STATE REVIEWS



Indian Minerals Yearbook 2022

(Part-I)

61st Edition

STATE REVIEWS (Jammu & Kashmir)

(ADVANCE RELEASE)

GOVERNMENT OF INDIA MINISTRY OF MINES INDIAN BUREAU OF MINES

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JAMMU & KASHMIR

Mineral Resources

Jammu & Kashmir is the sole holder of country's borax, sapphire and sulphur (native) resources and possesses 33% graphite, 23% marble and 14% of gypsum. Coal, gypsum and limestone are the important minerals produced in the State. **Coal** occurs in Kupwara district; **gypsum** in Baramulla & Doda districts; **limestone** in Anantnag, Baramulla, Kathua, Leh, Poonch, Pulwama, Rajauri, Srinagar & Udhampur districts; and **magnesite** in Leh & Udhampur districts.

Other minerals that occur in the State are bauxite & china clay in Udhampur district; bentonite in Jammu district; borax & sulphur in Leh district; diaspore in Rajouri & Udhampur districts; graphite in Baramulla district; lignite & marble in Kupwara district; quartz & silica sand in Anantnag, Doda & Udhampur districts; quartzite in Anantnag district; and sapphire in Doda district (Tables - 1 and 2).

Exploration & Development

The details of exploration carried out by GSI in the State during 2021-22 are furnished in Table - 3.

Production

Coal and Limestone were the principal mineral items reporting production in the state. The value of minor minerals' production is estimated as Rs.434 crores for the year 2021-22. There were 16 reporting mines in 2021-22 in case of MCDR minerals.(Table-4).

Mineral-based Industry

Jammu & Kashmir Cements Ltd, a State Government Undertaking, operates a cement plant of 4.00 lakh tpy capacity at Khrew in Pulwama district and 1.00 lakh tpy capacity at Samba, Jammu. The Company also owns a small cement plant of 20,000 tpy capacity located at Wuyan in Srinagar district, besides two other tiny cement plants that have a total capacity of 5,20,000 tpy. Khyber Industries (P) Ltd operates a cement plant of 3,30,000 tpy in the State. The State also has a 1,800 tpy capacity Unit that manufactures ceramic and refractory products in District Kathua. A 3,000 tpy capacity calcium carbide plant is situated at District Pulwama. J. K. Minerals Ltd has a plant of 30,000 tpy of DBM and 75,000 tpy of sized magnesite at Chipprian deposit near village Panthal in Udhampur district in the State. (Table-5)

Table – 2 : Reserve/Resource of Lignite as on 1.4.2023: Jammu & Kashmir	Table –	2 :	: Reserve/	Resource o	of l	Lignite as o	on 1.4	.2023:	Jammu &	& Kashmir
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				(In million tonnes)
District	Proved	Indicated	Inferred	Total
Total/Kupwara	_	20.25	7.30	27.55

Source: Coal Directory of India, 2022-23.

Table - 1: Reserves/Resources of Minerals as on 1.4.2020 : Jammu & Kashmir

			Re	Reserves					Remaining	Remaining Resources				
Mineral	Unit	Proved	Pro	Probable	Total	Total Feasibility	Pre-feasibility	sibility	Measured	Indicated	Inferred	e e	ince Total	Total
		SID 111	STD 121	STD 121 STD 122		(A) SID 211	STD 221	STD 222	S1D 331		SID 332 SID 333	SID 334	(B)	(A+B)
Bauxite	'000 tonnes		ı	ı			,		1323	182	1220		2725	2725
Borax	tonne		·	·	•		·	ı	ı			74204	74204	74204
Graphite	tonne	·	ı	ı	ı		ı	ı	ı	·	1059520	1059520 61681035	62740555 62740555	52740555
Limestone	'000 tonnes 156757 15852	156757	15852	12881	185490	122422	45566	58608	67456	26704	1703261	218054	2242071 2427561	2427561
Magnesite	'000 tonnes		ı	ı	ı		·				150	45	4145	4145
Sapphire	kilogram	'			ı		·				450		450	450
Sulphur (Native)	'000 tonnes	I	ı	I	I	·			ı		210	ı	210	210
Figures rounded off	inded off													

rigures rounded off

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Agency/	Location	Map	ping	Dri	lling	a l'	Remarks Reserves/Resources estimated	
Mineral/ District	Area/ Block	Scale	Area (sq. km)	No. of boreholes	Meterage	Sampling (No.)		
GSI Gold and Kupwara	associated minerals Lolab valley	1:12500	50	-	-	150	Large scale mapping (LSM) of 50 sqkm on 1:12,500 scale was carried for gold and associated mineralisation in Lashteal, Madmadou and Gagarnar areas in Lolab valley of Kupwara district, UT: J&K. The Cu concentration in 100 nos. of BRS samples varies from 5.09 ppm to 3256 ppm (Avg. 166.77 ppm), whereas in 50 nos channel samples it varies from 9.00 ppm to 11659.0 (1392.49 ppm). The geophysical survey such as the magnetic anomaly clearly depicts the structural deformation and displacement of quartz vein in the area. The low SP anomaly near old workings indicates the possibility of sulphide mineralisation in the area. However, SP anomalies and magnetic anomaly and IP/ resistivity map are not in the appreciable range and further investigation in the area is recommended.	
Gemstone Kishtwar	s (sapphire, ruby etc.) West of Machail area	and REE 1:12500	51	-	-	175	An area of 51 sq. km was mapped on 1:12,500 scale and a total of 80 bed rock samples, 15 PCS, 30 heavy mineral samples, 30 stream sediment/colluvial samples and 20 PT samples were collected to evaluate the potentiality of gemstone and REE in the study area. On the basis of field observations, the existing six mines (M1-M6) along south portal and one mine (M7) on the north portal of the Neelam Khan area is recommended to restore for further mining with proper Mine Plan involving Mining Engineer Blasting Expert, Rock Mechanica Engineer and Geologist to avoid any subsidence or mishap during mining The detailed geological mapping (DM) on 1:500/ 1:1000 scale of Neelam Khan area may be carried out to delineate the zone of resource bearing pegmatite veins. It is also	

Table –3 : Details of Exploration Activities in Jammu & Kashmir, 2020-21

(contd)

Agency/	Location	Map	ping	Dri	lling	G 1'	
Mineral/ District	Area/ Block	Scale	Area (sq. km)	No. of boreholes	Meterage	Sampling (No.)	Remarks Reserves/Resources estimated
							recommended to carryout grid pattern sampling of the scree/ stream sediments/ glacier moraine deposits in the SW slope/ area of the Neelam Khan along with bulk samples to establish concentration and distribution of placer gemstone deposit in the area.
Base Metal Reasi	Sersandu- Kherikot- Rahotkot- Darabi areas	1:12500	50		76.50	_	Large scale mapping of 50 sq. km area on 1:12,500 scale has been carried out along with pitting / trenching of 25 cubic m. In 59 nos. BRS samples the total REE varies from 61.6 ppm to 203.7 ppm. In 4 samples Pb ranges from 1113 ppm to 1.2%, in 4 samples Zn ranges from 2668 ppm – 5.0%. In Renkakot/Paddar area, 03 nos. channel samples collected from flaggy limestone adjoining the old workings have shown Zn values 5% to 15% and Pb values 1025 ppm to 4199 ppm. In Samatkhad area, 03 nos. channel samples collected from brecciated quartzite have analysed Pb-955 to 5577ppm. Besides, 05 nos. chip collected from the brecciated quartzite unit in the T5 Tunnel area have analysed and results are as Pb 521ppm to 11995ppm, Zn 588ppm to 7558 ppm. Keeping in view the accessibility of these different locations, scout borehole drilling of 76.50m has been carried out in T5 Tunnel area.
Tin Udhampur and Kathua	Bikindra and Khabbi areas	1:12500	50	-	-	-	Carried out LSM on 1:12,500 of 50 sq. Km area and following lithounits have been delineated 1) phyllite of Salkhala Formation 2) Jamotha/ Kaplas Granite of Palaeozoic age, with sharp contact between Salkhala Fm. and Kaplas Granite. Presence of tourmaline have been observed in Kaplas Granite around Bikindra peak. Dolerite dike with dimension of 50 x 20 meters has been observed within Kaplas Granite near Ute De Khabi.

Table –3 (concld)

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Table – 4 : Mineral Production in Jammu & Kashmir, 2019-20 to 2021-22 (Excluding Atomic Minerals)

(Value in ₹'000)

	** •	2019-20				2020-	21	2021-22 (p)			
Mineral	Unit	No. of mines	Quantity	v Value ^s	No. of mines	Quant	ity Value ^s	No. of mines	Quantity	Value [§]	
All Minerals		17		3710260	19		1937922	16	-	4698403	
Coal	'000t	-	14	-	-	10	-	-	11	-	
Limestone	'000t	17	959	280284	18	1173	300656	16	1156	354825	
Magnesite	t	-	-	-	1*	-	-	-	-	-	
Minor Mine	rals@	-	-	3429976	-	-	1637266	-	-	4343578	

Note : The number of mines excludes Fuels and Minor minerals.

\$ Excludes the value of Fuel minerals.

@ Excludes data for Ladakh for 2019-20 & 2020-21 as information is not available.

* only labour reported

Table – 5: Principal Mineral-based Industries

Table-5 (concld)

Industry/plant	Capacity ('000 tpy)
Jammu & Kashmir Cement Ltd, Khrew, Pulwama	400
Jammu & Kashmir Cement Ltd, Samba Jammu.	100
Jammu & Kashmir Cement Ltd, Wuyan Srinagar.	200
Khyber Industries (P) Ltd	330
	(contd)

Industry/plant	Capacity ('000 tpy)
Ceramic & Refractory Product, Kathua.	1.8
Calcium Carbide Plant, Pulwama	3
J. K. Mineral Ltd, Chipprian, Panthal, Udhampur	30 (DBM) 75 (Magnesite)
Nayyar Electrode Pvt. Ltd, Barri Brahmana	4.45