Indian Minerals Yearbook 2021

(Part- I)

60th Edition

STATE REVIEWS
(Himachal Pradesh)

(ADVANCE RELEASE)

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

Indira Bhavan, Civil Lines,
NAGPUR – 440 001

PHONE/FAX NO. (0712) 2565471
PBX : (0712) 2562649, 2560544, 2560648
E-MAIL : cme@ibm.gov.in
Website: www.ibm.gov.in

July, 2023

HIMACHAL PRADESH

Mineral Resources

The State is the sole holder of country's antimony ore and rock salt resources. Limestone and shale are the important minerals produced in the State. **Barytes** occurs in Sirmaur district; **limestone** in Bilaspur, Chamba, Kangra, Kulu, Mandi, Shimla, Sirmaur & Solan districts; and **rock salt** in Mandi district. Other minerals that occur in the State are **antimony** in Lahaul & Spiti districts; **gypsum** in Chamba, Sirmaur and Solan districts; **magnesite** in Chamba district; **pyrite** in Shimla district; and **quartz, quartzite** & **silica sand** in Una district Table - 1.

Exploration & Development

No mineral exploration activites was reported by any State Government agency during 2020-21. However, GSI carried out exploration activity for base metal & phosphate in kullu & Sirmaur districts. Details are furnished in Table-2.

Production

Limestone and Salt (rock) were the principle minerals reporting production in the state. The value of minor mineral's production is estimated as ₹ 70 crore for the year 2020-21. There were 24 reporting mines in Himachal Pradesh in 2020-21 (Table-3).

Mineral-based Industry

The present status of each mineral-based industry is not readily available. However, the principal mineral-based industries in the Organised Sector in the State are furnished in Table - 4.

Table – 2 : Details of Exploration Activities in Himachal Pradesh, 2020-21

Agency/ Mineral/ District	Location Area/ Block	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq. km)	No. of boreholes	Meterage		
GSI							
Vanadium							
Sirmaur	Nigalidhar Syncline	-	-	-	-	-	Reconnaissance survey (G4) for Vanadium and phosphorite was carried out in Nigalidhar Syncline area. The rocks exposed in the area belonged to the Krol Group and Tal Group of terminal Proterozoic to Cambrian Age. The Tal Group was disposed in the centre of synclinal basin, surrounded by rocks of the Krol Group from all sides. In Nigalidhar Syncline, the Kauriyala Formation of Krol Group was directly overlain by chert–shale association of Lower Tal (Shaliyan Formation). The Kauriyala Formation (Upper Krol) of the Krol Group comprised mainly dolomite and earthy dolomite. Detailed mapping of 3 sq. km in Kathwar block and LSM of 50 sq. km was done in western part of Nigalidhar Syncline.About 161 channel samples and 103 trench samples were collected from carbonaceous shale-siltstone and (contd)

Table-2 (Concld)

Agency/ Mineral/ District	Location Area/ Block	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq. km)	No. of boreholes	Meterage		
							lower intercalated black chert–shale–siltstone to assess the resources of vanadium and phosphorite. Besides, 21 samples for petrographic and 03. samples for XRD were also collected and studied. One borehole in the Kathwar block was completed with a total depth of 133.40 m. In Kathwar block, in 11 channel samples out of 13 (each sample length: 2.5 m) along the profile line of proposed boreholes HPSKBH-02, the P_2O_5 content was found to be less than 1%, only in two samples it was 1.30 % and 1.43%. Low-grade phosphorite mineralisation was recorded within channel samples, along the profile line of proposed boreholes HPSKBH-02 and 03. Further, in first borehole P_2O_5 varies between 0.12 % and 3.63%. In a zone of 10 m thickness (Depth: 88 m – 98 m), weighted average of a P_2O_5 was 2.58%. In Rajana–Chambi section, in the individual phosphorite nodules P_2O_5 is 23.01% and in mix of phosphorite nodules and chert from the same section, P_2O_5 was 9.86%. In one channel sample (mix of phosphorite nodules and chert) with a sample length of 2.5 m along the profile line of borehole, P_2O_5 was 6.63%.

Table – 1: Reserves/Resources of Minerals as on 1.4.2020: Himachal Pradesh

Mineral	Unit	Reserves				Remaining Resources								
		Proved STD111	Probable		Total (A)	Feasibility STD211	Pre-feasibility		Measured STD331	Indicated STD332	Inferred STD333	Reconnaissance STD334	Total (B)	Total resources (A+B)
			STD121	STD122			STD221	STD222						
Antimony														
Ore	tonne	-	-	-	-	-	-	-	-	-	10588	-	10588	10588
Metal	tonne	-	-	-	-	-	-	-	-	-	174	-	174	174
Limestone	'000 tonnes	696165	249863	75984	1022012	78403	653158	21105	1529950	5079	3295168	14271	5597134	6619146
Magnesite	'000 tonnes	-	-	-	-	-	-	-	-	-	298	-	298	298
Pyrite	'000 tonnes	-	-	-	-	-	-	-	-	-	2560	-	2560	2560
Rocksalt	'000 tonnes	-	3860	-	3860	3360	940	4620	-	-	-	-	8920	12780

Figures rounded off.

Table – 3 : Mineral Production in Himachal Pradesh, 2018-19 to 2020-21 (Excluding Atomic Minerals)

(Value in ₹'000)

Mineral	Unit	2018-19			2019-20			2020-21 (P)		
		No. of mines	Quantity	Value	No. of mines	Quantity	Value	No. of mines	Quantity	Value
All Minerals		**25**		**3224807**	**26**		**3453620**	**24**		**3325467**
Limestone	'000t	24	12034	2519275	25	12527	2746801	23	11987	2605856
Salt (rock)	t	1	17	160	1	130	1447	1	486	14239
Minor Minerals[@]		-	-	705372	-	-	705372	-	-	705372

Note : The number of mines excludes Minor minerals.
@ Figures for earlier years have been repeated as estimates because of non-receipt of data.

Table – 4 : Principal Mineral-based Industries

Industry/plant	Capacity ('000 tpy)
Cement	
ACC Ltd, Gagal (Gaggal I & II), Distt Bilaspur	4400 2870 (Clincker)
Ambuja Cement, Suli, P.O. Darlaghat, Distt Solan	1600
Ambuja Cement, Nalagarh, Distt Solan	1500
Asian Concretes and Cements Pvt Ltd, Bir Palsi, Distt Solan	1300

(contd)

Table-4 (concld)

Industry/plant	Capacity ('000 tpy)
CCI Ltd, Rajban, Distt Sirmaur	250
Ultra Tech Cement Ltd, Bagga, Distt Solan	2540
UltraTech Cement Ltd, (Blending & Grinding), Bagheri Solan	2000

Note: Data, not readily available for cement industries on respective websites, is taken from Survey of Cement Industry & Directory*