Mineral Resources of Dungarpur

Introduction

The district is named after the capital of the formerly princely state of Dungarpur. Its etymon, it is said is Dungar meaning a hill or a mountain and Pur meaning a town i.e. a town having a hill.

Dungarpur district is the third smallest district in Rajasthan situated in the southern part.

Location

The district is constituted by Aspur, Sagwara and Dungarpur tehsils and lies between 23^0 20' and 24^0 01' N latitude and 73^0 22' and 74^0 23' E longitude. It is bounded on the north by Udaipur district and on the east by Banswara district. On its south and west it has common border with the State of Gujarat. The district has an area of 3781 sq. kms.

Physiography

A major part of the district is characterized by a rugged terrain. The northeast southwest to north-south trending Aravalli hill ranges are prominent in the western part. The ground elevation of the area is about 320 mts. While the hills rise up to 552 mts. above MSL. The area is drained by a network of streams that discharge their water into the Som and Mahi the two major rivers of the district.

The Udaipur-Ahmedabad meter gauge railway line of western railway passes through the district with Dungarpur and Rikhabdev road as main stations. The Delhi-Ahmedabad national highway No. 8 also passes through western part of district. It is also connected by state highway to Banswara.

Geology of the District

The geological antiquity of the district belongs to Pre-Aravalli group of rocks represented by schist, gneisses and granites, quartzite and slates. These outcrops largely in west. Gneissic rocks occur in between Hathai and Mandav and along the Mahi river for ten kilometers southwards from Padardi to east of Nayagaon and are associated with diorites and traps. Slates are in abundance in the central region and are largely interstratified with veins of quartz (north of Dungarpur town). Pegmatite and granite intrusions are also seen in the states. The chief rock types of the area are Phyllite and quartzite striking NNW and SSE intruded by ultrabasic intrusive. The phyllite, quartzite, schist and dolomite belong to Aravalli Super Group, which has been subdivided into the lower Udaipur group and the upper Jhadol group. The quartzite occupies the top position. The ultrabasic are represented by talc, tremolite actinolite schist, chlorite schist and serpentine rocks, which are source of famous green marble. The crystalline limestone/dolomite in the north-eastern part can be used as marble as well as for cement manufacture.

Mineral Resources

Dungarpur has a rich assemblage of minerals. The important one is Soapstone, Fluorite, Green marble, Base metals, etc.

Base Metals

Occurrences of copper are found near Padar-ki-Pal, Amjera, Sarkan, Dewal, Methali, Oden, etc. the state department of Mines & Geology carried out detailed investigation at Padar-ki-Pal estimating about 1 million tone reserves of copper ore containing about 1.3% copper. Small occurrences were seen at other places.

Fluorite

The largest fluorite deposits in the state are located in Mando-ki-Pal area in this district. Other important localities are Kahila Ramore, Mata, Bhagat, Rahatwali, Thurwali, Umeria, Singhwali and Nawagaon. State department carried out the prospecting in the area and estimated about 7 lacs tones reserves in Mando-ki-Pal and 2.5 lacs tones in Kahila area. The deposit is being mined by Rajasthan State Mineral Development Corporation. Fluorite is used as flux in metallurgy of iron and aluminium. Acid grade fluorite is used in manufacture of Hydro-Fluoric acid, which is subsequently used in glass and chemical industries.

Soapstone

There are four important soapstone belts in the district. Soapstone occurs in pockets and lenses associated with ultra basic rocks and also associated with the dolomite limestone. The important localities are Dewal, Jakol, Thana, Rohanwara, Piloda, Sabli Munger, Padar, Amjera, Parsola, Bharkundi, Sarkan, Surata-ki-Pal, etc. It is used in cosmetics, refractories, paper and paint, pesticide and insecticide industries.

Asbestos

Crysotile variety of Asbestos is found sporadically near Dewal, Jakol, Gokulpura, etc. villages associated with ultrabasic rocks. Tremolite variety is also found and forms fairly workable deposits.

Marble

Serpentine rocks are being mined as green marble near Dewal, Surata, Dachki, Hirata, Simalwara, etc. villages. The marble takes good polish and has a good market.

Limestone

Crystalline pink-gray-white limestone belonging to Aravalli Super Group occurs in two belts in Dungarpur district near Sabla, Munger, Harwar, etc. villages. Near Sabla limestone belt runs for a strike length of about 17-18 kms from Rama in north to Bhatole in south. The width varies from 100 to 1,000 mts. Limestone of this belt is crystalline, pink and off white in colour. Preliminary investigations carried out by the department in parts of the area indicated about 15 million tones reserves containing 42 to 50% CaO, 2 to 4% MgO and 8 to 18% SiO2. The limestone takes good polish and can be used as marble. Another limestone band of about 1 km length and 50 to 100 mts. width occurs near Harwar, Nithuwa villages. It is off white to gray in colour containing 48 to 50% CaO, 5 to 10% SiO₂ and less then 2% MgO. It is also being used as marble.

Building Stone

There are large occurrences of slates and phyllites, which are being mined at places for, use as building stone. Phyllites are excavated for roofing etc. near Balwara. Quartzite used as building stone are excavated near Rampura, Denandi, Baramagra, etc.

The State department of Mines & Geology has been carrying out mineral survey programmes in the district regularly. Notable findings are deposits of base metal and fluorite besides small occurrences of Kyanite, Magnesite, Soapstone, etc.

The district is a major producer of soapstone and serpentine marble.