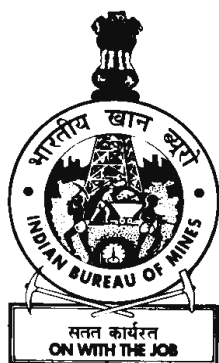


STATE REVIEWS



Indian Minerals Yearbook 2012

(Part- I)

51st Edition

**STATE REVIEWS
(Meghalaya)**

(FINAL RELEASE)

**GOVERNMENT OF INDIA
MINISTRY OF MINES
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MEGHALAYA

Mineral Resources

Coal and limestone are the only major minerals mined in the State. **Coal** occurs in Mikir Hills, Khasi Hills, Jaintia Hills and Garo Hills districts. The production of upgraded coal was reported by private non-captive mines in the unorganised sector located in these areas except Mikir Hills district. The mines are operated mostly by the local tribals in their private lands. Resources of **limestone** occur in West Garo Hills, East Khasi Hills, West Khasi Hills and Jaintia Hills districts. Other mineral occurrences are **apatite** in Jaintia Hills district; **china clay** in East Garo Hills & West Garo Hills, Jaintia Hills & East Khasi Hills districts; **copper, lead-zinc, silver and titanium minerals** in East Khasi Hills district; **felspar** and **rock phosphate** in East Garo Hills & Jaintia Hills districts; **fireclay** in East Khasi Hills & West Garo Hills districts; **granite** in West Khasi Hills district; **iron ore (magnetite)** in East Garo Hills district; **quartz** and **silica sand** in East Garo Hills, West Garo Hills & East Khasi Hills districts; and **sillimanite** in West Khasi Hills district (Table -1). The various coalfields and their reserves/ resources in the State are given in Table-2.

Exploration & Development

Details of exploration activities conducted by various agencies during 2011-12 are furnished in Table - 3.

Production

The value of mineral production in Meghalaya was at ₹ 4,924 crore in 2011-12 which was higher as compared to ₹ 2,624 crore in the previous year. About 99% of the value of mineral production was accrued from coal during the year under review whereas the remaining was contributed by limestone and minor minerals.

Meghalaya has emerged as an important coal producer of the country. The production of coal is spread over in Jaintia Hills, Garo Hills, East Khasi Hills and West Khasi Hills areas. The entire production is of ungraded coal mined from the large number of small scale mines operated mostly by the local tribal in unorganised private sector. Hence number of coal mines is not available for the state (Table - 4).

The production value of minor minerals was estimated at ₹ 721 lakh for the year 2011-12.

There were 10 and 13 reporting mines in 2010-11 and 2011-12 respectively.

Table – 2 : Reserves/Resources of Coal as on 1.4.2012 : Meghalaya

(In million tonnes)

Coalfield	Proved	Indicated	Inferred	Total
Total	89.04	16.51	470.93	576.48
West Darangiri	65.40	-	59.60	125.00
East Darangiri	-	-	34.19	34.19
Balphakram-Pendenguru	-	-	107.03	107.03
Siju	-	-	125.00	125.00
Langrin	10.46	16.51	106.19	133.16
Mawtong Shelia	2.17	-	3.83	6.00
Khasi Hills	-	-	10.10	10.10
Bapung	11.01	-	22.65	33.66
Jaintia Hills	-	-	2.34	2.34

Source: Coal Directory of India, 2011-12.

Table – 1 : Reserves/Resources of Minerals as on 01-04-2010 : Meghalaya

Mineral	Unit	Reserves				Remaining resources				Total resources (A+B)	
		Proved STD111	Probable		Total (A)	Measured STD331	Indicated STD332	Inferred STD333	Reconnaissance STD334		Total (B)
			STD121	STD122							
Apatite	tonne	-	-	-	-	-	1300000	-	1300000	1300000	
China clay	000 tonnes	-	-	-	-	1410	6266	76032	5167	88875	
Copper											
Ore	000 tonnes	-	-	-	-	-	880	-	-	880	
Metal	000 tonnes	-	-	-	-	-	9	-	-	9	
Felspar	tonne	-	-	-	-	-	-	37449	-	37449	
Fireclay	000 tonnes	-	-	-	-	-	-	10999	-	10999	
Granite											
(Dimen. stone)	000 cu m	-	-	-	-	-	-	286467	-	286467	
Iron ore											
(Hematite)	000 tonnes	-	-	-	-	-	-	225	-	225	
Iron ore	000 tonnes	-	-	-	-	-	-	3380	-	3380	
(Magnetite)	000 tonnes	-	-	-	-	-	-	-	-	-	
Lead-Zinc											
Ore	000 tonnes	-	-	-	-	-	-	880	-	880	
Lead metal	000 tonnes	-	-	-	-	-	-	16.5	-	16.5	
Zinc metal	000 tonnes	-	-	-	-	-	-	14	-	14	
Limestone	000 tonnes	138207	94459	232666	36898	23400	2811179	13941438	-	17273022	
Quartz-											
Silica sand	000 tonnes	-	-	-	-	-	177	6906	-	7083	
Phosphorite/Rock											
Phosphate	tonne	-	-	-	-	-	-	1311035	-	1311035	
Sillimanite	tonne	-	-	-	-	-	-	55807	-	55807	
Silver											
Ore	tonne	-	-	-	-	-	880000	-	-	880000	
Metal	tonne	-	-	-	-	-	19.8	-	-	19.8	
Titanium minerals	tonne	-	-	-	-	-	3345000	-	-	3345000	

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Table – 3 : Details of Exploration Activities in Meghalaya, 2011-12

Agency/ Mineral/ District	Location	Mapping		Drilling		Sampling	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
GSI							
Base Metal East Garo Hills	Simsang Diwa	-	-	-	-	-	Reconnaissance stage investigation (G-4) was carried out to assess basemetal potential in the area. During mapping different varieties of granites viz. porphyritic granites and homophanous granites were delineated. Lamprophyre dykes are exposed near Simsang Diwa. Three major dioritic intrusions were recorded in the area between Simsang Diwa and Gambil. Near Simsang Diwa a shear quartz vein trending North-South with about 3 m width is exposed which contains Pyrite grains. No significant sulphide mineralised zone could be delineated in the area so far. The work is kept in abeyance due to ground situation.
Limestone							
Jaintia Hills	Umphyrluh block	-	-	-	-	-	Prospecting stage investigation (G-3) was carried out to explore limestone resources in the peripheral area of the Litang valley limestone deposit. The area comprises limestone of Shella Formation belonging to Jaintia Group (Eocene). The limestone is grey to dark grey in colour, medium grained and highly fossiliferous. The work is under progress. The work is being continued in FS 2012-13.
REE							
East Khasi Hills	Sung Valley	-	-	-	-	-	Reconnaissance stage investigation (G-4) was carried out to evaluate REE potential. The Sung Valley intrusive is an oval-shaped body covering about 30 sq km area within Precambrian Shillong Group. The body is strongly discordant to the envelope rocks and its walls appear to dip steeply inwards. The major rock types comprising the Sung ultramafic Complex are serpentinite, pyroxenite, uncomphrite, ijolite, syenite, and carbonatite and apatite-magnetite rock. Two shear zones have been identified in South-West periphery of Sung valley and bed rock samples are collected for REE and other minerals. Analytical results are awaited. The work has been completed.

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Table - 3 (Concl.)

Agency/ Mineral/ District	Location	Mapping		Drilling		Sampling	Remarks
		Scale	Area (sq km)	No. of boreholes	Meterage		
Dte. of Mineral Resources							
Coal & Limestone							
South Garo Hills	Soling	1:50,000 1:4,000	0.50 2.0	01	103	-	Resources yet to be estimated.
Iron Ore							
West Khasi Hills	Riangolo-Aradonga	1:50,000 1:4,000	9.5 2.8	-	-	40	Resources yet to be estimated.
Limestone							
Jaintia Hills	Amsohrhong	1:50,000 1:4,000	10.0 2.64	-	-	50	Resources yet to be estimated.
Limestone							
East Khasi Hills	Balat	1:50,000 1:4,000	5.0 1.96	2	150.25	57	Resources yet to be estimated.
-do-	Nonglait	1:50,000 1:4,000	-	2	200.95	286	Resources yet to be estimated.
Quartz							
East Khasi Hills	Nongirong	1:50,000 1:4,000	10.0 3.00	-	-	50	Resources yet to be estimated.

**Table – 4 : Mineral Production in Meghalaya, 2009-10 to 2011-12
(Excluding Atomic Minerals)**

(Value in ₹ '000)

Mineral	Unit	2009-10			2010-11			2011-12 (P)		
		No. of mines	Qty	Value	No. of mines	Qty	Value	No. of mines	Qty	Value
All Minerals		9		21374850	10		26244680	13		49244220
Coal	'000t	1	5767	20545600	1	6974	25796800	1*	7206	47739800
Limestone	'000t	8	3249	757175	9	1783	374170	12	3606	1427008
Sand (others)	t	-	-	-	-	10220	1635	-	34111	5337
Minor Minerals@		-	-	72075	-	-	72075	-	-	72075

Note: The number of mines excludes minor minerals.

* Relates to coal mines as on 31.03.2011.

@ Figures for earlier years have been repeated as estimates because of non-receipt of data..

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Mineral-based Industry

The important large and medium-scale

mineral-based industries in the organised sector in the State are given in Table - 5.

Table – 5 : Principal Mineral-based Industries in Meghalaya

Industry/plant	Capacity (‘000 tpy)
Cement	
Mawmluh Cherra Cements Ltd, Cherapunji, Dist. East Khasi Hills.	210
Meghalaya Cements Ltd, Thangshai, Dist. Jaintia Hills.	495
Cement Manufacture Co. Ltd, Lumshnong Khleehriat.	590 tpd
CMJ Cement, East Garo Hills.	1000 tpd
Megha Technical & Engineering (P) Lumshnong, Dist. Jaintia Hills.	462
Ferro-alloys	
Jaintia Ferro Alloys Pvt. Ltd, Byrnihat.	6.0
Iron & Steel	
Jai Kamakhya Alloy.	815 tpd