

CHAPTER-I: INTRODUCTION

1.1 Introduction

Minerals are valuable natural resources being finite and non-renewable; therefore, their exploitation is guided by long term goals and perspective. Minerals as defined under Section 3 of the Mines and Mineral (Development and Regulation) Act, 1957 (the MMDR Act) includes all minerals except mineral oils. Under Section 3 of the MMDR Act, minor minerals mean 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. Important major minerals occurring in Uttar Pradesh are Coal, Iron ore, Andalusite, Rock Phosphate, Limestone, Potash, Sillimanite, etc. whereas minor minerals found in the State are Silica sand, China clay, Granite dimensional stone, Granite gitti, Sandstone, Dolomite, Brick clay and Sand/Morrum/Bajri/Boulder etc. Mining is not only a major source of employment in the rural and tribal areas of the State but also a major source of revenue for the Government, thus playing an important role in the development of the State. As on 31.03.2022, total 1,369 leases/permits were active in the State. Mineral Map of Uttar Pradesh is shown below -

Map 1.1 Mineral Map of Uttar Pradesh



Mine Mitra, an end-to-end Mineral Management System, is an innovative and ambitious initiative by the Directorate of Geology and Mining to bring in transparency in the user interface and curb illegal practices in mining and mineral transportation through real-time data surveillance and business process re-engineering. It is an integrated portal which provides e-services to

citizen, online mineral management, smart enforcement system and online e-commerce platform under one umbrella. It was implemented in December 2020.

1.2 Framework for Governance and Management of Mineral Resources

The MMDR Act (as amended from time to time) enacted by the Central Government lays down the legal framework for the regulation of mines and development of minerals. It provides the manner and system of mining operations, conservation and systematic development of minerals and also the penalties for violation of this Act and the rules made thereunder. Under Sections 13 and 15 of the MMDR Act, Central Government and State Government have powers to make rules for granting concession for major minerals and minor minerals respectively.

The Mineral Concession Rules, 1960 and the Granite (Conservation and Development) Rules, 1999 have also been framed by the Central Government for conservation and systematic development of minerals and for regulating grant of permits, licenses and leases.

Legislations for exploitation of minor minerals have been delegated to the States under Section 15 of the MMDR Act. State Governments are empowered, under Section 23C of the MMDR Act to make rules for prevention of illegal mining, transportation and storage of minerals and for purposes connected therewith. Accordingly, the Uttar Pradesh Minor Mineral (Concession) Rules, 1963 and 2021 and the Uttar Pradesh Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2002 and 2018 were framed by the State Government.

1.3 Mining Policy 2017

The Government of Uttar Pradesh (GoUP) has promulgated the ‘Mining Policy 2017’ to achieve the target of awareness about minerals, accessibility and availability of minerals to all people, at an affordable price.

The main objectives of mineral policy are:

1. Sustainable Socio-Economic development of State by means of mines and minerals;
2. Conservation of Minerals;
3. To maintain the Environment and Ecological Balance;
4. Enhancement of employment opportunity in mines sector;
5. To increase revenue from minerals from 1.85 *per cent* to three *per cent* (of State’s own resources) within next five years; and
6. Technical interventions to control illegal mining/transportation and to take strict action against the persons involved in illegal activities.

The strategy to fulfil the objective to control illegal mining is to constitute Departmental *Sachal Dal*, Departmental security forces, maximum leasing and licensing, Geo Fencing of mining lease area, Global Positioning System (GPS) tracking, mining surveillance system, Close Circuit Television (CCTV)/Pan Tilt Zoom (PTZ) mining system on gates and connecting it with control command centre, Risk increment to deterrent illegal mining/transportation through constituting inter-departmental task forces at district level, ensuring strict action, e-generation of MM-11 forms, Radio Frequency Identification

(RFID) based inward records, online payment system, constituting special courts for speedy hearing of cases related to illegal mining, etc.

1.4 Functions of the Department

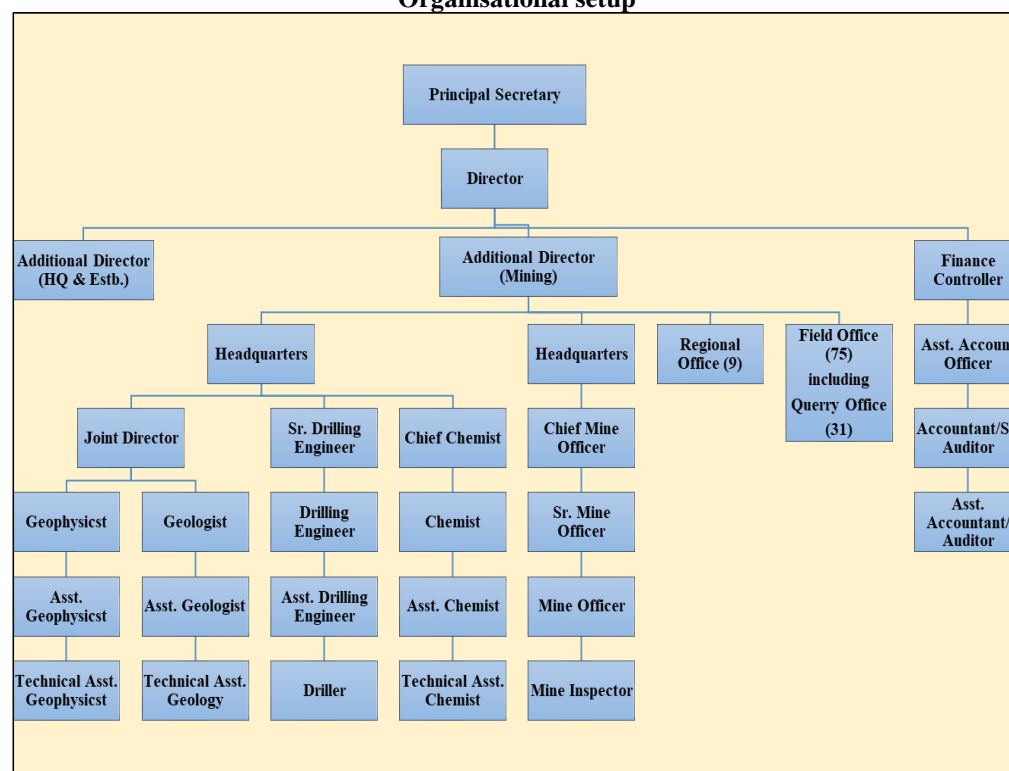
Main functions of Geology and Mining Department are:

1. Exploration, prospection and estimation of minerals.
2. Regulation and development of mines and minerals.
3. Grant of mineral concessions.
4. Assessment, levy and collection of rent and royalty.
5. Provide technical Know-how and facilities to entrepreneurs for scientific mining with environmental safeguards and mineral utilization.
6. Monitor mining operations and ensure reclamation of mined areas, as well as safety and welfare of workers engaged in mining.

1.5 Organisational Setup

The Principal Secretary, Geology and Mining, Uttar Pradesh is the administrative head of the Department at the Government level. The overall control and direction of the Geology and Mining Department (Department) is vested with the Director, Geology and Mining, (DGM) Uttar Pradesh, Lucknow. At Headquarters, the Director, Geology and Mining is assisted by two Additional Directors who are further assisted by four Joint Directors. At district level, the District Mines Officer (DMO) is responsible for determining royalty, dead rent, and permit fee, etc., due and payable. Additional District Magistrate (Finance & Revenue) is in charge of collection and accounting of mining receipts under the overall administrative control of the District Collector. The organisational setup is described below in **Chart-1.1**.

Chart 1.1
Organisational setup



1.6 Trend of mining receipts

• Trend of mining receipts vis-à-vis total revenue of the State

One of the objectives of Mining Policy 2017 was to increase share of mining receipts in State's own Resource from 1.85 *per cent* to three *per cent* in next five years i.e. till 2022. Total revenue of the State and mining receipts under the head "0853 Non-ferrous Mining and Metallurgical Industries" for 10 years are presented in **Table-1.1**.

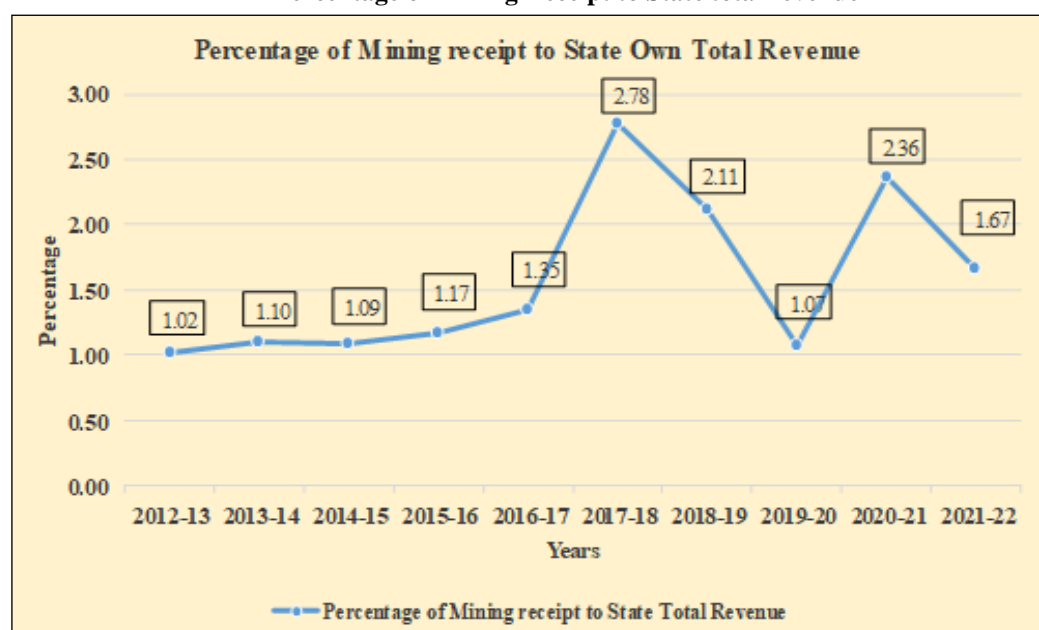
Table 1.1
Trend of Mining receipts with respect to Total revenue of the State

(₹ in crore)					
Year	Tax revenue	Non-tax revenue	Total Revenue of the State	Mining Receipts	Percentage of Mining receipt to Total Revenue of the State
2012-13	58,098.36	12,969.98	71,068.34	722.13	1.02
2013-14	66,582.08	16,449.80	83,031.88	912.52	1.10
2014-15	74,172.42	19,934.80	94,107.22	1,029.42	1.09
2015-16	81,106.26	23,134.65	1,04,240.91	1,222.17	1.17
2016-17	85,965.92	28,944.07	1,14,909.99	1,548.39	1.35
2017-18	97,393.00	19,794.86	1,17,187.86	3,258.88	2.78
2018-19	1,20,121.86	30,100.71	1,50,222.57	3,165.44	2.11
2019-20	1,22,825.83	81,705.08	2,04,530.91	2,180.93	1.07
2020-21	1,19,897.30	11,846.15	1,31,743.45	3,112.74	2.36
2021-22	1,47,356.46	11,435.97	1,58,792.43	2,655.48	1.67

Source: Finance Accounts of the GoUP.

The share of mining receipts in the total revenue of the State is presented in the **Chart-1.2**.

Chart 1.2
Percentage of Mining Receipt to State total revenue



The above table and chart show that mining receipts with respect to State total revenue ranged between 1.02 *per cent* and 2.78 *per cent* during last ten years. Target set in the Mining Policy 2017 to increase share of mining receipts upto three *per cent* of State's own revenue could not be achieved. The share of mining receipts in the total revenue of the State was more than two *per cent* in the year 2017-18, 2018-19 and 2020-21 only.

Further, mining receipts was inconsistent between 2017-18 and 2021-22. Mining receipts was comparatively high in 2017-18 and was low in 2019-20. The GoUP had introduced e-auction system in the allotment of mining leases from 2017-18 and the collection of mining receipts increased (110.47 *per cent*) from ₹ 1,548.39 crore in 2016-17 to ₹ 3,258.88 crore in 2017-18. However, the percentage of receipt fluctuated in subsequent years.

The Department stated that due to adverse conditions of Covid-19 pandemic, development/construction works were affected which resulted in low demand of minerals. Process of obtaining Environment clearance certificate is very complex due to which mining leases could not operate in due time. Production of minerals was also affected due to blockage of mining operations in compliance of various orders passed by Hon'ble National Green Tribunal.

- **Mining receipts vis-à-vis the budget estimates**

The details of budget estimates and mining receipts under the Major head "0853 Non-ferrous Mining and Metallurgical Industries" are presented in **Table-1.2**.

Table 1.2
Mining receipts vis-à-vis Budget estimates

(₹ in crore)				
Year	Budget estimates	Mining receipts	Variance (Col. 3- Col. 2)	Percentage variance
2017-18	3,200	3,258.88	(+) 58.88	(+) 1.84
2018-19	4,000	3,165.44	(-) 834.56	(-) 20.86
2019-20	4,400	2,180.93	(-) 2,219.07	(-) 50.43
2020-21	4,000	3,112.74	(-) 887.26	(-) 22.18
2021-22	4,500	2,655.48	(-) 1,844.52	(-) 40.99

Source: Finance Accounts of the GoUP and budget estimate as per the Statement of Revenue and Receipts of GoUP.

Above table shows that mining receipts were more than budget estimates only in the year 2017-18 while in rest of the years' revenue target could not be achieved by the Department. Variance between budget estimates and the mining receipt of the year from 2018-19 to 2021-22 was ranging from (-) 50.43 *per cent* to (-) 20.86 *per cent*, thus, the mining receipt was far behind from the budget estimate.

- **Mineral-wise receipts**

Mineral-wise receipts of the State are shown in **Table-1.3**.

Table 1.3
Mineral-wise receipts

	(₹ in lakh)				
Receipts from Minerals and others	2017-18	2018-19	2019-20	2020-21	2021-22
1. Minor Minerals					
Ordinary soil	24,466.34	5,793.70	0.00 ¹	0.00	0.00
Brick Earth	25,171.65	18,240.63	19,600.00	16,166.83	14,650.76
Granite (dimensional)	8,743.05	2,108.81	513.00	724.64	861.37
Slab	681.76	1,154.47	277.00	635.49	744.51
Gitti/Bolder	37,982.25	59,751.95	51,414.00	44,980.18	40,654.86
Bajri	0.00	2,043.05	10.46	912.69	346.81
Morrum	96,975.05	1,24,327.13	74,432.00	1,08,617.90	65,634.25
Sand	41,560.73	27,118.64	22,320.00	24,994.04	19,519.78
Stone dust	--	--	--	--	215.83
RBM	--	--	--	--	5,534.20
Silica sand	331.40	915.85	283.00	301.71	352.67
Pyrophyllite- Diaspore	55.99	57.93	46.00	36.35	33.29
Enforcement	2,873.00	8,086.00	4,867.00	7,755.00	12,489.00
Others ²	51,802.00	18,051.00	725.00	64,403.00	54,683.00
2. Major Minerals					
Coal	33,721.28	46,796.90	41,361.83	39,686.81	47,525.42
Limestone	1,479.41	2,097.81	2,243.21	2,059.41	2,302.30

Source: Information provided by the Department.

1.7 Non-reconciliation of departmental figures of Mining receipts with Finance Accounts

Para 96 of Chapter-XII of Uttar Pradesh Budget Manual stipulates that subject to any special arrangement that may be authorised by Government with respect to any particular class of receipts, it is the duty of the departmental controlling officers to see that all sums due to Government are regularly and promptly assessed, realised and duly credited into the Government account. The controlling officers should accordingly arrange to obtain from their subordinates monthly accounts and returns in suitable form claiming credit for so much paid into the treasury or otherwise accounted for and compare these with the statements of treasury credits furnished by the Accountant General, to see that the amounts reported as collected have been duly credited to Government account.

If wrong credits come to the notice of the controlling officers, they should at once inform the Accountant General with a view to correction of the accounts. If any credits are claimed but not found in the accounts, inquiry should be made first of the responsible departmental officer concerned. Where departmental registers are not maintained under the departmental rules, the heads of offices must make their own arrangement within the office to ensure the correct and complete report of receipts.

Audit noticed that there was a difference between mining receipts as provided by the Department and mining receipts as per Finance Accounts of the State Government. Although regular reconciliations were being done by the Department with the office of the Accountant General (A & E), Prayagraj but the Department did not get rectified the discrepancies. As a result, the

¹ From the year 2019-20, the royalty of ordinary soil was reduced to zero vide notification dated 27 March 2018.

² Others include demarcation fee, application fee, receipts from executing agencies, etc.

Department failed to ensure the correct and complete reporting of mining receipts. Details are shown in **Table-1.4**.

Table 1.4
Non-reconciliation of departmental figures of Mining receipts with Finance Accounts

(₹ in crore)			
Year	Mining receipts as per Finance Accounts	Mining receipts as per the Department	Variance (Col 2-Col. 3)
2017-18	3,258.88	3,244.57	(+) 14.31
2018-19	3,165.44	3,164.51	(+) 0.93
2019-20	2,180.93	2,177.49	(+) 3.44
2020-21	3,112.74	3,120.97	(-) 8.23
2021-22	2,655.48	2,664.59	(-) 9.11

Source: Finance Accounts of the GoUP and Information provided by the Department.

Mining receipts as per Finance Accounts were more than figures of mining receipts provided by the Department in the years 2017-18 to 2019-20 while less than in the years 2020-21 and 2021-22.

The Department, in exit conference, accepted Audit observation and stated that discrepancy between the details received from the treasury and the details available in the Accountant General's office would be reconciled.

1.8 Audit Objectives

The Performance Audit was conducted with a view to ascertain whether:

1. provisions of Acts and Rules governing administration of mines and minerals were being implemented effectively;
2. Department had adequate human resources, efficient IT system and utilised latest technology and know-how to detect and prevent illegal mining; and
3. effective controls existed to monitor mining activities so that environmental and ecological concerns were addressed properly.

1.9 Audit Criteria

The Performance Audit drew audit criteria from the following:

- The Mines and Minerals (Development and Regulation) Act, 1957;
- The Mineral Concession Rules, 1960;
- The Uttar Pradesh Minor Mineral (Concession) Rules, 1963 and 2021;
- The Uttar Pradesh (Prevention of Illegal Mining, Transportation and Storage) Rules 2002 and 2018;
- The Uttar Pradesh District Mineral Foundation Trust Rules, 2017;
- Uttar Pradesh Mining Policy, 2017;
- The Environment (Protection) Act, 1986;
- Sustainable Sand Mining Management Guidelines, 2016; and
- Notifications and circulars etc. issued by the Department.

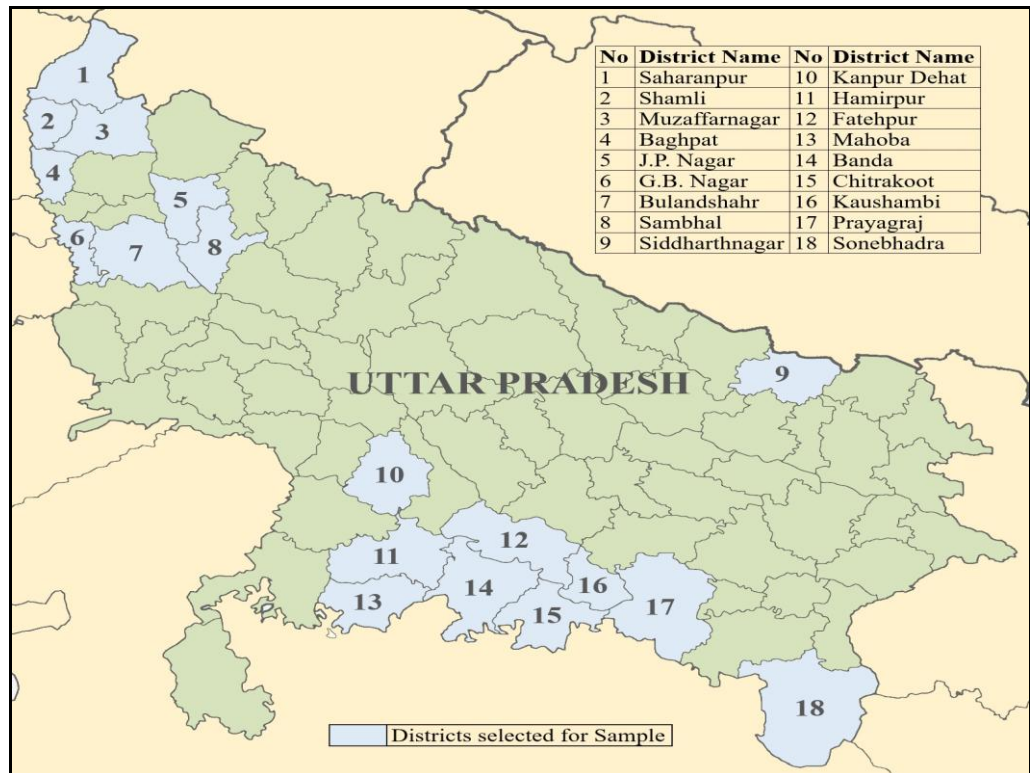
1.10 Audit Scope and Methodology

The Performance Audit covered a period of five years i.e. from 2017-18 to 2021-22. The scope of this audit was to examine whether mining activities in the State were being carried out in accordance with provisions of Acts and the Rules made thereunder. Audit examined the assessment, levy and collection of royalty, contribution to District Mineral Fund (DMF) and its utilisation in

affected mining areas. Audit also examined whether effective mechanism was in place to detect illegal mining activities and remedial action initiated to prevent illegal mining.

Audit methodology included scrutiny of records in the Directorate of Geology and Mining and in the DMO office in 18 selected³ districts, analysis of the mining database⁴, raising audit queries, physical verification, use of Remote Sensing and Geographic Information System (GIS) data, obtaining replies and discussion of audit findings with the Department. Audit test checked 217 leases and 60 permits out of 531 leases/permits operating in 18 districts. Selected districts have been shown below in the map of the State.

Map-1.2 Selected Districts



Audit had selected the areas⁵ in two sampled districts based on reported cases of illegal mining, for **geo-spatial analysis** which was carried out through satellite imageries from the Remote Sensing and GIS with the help of technical consultancy provided by Motilal Nehru National Institute of Technology, Allahabad (MNNIT), Prayagraj. The consultant visited the selected areas in the presence of the officials of the Department and submitted a study report to Audit.

In other selected districts *Google Earth*⁶ *Pro* was used to identify illegal mining areas by making .kml⁷ files of the lease coordinates found from

³ Baghpat, Banda, Bulandshahr, Chitrakoot, Fatehpur, GB Nagar, Hamirpur, JP Nagar, Kanpur Dehat, Kaushambi, Mahoba, Muzaffarnagar, Prayagraj, Saharanpur, Sambhal, Shamli, Siddharthnagar and Sonbhadra.

⁴ Database of Mine mitra portal and iMSS.

⁵ Tehsil Sarila in district Hamirpur and tehsil Bara in district Prayagraj.

⁶ Google Earth Pro is upgraded version of Google Earth, which is a computer program that renders a 3D representation of Earth based primarily on satellite imagery.

⁷ Keyhole Markup Language (.kml) file is used to display geographical data in an earth browser such as Google Earth.

environment clearance, boundary survey report and mining plan etc. Dump Data of e-MM-11 forms provided by the Department was analysed by Audit with the help of Tableau⁸ software.

The Entry Conference with the Department was held on 28 June 2022 to explain the objectives of the Performance Audit, audit criteria, audit scope, methodology and to elicit views/concerns of the Department on the issue.

An Exit Conference on conclusion of the Performance Audit was held on 4 August 2023 to discuss the audit findings and for obtaining responses of the State Government on the findings. The Special Secretary cum Additional Director, Geology and Mining appreciated the audit efforts and findings and assured to provide the reply of the Government at the earliest. The replies furnished by the Department and replies furnished during Exit Conference have been incorporated in the Performance Audit Report.

1.11 Sampling Method

Eighteen districts (24 *per cent* of 75 districts) were selected for Audit scrutiny on the basis of stratified random sampling with the help of IDEA⁹ software. Sampling was done from the data of last five years (2017-18 to 2021-22) of major head “0853-receipts from non-ferrous mining and metallurgical industries” of 75 districts in Uttar Pradesh. Apart from this, information was also gathered from the Department.

1.12 Content of this Report

This Performance Audit Report contains five chapters. Chapter I being introductory, presents the introduction, organisational setup of the Department, Revenue Receipts, audit objectives, audit criteria and the scope and methodology of audit. Chapter II deals with Grant of mineral concession, Chapter III highlights deficiencies in levy and collection of revenue, Chapter IV deals with illegal mining and Chapter V highlights deficiencies in Internal control and monitoring mechanism. Financial implication of the Audit observations included in the Report is ₹ 784.54 crore.

1.13 Acknowledgement

Audit acknowledges the co-operation extended by the Department in providing necessary information and records.

1.14 Records/Information not furnished

The Department could not furnish the following records/information even after various attempts made by Audit.

1. Arrear Register and status of arrear;
2. Reply on the 465 Audit memo issued to DGM and district offices;
3. Data dictionary of the dump data of iMSS and Mine-Mitra.

⁸ It is business intelligence Data Visualisation Analytical tool.

⁹ Interactive Data Extraction and Analysis.