

## **2.15. Mining & Metallurgy**

### **Geology and Mining**

Minerals form the basic raw materials for several industries in the large, medium and small scale sectors and contribute substantially to the GDP of the country. As minerals are exhaustible and non-renewable resources, their exploitation has to be done keeping in view not only the present but the long term needs. Management of mineral resources has, therefore, to be closely integrated with the overall strategy of development; and to be guided by long-term national goals and perspectives.

The important minerals of commercial value in Tamil Nadu are granite, lignite, limestone and recently found natural gas and oil. Tamil Nadu accounts for 90 percent of lignite potential in the country. Lignite constitutes a major mineral base for the production of power and fertilizers in the State. Manganese deposits in Salem are the largest in India and provide the raw material for manufacture of refractory materials. Granite is one of the important export earners from Tamil Nadu. Salt is found all along the coast and manufactured in large scale in Tuticorin. Other minerals, which occur in Tamil Nadu, are mica, chromite, graphite and bauxite.

The Important schemes implemented by the Department are:

#### **1) Geo-Technical Cell at Coonoor**

The Geo-technical Cell was established in 1985 at Coonoor in the Nilgiris district under the Hill Area Development Programme to identify the areas prone to landslides and to suggest remedial and preventive measures against such natural calamities. The Cell has continued its Geo-technical studies for identifying landslide prone areas. During the year 2007-08 a sum of Rs.18.84 lakh was allocated and a sum of Rs.11.10 lakh is anticipated to be incurred under this project.

## **2) Reappraisal Limestone investigation in southern and western districts**

During Tenth Plan it was proposed to cover the unexplored areas in southern and western districts in the State so that new areas of Limestone occurrence could be identified and the possibility of setting up of few more major or mini cement plants can be explored, considering the increase in building activities and consequent consumption of cement for such building activities.

Initially, investigation work has been carried out in Sathankulam Taluk of Thoothukudi District where it was found that the Calcium Oxide (CaO) content in these areas ranges from 32% to 45%. A reserve of 85,92,000 MT of Kankary limestone is inferred to be available in the area. In the second stage comprehensive investigation work has been taken up in Parapadi and Illankulam villages of Nanguneri Taluk in the year 2006-2007. The chemical reports reveal that the Calcium Oxide (CaO) content of Limestone is ranging from 21.42% to 52.15% showing potential for limestone mining in this area. The work is being continued.

## **3) Establishment of Geographical Information System**

During Eighth Plan period, the development of a data base management system concerning Mineral exploration and Mineral Administration was taken up by the Department. In order to have a complete analysis of the field data collected during the geological exploration, a Geological Information System package has been set up in the Department during the year 2005 to create a comprehensive data base. Compilation of the data base on Mineral receipts, Mineral production, Lease particulars etc., has since been undertaken using GIS techniques. Besides the above, digitization of maps is also contemplated.

An outlay of Rs. 0.69 crore has been approved for Mining and Metallurgy Sector for the year 2008-09.