CHAPTER I

Introduction

1.1 Introduction to mineral resources

Minerals are broadly classified in two categories, i.e. major minerals and minor minerals. Minor minerals means¹ building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral. Major minerals include all minerals other than minor minerals. Chhattisgarh is a leading producer of minerals such as coal, iron ore and dolomite and it has considerable reserves of bauxite, limestone and quartzite. The geographical distribution of main minerals in the state has been depicted in **Figure-1**.

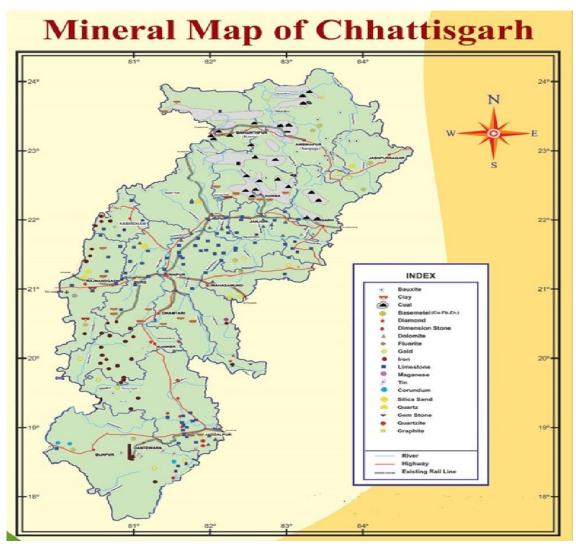


Figure 1: Geographical distribution of minerals in the State as taken from the Department's website.

As defined in the Mines and Minerals (Development and Regulation) Act, 1957.

There are 37 types of minor minerals found in the State of Chhattisgarh. However, minerals such as low grade limestone, dolomite, ordinary clay, sand, *murrum*, etc. are prominent minor minerals in the State. As on 01 April 2021, total 1,957 number of minor mineral quarry leases were sanctioned in the State.

The lucrative demand for minerals has led to large scale illegal mining in the recent past, especially in activities relating to quarrying of construction materials classified under minor minerals. Number of new registered cases of illegal excavation, transportation and storage of minerals increased from 3,756 during the year 2015-16 to 5,410 cases during 2020-21². Further, exploitation of minerals is closely linked with development of areas/local people affected by mining activities. Considering the fact, Government of India (GoI) amended the MMDR Act, 1957 in 2015, and made provisions for establishment of District Mineral Foundation Trust (DMFT).

1.2 Framework for Governance and Management of mineral resources

Management of mineral resources is the responsibility of both GoI and the State Government in terms of items³ listed under Union list (List I), and State list (List II) of the Seventh Schedule of the Constitution of India. GoI has enacted the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act, 1957), which lays down the legal framework for regulation of mines and development of all minerals other than petroleum and natural gas.

In addition, GoI has also framed Mineral Concession (MC) Rules, 1960 for regulating the grant of permits, licenses and leases in respect of all minerals other than Atomic minerals and minor minerals and Mineral Conservation and Development (MCD) Rules, 1988 for conservation and systematic development of minerals. As defined in MC Rules, 1960, illegal mining means any reconnaissance/ prospecting/ mining operation undertaken by any person or a company in any area without holding a mineral concession as required under sub-section (1) of section 4 of the MMDR Act, 1957. It was further explained that (a) violation of any rules, other than the rules made under section 23C of the Act, within the mining lease area by a holder of a mining lease shall not include illegal mining; (b) any area granted under a reconnaissance permit or a prospecting licence or a mining lease, as the case may be, shall be considered as an area held with lawful authority by the holder of such permit of licence or a lease, while determining the extension of illegal mining.

Section 15 of MMDR Act, 1957, provides power to State Governments to make rules in respect of minor minerals and Section 23 C of MMDR Act, 1957, empowers the State Government to make rules for prevention of illegal mining, transportation and storage of minerals. Accordingly, GoCG has framed Chhattisgarh Mineral (Mining, Transportation and Storage) Rules, 2009 and the Chhattisgarh Minor Mineral (CMM) Rules, 1996 (amended in 2015).

-

² As per the Administrative Reports of the Department.

Entry 54 of the Union list and entry 23 and 50 of State list.

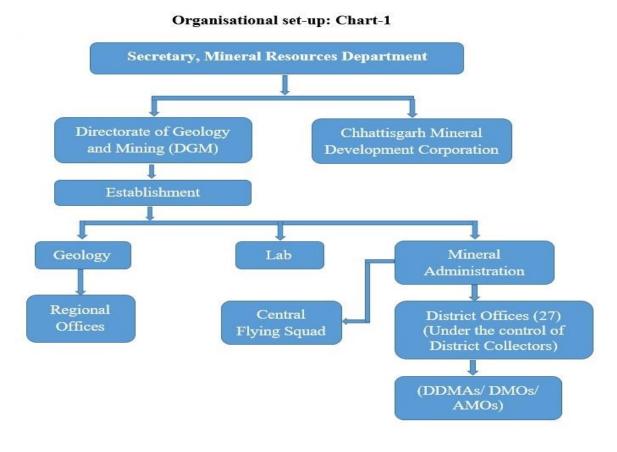
Section 9 (b) of the MMDR Act as amended in 2015, mandated the State Government to establish DMFT in every district affected by the mining operation for the benefit of persons and areas affected by the mining/mining related operations. Government of Chhattisgarh (GoCG) through its notification (22 December 2015) had established DMFTs in all 27 districts of Chhattisgarh.

1.3 Role of Mineral Resources Department

Mineral Resources Department, GoCG (the Department) through its subordinate office, Directorate of Geology and Mining (DGM) and Chhattisgarh Mineral Development Corporation is responsible for the exploration, prospection, estimation of minerals in the State, development and regulation of mines/ minerals, grant/ renewal of mineral concessions, assessment/ collection of rent and royalty, and implementation of rules and regulations by the lessees. The Department is also responsible for constitution of DMFT in every mining affected district. The object of DMFT is to work for the interest and benefit of persons and areas affected by the mining or mining related operations in such manner as may be prescribed by the Government. To discharge its responsibilities, the Department has developed a state wide structure, as depicted in the following paragraph.

1.4 Organisational set-up

The organisational set-up⁴ of the Department is as given in the **Chart-1**.



⁴ As on 30 December 2020.

At the Government level, the Secretary, Mineral Resources Department and at the Directorate level, the DGM is responsible for administration and implementation of the related Mining Acts and Rules. Under the Directorate, there are three Regional Offices (comprising departmental chemical laboratories) at Bilaspur, Jagdalpur and Raipur, headed by Regional heads, where qualitative analysis of minerals is done.

Mining offices are located in each District headquarter under the control of the concerned District Collector. There are 27 Deputy Directors of Mineral Administration (DDMA)/ District Mining Officers (DMO)/ Assistant Mining Officers (AMO) who are responsible for prevention of illegal excavation/ mining, transportation of minerals and other activities which could lead to leakage of revenue under their areas of control besides assessment/ collection of revenue.

1.5 Trend of revenue receipts

The budget estimates of revenue and actual receipts from the minerals under the Major Head 0853-Non-ferrous⁵ mining and metallurgical industries and the royalty received from minor minerals during 2015-16 to 2020-21 are given in **Table-1.1**.

Table-1.1: Details of budgeted and actual revenue receipt

(₹ in crore)

| Year | Budget Estimate | Actual Revenue Receipt | Difference | Percentage of shortfall (-)/ surplus (+) | Royalty received from minor minerals | Percentage of Actual Revenue Receipts |
|---------|--------------------|------------------------------|------------|--|--|--|
| 2015-16 | 7000.00 | 3709.52 | - 3290.48 | -47.00 | 243.07 | 6.55 |
| 2016-17 | 5500.00 | 4141.47 | -1358.53 | -24.70 | 185.07 | 4.47 |
| 2017-18 | 5600.00 | 4911.44 | -688.56 | -12.30 | 213.89 | 4.35 |
| 2018-19 | 6000.00 | 6110.24 | 110.24 | 1.84 | 300.88 | 4.92 |
| 2019-20 | 6500.00 | 6195.73 | -304.27 | -4.68 | 199.32 | 3.22 |
| 2020-21 | 6670.00 | 5538.49 | -1131.51 | -16.96 | 296.44 | 5.35 |
| Total | 37270.00 | 30606.89 | -6663.11 | -17.88 | 1438.67 | 4.70 |

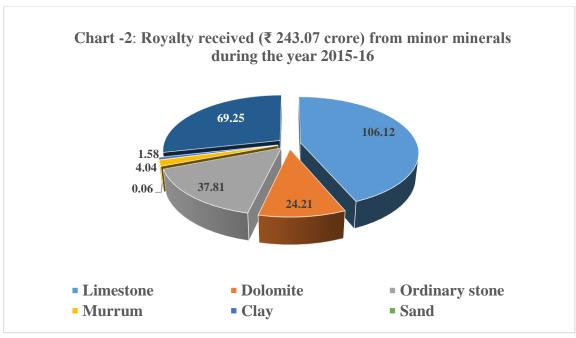
(Source: Finance Accounts of GoCG and information furnished by the Department)

It may be seen from the above table that there was significant shortfall in revenue in 2015-16, which was due to provisioning of Budget Estimate in anticipation of the realisation of penalty at the rate of ₹ 295 per Metric Tonne (MT) from lessee on allotment of coal block, as laid down by judgement of Hon'ble Supreme Court. It can be seen that mining receipts increased from ₹ 3,709.52 crore in 2015-16 to ₹ 6,195.73 crore in 2019-20 and decreased to ₹ 5,538.49 crore in the year 2020-21. Decrease in revenue receipts during the years 2020-21 compared to 2019-20 was mainly due to COVID-19 pandemic.

The royalty received by GoCG from the minor minerals during the period 2015-16 to 2020-21 was ₹ 1,438.67 crore which was 4.70 *per cent* of the total revenue receipts

⁵ Metals such as copper, nickel, zinc gold and silver.

(₹ 30,606.89 crore) from mining. Details of royalty collected by GoCG from prominent minor minerals during the year 2015-16 and 2020-21 is shown in the **Chart-2** and **Chart-3** below:





1.6 Audit Objectives

The Performance Audit was conducted to assess:

- ➤ Whether the Department has evolved controls and mechanisms for detection and prevention of illegal mining activities in respect of minor minerals.
- ➤ Whether District Mineral Foundation Trusts (DMFTs) delivered the intended benefits to the mining affected areas and communities.

1.7 Audit Criteria

The Performance Audit (PA) drew audit criteria from the following Acts/ Rules:

- ➤ Mines and Minerals (Development and Regulation) Act, 2015 (MMDR Act);
- ➤ Chhattisgarh Minor Mineral Rules, 2015 (CMM Rules);
- Chhattisgarh Minerals (Mining, Transportation and Storage) Rules, 2009 (CMMTSR);
- Chhattisgarh Minor Mineral Ordinary Sand (Quarrying and Trade) Rules, 2019 (CMMOSR);
- Environment (protection) Act ,1986 and Rules made thereunder;
- Water (Prevention and control of pollution) Act, 1974;
- Air (Prevention and control of pollution) Act, 1981;
- Chhattisgarh District Mineral Foundation Trust Rules, 2015 (DMFT Rules);
- ➤ Guidelines, circulars etc., issued by the Government of India/ Government of Chhattisgarh from time to time.

1.8 Audit Scope and Methodology

The Performance Audit covered the period from the year 2015-16 to 2020-21.

Besides the office of the Director, Geology and Mining (DGM), nine⁶ out of 27 offices of the Deputy Directors, Mineral Administration (DDMA)/ District Mining Officers (DMO) along with DMFTs were selected for audit on the basis of Stratified Random Sampling without Replacement (SRSWOR). In the selected nine DDMAs/ DMOs, records of 206 out of 955⁷ quarry leases of minor minerals, 15 *per cent* records of quarry leases in high density mining areas (i.e. Raipur, Bilaspur and Janjgir-Champa) and 25 *per cent* in other districts on judgemental sampling basis were selected for detailed scrutiny. Joint physical verification of 40 quarry lease sites out of 955 quarry leases, were selected on judgemental basis, was conducted to review the monitoring of ongoing mining activities and compliance of the statutes. However, in case of Raipur, Balodabazar, Bilaspur and Janjgir-Champa districts, the mining authorities did not sign the joint physical verification reports. In addition to the quarry leases, 34 out of 102 sand mines were also physically verified to substantiate the audit observations.

The objectives, scope and methodology of audit were discussed with the Secretary, Mineral Resources Department in an Entry Conference held in January 2021. The draft Performance Audit report was forwarded to the State Government in October 2021 and the findings of the report were discussed with the Secretary in an Exit Conference held in January 2022. The responses of the Government received during the Exit Conference and at other points of time have been appropriately incorporated in the relevant paragraphs of this Report.

⁶ Ambikapur, Balodabazar, Bilaspur, Durg, Kanker, Kawardha, Janjgir-Champa, Mungeli and Raipur.

⁷ As on 1 April 2020.

A drone survey of selected quarry sites of minor minerals was conducted (April/May 2022) through technical consultant i.e. National Institute of Technology (NIT), Raipur for mapping mining activities outside the approved boundary of quarry leases and quantify the minerals illegally excavated outside the approved boundary, based on the methodology as detailed in the **Appendix 1**. Audit has worked out the loss of revenue⁸ for the minerals illegally excavated on the basis of quantity estimated by the technical consultant. An analysis by plotting mining coordinates in the Google Earth Pro application was also done to derive/substantiate the audit findings regarding the monitoring of the mining activities in the State. The audit findings based on drone survey/ GIS analysis were issued to the Secretary, Mineral Resource Department in June 2022 and reply with respect to the audit findings based on drone survey was awaited (December 2022).

1.9 Acknowledgement

We acknowledge the co-operation of the Mineral Resources Department in providing necessary information and records to Audit.

_

At the rates of royalty charges as notified by the Government under CMM Rules, 2015