

CHAPTER V
NON-TAX RECEIPTS

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NON-TAX RECEIPTS - MINES AND MINERALS

5.1 Tax administration

The Geology and Mining Department is entrusted with the general regulation of extraction and conservation of minerals in accordance with the relevant Acts, Rules and instructions of the Government of Tamil Nadu (GoTN). The Department is under the administrative control of the Commissioner of Geology and Mining (CGM), who is assisted by Deputy Directors of Geology and Mining (DDGMs) and Assistant Directors of Geology and Mining (ADGMs) and Geologists in each district. Monitoring and control at the Government level is done by the Principal Secretary, Industries Department.

5.2 Internal audit

The details of offices programmed for conduct of internal audit and the offices in respect of which internal audit was done during the year 2017-18 were not furnished by the Department. The year-wise break up of outstanding inspection reports was also not furnished by the Department. In the absence of information, Audit could not comment on the efficacy of internal audit.

5.3 Results of audit

In 2017-18, test check of 17 district offices revealed non / short levy of dead rent, seigniorage fee and other observations amounting to ₹ 2,451.28 crore in 177 cases, which fall under the following categories.

Table 5.1

(₹ in crore)			
Sl. No.	Category	No. of cases	Amount
1	Performance Audit on “System of Mineral Wealth Management in Tamil Nadu”	1	2,376.27
2	Non / short levy of dead rent, seigniorage fees, royalty	36	44.79
3	Non-collection of brick mineral annual fee	6	3.34
4	Non-collection of interest / penalty	17	3.47
5	Others	117	23.41
	Total	177	2,451.28

During the course of the year 2017-18, the department accepted and recovered underassessments and other deficiencies amounting to ₹ 0.60 crore in 46 cases pointed out in earlier years.

The observations included in the Performance Audit on “System of Mineral Wealth Management in Tamil Nadu” involving ₹ 2,408.33 crore are discussed in the following paragraphs.

5.4 Performance Audit on System of Mineral Wealth Management in Tamil Nadu

5.4.1 Introduction

Tamil Nadu has rich deposits of mineral ores and minerals including Lignite, Granite, Petroleum and Natural gas. The resources are spread over various districts of the State. Deposits of Lignite, Vermiculite, Dunite and Molybdenum in the State form more than 50 *per cent* of the deposits of the entire country. Tamil Nadu has also significant deposits of rare minerals (atomic) such as garnet, titanium and sillimanite. The details of important mineral resources available in the State as compared to the availability in India is represented in Table 5.2.

Table: 5.2
Availability of mineral resources
(Quantity in million Metric Tonnes)

Sl. No.	Mineral	Available in India	Available in Tamil Nadu	Percentage of availability
1	Lignite	44,114.24	35,208.90	79.81
2	Vermiculite	2.35	1.87	79.57
3	Dunite	187.82	121.80	64.85
4	Molybdenum	19.37	10.05	51.88
5	Garnet	56.16	26.92	47.93
6	Titanium	413.63	114.40	27.66
7	Magnesite	393.98	98.23	24.96
8	Sillimanite	70.20	17.46	24.87

(Source: Indian Bureau of Mines' Yearbook 2016)

Minerals are broadly classified as major minerals and minor minerals for the purpose of regulating grants, and are governed by independent sets of rules. Except for those minerals, which are notified by Union Government (GoI) as minor minerals, all other minerals are termed as major minerals. Petroleum and Natural gas, although classified as minerals, are administered by separate regulations. Grant of concessions for major minerals and petroleum and natural gas are regulated by the GoI, while the States have been delegated the powers to prescribe regulations for minor minerals. The major minerals are classified into three categories viz., (i) hydrocarbon and energy minerals, (ii) atomic minerals and (iii) metallic and non-metallic minerals, and are placed under Schedule I of the MMDR Act and prior approval of GoI is mandatory for leasing of these minerals for the purpose of levy of royalty. While the term 'mining' is broadly used to denote extraction of minerals, the term 'quarrying' is specifically used to indicate extraction of minor minerals. The levy on major minerals and Petroleum and Natural gas is called royalty, whereas the levy on minor minerals is termed as Seigniorage Fee (SF). The rates of royalty are

prescribed by the GoI and the SF are fixed by the States. However, both royalty and SF are collected and administered by the States.

The Geology and Mining Department (Department) is entrusted with the general regulation of extraction and conservation of minerals in accordance with the relevant Acts, Rules and instructions of the Government of Tamil Nadu (GoTN). The department is under the administrative control of the Commissioner of Geology and Mining (CGM), who is assisted by Deputy Directors of Geology and Mining (DDGMs) and Assistant Directors of Geology and Mining (ADGMs) and Geologists in each district. The basic functions of the department are to (i) ensure proper exploitation of minerals with proper protection of environment, (ii) check illegal mining and transportation and (iii) maximisation of revenue to Government while conserving mineral reserve for future.

Receipts from mines and minerals mainly consist of royalty/SF which is levied either on specific rate or on *ad valorem* basis on the type and quantity of mineral removed or consumed from the mines. Dead rent is levied on the area leased out for mining activity, and is the minimum amount to be paid for the lease. Other receipts from mining are application fee for various permits and licences, lease amount, penalties and interest for belated payments of dues, *etc.* The receipts from mining, total non-tax revenue raised and the percentage of contribution by the mining sector towards non-tax revenue are given in the Table 5.3.

Table: 5.3
Trend of Revenue

(₹ in crore)

Year	Receipts from mining	Total non-tax receipts of the State	Percentage of the mining receipts to total non-tax receipts
2013-14	933.28	9,343.27	9.99
2014-15	976.59	8,350.60	11.69
2015-16	981.12	8,918.31	11.00
2016-17	983.90	9,913.76	9.92
2017-18	1,146.11	10,764.01	10.65

(Source: Finance Accounts of Government of Tamil Nadu)

5.4.1.1 Audit Objectives

The Performance Audit was taken up with the objectives to ascertain, whether

- the department employed appropriate system to facilitate scientific exploration and optimum exploitation;
- the system of issue of grant was regular;
- the controls of system of mineral administration were adequate and effective to facilitate revenue maximisation and sustainable mineral exploration;

5.4.1.2 Scope of Audit

The Performance Audit was conducted between May 2018 and September 2018 covering a five-year period from 2013-14 to 2017-18. The previous and subsequent periods were covered for relevance and continuity.

5.4.1.3 Audit Methodology

Audit followed top-down approach, by obtaining, ab-initio, information and data from the office of the CGM. Fourteen⁴⁹ district offices out of 28 were selected applying stratified sampling method based on revenue and number of leases. Out of 5,430 cases, 2,285 cases were selected for scrutiny in selected districts. The inputs obtained from the agencies/entities connected with mining activities, viz., Indian Bureau of Mines (IBM), Geological Survey of India (GSI), Directorate of Mines Safety, Institute of Remote Sensing, Anna University, Tamil Nadu Pollution Control Board (TNPCB) and State Environment Impact Assessment Authority (SEIAA) were also considered in the report wherever necessary. Audit also visited individual offices of the three Central Public Sector miners viz., Neyveli Lignite Corporation (NLC), Oil and Natural Gas Corporation Ltd. (ONGC), and Indian Rare Earths Ltd (IREL) and three State Public Sector miners namely Tamil Nadu Minerals Ltd. (TAMIN), Tamil Nadu Cements Ltd. (TANCEM) and Tamil Nadu Magnesite Ltd. (TANMAG) to verify relevant records.

Entry Conference was held with the Additional Chief Secretary to Government, Industries department on 24 April 2018, in which the audit objective, scope and methodology of audit including employing “Unmanned Aerial Vehicle (UAV) study” and “Satellite Images in Geographic Information System (GIS)” were explained in detail.

Exit conference was held on 01 March 2019. The views expressed by the Government and Department during the Exit Conference have been taken into account and suitably incorporated in the report.

5.4.1.4 Audit Criteria

The criteria for the performance audit were derived from following Acts and regulations:

- The Mines and Minerals (Development and Regulation) Act, 1957 and 2015 (MMDR Act)
- The Tamil Nadu Minor Minerals Concession Rules, 1959 (TNMMCR 1959)
- The Petroleum and Natural Gas Rules, 1959 and 2009 (P&G Rules)
- The Mineral Concession Rules, 1960 (MCR 1960)
- The Mineral Conservation and Development Rules, 1988 (MCDR 1988)
- The Granite Conservation and Development Rules, 1999 (GCDR 1999)

⁴⁹ Ariyalur&Perambalur, Cuddalore, Dindugul, Kancheepuram, Kanyakumari, Karur, Krishnagiri, Madurai, Nagapattinam &Thiruvavarur, Ramanathapuram, Salem, Tirunelveli, Tiruvallur and Virudhunagar.

- The Tamil Nadu Prevention of Illegal Mining, Transportation and Storage of Minerals and Mineral Dealers Rules, 2011
- The Mineral (Evidence of Mineral content) Rule, 2015 and
- Notifications, orders and circulars issued by the Government and the Department.

5.4.1.5 Acknowledgement and limitation

Audit acknowledges the co-operation extended by the department in production of records and information required for the purpose of this audit. Audit expresses gratitude to Survey of India for supplying co-ordinates for ground control points falling in Kancheepuram, Tirunelveli and Virudunagar, the three districts selected for UAV study, and to the Madras Institute of Technology (MIT), affiliated to Anna University, Chennai, which conducted the UAV study and gave a report. However, UAV study could not be conducted in Kancheepuram district as the District administration requested Audit to defer the study, given that a writ petition had been filed against the study. Audit was named as the first respondent, and the Hon'ble High Court of Madras had passed oral orders⁵⁰ not to cause any inspection of quarries by Audit. While Audit filed counter-affidavit immediately, the department had not filed counter-affidavit till January 2019, resulting in postponement of hearing. Due to this, the UAV study in Kancheepuram district could not be conducted, despite having been selected on the grounds of high risk potential.

During the Exit Conference, the Government stated that as the reported oral orders was relating to inspection by audit team, there would be no bar on the department officials to do the same and therefore concerned officials of DGM could accompany the Technical Consultant, viz., Madras institute of Technology Campus, Anna University so that the UAV study of the third site could be completed.

AUDIT FINDINGS

Audit findings as a result of examination of records of 14 out of 28 district offices are given in the succeeding paragraphs. Since these were the results of test check of sampled district offices only, Government may get the position examined in the remaining 14 district offices as this exercise is likely to yield considerable revenue to the exchequer.

5.4.2 Exploration of mineral resources

The mining reserves can be classified into two categories – undiscovered resources and identified resources. Undiscovered resources are believed to be existing, based on geological and remote sensing findings (reconnaissance operations), but the extent and quantity are not known. Based on geological findings, the persons interested in extracting the minerals for their business purposes, apply for a prospecting licence and explore the areas to identify and extract the minerals. The exploration of identified resources is carried out through obtaining of mining lease. Government's mineral policy shall necessarily focus on exploration of minerals and optimum utilisation of

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In WP Nos.28895 of 2018 and 30490 of 2018

discovered minerals. Observations relating to mineral policy and management of mineral resources are discussed in the following paragraphs.

5.4.2.1 Delay in formulation of State Mineral Policy

A mineral policy was required to identify opportunities, regularise and simplify mining process and also designed to check illegal mining. Although MMDR Act was introduced way back in 1957, the State had continued without a mining policy of its own. All the other Southern States, viz., Andhra Pradesh, Karnataka and Kerala have their own mineral policies. The first step towards a policy was contemplated only in December 2009, when a draft was prepared by the CGM on the lines of the NMP of the Union Government, and forwarded to the State Government. Later, the draft Policy was revised incorporating proposed provisions in the “Tamil Nadu Prevention of Illegal Mining Transportation and Storage of Minerals and Mineral Dealers’ Rules, 2011” (notified in January 2011) and resubmitted to Government in June 2011. As such, the State continued to administer mines and minerals without a comprehensive guidance through its own policy.

The matter was brought to the notice of Government in January 2019. During the Exit Conference, Government stated that due to change in policy of Government of India, exploration of major minerals had come down while the minor minerals continued to be governed by TNMMCR 1959. It was agreed that the State Mineral Policy would be reviewed in this context.

The amendments brought into the MMDR Act (January 2015) had entrusted all activities leading to mining of minerals to the State Government and also mandated auction of lease. The change in policy of GoI had actually necessitated review of mining policy for major minerals also. Therefore, the Government may reconsider.

5.4.2.2 Delay in formulation of Granite Policy

India possesses one of the best granite deposits in the world and has numerous varieties comprising over 200 shades. India accounts for almost 20 *per cent* of granite deposits in the world. A separate set of regulations in the form of GCDR had been formulated by GOI (1999) for mining of granite.

The State of Tamil Nadu have formulated separate regulations for granite within the TNMMCR 1959. Rule 8A of the rules *ibid* empowers the Government to lease its lands to any person for granite quarrying through open tender process. Rule 8C provides for granting of lease to public sector companies on Government lands by nomination basis. The first move to have a separate granite policy was contemplated way back in 2009 envisaging

- A transparent process for granting surface rights to be followed
- Mining near water bodies and archaeological monuments and in reserve forests to be discouraged
- Expeditious process of approval of leases
- Utilisation of granite waste for public purposes and thus reducing environmental impact of accumulation of such waste

Audit analysis revealed that the Government did not grant, during the period of Audit coverage, any lease under Rule 8A on open tender basis but all leases for quarrying granite on Government lands were issued to TAMIN under Rule

8C. This is because, the proposed granite policy in 2009 favoured continuation of lease of Government lands for granite quarrying only to PSUs.

Audit noticed, while verifying relevant records, that TAMIN had surrendered 40 out of 138 granite leases during the period of audit. Test check of seven of the surrendered leases (relating to four districts) revealed that they had a proven reserve of 25,47,005 cu.m valued at ₹68.47 crore (based on mining plan of TAMIN). This vast reserve had remained unexploited due to non-leasing of lands under Rule 8A.

A fresh draft policy was submitted to the State Government in 2012 but the State Government asked the CGM (June 2016) to modify the same based on the NMP of the Union Government. In the new draft granite policy 2017, the Government had proposed to introduce grant of granite leases under Rule 8A of TNMMCR 1959. However, GoTN decided that the policy would be notified only after the pronouncement of NMP of the Union Government. The NMP has since been approved by GoI on 28 February 2019. Thus, even after more than ten years had elapsed since an exclusive policy on granite mining in the State was proposed, the same was yet to see the light of the day.

The matter was brought to the notice of Government in January 2019. During the Exit Conference, Government agreed to review the need for State Mineral Policy.

5.4.2.3 Non-utilisation of funds from National Mineral Exploration Trust (NMET)

Exploration is an important activity to identify mineral resources. Under the erstwhile (prior to 2015) system of allotment of grants, the Reconnaissance Permit holders had preferential right to Prospecting Licences (PLs) and the holders of the licences had preferential right to mining leases, the allotment being made on first-come-first-serve basis. In the amended MMDR Act 2015, exploration was declared as isolated activity to be carried out by only Government or its agencies or to be outsourced to private entities without any further right or preference towards subsequent processes such as prospecting and mining.

The Mineral (Evidence of Mineral Contents) Rules, 2015 recognised four stages of exploration viz (i) G4 - Reconnaissance Survey, (ii) G3 - Preliminary Exploration, (iii) G2 - General Exploration and (iv) G1- Detailed Exploration. Auction of blocks would be conducted only after the exploration of all stages, preferably, by the Department. The State formed an exploration wing in 2007, for a period of five years. The wing consisted of geologists and assistant geologists to assist other officials and provide technical know-how in processing of documents relating to grants. The wing, however, was not continued to function beyond the first five-year tenure.

Consequent to closure of the exploration wing in 2012, the CGM, recommended (September 2015) to the Government that a preliminary prospecting/prospecting level exploration in respect of the 12 projects furnished by the GSI (three in respect of the mineral molybdenum, two in respect of limestone, three in respect of graphite and four in respect of iron ore). During the meeting held (April, 2016), among the officials of the Office of the CGM, IBM and GSI, in the capacity of the members of the

Comprehensive Regional Mineral Exploration, 12⁵¹ blocks for mineral exploration identified were discussed. As a follow up, Mineral Exploration Corporation of India Ltd (MECL) requested (May 2016) to provide the Geological reports, basic data of the said blocks. However, there was no further action on this proposal (January 2019). Five more proposals forwarded by MECL in September 2017 also did not materialise due to shortfall in lease area proposed. The discontinuance of the exploration wing, which assumed importance after the year 2015 from when reconnaissance operations were entrusted to State Governments, thus, had a negative impact on the progress of exploration in the State.

The Union Government constituted the National Mineral Exploration Trust (NMET) in January 2015 to fund exploration projects of States. The trust was being funded by contribution of existing lessees at the rate of two *per cent* on the royalty paid by them. While seeking funds for the projects, the States had to enter into a tripartite agreement with the Ministry of Mines and MECL assuring payment of 50 *per cent* of the one-time lease amount accrued to the respective State on tendering the projects funded through NMET. The Trust was, therefore, meant to encourage exploration activities by the States to discover new resources and thus earn incremental revenue by tendering mineral extraction. The State had deposited ₹ 28.04 crore as contribution to NMET (upto March 2018), but could not seek any funds, since it had no viable exploration project in hand.

The matter was brought to the notice of the Government in January 2019. During Exit Conference, the Government replied that since the extents in all the projects under exploration were below the criteria specified, NMET had been addressed to relax the minimum area requirement. It was also stated that the NMET had approved five exploration projects that are carried out by MECL, NLC and KIOCL.

5.4.2.4 Non-exploration of Molybdenum

Molybdenum is a refractory metal used as an alloying agent in steel, cast iron and super alloys to enhance strength and as a corrosive resistant. The mineral is also employed in automobile industry to reduce the weight of steel parts whereby fuel efficiency is increased. As per IBM database, out of 19.37 million tonnes of Molybdenum resources in India, 10 million tonnes (52 *per cent*) are found in Tamil Nadu.

Audit scrutiny of relevant records revealed that GoTN granted (August 1995) PL to TAMIN to explore the molybdenum deposit over 201.665 hectares in Dharmapuri district for five years. The company entered into MOU with GSI and MECL for the exploration in 1998. But the project could not be completed within five years and extension was not granted since this was not permissible under MMDR Act. GSI prepared a feasibility report in 2007 for assessing sufficiency of reserve in Velampatti South Block and a sum of ₹ 6.84 crore was jointly incurred by GoI, GoTN and TAMIN. In 2015, it was found that the ore was of marginal grade and hence it was decided to explore North Block. Although this exploration was approved by Standing Committee

⁵¹ One containing Iron Ore, one containing Bauxite, one containing Copper, Lead, Zinc & Gold and another nine blocks containing Limestone.

on Promotional Projects Technical Committee in June 2015, no further progress was made (September 2018). Due to delay in exploration, the Molybdenum reserve in the State had remained unexploited, which resulted in loss of revenue in the form of royalty. Thus in the absence of an approved mineral policy, there were no major discoveries of mineral deposits in the State during the period covered by audit.

The matter was brought to the notice of Government in January 2019. During Exit Conference, the Government replied that the details of valuation of molybdenum had been sought for from IBM and upon receiving the same, leasing through auction would be contemplated. Land Availability report and Forest Clearance Report NOC for auctioning blocks have been sought for from the district Collectors.

5.4.2.5 Inadequate efforts in taking up M-sand from Granite waste and Charnockite quarries

GoTN (August 2011) decided to implement the project of manufacturing of M-sand⁵² from Granite waste and Charnockite quarries by TAMIN as it was the best alternative to river sand as being eco-friendly, economical, more durable and stronger and there was also increasing demand.

TAMIN undertook efforts for exploration of Charnockite during the years 2012 to 2015. GoTN accepted the proposal of TAMIN (July 2016) for the allotment of Charnockite quarries in Vellore for establishing M sand unit in Arakonam Taluk at a total Project cost of ₹ 14.70 crore (contribution 60 *per cent* and Term loan 40 *per cent* - with conditions to rope in private partner).

GOTN (August 2016) permitted TAMIN to transport stones from four granite quarries in three⁵³ districts under Rule 36 (3) of TNMMCR. TAMIN (December 2017) requested the GoTN to reserve the areas and to grant lease under Rule 8 C (7) of TNMMCR 1959 as in the case of granite and not to collect lease rent as recommended by Commissioner of Land Administration. CGM, stating that TAMIN was not financially sound to make huge payments, did not grant the lease.

Though the M-sand project was perceived to have many advantages, manufacturing was not taken up, in spite of having the raw materials and necessary government approvals in hand. Since the allotment of lease and permission to remove and transport quarry waste granted in 2016, no concrete decision had been taken to launch the project.

The matter was brought to the notice of Government in January 2019. During Exit Conference, Government accepted the audit observation and instructed the department to complete the execution of the project as envisaged.

5.4.3 Processing of grant of mineral concessions

Extraction of minerals is authorised through leases by the Union and State Governments. Leases and quarrying permits issued, for the purpose of administration of minerals by Government, were termed as grants. As on 31 March 2013, there were 3,467 leases in the 14 selected districts. During the

⁵² Manufactured sand

⁵³ Dharmapuri, Tiruvallore and Vellore

period of audit, 1,963 new leases were granted in 14 selected districts. Out of 5,430 cases, 2,285 cases (42 *per cent*) were selected for scrutiny in the 14 districts, audit found irregularities / discrepancies in 828 cases (36 *per cent*) as mentioned in the paragraphs 5.4.3.1 to 5.4.4.8.

5.4.3.1 Pursuance/Granting of Leases on Applications that should have been rendered invalid

The GoI introduced, inter alia, Sections 10A and 10B, through an amendment to MMDR Act 1957, with effect from 12 January 2015, rendering all applications made before 12 January 2015 ineligible and grant of mining lease in respect of notified minerals through auction. However, under Section 10A(2)(c), protection was given to applications wherein a letter of intent had been issued or previous approval of GoI under Section 5(l) had been obtained prior to 12 January 2015. The Supreme Court in the Bhushan Power and Steel Ltd. Vs Government of Odisha⁵⁴ observed that letter of intent could be valid only if issued by a competent authority. Section 6(1)(b) of MMDR Act and Rule 22D of MCR read with Section 13 of the MMDR Act empowered GoI to relax the prescribed maximum and minimum extents respectively for grant of leases.

During the check of files relating to 13 leases which were protected by the provisions contained in Section 10(A)(2)(c), audit noticed discrepancies in 5 cases. In these cases, wherein application for mining limestone was made before 12 January 2015, the GoTN issued letter of intent (in all cases the precise area communication was treated as letters of intent) prior to the notification and then proceeded on to grant lease/kept them pending, after 12 January 2015, in contravention of the provisions of the amended Act and observations of the Supreme Court. The details are as follows:

- (i) In the case of M/s. Dalmia Cements (Bharat) Ltd., the lessee applied for a lease in September 2001 and GoTN forwarded the application of relaxing minimum area requirement to GoI in August 2012. The relaxation was approved by GoI only on 29 January 2015, after the amendment of the Act on 12 January 2015. Since GoTN was incompetent to issue a letter of intent and as the relaxation by GoI was not received before amendment, the application should have been treated as invalid as per Section 10A(1) of the Act. Instead, GoTN proceeded to grant the lease in May 2015.
- (ii) In the case of M/s India Cements Ltd., the lessee had applied for a lease in 2005 for mining limestone in a non-contiguous area, which in total exceeded 10sq kms and hence had to be ratified by GoI. The GoTN approved the lease under Section 6(1) (c) and forwarded (treated as letter of intent) the proposal to GoI, recommending the lease proposal, in 2013. The proposal was not approved but GoI issued an order in 2016 that GoTN on its own could decide cases relating to ratification of 10 sq.km to 50 sq. kms of lease applied for. Since GoTN was not competent to issue the letter of intent before the amended

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Contempt petition (Civil) No. 275 of 2016 (Civil Appeal no. 2790 of 2012)

provisions, the application should have been rendered redundant. But the CGM granted the lease in January 2017.

- (iii) In two more cases of application for lease by M/s.Dalmia Cement (Bharat) Ltd. applied in February 1996, the letter of intent was issued in 2005 and the same was also communicated to GoI in 2005 but the GoI did not communicate any approval. In the meantime (July 2010), TANCEM requested GoTN to grant lease on the same extent. As GoTN did not decide the case, M/s. Dalmia Cement (Bharat) Ltd. went on appeal, and was granted (January 2017), as an interim measure, lease in its favour but was barred from mining till the final decision of GoTN. Instead of treating the application as invalid, GoTN remained indecisive, that resulted in appeal. Otherwise, the lease could have been granted on auction basis which would have been revenue-accretive to the Government.
- (iv) In the case of M/s. Madras Cements Ltd., which applied for lease in 2007, the precise area communication sent to applicant in 2011 was subsequently cancelled by GoTN (March 2013). Therefore, there was no letter of intent as on 12 January 2015. As the GoTN remained indecisive, the lessee went on appeal in December 2016 wherein it was granted lease as an interim measure but was barred from mining. Had the Government decisively treated the application as invalid under the revised provisions of MMDR 1957, the extent could have been auctioned and revenue earned.

Thus, in two cases, GoTN, granted leases on the basis of letters of intent issued without competence and in the remaining three cases, it remained indecisive, leading to valuable resources having been blocked for mining. The value of minable reserve involved in these cases was ₹ 1,849.84 crore.

This was brought to notice of the Government in January 2019. During Exit Conference, the Government replied that the delay in approval for relaxation of extent was on the part of GoI and the intention of GoI in granting the approval, even if after January 2015, was to facilitate approval of lease. The reply was not acceptable since the approval was only for the extent of land and the lease applications should have been treated as invalid as soon as MMDR was amended in January 2015. The reply had also not addressed the issues of invalid and cancelled letters of intent.

5.4.3.2 Non-adherence to provisions of Acts / Rules while granting lease/permit

Audit noticed non-adherence to the provisions of Acts/Rules while granting leases/permits in six cases as detailed below:

- (i) The District Collector shall by notification in the District Gazette, published in the month of April every year, call for applications for direct grant of leases of stone quarries to the registered Swarna Jayanthi Gram Swarozgar Yojana Groups (SGSY) or societies formed by released bonded labourers. As per one of the conditions of Rule 8(10-A) of the TNMMCR 1959 for direct grant of leases, all the

members of the applicant society should have worked in a stone quarry for not less than two years and a certificate from the District Collector to that effect should have been enclosed. Audit noticed in the office of the DDGM, Dindigul, that three societies did not furnish the certificate from the District Collector for leases applied during 2016 and 2017, but leases were granted.

This was brought to notice of the Government in January 2019. During Exit Conference, it was stated that requisite certification was available and would be produced.

(ii) A lessee was granted permit by DDGM, Tiruvallur on 4 August 2016 to remove 4,758 lorry loads of savudu (a form of gravel). While the period of grant was 60 days, the lessee removed the entire quantity in 17 days. A complaint was received by the department later (September 2016) that the lessee was not the person who originally applied for lease. Had the department been tracking the removal, it would have been alerted by hurried removal of mineral.

(iii) According to Rule 12 of TNMMCR 1959, a notification shall be issued inviting applications for quarrying in tanks in charge of Public Works Department (PWD) for which desilting is required. The information on the requirement would be made known to public only through the notification. However, in the office of the DDGM, Madurai, audit observed that an applicant made an application for quarrying in a tank bund in 2012, whereas the requirement was actually notified only in 2014. The application was also processed and quarrying granted in 2016 instead of treating the application invalid and premature. On this being pointed out (February 2018), the DDGM, Madurai replied (March 2018) that the issue was procedural and there was no irregularity in grant. The reply was not acceptable since the application was pre-mature and hence needed to be treated as invalid.

(iv) In District Office Madurai, a lessee was granted permission to quarry gravel for a period of one year from 23 November 2013 to 22 November 2014. It was noticed from the letter dated 12 March 2015 that the Permit Holder did not register the lease deed even after the expiry of the lease period. However, he was permitted to quarry and remove 4,320 m³ of gravel, resulting in not casting contractual obligation on the permit holder, besides loss of stamp duty. On this being pointed out (July 2018), DDGM (Madurai) replied (July 2018) that the lease agreement was executed on 23 November 2013 in stamp papers and was sent to the Registering Officer through the lessee to register the document. Thus, it was contended that there was no loss of stamp duty. The department did not follow as to whether the deed was registered, but granted permit. The registered document was not obtained by the department till date. Therefore, the reply was not acceptable.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.3.3 Delay in processing of applications for lease of minor minerals

As of 31 March 2018, the total number of applications for grant of lease pending for approval was 1151 in the 14 selected districts as per the details furnished by the district offices. Audit noticed in three⁵⁵ district offices that 57 applications out of 1151 (five *per cent*), relating to major minerals, that should have been rendered ineligible from 12 January 2015 due to amendments introduced to the MMDR Act 1957, continued to be shown as pending.

Out of the remaining 1,094 applications relating to minor minerals, 317 applications (29 *per cent*) were selected for scrutiny. The duration of pendency of lease applications was mentioned in Table 5.4.

Table: 5.4

Year-wise analysis of pendency

Duration of pendency	No. of applications
<1 year	84
1-5 years	156
5-10 years	51
More than 10 years	26
Total	317

(Source: Details furnished by department)

While a small percentage of the pendency related to applications without necessary documents, most of the applications were pending with various departments as described in Table 5.5.

Table: 5.5

Reasons for pendency

Reason for pendency	No. of applications
Pending for want of documents from lessees	43
Pending with G&M department	47
Pending with Revenue department	201
Pending with other departments (PWD, Industries, etc.)	26
Total	317

(Source: Details furnished by department)

The pendency with Revenue Department was mainly because of field inspection report and land availability report not furnished by them. Shortage of personnel had been one of the reasons that contributed to delay in processing of lease proposals and consequent potential revenue loss by way of non-accrual of SF to Government.

This was brought to notice of the Government in January 2019. During Exit Conference, the Government replied that all the applications rendered invalid by law would be expeditiously disposed off and pending lease applications would be cleared through a special drive.

⁵⁵ Dindigul, Karur and Kanyakumari

5.4.3.4 Registration of lease deed

An amendment to MMDR Act, 1957 was introduced on 12 January 2015 introducing Section 6, among other Sections, mandating extension of all existing notified major mineral leases upto (a) the year 2030 or (b) fifty years from the date of original lease or (c) the currency of existing lease, whichever is later. It was laid down that the leases shall not be granted any further extension. As per Rule 31(2) of the MCR 1960 the date of commencement of the period for which a mining lease is granted should be the date, on which a duly executed lease deed was registered. According to Section 17 of the Indian Registration Act, 1908, any lease beyond the period of one year is a compulsorily registrable document. Besides compliance to above rules, registration of lease deeds is essential to protect the rights of the Government. Audit observed the following with regard to registration of lease deeds.

Non-revision of lease deed

In 14 selected districts, there were 275 major mineral leases in five⁵⁶ districts. Audit noticed that neither modified nor supplementary lease deeds, as prescribed in the format in the MCR, 2016, were executed and registered in 70 leases. The lessees were permitted to remove minerals on the strength of the conditions imposed by the erstwhile provisions of the Act. This, besides not casting contractual obligation in consonance with the amended provisions, also postponed the accrual of revenue, by way of stamp duty to the extent of ₹ 70.74 crore.

This was brought to notice of the Government in January 2019. During the Exit Conference, Government replied that format of new lease deeds were being vetted by Law Department and on completion of vetting, supplementary lease deeds would be executed.

Non registration of lease deeds by ONGC

As per Rule 5(1) of Petroleum & Natural Gas Rules, 1959, a Petroleum Exploration Licence (PEL) and Petroleum Mining Lease (PML) for On-land Exploration and Mining of Petroleum had to be issued by the State Government with the prior approval of GoI. Ministry of Mines (MoM) and Fuel directed (February 1963) that a fresh deed may be executed on every renewal, irrespective as to whether the original and renewal terms and conditions were identical or not.

Out of 25 PMLs held by ONGC, five Leases in Nagapattinam and Ramanathapuram Districts became due for renewal on expiry of the earlier Lease period. However, no lease deeds were executed and registered on such renewals. In all these leases, the lessee had started commercial production. Hence, non-registration of lease deeds in these five cases resulted in inadequate safeguard of Government's right to enforce contractual obligations, besides incidental loss of stamp duty to the extent of ₹ 8.09 crore.

⁵⁶ Ariyalur, Dindugul, Karur, Tirunelveli and Salem.

The issue was initially pointed out in Para Number 9.2.18 of the report of Comptroller and Auditor General of India for the year ending 31 March 1989, and the PAC recommended that the issue might be taken up with the Union Government. On further being pointed in the report of Comptroller and Auditor General of India for the year ending 31 March 2004, the Government replied in 2014 that it was in touch with GoI regarding this issue and PAC had directed for updation of the case. For fourteen years, the issue had not been resolved.

Loss of revenue due to inoperative leases

According to Rule 28 (1) of the MCR 1960, where mining operations were not commenced within a period of one year from the date of execution of lease or was discontinued for continuous period of two years after commencement of such operations, the State Government shall, by an order, declare the mining lease as lapsed and communicate the declaration to the lessee. However, explanation 2 under the Rule prescribed that where the discontinuance of mining operations for a continuous period of two years after the commencement of operations is on account of (a) orders passed by any statutory or judicial authority or (b) operations becoming highly uneconomical or (c) strike or lockout, the State Government may consider as sufficient reasons for discontinuance.

Audit noticed in four⁵⁷ of the 14 selected districts that in 77 cases, leases were rendered inoperative due to non-obtaining of Environment Clearance (EC).

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.4 Control of system of mineral administration

Mining dues or receipts of the Geology and Mining Department include SF / royalty, dead rent, surface rent, area assessment, cost of mineral, fees, penalties, interest, one-time lease amount, application fees, etc. The audit observations relating to controls of system of mineral administration, assessment and collection of mining dues are detailed in succeeding paragraphs.

5.4.4.1 Online Mining Tenement Registry System

The NMP 2008 envisaged creation of Online Mining Tenement Registry System (OMTRS), which was a GIS based on geo-referenced cadastral maps with the details of mining lease areas displayed online. The objective of OMTRS was to attract investments into mining sector for exploiting geological potential through state-of-art technologies and simplify the process of grant of mineral concessions in the interest of greater transparency. An integrated database creation of OMTRS was initially proposed (October 2011) for three⁵⁸ districts at a cost of ₹ 36 lakh and Electronics Corporation of Tamil Nadu (ELCOT) was entrusted with the responsibility of finalising the agency

⁵⁷ Ariyalur, Dindigul, Karur and Tirunelveli

⁵⁸ Coimbatore, Salem and Tirunelveli.

to develop the system. Extension of the system to six⁵⁹ more districts was accorded at a cost of ₹ 72 lakh in June 2012. However, ELCOT could finalise (February 2013) the tender for three districts originally planned at an elevated cost of ₹ 69.38 lakh. The Tiruchirappalli district was added to the proposal at a further cost of ₹ 11.52 lakh. The Government also granted (May 2013) ₹ 63.23 lakh towards purchase of four servers, GIS software, etc. The work was reported to be completed (March 2016) but data relating to three districts alone were uploaded in the State Data Centre. Almost 10 years since the commencement of the project, only four districts were mapped and, therefore, the objective of the project could not be fully achieved.

Audit individually checked the mappings of OMTRS by collecting the kmz⁶⁰ files of OMTRS data along with DGPS⁶¹ points of the leases from the Department. When these files were loaded in Google Earth Pro⁶², the lease boundaries were automatically mapped in shapes of polygon and the details⁶³ relating to the lease was also automatically loaded. Each lease was analysed for existence of pit violation⁶⁴ and dumping violation⁶⁵. During this check, audit noticed that-

- Out of the total of 342 leases in three districts, 77 leases (23 *per cent*) were not mapped.
- While Rule 12 of the Mineral Concession Rules, 1960 (MCR) bars grant of lease within a distance of fifty metres from, inter alia, reservoir, canal or other public works such as public roads or buildings, audit noticed 89 cases, wherein leases were granted within the proximity of water bodies, public roads, etc.
- There were 70 cases relating to dumping violations.
- There were 64 cases relating to pit mouth violations resulting in illegal mining.

Audit further investigated pit mouth violations, by obtaining the area of violation from the maps and adopting the depth of the mining plan approved for contiguous mine to estimate the quantity of mineral illegally removed. Audit calculated the extent (area) of violation from the Google Earth by drawing a polygon in the exact mined area. The depth of the pit was arrived taking the minimum depth (in case of more than one pit) from the mining plan of the respective lease. Then, the volume of illegally excavated mineral was calculated by multiplying the area and the depth. In case of minerals, other

⁵⁹ Ariyalur, Krishnagiri, Madurai, Tiruchirappalli, Villupuram and Virudhunagar.

⁶⁰ KMZ is a compression version of KML. KML stands for Keyhole Markup Language containing information regarding geographic annotation and visualization within two-dimensional and three-dimensional maps of earth.

⁶¹ Differential Global Positioning System is used to broadcast the difference between positions indicated by the satellite system and the known fixed positions in earth. These points help in aligning maps procured from two different sources.

⁶² Google Earth Pro is a software application that helps in viewing satellite imagery and exploring the geographical content. It has an inbuilt package of satellite imagery of geographical locations of the earth across different time period.

⁶³ Details such as Government Order, approved Extent of area, latitude, longitude, name of the lessee, period of lease, etc.

⁶⁴ Pit violation refers to mining beyond the approved extent of lease.

⁶⁵ Dumping violation refers to dumping of waste material beyond the approved lease boundaries.

than granite, the weight of mineral was calculated by multiplying the volume and the specific gravity and/or bulk density specified in the mining plan. The volume and the weight were adjusted for the recovery factor mentioned in the mining plan. The cost of limestone was arrived by taking the price mentioned in the IBM's average sale price for March 2018 and pit mouth cost for the period from January 2016 to March 2018 as furnished by TAMIN was adopted for cost of granite. During the exercise, it was found that the potential loss on account of non-recovery of cost of mineral was ₹ 1,586.00 crore in 42 cases involving an area of 99.13 hectares in Salem and Tirunelveli districts. Due to non-furnishing of mining plans, audit could not estimate the cost of mineral recoverable in 22 cases of pit violations involving 76.06 hectares.

This was brought to notice of the Government in January 2019. During Exit Conference, Government replied that technology would be employed for effective administration and also agreed to utilize the existing OMTRS data as a control mechanism to detect illicit mining.

5.4.4.2 Follow up action taken on triggers issued by Mining Surveillance System

Mining Surveillance System (MSS) was a satellite-based monitoring system which aimed to establish a regime of responsive mineral administration, through public participation, by curbing instances of illegal mining activity through automatic remote sensing detection technology.

Ministry of Mines, through IBM, developed the MSS, in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY), to use space technology for curbing illegal mining activity in the country. In the MSS the Khasra⁶⁶ maps of the mining leases had been geo-referenced. The geo-referenced mining leases were superimposed on the latest satellite remote sensing scenes obtained from CARTOSAT and USGS⁶⁷. The system checked a region of 500 meters around the existing mining lease boundary to search for any unusual activity which was likely to be illegal mining. Any discrepancy if found was flagged-off as a trigger.

Automatic software image processing technology would generate spontaneous triggers of unauthorized activities. These triggers would be studied at a Remote Sensing Control Centre of IBM and then transmitted to the district level mining officials for field verification. The reports of the field verification were sent to the Ministry through a mobile app named Mining Surveillance System.

Audit noticed that MSS had generated 45 triggers in six of the fourteen district offices visited during the selected period. Inspection were conducted by the

⁶⁶ Khasra is a legal agricultural document that details all the fields and their area, measurement, who owns and what cultivators he employs, what crops, what sort of soil, what trees are on the land etc.

⁶⁷ The CARTOSAT series of satellites are a type of earth observation satellites indigenously built by India. They were specifically launched for Earth's resource management and monitoring. USGS - United States Geological Survey.

department in 44 cases and unauthorised activities were reported in 13 cases mentioned in Table 5.6.

Table: 5.6

Details relating to verification of triggers communicated by MSS

Office	Triggers issued by MSS	Report forwarded to CGM after verification	Unauthorised activity detected by DDGM	Notice issued to lessees
Ariyalur	10	9*	-	-
Dindigul	4	4	1	-
Kancheepuram	9	9	1 ⁺	-
Karur	2	2	-	-
Salem	10	10	3 ⁺	-
Tirunelveli	10	10	8	7**
Total	45	44	13	7

(Source: Details furnished by the Department)

* DDGM Ariyalur stated that trigger information had been received by him only in respect of 9 cases.

** No follow-up action has been taken in respect of any of 7 cases by DDGM Tirunelveli.

+ Illegal mining activity by unknown person(s).

Audit, however, analysed all 32 triggers in which the department did not find any illegal activity, and identified illicit activities in three triggers as detailed below.

➤ **Trigger TMN052018**

The DDGM Kancheepuram, on verification of the site in June 2018 reported that the area was plain tariff government land and no mining activity was found. Audit, on analysis of maps available for different periods in Google Earth, noticed presence of mining vehicles, such as excavators and trucks, in the mined area indicating mining activity. Further, a comparison of satellite imagery between two time periods (Between August 2017 and January 2018) revealed substantial mining activity around one trigger. Audit also observed that while the triggers issued as per the attachment specified two map co-ordinates for verification [12 44 55.069N 79 52 37.403E and 12 44 52.743N 79 52 42.955E], the recitals of the e-mail from IBM forwarded to the District Officer by the CGM actually indicated a different co-ordinate [12.748523564314, 79.87787715932463 [12° 44' 54.7"N, 79° 52' 40.4"E]. The District Officer verified the incorrect co-ordinate forwarded and reported nil activity. Neither the department nor the Government furnished details about clarification, if any, sought for from IBM about incorrect trigger and co-ordinates, to Audit. Thus, due to non-perusal of connecting map attached to the e-mail as an image, the purpose of trigger flagging illegal activity was defeated.



Figure 1: Comparison of satellite imagery taken on 07.09.2017 and 07.01.2018 revealed that area around one of the trigger points was mined



Figure 2: DDGM (Kancheepuram) incorrectly verified co-ordinates (red circle) which are not mentioned in the MSS trigger report (green circles)

Trigger TMN062018

With regard to trigger TMN062018, DDGM (Kancheepuram), after inspecting the site in July 2018, reported the area as hilly terrain government land and found no mining activity. However, map analysis of time series maps in Google Earth photos (Between May 2017 and January 2018) revealed mining activity.

Audit also observed that while the triggers issued as per the attachment specified two map co-ordinates for verification [12 43 44.311N 79 50 53.093E and 12 43 45.078N 79 51 5.716E], the recitals of the e-mail from IBM forwarded to the District Officer by the CGM actually indicated a different co-ordinate [12.729071396372056, 79.8500245695893 12° 43' 44.7"N, 79° 51' 00.1"E]. The District Officer verified the incorrect co-ordinate forwarded and reported nil activity. Neither the department nor the Government furnished details about clarification, if any, sought for from IBM about incorrect trigger and co-ordinates, to Audit. Thus, due to non-perusal of connecting map attached to the e-mail as an image, the purpose of trigger flagging illegal activity was defeated.



Figure 3: Analysis of satellite imagery on 04.05.2017, 07.09.2017 and 07.01.2018 revealed significant mining activity in both locations of the trigger



Figure 4: DDGM (Kancheepuram) verified co-ordinates (red circle) which are not mentioned in the MSS trigger report (green circles)

➤ **Trigger TMN20**

In one of the trigger sites⁶⁸ jointly inspected by the members of the audit party and Department officials, the activity that raised the trigger was found to be dumping of waste outside the leased area. The waste remained in the same area and no further action was initiated by the Department for the illicit dumping of waste outside the leased area.

This was brought to notice of the Government in January 2019. During the Exit Conference, Government replied that a dedicated control room would be established to monitor suspicious activities over the leased areas and sufficient desk review would be undertaken before embarking on inspection. Further report was awaited (March 2019).

5.4.4.3 Audit Analysis of Mines by using Unmanned Aerial Vehicle

Based on analysis of OMTRS data and MSS triggers, audit selected three quarries (one each of rough stone, limestone and granite) in Kancheepuram, Tirunelveli and Virudunagar districts for mapping, volume calculation and modelling, by deploying UAV and Differential Global Positioning System (DGPS). The Centre for Aerospace Research (CASR), Anna University was engaged as a consultant for this purpose. However, due to aforesaid appeal and oral orders, UAV study could not be carried out in Kancheepuram District, wherein unauthorised mining activities, over an area of 24.7 Ha, beyond the period of lease, were identified by Audit through satellite imagery. Hence, volumetric quantification in respect of illegal removals in this district could not be projected and UAV analysis was restricted to Tirunelveli and Virudunagar districts. Audit accompanied the consultants along with department staff as well as Revenue Department during the site visits.

⁶⁸ Chettinadu Cement Corporation, in the District of Dindigul

- The consultant's report for granite mines situated in Pillaiyarkulam village of Virudhunagar district revealed the following:
- The mining plan map of TAMIN did not match with actual lease boundaries and there was shift in boundaries indicating mining in unauthorised extent.
 - Time slider option in Google Earth, which provided historical images, indicated crane movements in the mining area between March 2011 and August 2018 during various periods.
 - Granite excavation was done in Survey No. 854A of Pillaiyarkulam village without approved mining plan.
 - Granite excavated in the above area were dumped in Survey Nos. 200/5A1 and 200/5A2 of Arasiyarpatti village, which was adjacent to Survey No.854A of Pillaiyarkulam village. These areas, according to revenue records, belonged to private persons.
 - Mining in unapproved extent was also traced in Survey No 800.



Figure 5: Inspection of Mines through UAV at Pillayarkulam Village

The total excess and illegal mining of granite in the above village as per the above report was quantified at 6,855.77 cu.m for which cost at the rate of ₹ 9,000 per cu.m and SF at ₹ 2,210 per cu.m. totally amounting to ₹ 7.69 crore due to be recovered (Annexure 4).

- The report by the consultant in the limestone mines situated in Sethurayaputhur, Ramayanpatti and Thenkulam villages of Tirunelveli district had the following findings:
- Limestone was excavated without proper mining plan and approval in Survey Nos. 501, 502, 503, 504, 393, 394, 396 and 397 of Ramayanpatti village.
 - Limestone was excavated without approval in Survey No.109 of Sethurayanputhur village.
 - Excess limestone excavated was dumped in Survey No.109 of Sethurayanputhur village.
 - Time slider option in Google Earth, which provided historical images, indicated presence of trucks, excavators and such heavy duty vehicles between the period from August 2003 and March 2016 in the mining area.

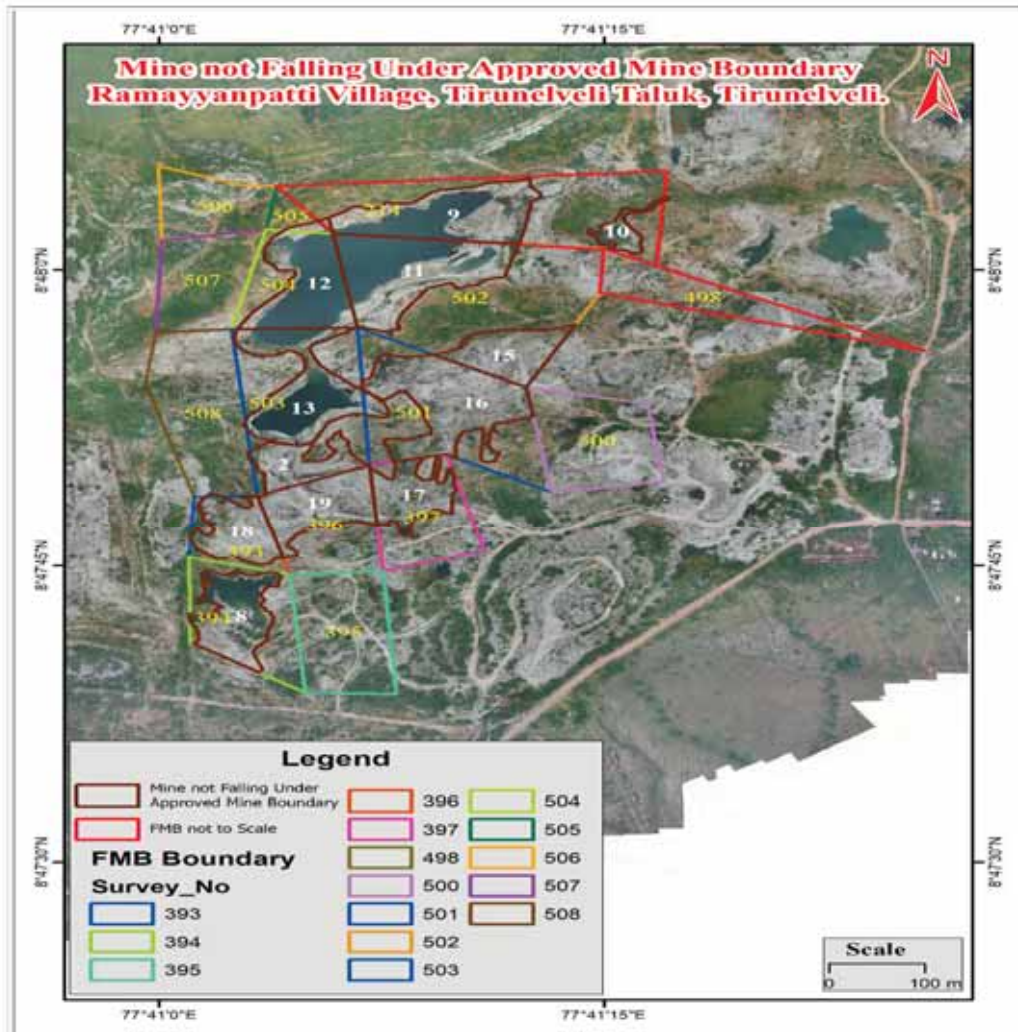


Figure 6: Inspection of Mines through UAV at Ramayyanpati Village

From the above report it is clear that there were mining activities happened during that period. The quantity of illegal and excessive mining of limestone in the above case was computed at 15,48,819 Tonnes. The cost and royalty for the mineral removed amounting to ₹ 71.55 crore (cost at the rate of ₹ 382 per Tonne and SF at ₹ 80 per Tonne) was to be imposed by the department and collected (Annexure 5).

Thus, absence of proper surveillance and enforcement mechanism in the Department resulted in a loss of revenue of ₹ 79.24 crore due to illegal removal of minerals.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.4.4 Removal of mineral without lawful authority

The Honourable Supreme court of India in the case of Common cause Vs Union of India held⁶⁹ that minerals excavated without Environmental Clearance (EC) was illegal and cost should be recovered for quantity thus mined without EC. Section 21(5) of the MMDR Act stated that whenever any person raised, without any lawful authority, any mineral from any land, the State Government recover from such person, the mineral so raised, or where such mineral had already been disposed of, the price there of, as the case may be. Audit observed the following cases of removal of mineral without lawful authority.

Removal of granite in excess of mining plan

Rule 19 of Granite Conservation and Development Rules, 1999, governing the leases for granites, stated that mining operations should be carried out in accordance with the approved mining plan, with such conditions, as have been prescribed and with such modifications permitted. Government authorised CGM, as the proper authority to approve the mining plans relating to granite leases and any further modifications that are made to the mining plan.

Audit scrutiny of granite leases in the selected districts revealed that the district officers improperly permitted removal of granite beyond the quantity mentioned in the approved mining plan in 56 granite leases in seven⁷⁰ districts. These cases pertain to illegal mining as per Hon'ble Supreme Court's decision, and warranted recovery of cost of minerals under Section 21(5) of the MMDR Act. However, department did not treat the removals illegal and continued to collect SF only. This resulted in non-collection of cost of granite amounting to ₹ 328.62 crore due to excess mining as detailed in Table 5.7.

Audit requested the district offices to produce the invoice details. In the absence of invoice details, the pit mouth cost of production for a lease pertaining to TAMIN (₹ 12,000 per cu.M for black granite and ₹ 9,000 per cu.M for colour granite) was adopted. The cost of the mineral that was to be recovered from the lessees worked out to ₹ 328.62 crore.

⁶⁹ WP (Civil) No.114/20145 dt.2.8.2017

⁷⁰ Ariyalur&Perambalur, Dindigul, Karur, Krishnagiri, Salem, Tirunelveli and Virudunagar

Table: 5.7

Cases relating to removal of mineral in excess of mining plan

Mineral	No. of leases	Excess Quantity removed (in cu.m)	Rate* of mineral per cu.m (in ₹)	Cost of mineral (3) X (4) (₹ in crore)
(1)	(2)	(3)	(4)	(5)
Black granite	14	52,659.927	12,000	62.96
Colour granite	42	295,172.412	9,000	265.66
Total	56	347,832.339		328.62

(Source: Details furnished by department)

* In the absence of invoice details, cost of production by TAMIN adopted

Removal of Rough stone in excess of mining plan

A review of the rough stone leases in three districts revealed that 47 lessees removed mineral in excess of the quantity approved in the mining plan. Department did not take action to collect cost as per Section 21(5) of MMDR Act. Therefore, the total cost of the rough stone excessively removed amounting to ₹ 220.33 crore remained uncollected as detailed in Table 5.8.

Table: 5.8 Excess removal of Rough stone

Sl. No.	Name of the Office	No. of Lessees in which excess removal was observed	Quantity in Cu.m	Cost of mineral (₹ in crore)
1	Kancheepuram	42	65,53,624	206.71
2	Karur	1	66,805	2.54
3	Virudhunagar	4	3,20,485	11.08
Total		47	69,40,914	220.33

(Source: Details furnished by the Department)

This was brought to notice of the Government in January 2019. During Exit Conference, Government agreed to introduce a facility to watch, through e-permit system, the quantum of mineral extracted and to stop issue of permit after the quantity approved through mining plan was fully achieved.

5.4.4.5 Non-determination of annual compensation fee for the leases in Government Lands

Rule 72 of the MCR, 1960 provided for payment of compensation to owner of surface right by the holder of quarrying permit or mining lease. Rule 72(1) empowers the District Collector to determine the annual compensation payable by licensee or lessee to the owner of the land. Thus, the holders of quarrying permit or mining lease over the Government Lands were liable for the payment of annual compensation to the Government.

During the course of verification of connected records, it was noticed in four districts that the annual compensation in respect of 27 leases were not determined as mentioned below in table 5.9.

Table 5.9: Annual compensation

Name of the District	No. of leases	Extent of land (In hectares)	Remarks
Kanyakumari	3	11.83.71	Annual compensation of ₹ 3.78 crore for the period from 1987-88 to 2016-17 fixed by the Revenue Divisional Office in June 2017. Action was not taken to collect the annual compensation. Further, annual compensation for the year 2017-18 was not determined.
Cuddalore	1	4.04.70	Annual compensation was not fixed so far.
Madurai	3	11.54.10	
Salem	20	264.94.00	
Total	27	292.36.51	

(Source: Details furnished by the Department)

On this being pointed out, the District Collector, Kanyakumari, instructed (September 2018) the Sub-Collector to fix the annual compensation for government poramboke lands with reference to Rule 72 of MCR. The ADGM Cuddalore replied (July 2018) that action would be taken after collecting the report from the RDO. The DDGM Madurai replied (October 2018) that action would be taken to fix and collect the annual compensation amount. The DDGM Salem stated (August 2018) that report was awaited from the RDO.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.4.6 Dead rent

According to Section 9A of the MMDR Act 1959, and according to Rules 8(10)(b) and 8(C)(7) of TNMMCR 1959, royalty/SF on the mineral removed or dead rent as agreed in the lease deed, whichever is higher, shall be payable by the lessee. As per Rule 13 (2) (a) of Petroleum and Natural Gas Rules, 1959, read with amended Proviso to the Rule 13 (2) (a) vide PNG Amendment Rules 2009, on the grant of a lease, the lessee should pay the dead rent or the royalty, whichever is higher and shall pay dead rent in advance for every year from the grant of Petroleum Mining Lease.

Non demanding of dead rent for major minerals

- In five⁷¹ out of 14 test checked district offices, action to collect dead rent from 76 limestone lessees amounting to ₹ 12.07 lakh, was not initiated. On being pointed out, DDGM Ariyalur replied that an amount of ₹ 0.61 lakh was since collected.
- In five⁷² out of 14 test checked district offices, dead rent, from 79 minor mineral lessees (other than granite), amounting to ₹ 6.35 lakh was not collected.
- In three⁷³ out of 14 test checked district offices, during the check of lease files relating to ONGC, audit found that dead rent of ₹ 2.31 crore for 2017-18 and differential dead rent of ₹ 9.65 crore for the period from 2013-14 to 2017-18, totally amounting to ₹ 11.96 crore was not collected. Besides, interest applicable at bank rate on belated payment should also be collected.

Lack of provision for levy of dead rent for granite in patta lands

According to Rule 19A(16) of the TNMMCR 1959, the lessee, besides area assessment, should pay SF at the rate prescribed from time to time for quarrying of granites.

The provision did not take into account the broad principle of levy of royalty/SF on any mineral excavated which should assure a minimum revenue to the Government from the lease granted. While dead rent was levied for Government lands, no such levy was included for patta (land owned by private persons) lands. In fact, all mineral leases, including oil and gas and atomic minerals, except granite on patta land, had the provision to levy SF or dead rent, whichever was higher. The present provisions in Rule 19A(16), however, denied revenue to Government in case where the lease was retained without operation. A decision in Andhra Pradesh High Court⁷⁴ had expressed levy of dead rent for patta lands as legally valid.

The lack of provision for levy of dead rent had resulted in revenue foregone amounting to ₹ 0.83 crore in 122 cases in ten out of 14 selected districts.

It is recommended that Rule 19A of TNMMCR 1959 may be amended to include levy of dead rent for patta lands.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

⁷¹ Ariyalur, Dindigul, Karur, Madurai and Tirunelveli

⁷² Cuddalore, Kancheepuram, Karur, Madurai and Nagappattinam&Tiruvarur

⁷³ Cuddalore, Nagappattinam&Tiruvarur and Ramanathapuram

⁷⁴ Enterprising Enterprises Private Limited Vs Govt of Andhra Pradesh 2003 (4) ALD 510 (519)/2003(3) ALT /2003 (8) ILD 610 (AP).

5.4.4.7 Non-collection of cost of mineral of Earth/ Savudu for quarrying permits granted

Permits for quarrying of minor minerals from unreserved waste lands other than bunds of water ponds or tanks were issued under Rule 7 of TNMMCR and quarrying permits for quarrying of sand, etc., from lands and tanks under the control of Public Works Department (PWD), Rural Development and Panchayat Raj Department were issued under Rule 12 *ibid*.

During verification of quarrying permits granted for earth/Savudu in the selected units, the following irregularities were noticed:

- (i) According to Rule 12, cost of mineral shall be collected on issue of permit to quarry. The department adopted the same cost for Rule 7 and Rule 12. However, there was no provision in Rule 12 to revise the cost as and when the cost under Rule 7 was revised. Therefore, for the identical quantities of same mineral, there was difference in cost determined under each of the Rules on a given date. Adopting the revised rates as applicable under Rule 7, audit identified that in 4 districts, there was a loss of revenue of ₹ 92.92 lakh in 33 cases. When this was pointed out, the department replied that there was no provision under Rule 12 to revise cost. But since Rule 12 was only a supplementary provision for left out areas under Rule 7, the difference in provisions was not justified and needed to be amended.
- (ii) In four out of 14 selected districts and in 32 cases, cost of minerals of ₹ 3.85 crore was not collected from the Executive Engineer of PWD department for removal of minerals and others. In respect of 30 cases, the department replied that cost was not collectible in case Government departments undertake quarrying but no reply was furnished in the remaining two cases. The reply was not acceptable since SF had been collected in all the cases. Further report was awaited (January 2019).
- (iii) As per the amended provisions of Rule 12 of TNMMCR, from 23 September 2015, both the cost of material to be quarried and SF should be collected before issue of quarrying permits. However, audit noticed in four out of 14 selected districts, in respect of 111 cases, both cost and SF were not collected prior to issue of permits. They were collected as and when the material was removed. This resulted in both short collection and postponement of collection of ₹ 26.45 crore by way of cost of the mineral and SF.
- (iv) As per existing provisions of Rule 7(5), whenever cost of minerals was revised, the revision would take effect from month of April retrospectively. Therefore, during every revision, the lessee had to pay differential cost calculated retrospectively. Audit observed in four out of selected 14 districts that the differential cost of minerals amounting to ₹ 19.58 lakh was not collected from seven lessees.

The ADGM (Dindigul) replied (July 2018) that unlike Rule 7, where lump sum amount is collected before issue of permits, Rule 12 includes collection of cost of mineral sought to be removed and hence, there was no short collection.

The reply overlooks the distinction between quarrying permits and quarrying leases. Under Quarrying permit, permit is obtained on payment of cost and SF for quantity sought to be removed. Hence, the liability to pay cost of mineral and SF arise at the time of quarrying permit.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.4.8 Royalty

As per Section 9 of the MMDR Act, 1957, read with Schedule II of the Act, every holder of a mining lease for lignite mined for captive consumption shall pay royalty for the mining of the minerals, at the rates prescribed therein. In the notification issued by Ministry of Coal (May 2012), the rate was fixed as 6 *per cent ad valorem* on the pit transfer price of lignite, as ratified by the Central Electricity Regulation Commission (CERC). According to Rule 64A of MCR 1960, interest at 24 *per cent* per annum shall be leviable for belated payment of any dues to Government.

Short collection of Royalty

- On verification of lease files and returns in the Office of DDGM, Cuddalore, audit noticed NLC adopted the rate of royalty fixed by CERC up to 2015-16 and adopted the same as provisional rate upto 31.3.2018. It was further noticed that CERC had determined the transfer price of lignite on 8 March 2017 for the period from 2013-14 to 2017-18. Since CERC rates were binding on the NLC for the purpose of payment of royalty, the lessee should have revised the rates retrospectively and paid the differential royalty latest by 7 April 2017. However, the differential rate of royalty on enhanced transfer price as fixed by CERC was not paid for 2016-17 and 2017-18 and the same was also not demanded by the department. The differential royalty worked out to ₹ 76.40 crore, besides interest leviable for the belated payment of royalty.
- During the verification of returns filed by NLC for the months of April 2014 and April 2015, audit noticed that the lessee returned a total production (both standalone and pooled) of 528239 MT of Lignite and paid a royalty of ₹ 3.47 crore. However, at the conservative rate of ₹ 81.72 per MT, that was applicable to standalone production, the royalty would work out to ₹ 4.32 crore. This resulted in a short collection of royalty and interest of ₹ 0.85 crore for which interest on belated payment upto 31 March 2017 would work out to ₹ 0.42 crore, resulting in a short payment of ₹ 1.27 crore. Taking into account the excess arrear amount of ₹ 0.83 crore paid during March 2017, the net short collection worked out to ₹ 0.44 crore. Interest of ₹ 0.11 crore upto 31 March 2018 was also payable by the lessee.

Short collection of royalty due to non-adoption of revised rates

As per Section 9 of the MMDR Act, 1957, the holder of mining lease should pay royalty in respect of any mineral removed or consumed by him from the leased area at the rate for the time being specified in the Second Schedule to the Act. Second schedule prescribed royalty on tonnage for the minerals, *inter alia*, limestone and *ad valorem* for the minerals silica, fireclay, ball clay and garnet. As per Rule 64-D of the Mineral Concession Rules, 1960, the regional prices published in the Monthly Bulletins by the IBM were the benchmark value for collection of royalty for the major minerals subjected to *ad valorem* mode of royalty.

- While verifying the returns in Cuddalore and Kanyakumari districts, audit noticed that the sale prices of garnet and ball clay were revised by IBM, but royalty was continued to be collected at the old rates in two leases. This resulted in a short collection of ₹ 2 lakh.
- Further, in the case of minor minerals, it was observed that the revision effected for rough stone and gravel by GoTN was not considered by five⁷⁵ District Officers while collecting SF in 61 leases, resulting in a short collection of ₹ 12 lakh.

When this was pointed out by Audit, DDGM (Ariyalur and Perambalur) reported (November 2018) realisation of the amount of ₹ 1.00 lakh. DDGM (Krishnagiri) reported (December 2018) collection of ₹ 5.00 lakh. Specific reply from other offices was awaited.

Short collection of SF following Reclassification of Major Minerals as Minor Minerals

With effect from 10 February 2015, GoI notified 31 major minerals as minor minerals of which 14 minerals were mined in the State. GoTN prescribed rates for these reclassified minerals only from 22 April 2016 without giving retrospective effect. Since these minerals were classified minor minerals and rate of SF were not prescribed for the interim period, the rates prescribed in Entry 8 of Table A of Appendix II to the TNMMCR 1959 have to be adopted for this period.

Audit verification of permit registers in five⁷⁶ districts revealed that the district officers continued to collect SF on fireclay, Silica sand, Ball clay and quartz and feldspar at old rates for this period also. This resulted in a short collection of SF of ₹ 1.13 crore.

When this was pointed out, the DDGM (Cuddalore) reported (October 2018) collection of SF relating to ball clay (₹ 0.15 crore) and silica sand (₹ 0.47 crore) in three cases after pointed out by audit. Specific reply from other offices was awaited (January 2019).

Non collection of interest for belated payment of royalty

Ministry of Coal (MoC) notified (May 2012) the rate of royalty for Lignite as 6 per cent *ad valorem* on Lignite Transfer Price. The Lignite Transfer Price

⁷⁵ Ariyalur&Perambalur (8), Kancheepuram (22), Krishnagiri (14), Ramanathapuram (1) and Virudhunagar (16).

⁷⁶ Ariyalur & Perambalur, Cuddalore, Dindigul, Kancheepuram and Salem.

was calculated by considering the norms specified therein, for the cost of elements such as Capacity Utilisation, Depreciation, O & M Expenses, Interest on Working Capital, Statutory Payments, Foreign Exchange Rate Variation, Mine Closure Expenses, etc. The above specified O&M Expenses included Salary & Wages Expenses involved for all the Mines. It was seen from the payment of royalty by NLC for Lignite Excavation in Mine I, IA & II, that during March 2017, NLC had paid Royalty Arrears on Wage Revision effected for the period from 2007-09 vide CERC order no. 65/MP/2013 dated 12 May 2015. The Lignite Transfer Price per Tonne had to be revised based on above CERC order giving effect to such Wage Revision and Royalty Arrears on the above Wage Revision amounting to ₹ 3.91 Crore, became due at the end of 60 days on 11 July 2015. However, above Royalty Arrears was paid only on 28 March 2017. The belated payment attracts interest under Rule 64A of MCR 1960 at 24 *per cent* per annum amounting to ₹ 1.61 crore which was not demanded by the department from NLC.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.5 Internal Control Mechanism

The essential functions of the department include strict monitoring to prevent illegal mining, ensuring of returns filed by the lessees, issue of transport permits for removal of mineral and inspection of mines for compliance of lease agreement. To ensure this, the department should establish appropriate and adequate internal controls which had in-built checks in the system. Audit check of internal control of the department over its day-to-day functioning revealed the following:

Joint Inspection of Mines/Quarry Sites with Departmental Officials

As a part of performance audit to ensure controls of system of mineral administration was adequate and effective, Audit conducted physical joint-inspection with the Department personnel in 24 quarry sites in all the selected districts and found the following irregularities:

- (i) Boundary pillars, which were necessary to identify lease area, were not erected in eight quarry sites in seven⁷⁷ districts. Without boundary pillars, the area under authorised lease and area illegally exploited could not be separated.
- (ii) Four quarries in four⁷⁸ districts did not maintain the Pit's mouth production register required for reconciliation of quantity of minerals with permits issued.
- (iii) Five quarries in four districts did not have log books relating to machineries to track their movement and one site did not have weighing machine.

⁷⁷ Cuddalore (1), Dindigul (1), Kanyakumari (1), Madurai (1), Nagapattinam (1), Ramanathapuram (1) and Tiruvallur (2).

⁷⁸ Cuddalore (1), Madurai (1), Ramanathapuram (1) and Tiruvallur (1).

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

Absence of follow up action on failure to file Form G and F returns

As per Rule 41 of the GCDR 1999, the owner, Mining Engineer or Manager of every granite quarry should submit to the State Government or any person authorized in this behalf by that Government, a half yearly return for every half year ending 30 September and 31 March (Form F) within 15 days of the following month and an annual return (Form G) which should be submitted before the end of the month of June each year. Similar provisions existed, in respect of major minerals in Rule 45 of MCDR 1988, to submit the returns to the IBM and copy was to be submitted to the State Government under Rule 52 of the rules *ibid*. Prompt receipt of periodical returns would enable the Department to exercise effective control for reconciliation of quantity permitted to be mined and actual quantity removed.

In six districts out of 14 test checked, audit found that out of 66 operative major mineral leases, owners of 54 leases (82 *per cent*) did not furnish a copy of return to the department. In respect of granite leases, out of 152 operative leases owners of 135 leases (89 *per cent*) did not file returns.

This was brought to notice of the Government in January 2019. During Exit Conference, Government replied that the Department was working on design and implementation of online filing of statutory returns.

Inadequate Field Inspection of Mines and quarries by District Officers

In one of the Review Meetings (May 2013), the Secretary issued instructions to conduct at least fifteen inspections of mines/quarries per month i.e. 180 inspections per annum. During check of relevant records in 10 district offices, audit observed that only two district offices, viz, Krishnagiri and Karur conducted the prescribed number of field inspections. The remaining eight⁷⁹ district offices did not conduct the minimum number of inspections prescribed. In Madurai and Kancheepuram, the total number of inspections was less than 100 in all the five years put together, as against 180 per annum prescribed.

This was brought to the notice of Government in January 2019. During Exit Conference, Government accepted the observation and instructed to discuss the issue during Revenue Arrears Meeting.

Non-follow-up of results of physical inspection

Section 21(5) of MMDR Act and Rule 36A of TNMMCR envisage imposition of penalty for violation of provisions of Section 4 of MMDR Act.

Audit scrutiny in seven out of 14 selected offices revealed that follow up action in respect of findings of inspection reports was not taken promptly by the department. While 134 cases of illegal mining were identified, penalty was imposed only in 94 cases (70 *per cent*) and even the amount imposed

⁷⁹ Cuddalore, Dindigul, Kancheepuram, Kanyakumari, Madurai, Nagappattinam & Tiruvarur, Ramanathapuram and Tiruvallur

amounting to ₹110.36 crore was not collected. Among the 94 cases pending for collection of penalty, seven cases were pending in appeal and the remaining cases were pending for want of action by the department. Further, more than 30 *per cent* (₹ 31.81 crore out of ₹ 110.36 crore) of the uncollected amount was pending for more than three years.

This was brought to the notice of Government in January 2019. During Exit Conference, Government accepted the observation and instructed to discuss the issue during Revenue Arrears Meeting.

Co-ordination with the Directorate of Mines Safety

Directorate General of Mines Safety (DGMS), was the Regulatory Agency under the Ministry of labour and employment, Government of India in matters pertaining to occupational safety, health and welfare of persons employed in mines. As per Rule 57 of the MCR, 1960, each State Government shall supply, within two months of grant or renewal of reconnaissance permit, PL and the mining lease of major minerals, a copy of the permit, licence or lease to the Controller General, IBM and the DGMS.

There were 530 leases relating to major minerals in operation in the State during 2017-18, out of which only 294 (55 *per cent*) were reported upto the end of November 2017 as per details furnished by DGMS. In this connection, details of leases reported to DGMS, instructions and circulars, if any, issued to the field offices requested by audit were not furnished by the department.

This was brought to the notice of the Government in January 2019. During Exit Conference, Government accepted the audit observation and replied that the details of lease would be shared online with Directorate of Mines Safety.

Manpower position in the Department

The Department of Geology and Mining was created in April 1983 with the imperative need to bring the entire mineral administration comprising of statutory, regulatory and development activities under a single authority and to facilitate planned development of the limited mineral resources both by exploration of new potential and by better and scientific administration of the existing areas. This was to ensure inspection of the mines by qualified geologists and regular and scientific checks on mining and production. Officials of the Department were obtained through transfer from various other departments. The original strength of staff sanctioned for the department in 1983 for eight revenue districts was 379. This had been increased to 394 despite formation of 24 additional revenue districts and 153 posts out of 394 (39 *per cent*) were vacant as on August 2017. Significant vacancies were noticed in key positions such as Assistant Director of Geology and Mining (16 out of 40) and Assistant Geologist (29 out of 41). The posts of DDGM/ADGM in eight districts were manned by additional charge.

The acute shortage of manpower in the department had contributed to delay in approval of lease applications, inadequate verification of illegal/excess mining and stagnation in exploration activities indirectly contributing to lesser revenue to Government. Further, functions related to vacant posts were performed by other officials as additional charge continuously.

This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

Non-registration of stone crushing units

According to Rule 7 of the Tamil Nadu Prevention of Illegal Mining Transportation and Storage of Minerals and Mineral Dealers' Rules, 2011, all traders in minerals shall register as dealers.

Information obtained from TNPCB revealed that there were 3,076 stone crushing units registered with the Board, out of which, there were 1,612 Stone Crushing Units in the 14 selected districts. However, only 94 units (six *per cent*) were registered with the department.

The matter was reported to the Government in January 2019. During Exit Conference, Government accepted the observation and instructed the department to collate details from TNPCB.

Non-receipt of Triplicate (Department) copy of utilised dispatch slips

As per Rule 36(5) (b) of the TNMMCR, 1959, the lessee or the permit holder was permitted to remove the minerals from the leased area only after obtaining bulk transport permit and facsimiled dispatch slips in the form prescribed in the rules except for the removal of minerals within the same or adjoining revenue Village, for *bona fide* domestic or agricultural purposes. One Transport Permit with the validity period of seven days was accompanied by dispatch slips. These dispatch slips were issued in triplicate of which one was retained in the quarry and another is accompanied with the movement of minerals and the third copy had to be returned to the issuing office on utilisation.

- During the verification of permit records in the selected offices, it was noticed that none of the selected District offices reported receipt of third copy of the utilised dispatch slips from the lessees. The District Offices also did not insist on the return of utilised dispatch slips, before issue of subsequent Transport Permits and Dispatch Slips.
- While verifying quarrying records in DDGM, Tiruvallur, it was observed that bulk permit was issued in seven cases to remove gravel from sites managed by the PWD, but no dispatch slips were issued. District office neither verified the quantum of mineral, nor obtained utilisation certificate from PWD. This posed potential misuse of the dispatch slips by repetitive use for transport of minerals.

This was brought to the notice of Government in January 2019. During Exit Conference, Government accepted the observation of Audit and stated that the proposed e-permit system would cover this aspect also.

Training of Personnel

Information collected from fourteen District Offices revealed that periodical training was not imparted to the officers either by the Directorate or deputing the officers for the training offered by the IBM and by the GSI.

This was brought to the notice of Government in January 2019. During Exit Conference, Government accepted the observation of Audit and agreed to take necessary action.

Delayed formation of District Mineral Fund by GoTN

According to Section 9B of MMDR Act, that States had to establish District Mineral Fund (DMF) for collection of Contributions from the ML Holders for the benefit of people and areas affected by mining related activities.

GoTN established the DMF for the state (May 2017) and started collecting contributions from the Lessees. However, as per the Supreme Court Judgement on DMF the date of coming into effect for Lignite for making such contributions was 20 October 2015 or date of establishing DMF by GoTN. GoI issued direction under Section 20A of the MMDR Act on 16th September, 2015 requiring the State Governments to issue a notification for setting up the DMF. The State Government formed DMF for Minor Minerals vide Gazette Notification (May 2017).

NLC had paid a royalty of ₹ 446.66 crore for the period from November 2015 to March 2017. Consequently, GoTN had foregone the Contributions to DMF at 30 *per cent* of the Royalty Amount collected from NLC, which worked out to ₹ 134 crore. This was brought to notice of Government in January 2019. During Exit Conference, Government stated that comprehensive replies to all paras would be furnished.

5.4.6 Conclusion

The Department did not have adequate system in place to promote scientific exploration and optimal exploitation of minerals and no significant discoveries had been made during the period of coverage of audit. The OMTRS system, very vital for transparency and to check illicit mining, had not been implemented in all districts and the department did not utilise even the existing data. The Department did not have a response system in place to act upon detection of illegal mining activities. Control systems required for mineral administration were inadequate and the existing systems had also not been followed scrupulously. There is no co-ordination between the Department and allied agencies such as TNPCB and DGMS. The lack of manpower hindered efforts to maximise revenue through expeditious issue of grants, and measures for improving collection of royalty and SF and penalty were conspicuous by their absence. The department did not use new technologies for better administration of minerals. Given the significant deficiencies identified in vital functions, audit could not provide an assurance on economy, efficiency and effectiveness of the mineral wealth management system in the State.

5.4.7 Recommendation

We recommend that

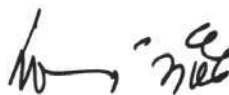
- Exploration activities in already identified projects may be expedited and fresh exploration may be prioritised through a mineral policy.
- Adequate measures may be contemplated using OMTRS mappings and other technological innovations to check and prevent leakage of vital mineral resources due to illegal mining and also to establish a quick response system to take prompt action on information about illegal activities.
- Existing controls meant for functioning of the department may be revisited and strengthened and departmental action may be considered in cases where there was loss of revenue due to inaction or incorrect action and Co-ordination between the department and other agencies may be strengthened.
- Amendments may be introduced to cap time limit for approval of leases and levy of dead rent for granite quarried on patta lands so as to plug leakage of revenue.



Chennai
Dated 04 July 2019

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(RAJIV MEHRISHI)
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