# CHAPTER - I

## INTRODUCTION TO CONTROLS AND SYSTEMS FOR SUSTAINABLE MINING IN KARNATAKA

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### CHAPTER-I INTRODUCTION TO CONTROLS AND SYSTEMS FOR SUSTAINABLE MINING IN KARNATAKA

#### 1.1 Introductory

Minerals are valuable natural resources which are finite and non-renewable. Mineral exploration and development is closely linked with development of country's economy and the people. However, as it intervenes with the environment and social structure, a harmony and balance is to be maintained between conservation and extraction in the interest of sustainable development. Minerals are classified as major minerals (iron ore, manganese, gold, etc.) and minor minerals (granite, building stone, gravel, sand, etc).

The responsibility for the management of mineral resources is shared between the Central and State Governments<sup>1</sup>. The Mines and Minerals (Development and Regulation) (MMDR) Act, 1957 enacted by the Central Government, lays down the legal framework for regulation of mines and development of minerals <sup>2</sup>. The Mineral Concession (MC) Rules, 1960, the Mineral Conservation and Development (MCD) Rules, 1988 and the Granite Conservation and Development Rules, 1999 have been framed for conservation and systematic development of minerals and for regulating grant of permits, licences and leases.

Legislations for exploitation of minor minerals have been delegated to the States. Accordingly, Karnataka Minor Mineral Concession (KMMC) Rules, 1994 were framed by the State Government.

#### 1.2 Organisational set-up

The Department of Mines and Geology (DMG) is responsible for the levy and collection of mineral receipts based on the production and dispatch of minerals. The DMG is under the administrative control of the Principal Secretary to the Government of Karnataka, Commerce and Industries Department. The Director of Mines and Geology is responsible for implementation of the related Acts and Rules for the Controls and systems for sustainable mining in Karnataka and assisted by Additional Director (Mineral), Joint Director (Administration), Accounts Officer and Deputy Directors for Legal, Mineral Administration and Planning & Monitoring at headquarters besides two Joint Directors for North zone and South zone. There are 31 district level offices; each office headed by a Deputy Director or a Senior Geologist.

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<sup>&</sup>lt;sup>1</sup> Entry 54 of the Union list (list I) and entry 23 and 50 of the State list (list II) of the Seventh Schedule of the Constitution of India.

<sup>&</sup>lt;sup>2</sup> Other than petroleum and natural gas and atomic minerals.

#### 1.3 Audit Criteria

The audit criteria are derived from the following Central and State Laws and the Rules made there under to govern the management and regulation of mines and levy and collection of royalty.

- The MMDR Act, 1957
- The MC Rules, 1960
- Water (Prevention and Control of Pollution) Act, 1974
- Forest Conservation Act, 1980
- 5. Air (Prevention and Control of Pollution) Act, 1981
- Environment (Protection) Act, 1986 and Rules made thereunder
- Mineral Conservation and Development (MCD) Rules, 1988
- 8. Karnataka Minor Mineral Concession (KMMC) Rules, 1994
- Granite Conservation and Development Rules, 1999
- National Mineral Policy 1993 and 2008
- Karnataka Mineral Policy 2000 and 2008
- Relevant Notifications/Circulars issued by the Central/State Government/Directorate of the Mines and Geology
- INTOSAI Guidelines on auditing of Mining Sector.

#### 1.4 Audit objectives

The main audit objectives were to ascertain whether effective controls and systems were in place for:

- 1. monitoring and implementation of mining policies of the Government;
- 2. levy and collection of fees, rent, royalty, penalty etc.;
- grant and renewal of mining and quarrying leases for prevention of illegal excavation of minerals;
- 4. estimation of mineral resources and for fixing targets of production;
- ensuring that environmental and ecological concerns were addressed and preventive measures were useful; and
- addressing the socio economic concerns of the persons affected by mining.

#### 1.5 Reasons for selection and scope of Performance Audit

A Performance Audit Report on Mineral Receipts for the period from 2001-02 to 2005-06 appeared in the Report of the Comptroller and Auditor General of India for the year 2006. The Report is yet to be discussed by the Public Accounts Committee (PAC). The issue of illegal mining of iron ore was repeatedly covered in the print and electronic media. The Lokayukta of Karnataka submitted (July 2011) final report on illegal mining in Karnataka to the Government covering the period from 2006-07 to July 2010. The issue of illegal mining in Karnataka was also taken up by the Hon'ble Supreme Court who directed the Central Empowered Committee (CEC) and the Central Bureau of Investigation (CBI) to investigate the matter.

In view of the issues highlighted in the Report of the Lokayukta and the concerns expressed by the CEC, we felt it appropriate to conduct a performance appraisal on the controls and systems in place in the State of Karnataka for legitimate and sustainable mining.

The controls comprise policy initiatives and their implementation, the regulatory frame work for processing applications and allotment of leases, the approval of mining plans, assessments of quantities mined and permission for transportation of the same along with enforcement activities. The other crucial systems governing the mining of natural resources in the State include protective measures for safeguarding the environment as well as the well being of the local citizenry. The existing processes and status of the controls have been analysed to see how effective they are, to what extent they conform to the stated policy objectives including revenue maximization and sustainable development. The gaps between policy and implementation and their effect on environment have been highlighted.

The Performance Audit relies on samples selected for analysis of each of the controls and individual instances have been quoted to the extent that these support our observations or recommendations. These instances, however, do not reflect the whole gamut of transactions connected with mining. The Performance Audit also does not deal with those examples of individual irregularities that have already been examined by the Lokayukta, which is a statutory institution with a mandated procedure for action taken and follow up on its reports.

To achieve our objectives, we test-checked during 2011-12 the records of the DMG at the selected districts, records at the Secretariat of Commerce and Industries Department, Environment and Ecology Department, Indian Bureau of Mines (IBM), Karnataka State Pollution Control Board (KSPCB) and two divisional forest offices (Chitradurga and Bellary) for the period from 2006-07 to 2010-11. The mining activities were stopped on the orders of Supreme Court during most of 2011-12. As such this period has not been covered. We selected mining of iron ore and stone quarrying in the State as these were the two major contributors of revenue to the State in major and minor minerals.

Export of iron ore from the three ports of Karnataka viz., Mangalore, Belikere and Karwar were not checked as it was dealt with extensively in the report of the Lokayukta.

The Performance Audit also does not cover the activities of the Public Sector Undertakings involved in mining except to the extent mentioned in Chapter-VIII. Transactions relating to sale of mineral below the market price by Mysore Minerals Limited (MML) involving ₹ 82.20 crore have been commented in the Commercial Audit Reports of the Comptroller and Auditor General of India for the years 2005-06 to 2009-10. The Reports have already been laid in the State Legislature and action in this regard is being taken by Committee on Public Undertakings (COPU).

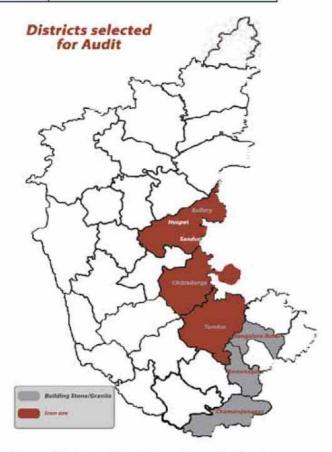
#### 1.6 Methodology of audit

The sample selected by us for audit was a judgmental sampling based on the criteria mentioned in the following paragraph:

Population under examination	Sample selected for test check	Basis for the sample selected		
Minerals	1. Iron ore 2. Stones	Major contributor of revenue <sup>3</sup> .  Media reports on illegal quarrying.		
Field offices of DMG for major minerals (Iron ore)	Offices of the Deputy Directors (DD), Hospet in Bellary district, Tumkur and Chitradurga	Finding in the Hon'ble Lokayukta report, media reports on illegal mining and regions having maximum contribution of revenue.		
Field offices of DMG for minor minerals (Granite and building stone)	Bangalore Rural, Ramanagara and Chamarajanagara. In additon, offices of DDs, Chitradurga, Hospet and Tumkur were also covered.	Media reports on illegal quarrying and results of our local audit in the previous years.		

Scrutiny of the systems in place for grant and renewal of mining leases in the Director's office and actual transactions in the office of the DD, Hospet were conducted based on random sampling. In the field offices of Tumkur and Chitradurga, the transactions were checked fully. In respect of minor minerals, transactions of the six selected divisions were test checked based on random sampling.

With a view to assess the social and economic impact of mining, we scrutinised data available with the district offices of the Agriculture, Veterinary services, Medical, Labour, Health and Statistics departments of Bellary district besides conducting a local survey in Hospet and Sandur taluks with the help of the Revenue authorities. Further, the services of three



subject experts from the Indian Institute of Science, Bangalore were obtained. We held meetings with lessees viz., MML, Hutti Gold Mines Limited (HGML) and Sandur Manganese and Iron Ore Limited (SMIORE). We also consulted Indian Space Research Organisation and Geological Survey of India.

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<sup>&</sup>lt;sup>3</sup> 29 per cent of the revenue from major minerals

#### 1.7 Production of major minerals

We noticed that the despatches of iron ore was consistently showing a decreasing trend from 2007-08 to 2009-10 though there was increase in production from 2006-07 to 2008-09 as is evident from the data 4 on production and despatch of major minerals during the years 2006-07 to 2010-11 summarised below:

(in lakh tonnes)

Mineral	2006-07		2007-08		2008-09		2009-10		2010-11	
	Produc- tion	Despatch								
Iron Ore	414.66	624.85	629.26	487.97	693.75	474.94	529.22	349.37	383.26	365.38
Manganese	1.82	1.65	2.64	1.89	1.21	1.18	0.47	0.64	1.90	0.99
Lime Stone	146.75	145.66	162.86	161.14	645.01	643.33	127.22	124.76	28.89	14.39
Bauxite	1.04	1.40	1.62	1.30	1.38	1.73	1.23	1.12	0.65	0.59
Others	16.36	15.19	20.24	17.88	21.88	20.84	14.18	12.07	14.27	9.77

#### 1.8 Trend of Revenue

The components of the revenue are royalty, penalty, fee, interest etc. The details of revenue realised under the Head of Account "0853 – Non-Ferrous Mining and Metallurgical Industries" for the years 2006-07 to 2010-11 and the variations in revenue over previous year and its growth rate were as under:

(₹ in crore)

Year	Revenue	Variation in revenue over previous year	Percentage of increase (+)/decrease (-) over previous year	
2006-07	366.29			
2007-08	472.35	106.06	28.96	
2008-09	556.07	83.72	17.72	
2009-10	859.50	303.43	54.57	
2010-11	1185.96	326.46	37.98	

It could be seen from the above that the growth rate of revenue ranged between 17.72 per cent and 54.57 per cent.

#### 1.9 Acknowledgement

The Indian Audit and Accounts Department acknowledges the co-operation extended by the Director of Mines and Geology and all the departmental officers for their cooperation in completing the audit. We have benefited from the opinions and research findings of three subject experts of the Indian Institute of Science (IISc), Bangalore namely, Dr. T. V. Ramachandra, Prof. K. A. Natarajan and Dr. N.K.S. Rajan. Further, we acknowledge the cooperation of the Indian Space Research Organisation and Geological Survey of India for sharing their knowledge with us on usage of satellite imagery and survey.

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<sup>&</sup>lt;sup>4</sup> As obtained from DMG, Government of Karnataka

We held an entry conference with the Principal Secretary, Commerce and Industries Department on 22 August 2011, wherein we explained objectives, scope and methodology of audit. We also held an exit conference with the Secretary, Commerce and Industries Department on 3 September 2012. The replies received in the exit conference and other points of time have been commented in the relevant paragraphs.

### 1.10 This Report

This Report on "Performance Audit on Controls and Systems for Sustainable Mining in Karnataka" consists of 47 paragraphs relating to assessment, levy and collection of revenue and to assess the impact of mining on socioeconomic and environment sectors. It revealed a number of system and compliance deficiencies in the assessment, collection and accounting of revenue involving monetary implication of ₹ 3,414.45 crore. Out of these, the Department accepted audit observations involving ₹ 1,212.12 crore and recovered ₹ 7.22 crore. These are discussed in succeeding Chapters II to IX.