

Chapter 1

Introduction

1.1 Background

Mineral as defined under Section 3(ad) of the Mines and Mineral (Development and Regulation) Act, 1957 (MMDR Act) includes all minerals except mineral oils. Management of mineral resources is the responsibility of both the Central and State Government¹. Minerals can be divided into two categories *i.e.*, Major and Minor Minerals. Minerals defined in the First Schedule (including notified minerals in the Fourth Schedule) of the MMDR Act are interpreted as major minerals in Rules framed under the MMDR Act. As per Section 3(e) of the Act, *ibid*, minor minerals include building stone, gravel, ordinary clay, ordinary sand *etc.* and any other minerals notified by the Central Government.

Section 15 of the Act *ibid* empowers a State Government to make rules for regulating the grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals and for the purposes connected therewith.

The Government of Jharkhand (GoJ) has framed Jharkhand Minor Mineral Concession (JMMC) Rules, 2004 for regulating grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals. A list of minor minerals is annexed with JMMC Rules as Schedule-2 and 2 (क).

The Department of Mines and Geology, Government of Jharkhand implemented (May 2015) an IT based mineral administration system through a software application named the Jharkhand Integrated Mines and Minerals Management System (JIMMS) with an objective to simplify the assessment procedure. As per JIMMS portal, there were total 599 working leases of minor minerals in Jharkhand as of November 2023.

1.2 Why we selected this topic?

Issues relating to irregularities in grant of mineral concessions by the State Government, unscientific and unsustainable mining practices by stone mining lease holders, non-settlement of sand *ghats etc.* have prominently featured in both print and electronic media.

Therefore, the topic ‘Management of Minor Minerals in Jharkhand’ was selected to assess the State Government’s efficacy in enforcing provisions

¹ Entry 54 of the Union List (List I) and entry 23 of the State List (List-II) of the Seventh Schedule of the Constitution of India.

of the applicable Act and Rules framed thereunder by the Central and the State Governments to tackle the highlighted issues.

1.3 Organizational set up

At the Government level, the Secretary, Department of Mines and Geology (Department), GoJ is responsible for the administration of the Act and Rules. The Secretary is assisted by two Joint Secretaries, two Deputy Secretaries and three Under Secretaries. The Department is divided into two functional entities under the charge of Director, Geology and Director, Mines.

The Director, Mines, is responsible for the administration of the Act and Rules. He is assisted by an Additional Director, Mines, (ADM), two Deputy Directors, Mines (DDM) and two Assistant Mining Officers (AMOs) at the Headquarters' level. The State is divided into six Circles², each under the charge of a DDM. The Circles are further divided into 24 District Mining Offices³, each under the charge of a DMO/AMO. The DMOs/AMOs are responsible for levy and collection of royalty and other mining dues. They are assisted by Mining Inspectors (MIs). DMOs and MIs are authorized to (i) inspect the mining lease areas, (ii) review the production and (iii) check the dispatch of minerals.

The Director, Geology is responsible for detailed geological exploration of minerals, geo technical studies & analysis of minerals and preparation of mineral blocks for auction with reference to Minerals (Evidence of Mineral Contents) Rules, 2015. The Director, Geology is assisted by an Additional Director, four Deputy Directors, three Assistant Directors and five Geologists at the headquarters level. Jharkhand also has a State Geological Laboratory and a Geological Training Institute under the charge of an Additional Director, Geology. The State is divided into five Circles⁴, each under the charge of a Deputy Director, Geology. The Circles are further divided into 14 District Geological Offices⁵, each under the charge of an Assistant Director, Geology. These Assistant Directors are further assisted by Geologists.

² South Chotanagpur Circle (Ranchi), North Chotanagpur Circle (Hazaribagh), Kolhan Circle (Chaibasa), Santhal Pargana Circle (Dumka), Dhanbad Circle and Palamu Circle (Medininagar).

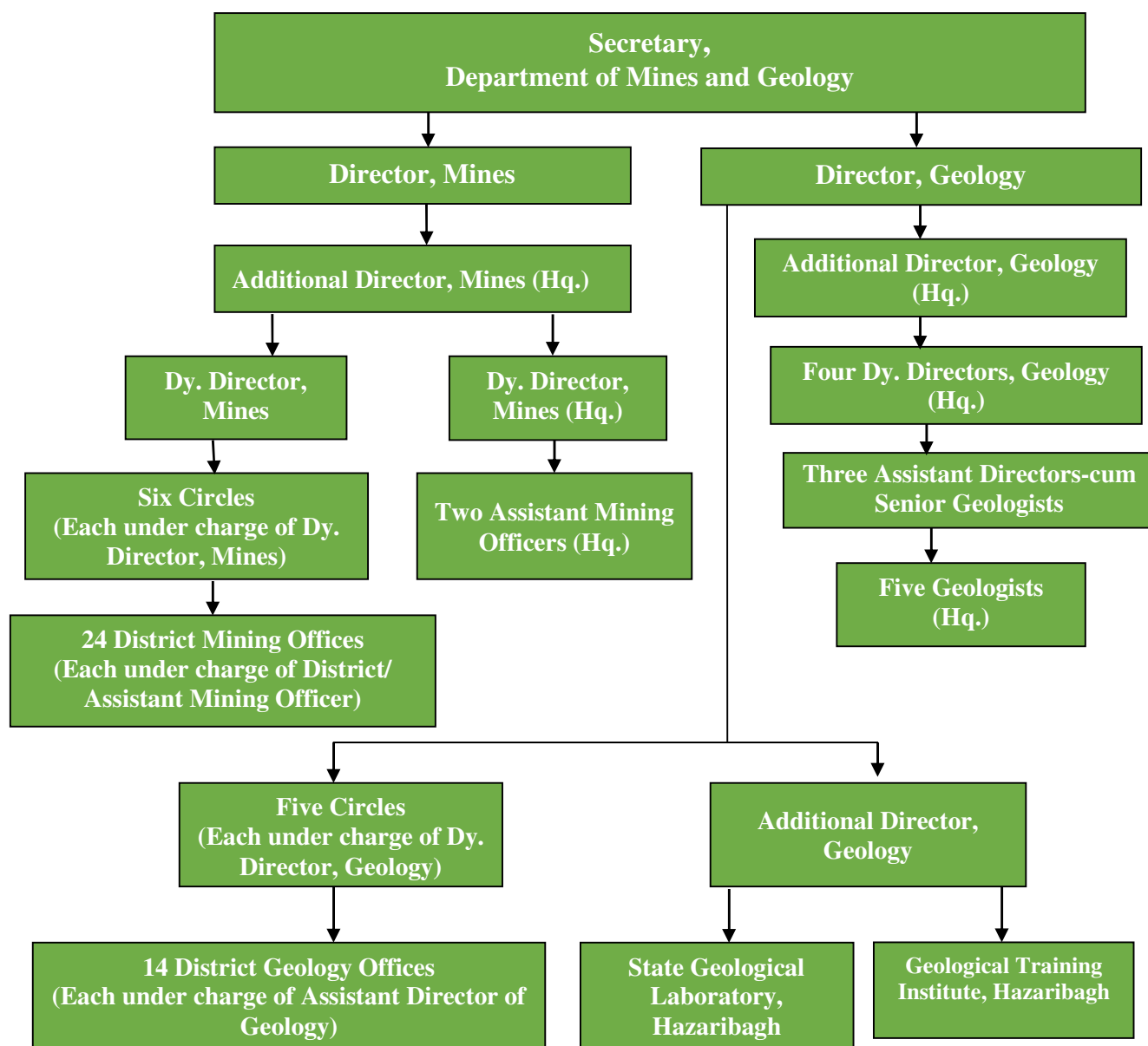
³ Bokaro, Chaibasa, Chatra, Deoghar, Dhanbad, Dumka, Garhwa, Giridih, Godda, Gumla, Hazaribagh, Jamsshedpur, Jamtara, Khunti, Koderma, Latehar, Lohardaga, Pakur, Palamu, Ramgarh, Ranchi, Sahibganj, Saraikela–Kharsawan and Simdega.

⁴ Kolhan, North Chotanagpur, Palamu, Santhal Pargana and South Chotanagpur.

⁵ Bokaro (for Bokaro and Dhanbad districts), Chaibasa, Deoghar (for Deoghar and Jamtara districts), Dumka (for Dumka and Godda districts), Hazaribagh (for Chatra, Hazaribagh and Ramgarh districts), Jamsshedpur, Gumla (for Gumla and Simdega districts), Koderma (for Giridih and Koderma districts), Latehar, Lohardaga, Medininagar (for Garhwa and Palamu districts) Ranchi (for Ranchi and Khunti districts), Sahibganj (for Pakur and Sahibganj districts) and Saraikela–Kharsawan.

The organizational set-up is depicted in the **Chart 1.1**.

Chart- 1.1: Organizational Set-up of the Department



1.4 Audit Objectives

The Performance Audit (PA) was undertaken to ascertain whether:

- i) mining leases or licenses were granted, renewed, closed and cancelled in accordance with the provisions of the relevant Act and Rules;
- ii) management of mines of minor minerals in the State was adequate and effective to ensure systematic, sustainable & scientific mining and to augment and safeguard revenue; and
- iii) adequate internal controls and co-ordination existed between various Departments involved in mining activities to address environmental and ecological concerns; prevent illegal mining and leakage of revenue.

1.5 Audit Criteria

The Audit Criteria have been derived from the following sources:

- The MMDR Act, 1957 with amendments;
- Minor Mineral Conservation and Development Rules (MMCDR), 2010;
- Jharkhand Minor Mineral Concession (JMMC) Rules, 2004 with amendments;
- Jharkhand Minor Mineral (Auction) Rules, 2017;
- Jharkhand State Sand Mining Policy, 2017;
- Jharkhand Minor Minerals (Evidence of Mineral Contents) Rules, 2018;
- Jharkhand Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2017;
- The Bihar and Orissa Public Demands Recovery (BOPDR) Act, 1914;
- Notifications, orders and circulars issued by the Government and the Department.

1.6 Audit Scope and Methodology

The Performance Audit covered the period of five years from 2017-18 to 2021-22. Audit involved scrutiny of records at the State level units (Departments and Directorates), selected district mining offices and joint physical verification (JPV).

Audit scrutinized the following broad areas:

- allocation and auction of minor minerals, trend of revenue and exploration of minerals;
- the role of associated agencies like State Environmental Impact Assessment Authority (SEIAA), Jharkhand State Pollution Control Board (JSPCB) *etc.*, and their coordination with the Department;
- the role of Jharkhand State Mineral Development Corporation Ltd. (JSMDC) in view of Jharkhand State Sand Mining Policy, 2017;
- Mining plans and information available on JIMMS, in respect of 74 mining leases of minor minerals;
- Mining plans of 63 stone leases in six sampled districts (out of 24 districts in Jharkhand) through Joint Physical Verification (JPV), examination of mining lease area through Keyhole Markup Language

(kml) files⁶ on *Google Earth pro* and information available on Geographical Information System (GIS) *etc.*; and

- beneficiary survey of 597 mines affected people in six sampled districts.

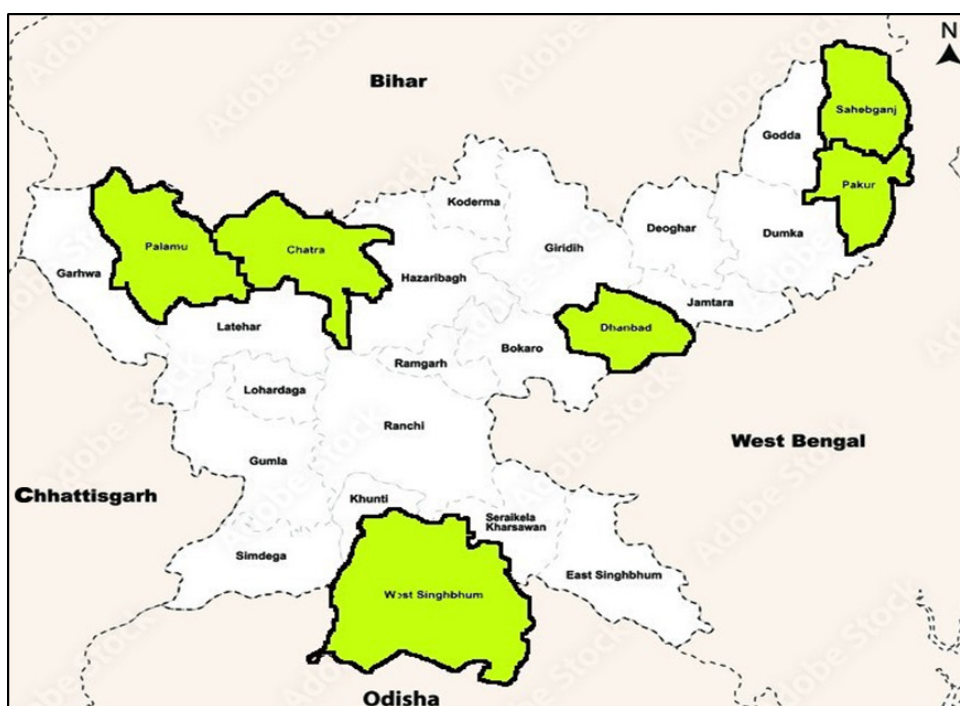
1.7 Sample and Sampling Methodology

The Performance Audit covered the Department and JSMDC.

Details of sampling of minerals, units and methodology used therein are as under:

Minerals: During 2017-22, out of total royalty from minor minerals⁷, 95 *per cent* was realized from stone alone so six⁸ out of 24 District Mining Offices were selected based on royalty collected from stone quarrying for detailed audit analysis. Representation of sampled districts on the map of Jharkhand is as under:

Picture- 1.1: Showing six sampled districts on the map of Jharkhand



JSMDC: Under a new sand mining policy of August 2017, JSMDC was made deemed lessee for regular and adequate supply of sand at a reasonable price to common people of the State. However, only 21 out of 608 Category-2 sand *ghats* were in operation during the audit coverage period.

⁶ kml file is a format used to display geographical data in Earth browser such as Google Earth.

⁷ Stone metal, Brick earth, Sand, China Clay, Dolomite, *Morrum etc.*

⁸ Chaibasa, Chatra, Dhanbad, Pakur, Palamu and Sahibganj.

A detailed review of JSMD C was carried out by Audit to assess the reasons for the operation of only 3.45 *per cent* of commercial sand *ghats*.

1.8 Entry and Exit Conference

Entry Conference was held on 25 August 2022 with the Secretary, Department of Mines and Geology, GoJ, wherein objectives, scope and methodology were explained. The Exit Conference was held with the Secretary of the Department on 22 July 2024. The Secretary stated that the data pertaining to observations/suggestions were under verification and the detailed reply/comments would be furnished after examination. However, detailed replies in respect of the audit observations made have not been received despite several reminders issued between March 2024 and May 2025 (July 2025).

1.9 Structure of the Report

This report is structured on the basis of findings that emerged during audit. The audit findings have been reported under the following chapters:

Chapter-2: Allotment of mining leases;

Chapter-3: Revenue realisation and Management of Sand *Ghats*;

Chapter-4: Sustainable and Scientific mining; and

Chapter-5: Conclusion.

1.10 Acknowledgement

The Performance Audit was conducted between November 2022 and October 2023. Audit acknowledges the cooperation and assistance extended by the Department, JSMD C, State Environment Impact Assessment Authority (SEIAA) and the test checked District Mining Offices in conducting the PA.