Member),

District Treasury Officer (Member), Dy. Director/Mining Engineer (Member) and District Mineral Officer (member Secretary). The committee has been instrumental in successfully auctioning 166 minor mineral blocks in various Districts of Kashmir Region which has been culminated into 72 mining leases till date

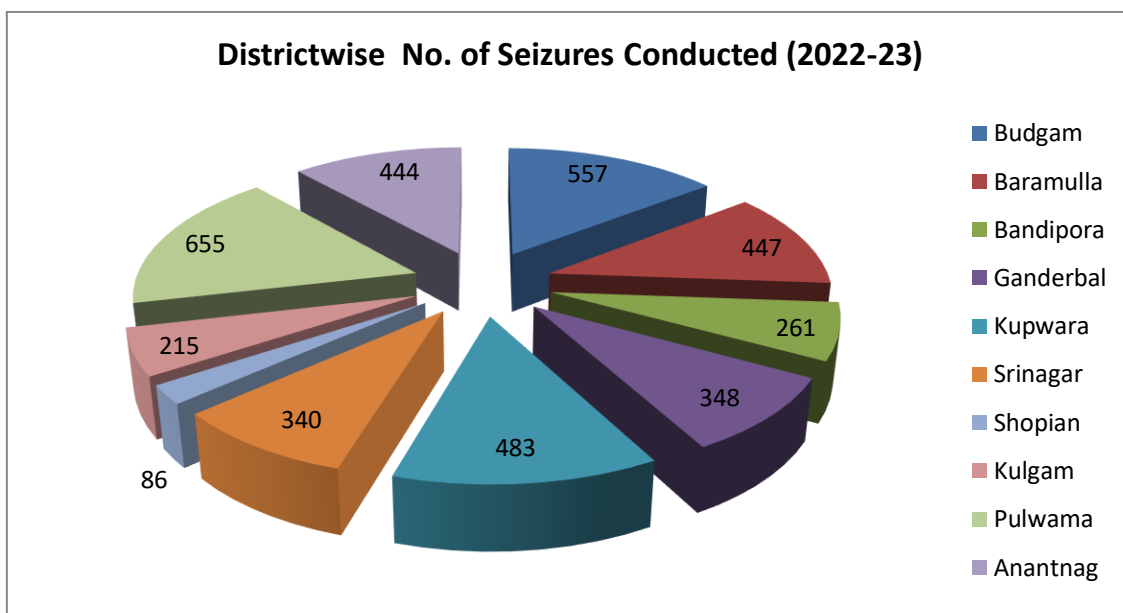
6.4.2 District Level Mining Plan Approval & Single Window Clearance Committees:

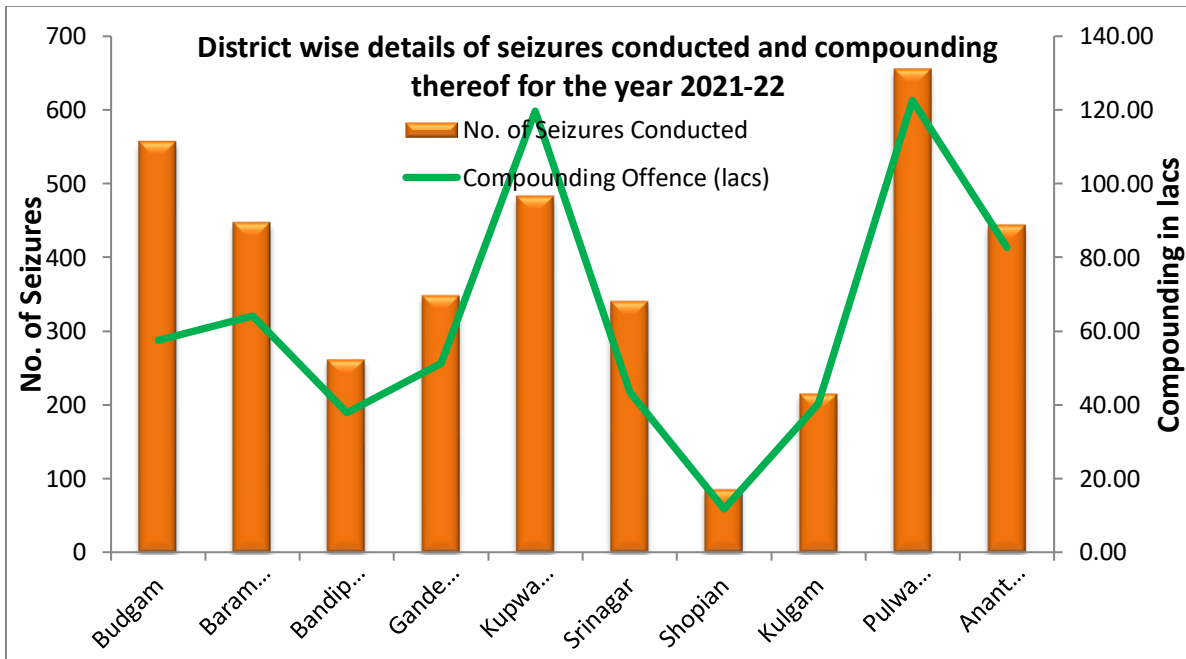
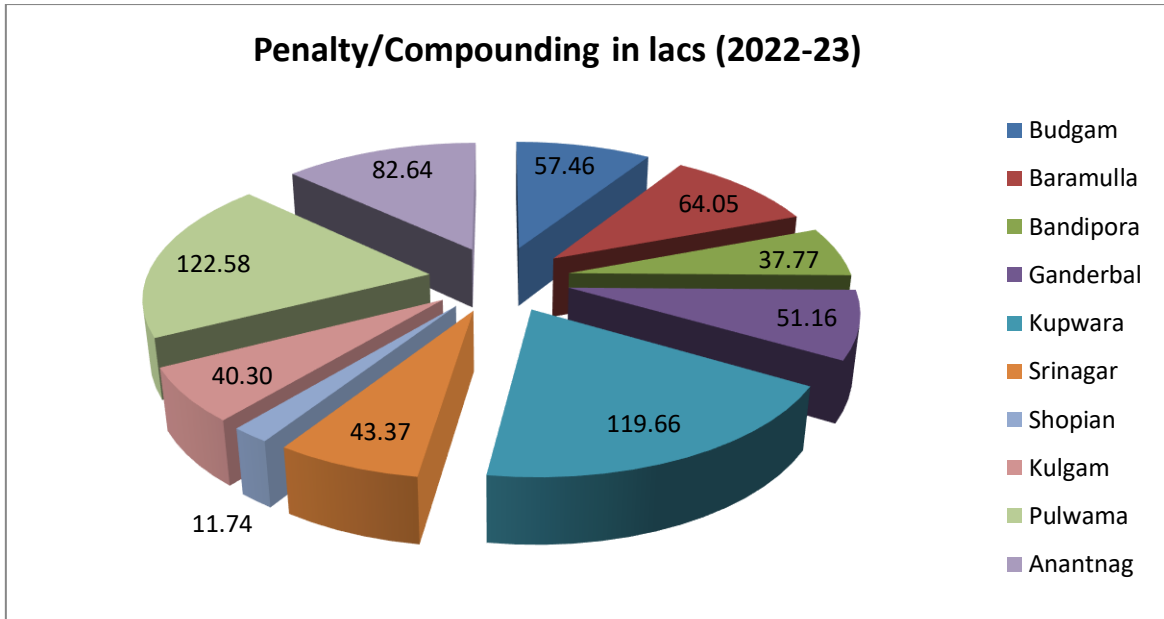
The Government of Jammu & Kashmir Vide Order No. 87-IND of 2020 dated: 30.04.2020 constituted a committee headed by Dy. Commissioner concerned for approval of Mining Plans for minor mineral blocks. The committee under reference has approved about 145 Mining Plans with PMCP of minor minerals till date in Kashmir Province excluding modified Mining Plans. However during the appraisal of applications of project proponents by JKEIAA for grant of Environmental Clearances, most of the project proponents were advised to revise the mining plans as per the Enforcement & Monitoring Guidelines for Sand Mining-2020 within 03 months from the grant of ECs in favour of their mining projects. Accordingly under Rules 8 of J&K Minor Mineral Concession Rules 2016, the project proponents submitted the revised Mining plans which were approved by the competent authority, the details of which are enclosed as **Annexure III**.

The Government Vide Order No: 1145 -JK(GAD) of 2021 dated: 28.10.2021 Constituted the District Level Single Window Committee for each District of the Union Territory of Jammu and Kashmir under the chairmanship of Dy. Commissioner concerned for acquiring the inevitable clearances/NoCs from the stake holding Departments in order to facilitate the execution of mining leases wherein the said committees have issued about 100 consolidated Clearances/NoCs till date.

6.4.3 District Level Multi-Departmental Task Force Cell: The J&K UT vide Government Order No. 1569-GAD of 2018 dated: 22.10.2018 constituted Multi Departmental District Level Task force Cell in Geology & Mining Department headed by Dy. Commissioner concerned and District Mineral Officer as Member Secretary with the main mandate to check illegal

mining activities in the respective Districts and imposition of penalties/compounding against the violators thereof. During the financial year 2022-23, the Department has seized 3836 vehicles and 339 illegal mineral dumps and imposed penalty/compounding to the tune of Rs 7.80 crore to the people involved in illegal extraction and transportation of minerals in accordance with the provisions of Jammu & Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules 2016. The district wise detail of seizures and compounding thereof is appended as **Annexure IV**.





6.5 CONSTRUCTION OF HI-TECH MINERAL CHECK POSTS:

The Department through J&K State Industrial Development Corporation (SIDCO), the Executing Agency is constructing 61 hi-tech Mineral Check Posts on important exit points/strategic locations in various districts of Kashmir Province @ Rs 9.77 lacs per check post with

CCTV facility for monitoring the transportation of minerals. Till date, the SIDCO has completed 11 Mineral check posts which stand handed over to the Department and made operational which has improved the surveillance of the Department for curbing the instances of unauthorized transportation of minerals. This is in addition to the already existing mineral check posts which are in place in all the Districts of the Region. The details of completed high tech Mineral Check Posts is enclosed as **Annexure V**.

6.6 MINOR MINERAL SURVEILLANCE SYSTEM

The Ministry of Mines through Indian Bureau of Mines, Government of India launched Mine Surveillance System (MSS) in the year 2016 for Major minerals, developed in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY), which is a satellite-based monitoring system with an objective to establish a regime of responsive mineral administration by curbing instances of illegal mining activity through automatic remote sensing detection technology. Subsequently the Ministry of Mines asked all the states/UTs to take up and implement the Mining Surveillance System (MSS) in case of Minor Minerals as the minor mineral fall within the domain of State/UT Governments.

On the request of Geology & Mining Deptt, IT section of J&K Small Scale Industries Development Corporation Limited (SICOP) prepared Detailed Project Report (DPR) for developing and Maintainace of comprehensive Mine Surveillance System (MSS) web portal which has been now taken up under Languishing projects Scheme with the approved cost of the project as Rs. 2.89 crores. As reported by SICOP, 70% of the project work has been completed by M/s Sakura Limited (Delhi based Firm).

The surveillance system checks a region of 500 meters around the existing mining boundary to search for any unusual activity which is likely to be illegal mining and any discrepancy, if found is flagged-

off as a trigger. The system once established shall be highly efficacious for monitoring and regulation of mineral resources of the UT.

6.7 VEHICLE TRACKING SYSTEM & I-CHECKGATES FOR MINERAL TRANSPORTATION.

The Department invited Expression of Interest (Eoi) for empanelment of vendors for installation of Vehicle Tracking Devices with Load Sensors on the vehicles engaged in transportation of minor minerals and is in the process of finalization of empanelment of vendors. Once implemented, the project would be of immense help in tracking the vehicles enroute, quantity of minerals being transported and as such shall go a long way in checking the illegal extraction/transportation of minerals and loss to the Government exchequer.

The Department is also pursuing the establishment of 1-checkgates on strategic locations in J&K UT which is Artificial Intelligence (AI) and Internet of Things (IoT) infrastructure based Smart Enforcement System comprising of Unmanned CHECKGATE, mCheck Mobile App with DSS and Command Center based on real-time data surveillance and alerts from pit mouth (Mine) to Market for issuing e-notices & online payment facility for penalty recovery. It shall be the 24x7 transparent vigil on mining & mineral transportation without manual intervention.

6.8 SECURITY ENABLED TRANSPORTATION CHALLANS.

As per guidelines of Ministry of Environment, Forest & Climate Change Notification issued vide No. S.O.141 (E) dated 15.01.2016 and NGT directions; the Department introduced the issuance of transportation permits/challans with security features like unique bar code, fugitive ink background, invisible ink mark and water mark. Further, as per Govt. of J&K S.O.430 dated: 22.12.2022, an amendment in J&K Minor Mineral Concession Rules 2016, Mineral Concessionary requires transportation of minerals in different colour coded permits/challans in respect of Mining Lessees, Crusher Unit Holders and Principal Executing Agencies of various projects of National importance so that violators if any are identified and penalized/checked.

Further the Department has established e-market/e-challan web portal in the year 2022 wherein the consumers can purchase the minor minerals and processed minerals from the legal vendors/mineral concessionaires on the Govt. notified rates. Further the transportation of the minerals is allowed only on the generation of approved security enabled e-challans from the web portal. During the year 2022-23, 1.40 lakh e-challans were generated on web portal for legal transportation of the minerals.

6.9 FIXATION OF SALE RATES OF MINOR MINERALS.

In absence of Government notified rates of the minor minerals, the suppliers of minor minerals were arbitrarily fixing/deciding the rates which caused overall inflation and impediments in the developmental works. In such a scenario it becomes imperative to have a ceiling on the sale price of the construction material. Further Hon'ble High Court, J&K, Jammu vide its Direction in OWP No: 1019/2020 directed all Deputy Commissioners of J&K to fix the Sale Price of Minor Minerals (Raw material and Processed Minerals) in their respective Districts.

One of the mandate of the Multi Departmental District Level Task Force Cell headed by Dy. Commissioner concerned constituted by J&K UT Government Vide Order No. 1569-GAD of 2018 dated: 22.10.2018 is to evaluate price/sale of mineral at pit head, cost of transportation to its destination. On the basis of input cost analyses study, all the Districts of Kashmir Region fixed and notified the sale price of minor minerals and processed minerals excluding transportation charges in their respective Districts so that black marketing/profitteering of minerals is curbed and people get the supply of construction of material at reasonable rates.

The Government vide public notice issued vide No. 92/MCC/DGM/Taskforce/15/5956-59 dated: 18.10.2021 nominated the Special Point of Contact to register the complaints regarding illegal mining, overcharging of rates of minor minerals and processed minerals beyond the rates fixed by the competent authority.

7. CONCLUSIONS

Subsequent to the judgment of the Hon'ble Supreme Court in Deepak Kumar vs. State of Haryana & Ors (2012), Ministry of Environment, Forest and Climate Change & National Green Tribunal prescribed the framework for effective enforcement and monitoring of extraction of minor minerals from the stage of identification of source to its dispatch and end use which requires involvement of all stakeholders viz. Central Government, State Government, Leaseholders/Mine Owners, Distributors, Dealers, Transporters and Consumers (bulk & retail). Enforcement & Monitoring Guidelines for Sand Mining-2020, which are supplementary to the existing Sustainable Sand Mining Guidelines-2016 stresses on sustainable mining, Environment Management Plan using IT and IT enabled services wherein monitoring has to be with reference to quantity of mined material and its transportation with a view to promote environmental protection, limit negative physiological, hydrogeological and social impacts underpinning sustainable economic growth.

Kashmir Valley with its unique Geological framework shares a modest place in the mineral map of the Country wherein river bed material comprising of sand, silt, bajri and boulders constitute important minor minerals which form essential raw materials for the infrastructural development works and in the construction industry. Mining of these minor minerals, though individually, because of smaller size of mine leases is perceived to have lesser impact as compared to mining of major minerals. However, the unregulated activity as a whole is seen to have significant adverse impacts on environment and fluvial physical habitat characteristics.

Extraction of river bed material (boulder, bajri and sand) for infrastructural development projects and construction industry is an important economic activity in Kashmir Region. In pursuance to Supreme Court Judgement, the Government of J&K framed new rules titled "J&K Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules 2016" wherein the minor mineral blocks in an environmentally viable areas for river bed material are leased out for a period of 05 years through e-auction mode in case of State land.

Prior approved Mining Plan, Environmental Clearance, No objection from all the Stake holding Departments and Consent to Operate has been made mandatory before the execution of the mining operations so that the mining operations are carried out in a responsible manner with minimum environmental damage.

In compliance to various Moef&CC/NGT directions, the Government has already established District Level Task Forces headed by concerned Dy. Commissioners, Hi Tech Mineral Check Posts with CCTV cameras, security enabled transportation challans for regulation and monitoring of the extraction and transportation of minor minerals. The prestigious projects like Mine Surveillance system, GPS tracking of Vehicles and AI based I-checkgates are under development and once completed and operationalised shall improve the efficiency of the Department for robust management of mineral resources of the Region with dedicated thrust on the safeguard of local ecology and environment.

Annexure I

District-wise operational minor mineral mining leases, their approved production limit in the EC and the production during the year 2022-23:

District	Block No	Production as per EC (MTs)	Production/Dispatch During 2022-23 (MTs)
Budgam	10	58200	26003.85
	11	37320	11178.45
	12	41676	35253.00
Pulwama	03	35000	24390.30
	36	75000	7599.99
	37	58200	7712
Shopian	05	78960	2043.83
	06	43000	1297.14
	08	69600	970.94
	11	113000	0
	13	42000	19724.42

	14	98640	11441.63
	15	42800	2977.45
	19	66000	21296.38
	20	58000	0
	21	58800	29026.68
	22	48000	33552.7
	24	24000	10450.68
	28	37800	14418.33
	30	30000	12640.27
	32	93200	34347.07
	33	111200	39848.75
	34	118800	22438.30
	35	117600	23711.70
	53	54600	21306.88
	54	28500	15324.07
Ganderbal	04	72000	59114.4
	08	36000	13928
Kulgam	04	84400	0
	07	106900	0
	10	7200	0
	11	110500	0
	12	53520	0
	13	111800	0
	14	51120	5081.92
	15	50280	5019.76
	18	49080	18266.52
	19	114200	36426.20
	20	22200	6559.53
	22	51240	38310.20
	23	109000	88754.97
	24	51960	17442.71
	25	20400	19776.38
26	38400	35066.03	
27	61200	62353.62	

	28	88900	0
	30	12000	0
Srinagar	Nil	0	0
Kupwara	02	50400	15055
	03	46500	0
	05	56011	1624
	06	43900	13731
	07	94600	45777
	08	33700	24381
	09	15552	15362
	10	15550	20818
	11	31000	80
	12	50000	0
	14	19444	6211
	15	35300	2100
	19	43000	6793
Bandipora	Nil	0	0
Anantnag	01	28800	23967.53
	04	58500	15847.04
	10	28900	18945.17
Baramulla	04	4200	748.32
	07	54000	33564.59
	14	24000	1765.29
	16	18200	13059.23
	17	11800	11800
	18	58800	29911.075
	19	12000	5602.809

Annexure II.

The District wise status of District Survey Reports and Sediment Replenishment Study:

A: District Survey Reports

Sr.no.	District	Status of DSR	Due for Revision
1	Srinagar	The District Survey Reports of all the 10 Districts of Kashmir Region were prepared and handed over to DEIAA/SEIAA during the year 2017-18	As per the MoeF&CC Notification Vide S.O. No. 141 dated 15th January 2016, the District Survey Reports shall be updated once every five years and as such the validity of the District Survey Reports (DSR) was upto March 2023 and the revision of District Survey Reports shall be taken up during the field season 2023-24
2	Ganderbal		
3	Budgam		
4	Pulwama		
5	Anantnag		
6	Shopian		
7	Kulgam		
8	Bandipora		
9	Baramulla		
10	Kupwara		

B.1.: Status of Replenishment Study (River/nalla wise):

Sr.no.	River/Nalla	District	Status
1	Ferozpora nalla	Baramulla	Report Submitted
2	Bringhi/Sandran nalla	Anantnag	
3	Shaliganga/Doodhganga nalla	Budgam	
4	Sind	Ganderbal	
5	Rambiara nalla	Pulwama/Shopian	Field work completed, Report under compilation
6	Vishu nalla	Kulgam	
7	Romshi nalla	Pulwama	
8	Pohru nalla	Kupwara	

B.2.: Status of Replenishment Study (Mineral Block wise):

Sr.No.	District	E-auctioned Minor Mineral Blocks	Remarks
1	Anantnag	2,8,9,20	The Replenishment study reports were submitted to JKEIAA and approved by the authority.
2	Baramulla	6,8,11,12,16	
3	Kulgam	1,3,17,21,22	
4	Ganderbal	3,5	
5	Pulwama	1,2,6,9,31,33,34	
6	Shopian	9,18,23,25,26,42,43	
7	Kupwara	4,16,17,18	
8	Budgam	03 Blocks reserved for M/S NKC, the Principal Executing Agency of Srinagar Ring Road project.	

Annexure III

District-wise and block wise status of revised mining plans in accordance with the recommendations of JKEIAA as in the ECs during the year 2022-23 for Kashmir Region.

Sr.no.	District	EC granted/ Recommended for Minor Mineral Blocks (No.)	Mining Leases granted (No.)	Revised/Modified Mining Plan Submitted (No.)	Revised/Modi fied Mining Plan Approved (No.)
1	Shopian	20	20	16 (Block No. 5, 6, 8, 11, 14, 20, 21, 22, 24, 28, 30, 32, 33, 34, 35, 53)	10 (Block No. 5, 6, 8, 11, 14, 20, 22, 28, 30, 32,)
2	Anantnag	03	03	02 (Block No. 4, 10)	01 (Block No. 10)
3	Kulgam	20	19	07 (Block No. 07, 10, 11, 13, 19, 26, 28, 30)	04 (Block No. 10,19, 26, 30)
4	Pulwama	04	04	03 (Block No. 3, 36, 37,)	03 (Block No. 3, 36, 37)
5	Srinagar	00	0	00	00
6	Budgam	03	03	03 (Block No. 10,11,12)	03 (Block No. 10, 11,12)
7	Ganderbal	02	02	00	00
8	Bandipora	00	0	00	00
9	Baramulla	07	07	03 (Block No. 7, 14, 18,)	02 (Block 7,18)
10	Kupwara	14	14	04 (Block no. 7, 8, 10, 14,)	03 (Block no. 7, 8, 10)
	TOTAL	73	72	38	26

Annexure IV

The details of completed high tech Mineral Check Posts (MCP) in Kashmir Province, J&K UT.

Sr.no.	Location of the Mineral Check Post(s)	District
1	Zewan I	Srinagar
2	Zewan II	
3	Bagwanpora Noorbagh	
4	KP Bagh	
5	Watine Sagipora	Kupwara
6	Waripora Handwara	
7	Gagloosa	
8	Lolab	
9	Nadihal	Bandipora
10	Watapora	
11	Donipora Sangam	Anantnag
12	Donipawa	

Annexure V

Details of seizures (vehicles/illegal dumps) and compounding thereof

District	No. of Vehicles Seizures	Penalty/Compounding of seized vehicles (Lacs)	No. of illegal mineral dumps Seized	Penalty/Compounding of seized illegal dumps (Lacs)	Total Compounding (Lacs)
Srinagar	340	43.37	1	4.16	47.53
Budgam	557	57.46	104	46.74332	104.20332
Pulwama	655	122.58	55	41.88699	164.46699
Shopian	86	11.74	0	0	11.74
Kulgam	215	40.3	2	2.77	43.07
Kupwara	483	119.66	153	25.73744	145.39744
Bandipora	261	37.77	0	0	37.77
Anantnag	444	82.64	16	23.52	106.16
Ganderbal	348	51.1642	0	0	51.1642
Baramulla	447	64.05	8	5.35	69.4
Total	3836	630.7342	339	150.16775	780.90195

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Authors:

Dr. Surjeet Singh, G.A

Abhey Kumar, Geologist Grade-III

Sarfaraz Shaban, Geologist Grade-III

M. Yaseen Bhat, Geologist Gr-III

Khursheed Ah. Mir, Mineral Officer (K)

Dr. Rajinder Singh Rana, Geologist Gr-I

Dr. Rajinder Singh Bandral, GG-I

H.L Langeh, Joint Director(J)