Indian Minerals Yearbook 2021

(Part- I)

60th Edition

STATE REVIEWS
(Mizoram & Nagaland)

(ADVANCE RELEASE)

GOVERNMENT OF INDIA
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MIZORAM

Mineral Resources

Occurrences of lignite, sandstone and pyrites are reported from the State. Major deposits of economic importance have not been reported so far in the State.

Exploration & Development

No exploration activities was reported to be carried out by any Central/State Government agency during 2020-21 in the State.

Production

No mineral production (except minor minerals) was reported from Mizoram during 2020-21. The value of minor minerals' production was estimated at ₹168 lakh for the year 2020-21.

NAGALAND

Mineral Resources

Important mineral occurrences in the State are: **coal** in Borjan, Jhanzi-Disai, Tiesang and Tiru Valley Coalfields; **iron ore (magnetite), cobalt, dunite** and **nickeliferous chromite** in Tuensang district and **limestone** in Phek and Tuensang districts (Table-1). The various coalfields and their reserves/resources are furnished in Table-2.

Exploration & Development

Details of exploration activities conducted by GSI and DGM, Nagaland during 2020-21 for Nickel, Limestone and Magnetite ore are furnished in Table-3.

Production

No mineral production (except minor minerals) was reported from Nagaland during 2020-21. The value of minor minerals' production was estimated at ₹18 lakh for the year 2020-21.

Table – 2 : Reserves/Resources of Coal as on 1.4.2021 : Nagaland

(In million tonnes)

Coalfield	Proved	Indicated	Inferred	Total
Nagaland	**8.76**	**21.83**	**415.83**	**446.42**
Borjan	6	–	5	11.00
Jhanzi-Disai	2	22	109	133
Tiensang	1	–	2	3
Tiru Valley	–	–	7	7
DGM	–	–	293	293

Source: *Coal Directory of India, 2020-21.*

Table – 1 : Reserves/Resources of Minerals as on 01-04-2020 : Nagaland

Mineral	Unit	Reserves				Remaining resources								
		Proved	Probable		Total	Feasibility	Pre-feasibility		Measured	Indicated	Inferred	Reconnaissance	Total	Total resources
		STD111	STD121	STD122	(A)	STD211	STD221	STD222	STD331	STD332	STD333	STD334	(B)	(A+B)
Chromite	000 Tonnes	-	-	-	-	-	-	-	-	-	3200	-	3200	3200
Cobalt	Million Tonnes	-	-	-	-	-	-	-	-	-	-	5	5	5
Copper														
Ore	000 Tonnes	-	-	-	-	-	-	-	-	-	2000	-	2000	2000
Metal	000 Tonnes	-	-	-	-	-	-	-	-	-	15	-	15	15
Iron Ore (Magnetite)	000 Tonnes	-	-	-	-	-	-	-	-	5280	-	-	5280	5280
Limestone	000 Tonnes	-	-	-	-	825	-	-	-	1005500	745875	-	1752200	1752200
Nickel Ore	Million Tonnes	-	-	-	-	-	-	-	-	5	-	5		5

Figures rounded off.

Table – 3: Details of Exploration Activities in Nagaland

Agency/ Mineral/ District	Location	Mapping		Drilling		Sampling	Remarks
		Scale	Area (sq km)	No. of boreholes	Meterage	(No.)	Reserves/Resources estimated
GSI							
Nickel							
Phek	Mollen-Washelo	1:12500	50	-	-	-	Reconnaissance survey (G4) was carried out for nickeliferrous laterite, chromium, PGE and associated base metals in ultramafic-mafic rocks in part of Ophiolite Belt. Large scale geological mapping on 1:12500 scale has been carried out for 50 sq km area with an objective to demarcate nickeliferous laterite, chromium, PGE and base metals. The ophiolite unit comprises dominantly peridotite and its altered derivatives serpentinite, dunite, minor pyroxenite, gabbro, volcanic (basalt/ andesite). The pelagic sediment is represented by cherts and limestone. The ultramafics are dominated by cumulate peridotite with minor dunite and pyroxenite. Cumulate peridotite exhibits primary magmatic layering defined by the alignment of pyroxene minerals. Ultramafic derived lateritic soil over the dunite- peridotite of about 1.6 sq km was delineated as a potential supergene Ni-laterite deposit (SE of Mollen). Sulphide disseminations were also recorded in basalt near Washello.
Directorate of Geology & Mining, Nagaland							
Limestone							
Kiphre	Salumi village	1:4000	0.79	5	224.75	163	Limestone occurs as rootless, lensoidal deposits/pockets associated with the volcanic of Naga Hill Ophiolite (NHO) suite of rocks. Five limestone pockets of varying dimensions have been delineated in the block. Resource estimated at about 6650 thousand tonnes of cement grade limestone and 6683 thousand tonnes of siliceous Limestone.
Magnetite ore							
Phek	Bearomg areas, falling within the, Mollen-Jopi-Ziphu ridge.	-	103	-	-	-	The block forms a part of Naga Hills Ophiolite (NHO), the igneous rocks mostly ultramatic rocks are overlain by sedimentary rocks of Jopi-Formation.