

Chapter II

Performance Audit

Chapter II – Performance Audit

Industries and Commerce Department

Telangana State Mineral Development Corporation Limited

Sand mining with special emphasis on initiatives taken to curb illegal mining

2.1 Introduction

Summary

Government of Telangana (GoTS) introduced (December 2014) the New Sand Mining Policy, 2014 (NSM Policy) and framed (January 2015) the Telangana State Sand Mining Rules, 2015 (TSSM Rules) to ensure availability of adequate quantity of the right quality of sand at a reasonable price to the people of the State. Telangana State Mineral Development Corporation Limited (TSMDC) which functioned under the supervision and control of the Director of Mines and Geology (DM&G), Industries and Commerce Department was responsible for excavation, regulation and supply of sand.

This Performance Audit was conducted to ascertain whether excavation, transportation, storage and sale of sand were carried out efficiently, effective control mechanisms were put in place to detect and prevent illegal sand mining and environmental concerns related to sand mining were appropriately addressed. Audit test checked and reviewed the records of three selected Project Offices (POs) of TSMDC namely, Jayashankar Bhupalapally, Bhadradi Kothagudem and Karimnagar, the Director of Mines and Geology, Assistant Director of Mines and Geology (ADM&G) and the offices under the control of the District Collectors falling under the jurisdiction of the above POs and covered the five-year period from 2016-17 to 2020-21.

2.1.1 Sources of sand

Sand can be classified into two types; River sand and Manufactured sand or M-Sand (used as a substitute for river sand and manufactured artificially by crushing hard stones). River sand is again of two types namely, coarse sand (used for building large concrete structures) and fine sand (used for plastering/ finishing works). Both River sand and M-Sand are available in Telangana. Sand is used for construction and stowing¹ activities.

In Telangana, river sand is available from three sources namely, (i) riverbed and streams

¹ Usage of sand for filling the abandoned or exhausted coal pits

which are categorised into I to V order streams² depending upon quantum of sand available, (ii) de-siltation of irrigation projects and (iii) de-casting³ of private *patta* lands. Sand in I, II and III order streams is left to the villagers for domestic use (free of cost) as well as for local body and Government sponsored weaker section housing schemes (on payment of Seigniorage Charges). The excavation and transportation of sand in I, II and III order streams are to be done manually and neither mechanical means are allowed nor sand is allowed to be transported outside the local jurisdiction. Sand in IV and V order streams is allowed for commercial exploitation subject to Water, Land and Trees (WALTA) Act, 2002 and WALTA Rules, 2004.

2.1.2 Accountability for sand mining

Government of Telangana (GoTS) introduced (December 2014) the New Sand Mining Policy, 2014 (NSM Policy) and framed (January 2015) the Telangana State Sand Mining Rules, 2015 (TSSM Rules) to ensure availability of adequate quantity of the right quality of sand at a reasonable price to the people of the State. Under the NSM Policy and TSSM Rules, the responsibility for excavation, regulation and supply of sand was entrusted to the Telangana State Mineral Development Corporation Limited (TSMDCL), a State Public Sector Enterprise incorporated (October 2014) under the Companies Act, 2013. The TSMDCL functions under the supervision and control of the Director of Mines and Geology (DM&G)⁴, Industries and Commerce Department.

2.1.3 Organisational set up

Organisational set up of the DM&G is as detailed in **Appendix 2.1**. The management of TSMDCL is vested in its Board of Directors (BoD). The Vice Chairman and Managing Director (VC&MD) of TSMDCL looks after the day-to-day operations of the Company and is assisted by five General Managers who look after the specific operations like mining, legal, finance, projects and information technology and human resources. The General Managers are assisted by two Deputy General Managers and eight Project Officers who monitor the sand excavation and stockyard operations at field level.

2.1.4 Audit Objectives

This Performance Audit was conducted to ascertain whether:

- Excavation, transportation, storage and sale of sand were carried out efficiently,
- Effective control mechanisms were put in place to detect and prevent illegal sand mining, and
- Environmental concerns related to sand mining were appropriately addressed.

² The source of I order streams is a small village stream or “*Vagu*” while the source of V order streams would be large rivers like the Krishna and the Godavari

³ Is the process of quarrying/ removing sand deposits accumulated on agricultural lands due to flooding

⁴ The DM&G oversees the functions of receipt and processing of mineral concession applications, grant of leases, approval of mining plans, inspection of mines, curbing of illicit mining, vigilance, monitoring, survey and demarcation of areas, mineral revenue collection, etc.

2.1.5 Audit Criteria

Audit findings were benchmarked against audit criteria sourced from the following:

- NSM Policy and TSSM Rules issued by GoTS and as amended from time to time,
- Sustainable Sand Mining Management Guidelines, 2016 (SSMM Guidelines) issued by Ministry of Environment, Forests & Climate Change, Government of India (MoE,F&CC),
- Water, Land and Trees Act, 2002 (WALTA) and WALTA Rules, 2004,
- Panchayat Extension to Scheduled Areas Act, 2002 (PESA) and PESA Rules, 2011 (PESA Rules),
- Mines and Minerals (Development and Regulation) Act, 1957,
- Telangana Minor Mineral Concession Rules, 1966 (as adapted in August 2015),
- Telangana Mineral Dealer Rules, 2000 (as adapted in August 2015),
- Notifications and Circulars issued by the Central/ State Governments and the Directorate of Mines & Geology, GoTS relating to sand mining,
- The agenda and minutes of the meetings of the BoD of TSMDCCL,
- Standard procedures of tendering and award of contracts and
- The tender documents, contracts awarded, correspondence made with contractors and payments released.

2.1.6 Audit Scope, Sample and Methodology

This Performance Audit was conducted from October 2021 to March 2022 covering the activities carried out by the DM&G and the TSMDCCL during the period 2016-17 to 2020-21. Information pertaining to prior and subsequent periods was also reviewed as per requirement.

Audit selected three (out of eight) Project Offices (POs) of TSMDCCL using stratified sampling based on the parameter of quantity of sand excavated. Further, records of the TSMDCCL Corporate Office and offices of the DM&G, the Assistant Director(s) of Mines and Geology (ADM&Gs) and the District Collectors of eight revenue districts covered by the selected POs were reviewed. Similarly, records of District Police Authorities and State Transport Department were also reviewed wherever found necessary. Judgmental sampling was used in selecting the records of the offices of TSMDCCL, the DM&G, the ADM&G, the District Collector, etc. Further, Joint Physical Verification (Joint PV) of 46 (out of 251) sand reaches and stockyards under the selected POs was conducted along with the TSMDCCL and Departmental representatives to check the facilities available and compliance to various guidelines. Details of audit sample are indicated in **Appendix 2.2**.

An Entry Conference was held on 14 February 2022 with the Joint Director, Mines and Geology and the VC&MD of TSMDCL wherein the audit objectives, criteria, scope, sample and methodology were discussed. Audit findings were discussed with the Department, TSMDCL in the Exit Conference conducted on 20 September 2022. Replies furnished (January 2023) by the State Government and the views expressed in the Exit Conference have been suitably incorporated in the Report.

2.1.7 Acknowledgement

Audit acknowledges the cooperation and assistance rendered by the officials of the DM&G and the TSMDCL in conducting the Performance Audit.

2.1.8 Audit findings

Audit findings relating to excavation of sand, control mechanisms to detect and prevent illegal sand mining and environmental concerns related to sand mining are presented under the following sections.

- Section 2.2 - Excavation, transportation, storage and sale of sand.
- Section 2.3 - Control mechanisms to detect and prevent illegal sand mining.
- Section 2.4 - Addressing environmental concerns related to sand mining.

2.2 Excavation, transportation, storage and sale of sand

Summary

The tribal societies entered into sand raising contracts with TSMDCL and engaged third-party sub-contractors for excavation of sand. This defeated the objective of eliminating exploitation of mineral resources available in the Scheduled Areas by the non-locals/ tribals as envisaged in the PESA Act and PESA Rules. The tribal societies appointed third parties without following any tender process, resulting in extension of undue benefit to the third-party sub-contractors.

Delays in excavation and sale of sand due to various reasons like delay in processing of the applications by the District Level Sand Committees, non-receipt of clarification from the State Government and lack of action plan to excavate sand as per the timelines agreed with the *pattadars* deprived the *pattadars* from cultivating their lands and delayed the earning of revenue by the Government. Further, TSMDCL incurred avoidable extra expenditure due to payment of pre-revised rates despite amendments to the TSSM Rules.

Introduction

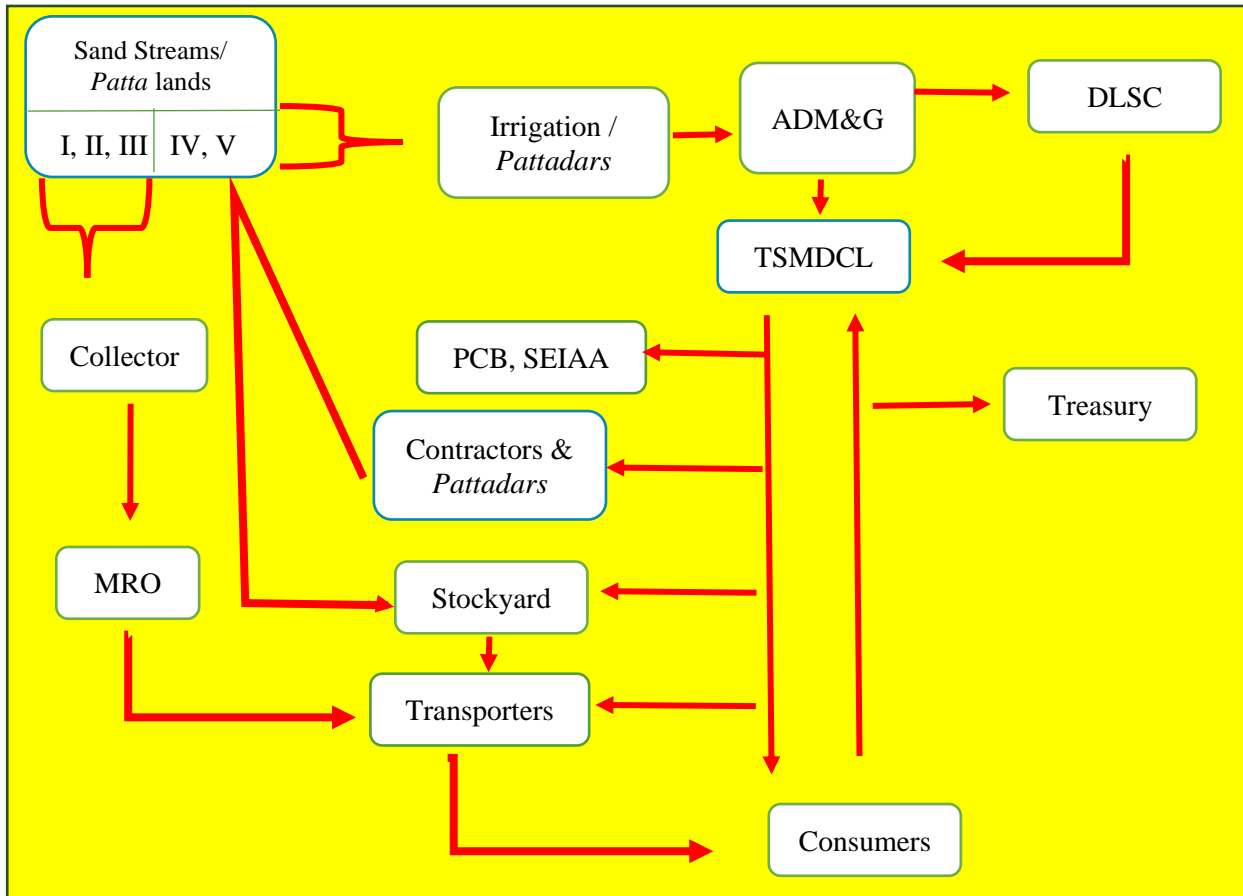
The Irrigation Department (as well as *pattadars* for de-casting of *patta* lands) submits proposals to the Additional Director of Mines & Geology (ADM&G) for de-casting of sand bearing areas and de-siltation of Reservoirs/ Dams. The ADM&G carries out a Joint Inspection⁵ and submits a Report to District Level Sand Committee (DLSC) for approval. The DLSC allots mining license for sand bearing areas to TSMDCL for excavation and sale of sand. The TSMDCL will then obtain the statutory clearances like Environmental Clearance (EC) from State Environment Impact Assessment Authority (SEIAA), Mining Plan from the Deputy Director of Mines, Environment Management Plan, Consent for Establishment (CFE) and Consent for Operation (CFO) from the Telangana State Pollution Control Board (TSPCB). Once the TSPCB's clearance is obtained, TSMDCL appoints sand raising contractors/ tribal societies (*pattadars* in case of *patta* lands) for excavation of sand. The excavated sand is transported to stockyards established near the sand reaches and managed by TSMDCL. The consumers make online bookings for sand through TSMDCL's web portal "Sand Sale Management and Monitoring System (SSMMS)", make the payment at approved rates and obtain the E-Order copy. The sale proceeds are directly credited into the Treasury. The sand is loaded into the designated transport vehicles at the stockyards on the production of E-Order copy and the stockyards issue the E-Transit Pass for onward

⁵ Joint Inspection is conducted with the following: (i) ADM&G shall certify the suitability of sand for construction, (ii) Tahsildar shall identify the *patta* land, possessor/ occupier and furnish attested sketch demarcating the area and fix the boundaries on ground, (iii) Mandal Agriculture Officer shall certify that without de-casting, the *patta* land is not fit for agriculture, (iv) Ground Water Department shall record the geo co-ordinates of the *patta* land as per boundaries fixed by the Tahsildar, assess the thickness, quantify the sand to be de-casted and give specific recommendation on the mode of de-casting i.e. manual or mechanised and (v) Executive Engineer, Irrigation Department shall report on the location of *patta* land with reference to riverbed/ course

transportation of sand to the designated consumer locations. The TSMDCCL receives reimbursement of operational expenditure incurred and six *per cent* service charges from the State Government.

The above flow of sand mining operations is indicated in the **Chart 2.1**.

Chart 2.1: Flow of sand mining activities



Out of the total assessed sand availability of 1,001.64 lakh Cubic Meters (CBM) in 709 sand reaches operated during the period from 2016-17 to 2020-21, TSMDCCL excavated 685.55 lakh CBM and sold 672.18 lakh CBM valued ₹4,262.95 crore. Audit reviewed the sand mining operations and observed the following.

2.2.1 Delay in disposal of applications for de-casting of patta lands

Rule 7 of TSSM Rules permitted de-casting of sand from the private *patta* lands to make them fit for agriculture. The *pattadar* shall for this purpose make an application to the ADM&G concerned along with a copy of the *pattadar* passbook⁶ and location of the land on the village map. Based on the application made by the *pattadars*, the ADM&G shall take up a joint inspection of the *patta* land and submit a report to the DLSC which after considering the same, permits TSMDCCL to de-cast sand from the *patta* lands by entering into agreement with the *pattadars*.

⁶ Title Deed Book

Audit noticed in one (Bhadrardri Kothagudem) of the three sampled POs that out of the 53 applications received by the ADM&G for de-casting of *patta* lands during the year 2016-17, only 22 applications were approved. Reasons for not approving the remaining 31 applications were not on record.

The GoTS issued (April 2018) instructions to the District Collectors requiring them to review all the pending applications of the farmers and to clear the applications to enable the farmers to remove sand and make the area viable for cultivation. The DLSCs were also directed to conduct monthly review of the ADM&G's inspection report on the applications received from the *pattadars* and grant or reject the applications within four weeks from the receipt of the inspection report. Audit observed that despite such clear instructions from the GoTS, the ADM&G and the DLSC of Bhadrardri Kothagudem did not take any action and the above 31 applications received during 2016-17 were still pending (December 2021). Thus, non-disposal of pending applications was not only in violation of the Government instructions but also resulted in non-removal of sand from *patta* lands thereby depriving the *pattadars*/ farmers from cultivating their lands. The Government was also deprived of the revenue realisable (not ascertainable due to non-assessment of extractable sand quantity) from the sale of sand from these *patta* lands for that period.

Government replied (January 2023) that the applications were pending for want of feasibility reports from the Tahsildars concerned. In the Exit Conference, Government stated that the DLSCs would be asked to dispose-off the pending applications.

The fact remained that the DLSC Bhadrardri Kothagudem failed to adhere to the Government's directions resulting in non-conversion of *patta* lands fit for agriculture.

Recommendation 1: District Level Sand Committees may ensure processing of the *pattadar* applications within the stipulated timelines and TSMDCL may prepare an action plan to de-cast sand within the timelines stipulated in the agreements with the *pattadars*.

2.2.2 Engagement of third parties for sand excavation

The Panchayat Extension to Scheduled Areas (PESA) Act, 2002 and PESA Rules, 2011 allowed exploitation of minor minerals in areas located fully/ partially in the Scheduled Areas only by the individual members of local Scheduled Tribes (ST) or societies comprising exclusively of members of local ST. Further, Clause 2 (iii) and (iv) of the agreement entered by TSMDCL with sand raising contractor (tribal society) for excavation of sand stipulated that the agreement was not transferable, sub-lease of the same to any third-party was prohibited and in the event of failure, the pending payments of the society were liable to be held up and forfeited.

In the test checked POs of Jayashankar Bhupalapally and Bhadrardri Kothagudem, audit noticed that the tribal societies appointed third parties on nomination basis as their sub-contractors for excavation of sand. The DLSCs also permitted (November 2015) the sub-lease of sand raising agreements due to tribal societies' lack of financial, operational

and technical capacities required for sand mining operations. Moreover, the DLSCs allowed payment of ₹180 per CBM to the sub-contractors (out of ₹220 per CBM paid by TSMDCL to the tribal societies) and retention of the balance ₹40 per CBM by the societies for equal distribution among its members.

The TSMDCL too noticed (November 2018) that the tribal societies engaged third parties for excavation of sand and that the Integrated Tribal Development Authority (ITDA) itself made payments to the tribal societies and the third-party contractors as per the ratio decided by the DLSCs. The TSMDCL requested the DLSCs concerned to stop the third-party contractors' interference to ensure that the benefit of sand mining in the Scheduled Areas reaches the tribal societies for whom it is intended. The TSMDCL however, did not take any action against the tribal societies as per the terms and conditions of the sand raising agreement.

Thus, audit observed that none of the stakeholders took steps to prevent third parties from performing sand mining operations despite clear statutory and contractual provisions. This defeated the objective of eliminating exploitation of mineral resources available in the Scheduled Areas by the non-locals/ tribals as envisaged by the PESA and PESA Rules. Audit also observed that the tribal societies appointed third parties without following any tender process. Thus, out of the total ₹56.73 crore paid by TSMDCL to the tribal societies, the third parties were paid ₹46.42 crore. Further, considering the rates finalised by TSMDCL under tenders invited for sand raising contracts for desiltation at Medigadda, Annaram Barrages (₹68.50 per CBM to ₹135 per CBM) and at Khammam (₹75.01 per CBM), the undue benefit enjoyed by the third-party sub-contractors worked out to ₹11.61 crore (25.79 lakh CBM X ((₹180 - ₹135)) during the period 2016-2021. Details are given in **Appendix 2.3**.

Management replied (September 2022) that in some cases tribal societies might have hired tractors for transportation of sand because societies themselves may not have the required type of tractors. The payment made for tractor hire charges cannot be treated as sub-contracting. Further, the cost of sand excavation by way of de-siltation of reservoirs cannot be compared to the cost of sand excavation through de-casting of sand bearing areas since the former is a mechanised operation and the latter is a manual operation.

Government concurred (January 2023) with the management's reply.

The reply is not tenable since the tribal societies have sublet the entire sand excavation activities to the third party contractors by paying ₹180 per CBM out of ₹220 per CBM paid by TSMDCL to the tribal societies. The tribal societies would benefit more by seeking competitive rates instead of appointing the third-party contractors on nomination basis with a fixed payment of ₹180 per CBM.

In the Exit Conference, the Government agreed to take up the matter with the Tribal Welfare Department.

The fact remained that the objective of eliminating exploitation of mineral resources available in the Scheduled Areas by the non-locals/ tribals was defeated.

Recommendation 2: District Level Sand Committees may consider allotting sand mining licenses in the Scheduled Areas to tribal societies and TSMDCL may consider appointing the sand raising contractors on behalf of the tribal societies duly following open tender process.

2.2.3 Excavation of sand without DLSC approval, agreement with TSMDCL

Rule 7 of TSSM Rules stipulated obtaining of DLSCs approval and entering into agreement by the *pattadars* with TSMDCL for de-casting of sand from their *patta* lands. In case, the allotted quantity is not de-casted within the time stipulated by such approval and the agreement, the TSMDCL obtained DLSC's approval afresh, and entered into a fresh agreement with the *pattadars* for de-casting the balance quantity of sand from their *patta* lands. Further, Rules 5 (1) (f) and 7 (5) (f) of the TSSM Rules prescribed levy of a penalty of ₹1,00,000 or ₹500 per CBM, whichever is higher, if sand was excavated beyond the specified limits (area) or beyond the specified width (thickness) or for any other violation on both the TSMDCL and the *pattadar* respectively.

In the selected PO of Karimnagar, audit observed that one *pattadar* (Giravelli village) did not extract any sand (out of 2.47 lakh CBM) and another *pattadar* (Kunchavelli village) excavated only 7,970 CBM (out of 1.06 lakh CBM) during the contract period (September 2018 to September 2019) for which DLSC's approvals were obtained in April 2017.

Though fresh approval of DLSC was required for extracting the balance quantity of sand, the TSMDCL, in anticipation of the extension of time by the DLSC, extended (December 2019) the period of the original agreements with the above *pattadars* stating severe shortage of sand in the State and the need to make sand available to reduce the burden of sand supply and vehicle/ traffic conjunction from Kaleshwaram road.

Audit observed that the DLSC was yet to extend the validity of its approval. The TSMDCL however, excavated (February 2020) 4,582 CBM of sand (Giravelli: 1,848 CBM and Kuchavelli: 2,734 CBM) under its extended agreements. Thus, excavation of sand from the above two *patta* lands without obtaining due approval from the DLSC was irregular and attracted penalty of ₹22.91 lakh (4,582 CBM X ₹500 per CBM). But the ADM&G did not impose any penalty either on the TSMDCL or the *pattadars*.

Management replied (September 2022) that the sand was not de-casted within the stipulated contract period from the above *patta* lands due to various reasons like heavy rains and local issues with the villagers. It was further stated that it was only a case of extension of the contract period in anticipation of the DLSC's approval and there is no violation of TSSM Rules as sand was sold properly following the usual mechanism.

The reply is not specific to the audit observation on extension of the agreement period with the *pattadars* without prior extension/ approval of DLSC and agreement with TSMDCL as provided in the TSSM Rules.

Government's reply was awaited (January 2023). During discussion in the Exit Conference, the Government directed TSMDCL to seek ratification of the DLSC concerned.

The fact remained that TSMDCL did not adhere to the spirit of the TSSM Rules.

2.2.4 Delay in excavation of sand

As per Rules 4 and 5 of the TSSM Rules, after communication of DLSC's approval for allotment of specific sand bearing areas to TSMDCL for excavation of sand, the TSMDCL shall within a period of three months (extendable by another three months) obtain necessary permissions for sand mining and enter into licensee agreement with the ADM&G and extract and dispatch sand by appointing sand raising contractors (contractors or tribal societies). Further, under Rule 7 of TSSM Rules, the DLSC, after considering the report submitted by ADM&G permits TSMDCL to de-cast sand from the *patta* lands by entering into agreement with the *pattadars*.

In the selected POs of Jayashankar Bhupalapally and Bhadradi Kothagudem audit observed excavation of sand was delayed despite existence of DLSC's approvals, as detailed below.

2.2.4.1 Delay in de-silting at Dummugudem Anicut

The DLSC, Bhadradi Kothagudem permitted (February 2020) TSMDCL to de-silt 23,38,080 CBM of sand under the submergence area of Dummugudem Anicut on the Godavari River for a period of one year from the date of commencement of sand excavation. TSMDCL was required to enter into an agreement with four local tribal societies concerned and desilting was to be carried out by mechanised method.

However, TSMDCL decided that the said de-silting of sand from the submergence areas of Dummugudem Anicut was of the nature of civil works of Irrigation Department, and sought (April 2020) clarification from the State Government whether to appoint the tribal societies as per PESA Rules and if so whether the estimated rate of ₹120 per CBM was payable (based on the quoted rate of ₹90 per CBM obtained for similar operations in Medigadda and Annaram Barrage areas). However, the State Government has not yet (March 2022) furnished any clarification in the matter. Hence, TSMDCL did not enter into sand raising agreements with the local tribal societies for de-siltation of 23,38,080 CBM sand under the submergence area of Dummugudem Anicut till March 2022. Audit observed that the delay of 24 months led to delay in realisation of estimated revenue of ₹140.28 crore (23,38,080 CBM X ₹600 per CBM) due to non-commencement of sale of sand by TSMDCL from this project area.

Management replied (September 2022) that approval of GoTS to award the work to local tribal societies at ₹120 per CBM was awaited.

Government in its reply (January 2023) acknowledged that TSMDCL had sought (April 2020) clarification from the State Government. In the Exit Conference, the Government agreed to examine the matter.

The fact remained that inordinate delay on the part of the Government resulted in delay in realisation of estimated revenue of ₹140.28 crore from de-silting the Dummugudem Anicut.

2.2.4.2 Delay in de-casting of patta lands

Audit noticed that during the period 2016-17 to 2020-21, TSMDCL did not commence de-casting of sand from *patta* lands in 35 cases in the selected POs of BDKG and JSBP even after obtaining DLSC's approval and entering into agreements with the *pattadars*. The total approved quantity of sand to be de-casted from these *patta* lands was 4.80 lakh CBM valued ₹28.78 crore (4.80 lakh CBM X ₹600 per CBM).

Further, in respect of two other *patta* lands under PO Bhadradi Kothagudem, TSMDCL excavated (up to March 2017) only 21,901 CBM (26.87 per cent) out of 81,522 CBM approved (October 2016) by DLSC Khammam and stopped the work thereafter. Aggrieved by the poor rate of sand excavation, the *pattadars* filed (March 2018) a case in the Honourable High Court of Telangana & Andhra Pradesh. The TSMDCL submitted to the High Court that since the validity of these agreements lapsed before de-casting the full allotted quantity, TSMDCL would excavate the balance quantity of 59,621 CBM valued ₹3.58 crore (59,621 CBM X ₹600 per CBM) by renewing these agreements after obtaining necessary approval from the concerned DLSC. The State Government also instructed (April 2018) TSMDCL to complete the excavation of sand from *patta* lands within the time allowed under the agreements with the *pattadars*. The High Court disposed the above cases directing (April 2018) TSMDCL to strictly adhere to the instructions issued by the State Government.

Audit observed that despite clear directions of the State Government and the High Court, TSMDCL did not prepare an action plan to adhere to the timelines of its agreements with the *pattadars*. TSMDCL neither renewed the agreements till date nor took any other steps to excavate sand from these 37 *patta* lands. Specific reasons for not de-casting sand from these *patta* lands were not placed on record. Thus, the State Government was yet to earn the revenue of ₹32.36 crore (₹28.78 crore + ₹3.58 crore) due to delay in commencement of sale from the above *patta* lands. Further, the objective of converting these *patta* lands into cultivable lands was not achieved.

Management replied (September 2022) that sand was not excavated from the *patta* lands due to unwillingness of the farmers, poor quality of sand, road connectivity problem, local issues and objection by the Forest Department. It was further stated that the time allowed by the DLSCs was not sufficient to de-cast total sand from *patta* lands. However, the entire requirement of sand in the State was already met. Government concurred (January 2023) with the management's reply.

In the Exit Conference, the Government opined that the DLSCs have to take a call in this issue and directed TSMDCL to write to the DLSCs for cancellation of the approvals.

Reply of the Company and the response of the Government are not acceptable as the reasons stated for not commencing the de-casting of sand were not found on records produced to audit. Further, the DLSC, Jayashankar Bhupalapally (JSBP), to which these *patta* land cases were transferred, decided not to de-cast sand from the said *patta* lands on the ground that even after de-casting the balance quantity of sand, these *patta* lands may not be fit for cultivation. The decision of DLSC, JSBP was inappropriate since the DLSC, Khammam had already approved the de-casting of these *patta* lands following due procedures and considering all the parameters and TSMDCL also entered into agreements with these *pattadars*. Thus, the delay in de-casting of *patta* lands defeated the objective of conversion of *patta* lands fit for cultivation.

2.2.5 Excess payment to pattadars

2.2.5.1 Payment at higher rate

Rule 7 of TSSM Rules permitted TSMDCL to de-cast sand from the *patta* lands of private *pattadars* by entering into agreement with them. The original TSSM Rules, however, did not specify any amount to be paid to the *pattadars* as their share from the sale of sand de-casted from their *patta* lands. Pending determination of such rate, the State Government in a review meeting (May 2015) instructed the TSMDCL to pay ₹200 – ₹250 per CBM to the *pattadars*. Accordingly, TSMDCL entered into agreements with the *pattadars* and allowed payment of ₹250 per CBM (₹200 towards beneficiary amount and ₹50 towards raising cost). Subsequently, State Government amended (August 2015) the TSSM Rules and allowed payment of 35 per cent of the sale amount, subject to a maximum ceiling of ₹200 per CBM, as the *pattadar*'s share.

Audit noticed that TSMDCL continued to pay ₹250 per CBM in 124 agreements entered after amendment of the TSSM Rules by the selected POs of Jayashankar Bhupalapally (45 cases), Bhadradi Kothagudem (64 cases) and Karimnagar (15 cases). The TSMDCL however, did not place on record the basis for fixation of the rate of ₹250 per CBM in these agreements. Hence, payment of ₹250 per CBM in contravention of the amended TSSM Rules was not justified and this had resulted in avoidable excess payment of ₹11.43 crore to the *pattadars* on 22.88 lakh CBM of sand de-casted under these agreements during the period September 2015 to March 2021.

Management replied (September 2022) that the rate of ₹250 per CBM was allowed as per the minutes of review meeting (May 2015) chaired by the Minister for Mines and Geology. It was further stated that as de-casting operations increased in the State, the rate was reduced to ₹100 per CBM.

Government stated (January 2023) that the decision (May 2015) to pay ₹200 to ₹250 per CBM was based on availability of sand in the State at that point of time. During the Exit Conference, the Government explained that higher rate was allowed to stabilise the NSM Policy.

The reply of TSMDCL and the response of the Government are not acceptable because the TSMDCL allowed the rate of ₹250 per CBM even in the agreements entered after amendment (August 2015) of the TSSM Rules.

2.2.5.2 Payment at old rate

The State Government further amended (November 2017) the TSSM Rules to provide for payment of ₹100 per CBM as the *pattadar*'s share from the sale of sand de-casted from their *patta* lands. The State Government however, permitted (March 2018) TSMDCL to enter into agreements at the old rate of ₹200 per CBM with the *pattadars* who had got DLSC's proceedings prior to the further amendment (November 2017) of the TSSM Rules. Accordingly, TSMDCL entered into agreements with *pattadars* for de-casting of sand at ₹200 per CBM.

Audit however, noticed that in 76 agreements, TSMDCL did not excavate the entire approved quantity of sand within the agreement period. Hence, TSMDCL entered (between May 2018 and May 2021) into fresh agreements (Jayashankar Bhupalapally - 32 cases, Bhadradi Kothagudem - 37 cases and Karimnagar- seven cases) with *pattadars* for the balance quantities after obtaining separate DLSC approvals. However, in these subsequent agreements also TSMDCL agreed to pay ₹200 per CBM though the rate was re-fixed at ₹100 per CBM. Adoption of old rate in respect of subsequent agreements entered for balance quantities as per separate DLSC proceedings was not justified and resulted in avoidable extra payment of ₹10.69 crore on 10.69 lakh CBM in these 76 *pattadar* agreements.

Management replied (September 2022) that since TSMDCL entered into fresh contracts with the *pattadars* for balance quantities under the same DLSC proceedings issued prior to the amendment of the TSSM Rules, the rate of ₹200 per CBM was allowed to the *pattadars*.

Government concurred (January 2023) with the management's reply. During Exit Conference, TSMDCL further contended that since the total quantities to be excavated were already approved by the DLSCs under the earlier proceedings, payment of the rate of ₹200 per CBM was justified.

The reply is not acceptable because as per the procedure in vogue, in case the allotted quantity is not de-casted within the stipulated time, the TSMDCL obtained DLSC's approval afresh and entered into fresh agreements with the *pattadars* for de-casting the balance quantity of sand from their *patta* lands (refer to **Para 2.2.3** above). Hence, the relaxation given by GoTS in March 2018 cannot be applied to the fresh agreements undertaken (between May 2018 and May 2021) after amendment of the TSSM Rules.

Recommendation 3: Government may fix the responsibility of the officials concerned for allowing excess payments to the *pattadars*.

2.2.6 Extension of undue benefit to sand raising contractors

During 2017-18 to 2018-19, the selected POs of Jayashankar Bhupalapally, Bhadradi Kothagudem and Karimnagar entered into 47 sand raising contracts for a period of 18 months and extendable for another six months. Clause 3 (v) of these contracts provided for furnishing a Performance Security Deposit (PSD) and Additional Performance Security Deposit (APSD) as mentioned in the tender document to TSMDCL. Further as per Clause 3 (xiv) of these contracts, TSMDCL shall closely monitor the achievement of the monthly targeted quantities (assessed quantity / number of months) and reserves the right to forfeit the PSD in case excavation was less than 50 per cent of the monthly targeted quantities. The agreement was also liable for termination without any further notice.

A review of 27 out of 47 contracts revealed the following:

- All the 27 contractors did not excavate sand as per the monthly targeted quantities,
- Extension was given for 12 months for excavation of balance quantities, in all the cases,
- Second Extension of contracts was given in 16 cases, and
- Third Extension was given in six cases.

Despite grant of extension of time by TSMDCL, the rate of extraction by the contractors remained poor as they failed to adhere to the monthly targeted quantities.

Therefore, audit observed that despite a clear failure on the part of the sand raising contractors, TSMDCL extended the contracts in a routine manner beyond the maximum allowed contract period of 24 months instead of calling for fresh tenders at the end of the 24 months period. TSMDCL did not invoke the contractual provisions of forfeiture of the PSD and APSD and termination of the contracts. In two cases, instead of forfeiting the PSD and APSD amounting to ₹3.59 crore, TSMDCL imposed a token penalty of ₹7.00 lakh only for delayed excavation even though the contracts did not provide for imposition of any penalty. Thus, by extending the contracts beyond the agreed contract period and by not invoking the contractual clauses, TSMDCL extended undue benefit to the sand raising contractors.

Management replied (September 2022) that extension of time became inevitable because of the difficulties in providing sand reaches continuously for 18 months, re-assessment of sand quantity due to impounding/ water storage in the reservoir for more than 10 months and mobilisation/ demobilisation every year within 50 to 60 days' time.

Government concurred (January 2023) with the management's reply.

In the Exit Conference, TSMDCL agreed to incorporate suitable penal provisions in the sand raising contracts. Government concurred with the views of TSMDCL.

The reply is not acceptable because TSMDCL finalised the contract period in the tenders and entered into agreements duly considering the working conditions in the field. Further, TSMDCL itself expressed dissatisfaction on the performance of the sand raising contractors and stated that the sale of sand to meet the customer demand was getting affected due to their poor performance. Hence, not invoking of the contractual provisions of forfeiture of the PSD and APSD and termination of the contracts was not justified.

2.3 Control mechanisms to detect and prevent illegal sand mining

Summary

Control mechanisms to detect and curb illegal sand mining were not put in place as TSMDCL did not evolve an appropriate stock policy. Closed Circuit Television Cameras and Weighbridges were not installed at all the stockyards up to September 2020. The vehicles transporting sand were not tracked through Global Positioning Systems and Radio Frequency Identification Devices. Thus, TSMDCL did not exercise effective monitoring over the sand reaches, stockyards and sand transportation vehicles.

The TSMDCL excavated and dispatched sand from the allotted sand bearing areas without obtaining sand dispatch permits from the ADM&G. The sand raising contractors excavated excess quantities of sand by excavating sand beyond the specified geo-coordinates, depth and quantity. The ADM&G also did not carry out periodical inspection of the sand bearing areas. Even in cases where excess excavation of sand was noticed, the TSMDCL pleaded excuses to avoid levy and payment of applicable penalty. Hence, the casual implementation of the NSM Policy and the TSSM Rules rendered them ineffective in curbing the illegal sand mining in the State. Also, unauthorised and excess excavation and transportation of sand from I, II and III order streams went unnoticed because the Sand Taxi Management System had a software glitch.

Monitoring Mechanism

According to the New Sand Mining (NSM) Policy and TS Sand Mining (TSSM) Rules, any vehicle carrying sand without a waybill issued by TSMDCL will be considered as illegal and seized. Also, any machinery and vehicles used for extraction and transportation of sand in contravention of the TSSM Rules shall be seized. Further, excavation of sand without obtaining necessary approvals from the concerned authorities or beyond the specified Geo Co-ordinates or beyond the specified depth were also considered by the DM&G as illegal mining activity. The Revenue, Police and ADM&G authorities at the district level were authorised to seize the illegal sand vehicles, machinery, stocks and to impose penalties as prescribed under TSSM Rules. The seized sand stocks were to be disposed-off through TSMDCL.

During the years 2016-17 to 2020-21, the ADM&Gs of 32 revenue districts detected 21,768 cases of illegal sand transportation and imposed penalty of ₹31.84 crore. Audit reviewed the mechanism put in place to detect and curb illegal mining and transportation of sand and observed the following.

2.3.1 Stock Policy not evolved

As a licensee for mining, stocking, and trading of sand under the NSM Policy and TSSM Rules, the TSMDCL operated stockyards for stocking sand excavated from sand reaches till sand is dispatched to the consumers. Therefore, evolving an appropriate stock policy as

a monitoring mechanism was necessary to detect and prevent illegal sand mining through excavation and transportation of sand more than the prescribed limits.

Audit however, observed that the NSM Policy and TSSM Rules did not specifically require TSMDCL to evolve an appropriate stock policy. The TSMDCL also did not take any steps in this regard. Audit observed that TSMDCL did not determine the modalities to fix the percentage of normal stock loss at various stockyards. This indicated not only lack of policy support but also lack of managerial action to put in place control mechanisms to detect and prevent illegal sand mining. As a result, audit noticed unreasonable stock levels as per the stock registers maintained by the selected POs as detailed below.

- Negative stock balances were noticed at Janampeta reach under PO Bhadradi Kothagudem (-132 CBM on 23 August 2016) and Kodimunja reach under PO Karimnagar (-115 CBM on 31 January 2018).
- Zero or negligible (0.50 CBM to 10 CBM) stock balances in 35 instances were noticed during the years 2016-17 to 2020-21 under the selected POs of JSBP and Karimnagar.
- After considering the opening Balance, production and despatch of sand at Tallagadda, Audit arrived at huge stock balance of 12,930 CBM (20,688 Metric Tonnes - MTs) as of February 2019 at Tallagadda-1 reach under PO Karimnagar whereas book balance was 1971 CBM. This was equivalent to 690 sand lorries of 30 MT capacity.

Management replied (September 2022) that the percentage of normal stock loss could not be fixed as the surface area and type of soil is not uniform at various stockyards. No stockyard was handed over without dispatching the leftover stocks. It was further stated that TSMDCL accounted for stocks in a systematic manner using Oracle based solutions and the Sand Sale Management and Monitoring System (SSMMS).

The reply is not acceptable because without the yardstick of normal loss being fixed, TSMDCL could not hold the sand raising contractors liable for the shortfall in the quantity of sand at the stockyards. Further, from the information furnished by TSMDCL itself audit observed the presence of left over stocks on the date of handing over of the stockyards.

Government stated (January 2023) that all the transactions i.e., excavation, stock and sales are recorded on TSMDCL's online (SSMMS) portal. In the Exit Conference, TSMDCL agreed to frame a stock policy after studying the issues related to stock maintenance and stock records. Government concurred with the views of TSMDCL.

Reply confirmed that TSMDCL did not evolve a stock policy till date (September 2022).

2.3.2 Non-compliance of rules regulating operation of sand reaches and stockyards

With a view to detect and curb illegal mining and transportation of sand, the TSSM Rules and the Sustainable Sand Mining Management Guidelines (SSMG) issued (January 2016)

by Government of India stipulated that following monitoring arrangements at sand reaches and stockyards should be put in place within three months (by 15 April 2016).

- Installation of Closed-Circuit Television Cameras (CCTVs) at the sand bearing areas as well as the stockyards at TSMDCCL's expense for electronic surveillance of excavation of sand from allotted sand bearing areas and dispatch of sand from stockyards. Also, the stockyards should be geo co-ordinated and geo fenced to avoid the entry of any unauthorised vehicles into the stockyard areas.
- Installation of computerised weighbridges at the stockyards for electronic documentation linked to a central documentation monitoring facility of TSMDCCL and loading of sand from stockyards as per the approved capacity of the vehicles through weighment or volumetric analysis of sand stocks before unloading at the stockyard.
- Transportation of excavated sand to and from the approved stockyards along with the waybill issued by the ADM&G and the computerised weighment slip. Also, the vehicles transporting sand were to be provided with Global Positioning System (GPS) and Radio Frequency Identification (RFID) to enable tracking of vehicles for surprise checks and avoiding discrepancies in the delivery of sand. Further, vehicles carrying more than the permitted capacity from the stockyard were subject to levy of penalty of ₹10,000.00 per MT (₹2,000.00 per MT with effect from February 2015).
- Maintenance of daily stock/ production and dispatch register/ records at the allotted sand bearing areas and stockyards.

During the Joint PV of 46 sand reaches and stockyards in the selected POs of Jayashankar Bhupalapally, Bhadradi Kothagudem and Karimnagar, audit reviewed the availability, functioning and maintenance of the above facilities and records which were essential to curb illegal mining, transportation of sand and noticed the following shortcomings.

2.3.2.1 Installation of CCTVs and geo-fencing the sand reaches and stockyards

Installation of CCTVs in PO Jayashankar Bhupalapally commenced from September 2020 onwards and by March 2021 CCTVs were installed at only 21 out of the 49 stockyards operated during 2016-21.

In PO Bhadradi Kothagudem, CCTVs were not installed at *patta* lands and none of the stockyards were geo fenced.

Hence, audit observed that TSMDCCL did not exercise effective monitoring over the sand reaches and stockyards to ensure that excess quantities of sand were not excavated and dispatched.

Management replied (September 2022) that CCTV cameras were installed at 44 sand reaches in the State till March 2021. Due to lack of/ infrequent power connectivity, limited period operations and remoteness of the locations, CCTV cameras were installed on the approach roads from where all the *patta* lands could be monitored. TSMDCCL's outsourced

staff were allotted duties of route check & night vigilance for monitoring sand transportation. Government concurred (January 2023) with the management's reply.

In the Exit Conference, the management stated that cost-benefit proportions are the main considerations resulting in provision of insufficient number of CCTV cameras particularly at the *patta* lands. Despite delay, the Company has been making steady progress in providing required monitoring facilities at the sand reaches and stock yards. Government concurred with the views of TSMDCCL.

The reply is not tenable because TSMDCCL confirmed (September 2022) that there is delay in implementation of the SSMM guidelines regarding installation of CCTV cameras and that separate records of posting orders, attendance registers and wages for night shift duties were not maintained. The reply is also silent about Geo-fencing of the stockyards.

2.3.2.2 Installation of weighbridges and dispatch of sand from the stockyards

Installation of weighbridges in PO Jayashankar Bhupalapally commenced from December 2020 and by March 2021 weighbridges were installed at eight (out of 49) stockyards. However, the calibration certificate issued by the Department of Weights and Measures and test weights were not made available to check the accuracy of the weighment made by these eight weighbridges. Further, weighbridges were not found installed in any of the stockyards in PO Bhadradi Kothagudem. The services of empanelled private parties for weighbridges utilised by PO Bhadradi Kothagudem were not found to be satisfactory. Further, none of the vehicles transporting sand were provided with GPS, RFID to enable their tracking and monitoring the sand dispatch and delivery operations.

Audit noticed that due to non-availability of weighbridges at the stockyards, TSMDCCL loaded the vehicles as per the approved capacity of the vehicle on volumetric basis and noted the estimated weight of the consignment in the E-waybills issued by it. The ADM&G however, levied penalty on the excess quantity found during the transportation of sand. Hence, audit observed that there was no monitoring mechanism to ensure that the vehicles were loaded with the correct weight of sand at the time of their dispatch from the stockyard.

The ADM&Gs maintained data of only the number of vehicles penalised for overloading but did not maintain the data related to the number of vehicles checked. Thus, audit also could not ascertain the magnitude of overloading cases. Hence, the sufficiency of vigilance exercised by ADM&G to ensure that excess sand quantities drawn were detected and assessed for levy of penalty could not be verified.

Management replied (September 2022) that TSSM Rules allowed weighment on volumetric basis and weighment through weighbridges was meant to be a counter check only. Two weighbridges (Ramanujavaram and Morranpalli Banjara) under PO Bhadradi Kothagudem were empanelled since 2017-19. Further, GPS/ RFID devices were installed in 9,800 out of 39,900 vehicles registered with TSMDCCL till date and the process is going on.

Government concurred (January 2023) with the management's reply and stated that applicable penalty was levied on vehicles violating the TSSM Rules to check leakage.

In the Exit Conference, TSMDCL also stated that GPS facilities are provided in all the vehicles transporting sand for irrigation department and bulk consumers. Government concurred with the views of TSMDCL.

The reply is not acceptable because the ineffectiveness of the weighment arrangements made was evident from the number of overloading cases booked and penalty levied during the period 2016-21 (1,163 No.s involving penalty of ₹1.40 crore in PO Jayashankar Bhupalapally and 1,910 No.s involving penalty of ₹2.28 crore in Bhadradri Kothagudem).

2.3.2.3 Discrepancies in the maintenance of registers and records

Audit noticed that although the required registers such as Dumping/ Production Register, Daily Dispatch Register, Cumulative Register and Security Paper Register were maintained at the stockyards, their correctness was not authenticated at regular intervals either by the Sand Reach Assistant or by the competent authority at the Project Office level. Audit also noticed many instances of (i) differences between the closing stock balances as per the registers maintained at the stockyards and the Sand Sale Management and Monitoring System (SSMMS) maintained by TSMDCL, (ii) errors in casting the closing balances in the registers, and (iii) carrying forward the closing balances.

Audit further noticed that the POs endorsed the contractor's monthly bills for water sprinklers without insisting upon the maintenance and submission of the vehicle logbooks though it was provided in the contracts. Hence, audit observed that TSMDCL did not ensure proper maintenance of the required records. Absence of reliable records would render detection of illegal transactions very difficult. Further, in the absence of vehicle logbooks, audit could not verify the veracity of expenditure of ₹1.87 crore incurred by the POs of Karimnagar and Jayashankar Bhupalapally towards water sprinklers.

Management replied (September 2022) that stock figures were updated in the Oracle based SSMMS software only after their certification by the POs and reconciliation of differences, if any. It was further stated that since sprinkling of water by tractors was carried out by local villagers, much documentation was not insisted upon. However, Logbooks will be maintained henceforth and submitted during next audit.

Government agreed (January 2023) to advise TSMDCL to improve the existing system of maintenance of records and their authentication from time to time.

In the Exit Conference management accepted the audit observation and assured to improve the maintenance of records. Government concurred with the views of TSMDCL.

Recommendation 4: Government may ensure that TSMDCL puts proper monitoring mechanism in place namely, installation of CCTV cameras, Weighbridges and maintenance of Stock Registers at sand reaches and stockyards.

Recommendation 5: Department of Mines & Geology may consider using Remote Sensing Mapping or Drone enabled (Intelligent Video Surveillance) technology to monitor and regulate the sand excavations effectively.

2.3.3 Dispatch of sand without obtaining the permit and without paying requisite fees for sand

Rule No.5 (1) (d) of TSSM Rules stipulated that TSMDCL shall extract and dispatch sand from the allotted sand bearing area to the approved stockyard along with the sand dispatch permit (i.e., the waybill in Form-S2) obtained from the ADM&G after paying in advance the Seigniorage Fee (SF) of ₹40 per CBM and other taxes (i.e., District Mineral Foundation Trust (DMFT)⁷ at the rate of 30 *per cent* of SF and State Mineral Exploration Trust (SMET)⁸ at the rate of two *per cent* of SF) for the quantity of sand proposed for extraction.

Audit noticed that TSMDCL excavated and dispatched sand from the allotted sand bearing areas without obtaining sand dispatch permits from ADM&G and also without paying SF, DMFT and SMET. Further, Audit noticed that an amount of ₹50.15 crore was due towards SF (₹37.99 crore), DMFT (₹11.40 crore) and SMET (₹0.76 crore) on 94.98 lakh CBM of sand excavated and dispatched by TSMDCL during the year 2020-21. Further, an amount of ₹58.81 crore was due to be paid towards SF, DMFT & SMET on 111.37 lakh CBM of sand excavated during 2021-22 by TSMDCL. Thus, audit observed that TSMDCL violated the TSSM Rules which attracted penalty of ₹1,031.75 crore⁹. Non-observance of rule provisions also resulted in blocking of Government revenue to the extent of ₹108.96 crore.

Management replied (September 2022) that SF is remitted upto March 2020. Thereafter, remittance of SF was held up due to lack of funds with TSMDCL. An amount of ₹584.00 crore receivable from Government was pending due to various administrative reasons. Soon after receipt of this amount from Government, TSMDCL would remit the pending SF.

Government replied (January 2023) that the sand sale price of ₹600 per CBM included SF of ₹40 per CBM. The TSMDCL was collecting the sand sale price at the time of sale of sand and remitting the entire sale price to the State exchequer.

During Exit Conference, Government agreed to examine the matter further.

The fact remained that both TSMDCL and the DM&G failed to adhere to the TSSM Rules resulting in sub-version of the prescribed procedure and blocking of Government revenue to the extent of ₹109 crore.

2.3.4 Discrepancies in the implementation of Sand Tax

Rule 3 of the TSSM Rules provided that for enforcement of extraction and transportation of sand in I, II and III (from February 2015) order streams, the District Collector (DC) who is also the Chairman of DLSC (Rule 4) shall put in place proper administrative mechanism comprising of district level authorities from revenue, ground water, irrigation, police, and transport departments.

⁷ A statutory trust to work for the interests, benefits and sustainable development of areas affected by mining and mining related operations in the district

⁸ A statutory trust to promote mineral exploration in the State

⁹ ₹1,031.75 crore [(94.98 lakh CBM + 111.37 lakh CBM) X ₹500 per CBM]

District Level Sand Committee, (DLSC) Peddapalli under PO Karimnagar first introduced (February 2017) Sand Taxi Management System (STMS popularly known as *Mana Isuka Vahanam* or Sand Taxi) with the objective of curtailing illegal transportation and interference of middlemen in the supply of sand from I, II and III order streams. Sand Taxi is an online web application where public can book sand through online portal and get it delivered at their doorstep through authorised tractors at affordable rates. The Sand Management Society (SMS) under the Chairmanship of the DC looked after the policy framework, implementation, functions, vigilance activities and disciplinary action on the Sand Taxi. The STMS was maintained and operated by the Center for Good Governance, Gachibowli, Hyderabad (CGG). Other DLSCs like Mahaboobnagar, Nalgonda, Karimnagar, Gadwal and Wanaparthy started (April 2018) emulating the Sand Taxi system owing to successful implementation of Sand Taxi by DLSC, Peddapalli. From a review of implementation of Sand Taxi in the revenue districts covered by the selected POs of TSMDCL audit observed the following.

2.3.4.1 Excavation and transportation of excess quantity of sand

The SMS Bhadradi Kothagudem approved extraction and transportation of sand within the specified geo co-ordinates for a defined period (six months to one year) from the commencement of sand excavation or completion of the approved quantity whichever is earlier.

Audit noticed that as against 1.60 lakh CBM of sand approved (October 2019 to March 2021) for extraction from 15 sand reaches by the SMS, Bhadradi Kothagudem, the actual quantity of sand excavated and transported through the Sand Taxi was 2.82 lakh CBM. Thus, huge excess quantity of 1.22 lakh CBM was extracted and transported over and above the approved quantity.

Thus, audit observed that there was unauthorised/ illegal excavation and transportation of sand under Sand Taxi. However, the ADM&G Bhadradi Kothagudem received the SF and other taxes for the over exploited quantities also. The over extraction went un-noticed because the STMS software did not provide for limiting the customer bookings on the web portal once the permitted quantity from a particular sand reach gets exhausted. Hence, audit observed that the objective of curtailing illegal transportation through Sand Taxi for sand reaches of I, II and III order streams could not be ensured by the SMS concerned.

Government replied (January 2023) that ADM&G Bhadradi Kothagudem has confirmed that the excess extraction and sale of sand occurred due to the glitch in the STMS software as pointed out by audit.

In the Exit Conference, Government agreed to examine the issues raised by audit in consultation with the DLSC Bhadradi Kothagudem.

2.3.4.2 GPS devices were not installed in the tractors transporting the sand

As per the Sand Taxi policy, every owner of the tractor willing to engage his vehicle as a Sand Taxi should make an application to the Revenue Divisional Officer duly depositing

refundable advance deposit amount of ₹25,000.00. Also, the tractor shall be installed with GPS device to tag the vehicle and monitor its movement while transporting the sand.

Under SMS, Karimnagar, 1,712 tractors and under SMS, Peddapalli, 1,461 tractors were registered as Sand Taxis. However, details of deposit collected from the tractor owners were not available with the ADM&Gs concerned. Further, GPS devices were installed in only 235 tractors under SMS, Peddapalli. Details of installation of GPS devices in the tractors under SMS, Karimnagar were not available with the ADM&G, Karimnagar.

Thus, audit observed that the objective of curtailing illegal transportation through monitoring the movement of Sand Taxi could not be ensured by the SMS concerned.

Government replied (January 2023) that ADM&G Karimnagar had proposed to increase the vehicle registration fee from ₹300 to ₹1,000 to enable installation of GPS devices in the tractors and after DLSC's approval the same will be implemented. Further, ADM&G Peddapalli informed that installation of GPS in all the tractors was not insisted since the tractors registered under Sand Taxi were also used for other purposes.

In the Exit Conference, Government agreed to examine the issues raised by audit in consultation with the DLSCs concerned.

2.3.5 Inaction in cases of excavation of sand beyond the permitted limits

Rule 5 (1) (k) and Rule 7 (5) (f) (i) of the TSSM Rules stipulated that penalty of ₹1,00,000.00 or ₹500.00 per CBM whichever is higher shall be imposed on the licensee (TSMDCL) if sand is excavated or de-casted beyond the specified limits (approved quantity) or more than the stipulated thickness/ depth. Further, as per the Manual of the DM&G, the ADM&G and the Royalty Inspector at the district level were required to periodically inspect mineral mines.

Review of sand raising contracts awarded by the selected POs of Jayashankar Bhupalapally, Bhadradi Kothagudem and Karimnagar revealed that the ADM&G did not carry out periodical inspection of the sand reaches licensed to TSMDCL. Further, even in the cases where excess excavation of sand was noticed during field inspection by the ADM&G and the TSMDCL, the DM&G did not levy the prescribed penalties. Few such instances are discussed below.

2.3.5.1 Non levy of penalty on the licensee for excavation of sand beyond the specified limits at Chenchupally

During the joint inspection (April 2016) by the ADM&G, Warangal and TSMDCL of the sand reach at Chenchupally village, it was noticed that out of the quantity of 1,79,452.80 CBM of sand permitted to be excavated during March 2016 to March 2021, the sand raising contractor (SR Contractor-1) excavated a total of 98,991.50 CBM outside the geo co-ordinates as given in the Approved Mining Plan. Out of this quantity, TSMDCL had already sold 28,991.50 CBM and a quantity of 70,000 CBM was available in the stockyard as on the date of the joint inspection.

Accepting the plea (August 2016) of TSMDCCL that the sand excavated outside the geo co-ordinates was stacked properly in the authorised stockyard, sold online to the general public and the sale amount was remitted directly to the Government Treasury, the GoTS permitted (August 2016) the TSMDCCL to sell the balance quantity of sand available in the stockyard by forfeiting the sand raising cost payable to the Sand Raising Contractor-1.

The Sand Raising Contractor-1 however, challenged this decision of the GoTS before the honorable High Court of Telangana (High Court) which directed (January 2018) the GoTS and the TSMDCCL to pay the remuneration, subject to deduction of reasonable compensation. Accordingly, the GoTS ordered (April 2018) TSMDCCL to deduct 50 *per cent* of the remuneration payable to the SR Contractor-1 who again challenged the GoTS decision before the honorable High Court. The High Court in its order (September 2018) directed that entire remuneration should be paid to the SR Contractor-1 and observed that since TSMDCCL had entered into agreement with the ADM&G for sand mining, the Sand Raising Contractor-1 who undertook the entire activity under the supervision and control of TSMDCCL was not recognised as a party to the contract for sand mining.

Audit also observed that in addition to the quantity of 98,991.50 CBM excavated outside the geo-coordinates, the Sand Raising Contractor-1 excavated 37,633.20 CBM in excess of the permitted quantity of 1,79,452.80 CBM from the same sand reach.

Thus, audit observed that although it was a clear case of illegal mining as TSMDCCL failed to ensure that sand mining was carried out within the specified geo co-ordinates, the DM&G did not take any action to impose penalty of ₹6.83 crore [(98,991.50 CBM + 37,633.20 CBM) X ₹500 per CBM] on TSMDCCL.

Management replied (September 2022) that mining beyond the permitted geo co-ordinates occurred since the society members were innocent local tribals unaware of Rules and Regulations. However, the excess excavated sand was sold through TSMDCCL and the sale proceeds were remitted to the Government. Government did not furnish any reply (January 2023).

The reply is not acceptable because in the instant case also the tribal society engaged a non-tribal third party as their nominated contractor who are experienced contractor in this field and ignorance of the rules cannot be accepted.

2.3.5.2 Lenient action on illegal excavation of sand beyond the specified depth at Ramaraopet

During inspection (June 2017) of the sand reach at Ramaraopet village the ADM&G, Bhadradi Kothagudem noticed that out of the 1,25,124 CBM of sand excavated by the sand raising contractor (SR Contractor-2), a quantity of 6,188 CBM was excavated in 25 pits by digging sand up to a depth of 1.75 meters (on average) which was more than the permitted depth of one meter. Accordingly, the ADM&G served (July 2017) notice to TSMDCCL and imposed (September 2017) a penalty of ₹30.94 lakh (6,188 CBM X ₹500 per CBM).

The TSMDCL filed (October 2017) an appeal before the DM&G on the grounds that the joint inspection was conducted after the closure of activities at the sand reach without the involvement of its authorised officials, an opportunity of being heard was not offered and issue of demand notice without considering the reply submitted by TSMDCL. However, observing that opportunity of personal hearing was accorded and that TSMDCL sold the entire quantity of 1,25,124 CBM duly paying the SF in advance, the DM&G dismissed (January 2020) the appeal and advised TSMDCL to file revision petition before the Government for waiving the penalty. The TSMDCL however, after a lapse of more than two years filed (April 2022) an appeal before the GoTS for waiver of penalty. Reasons for such delay were not forthcoming from the records produced to audit. Further, no such waiver was allowed by the GoTS till date (May 2022).

Audit observed that TSMDCL failed to monitor sand raising activities effectively to see that sand was not excavated beyond the specified depth. However, the DM&G issued prejudicial orders instead of promptly acting against TSMDCL to impose the penalty of ₹30.94 lakh.

Management replied (September 2022) that Government heard (August 2022) the revision petition filed by TSMDCL for waiver of penalty and orders were awaited. Government confirmed (January 2023) the management's reply.

The reply is not tenable because after holding TSMDCL liable for the illegal excavation of sand, the DM&G should have imposed and recovered the applicable penalty. However, this was not done resulting in non-compliance of the TSSM Rules.

2.3.5.3 De-casting of sand by pattadars beyond the specified quantity

Audit reviewed 22 (out of 89) cases of *patta* lands de-casted during the period from 2016-17 to 2020-21 at PO Bhadradi Kothagudem (BDKG) and observed that in three cases, *pattadars* had de-casted excess quantity (1,097 CBM) of sand than the quantity (44,289 CBM) approved by the DLSC, BDKG. This indicated that TSMDCL did not effectively supervise the de-casting activity done by *pattadars* in their *patta* lands. The ADM&G however, did not hold TSMDCL responsible for its deficient monitoring and did not impose the applicable penalty of ₹5.49 lakh (1,097 CBM X ₹500 per CBM).

Management replied (September 2022) that the actual sand excess de-casted was only up to 450 CBM. Further, TSMDCL had not released the raising cost to the *pattadars* towards the excess de-casted quantity but remitted the sale amount against the excess de-casted quantity into Government Treasury.

Government concurred (January 2023) with the management's reply.

The reply is not acceptable because the Sand Sale Management and Monitoring System (SSMMS) web portal of TSMDCL depicted the above excess de-casted quantities against the quantity approved by the DLSC. Further, withholding of the raising cost payable to the *pattadars* was not legally permissible (refer *Para 2.3.5.1* above) and hence, not a remedy.

In view of the foregoing, audit observed that the above instances of excavation of sand beyond permitted limits were in violation of the NSM Policy, the TSSM Rules, approvals accorded by the DLSCs and the conditions appended to the Environmental Clearance Certificate. However, as the NSM Policy and the TSSM Rules made TSMDCL liable for any type of illegal sand mining, both the DM&G and the TSMDCL pleaded unjustified excuses of payment of SF, remittance of sale proceeds to Government Treasury and no revenue loss suffered by Government to avoid levy and payment of applicable penalty. Therefore, DM&G and the TSMDCL dealt with the identified cases of sand mining beyond the permissible limits by the sand raising contractors and *pattadars* as a matter of routine. This indicated that both the DM&G and the TSMDCL were not acting firmly against identified cases of illegal sand mining. Hence, the casual implementation of the NSM Policy and the TSSM Rules rendered them ineffective in curbing the illegal sand mining in the State.

In the Exit Conference, Government agreed to examine audit's suggestion to make the actual perpetrators liable for the illegal mining through suitable amendments to the policy.

Recommendation 6: Government may consider incorporating suitable provisions in the NSM Policy and the TSSM Rules to bring sand raising contractors and *pattadars* under the ambit of penalty provisions for breach of any contractual obligations.

2.4 Addressing Environmental concerns related to sand mining

Summary

The District Survey Report meant to map the sand sources available in a district to enable excavation of sand in a systematic manner was not prepared for any of the districts under the selected POs up to January 2020. Further, monitoring of the impact of sand mining through photographing of project sites and recording of changes in the ground water levels was not done. The TSMDCCL did not incur the committed capital and revenue expenditure towards environmental protection measures as required under the conditions governing the Environmental Clearance.

The concerns raised by M-Sand manufacturing industry were not properly addressed resulting in non-extension of the incentives and concessions envisaged under the NSM Policy and TSSM Rules. The DLSCs also did not promote the manufacture and use of M-Sand. The TSMDCCL also did not establish a crusher for manufacturing M-Sand even though the lease period was due to expire in November 2023. Further, TSMDCCL diverted 94.71 *per cent* of the Road Damage Charges collected during the period 2016-17 to 2020-21 for other than the specified purposes. Moreover, de-casting of patta lands located in the midst of the Godavari riverbed was permitted before TSMDCCL obtained necessary statutory clearances.

Introduction

Rule 4 (iv) (b) of TSSM Rules required TSMDCCL to obtain (i) Approved Mining Plan (AMP) from the DM&G, (ii) Environmental Clearance (EC) from the State Level Environment Impact Assessment Authority (SEIAA) and (iii) Consent for Establishment (CFE), Consent for Operation (CFO) from the Telangana State Pollution Control Board (TSPCB). Also, Rule 5 (1) (b) of the TSSM Rules stipulated that TSMDCCL should excavate sand as per the approved AMP and other conditions laid in the clearances issued under the River Conservancy Act, 1884, the WALTA Act, 2002, the Environment Protection Act, 1986 and Air & Water Pollution Prevention Act, 1974 and amendments thereon or any suitable subsequent Act/ Rules issued by Government from time to time. Further, the MoE,F&CC issued SSMM Guidelines with the objective to ensure sustainable sand mining and environment friendly management practices to restore and maintain the ecology of river and other sand sources. Audit reviewed the above mechanism put place to protect the environment from the effects of sand mining and observed the following.

2.4.1 Mapping and monitoring of sand sources not done

The SSMM Guidelines mandatorily required mapping of sand resources and monitoring of the mined-out material for management of sustainable sand extraction. Accordingly, the SSMM Guidelines stipulated preparation of District Survey Report (DSR) by a District Environment Impact Assessment Authority (DEIAA) for mapping the sand sources available in a district to identify the rivers, streams and other sources suitable for extraction

of sand, their carrying capacity and the maximum quantity to be extracted in a systematic manner.

The SSMM Guidelines further stipulated that, photographs of the project sites should be taken prior to excavation to document the baseline conditions, and again during each monitoring session. Photos should be taken twice a year and photos of structures nearby like outfalls/ off-takes, intakes, bridges and other structures were to be regularly taken. Similarly, monitoring wells were to be established adjacent to each off-channel flood plain excavation to record changes in ground water levels. Measurements should be taken monthly to help analyses of surface water and ground water interaction along the sand reaches. This has to be done by the Environment Clearance holder and duly checked and assessed by the DEIAA.

Audit noticed that though the SSMM Guidelines were communicated by GoI in March 2016, the DSR was not prepared for any of the districts under the selected POs up to January 2020. Further, monitoring of the impact of sand mining through photographing of project sites and recording of changes in the ground water levels was not done. Thus, audit observed that the recommended action for sustainable sand mining was not taken.

Management replied (September 2022) that DSRs were prepared for nine districts.

Government stated that DSRs were prepared for the districts having IV and above order streams where sand deposits were available.

In the Exit Conference, TSMDCL stated that DSR has been prepared in respect of the sand bearing districts. Government concurred with the views of TSMDCL.

The fact remained that DSRs were prepared after a delay of more than four years. Further, TSMDCL has not confirmed whether the DSRs were approved for implementation.

2.4.2 Non-compliance of the conditions governing the Environmental Clearance

The ECs issued by the State Level Environment Impact Assessment Authority (SEIAA) inter-alia specified the conditions to;

- take up plantation on both sides of approach road between the river bund and main road to absorb dust and other particles around sand mining area.
- incur prescribed capital and revenue expenditure for Environmental Protection Measures (EPMs) and to keep the funds in separate account and not to divert for any other purposes.
- set up separate Environment Management Cell (EMC) with suitably qualified persons to implement the environmental protection measures.
- report the year wise expenditure on EPMs and to submit half-yearly reports on compliance with the EC conditions to Regional Office of MoE,F&CC at Chennai.

During 2016-17 to 2020-21, TSMDCL obtained 29 ECs (PO's Bhadradi Kothagudem and Jayashankar Bhupalapally) and committed to incur capital expenditure of ₹65.39 lakh and annual revenue expenditure of ₹41.21 lakh for EPMs. Similarly, TSMDCL in the Report

(January 2021) on Environmental Impact Assessment of De-siltation of sand at Annaram and Medigadda barrages (EIAD Report) under PO Jayashankar Bhupalapally estimated to incur capital expenditure of ₹13.50 lakh and annual revenue expenditure of ₹11.00 lakh for (a) barricading of dredge area in riverbed to avoid fall of animals, (b) plantation of trees at river bund and stockyards, (c) providing enclosures and seep traps at stockyards to avoid dust emission and to collect seepage water, (d) annual silt deposit ratio studies to fix depth of de-silting and (e) environmental monitoring of water, air, noise and ground water fluctuations in the surrounding areas of de-siltation.

From a review of records of selected POs and Joint Physical Verification (JPV) of selected stockyards, audit observed that TSMDCL did not implement any of these EPMs. Details of constitution and functioning of EMC, expenditure details and half-yearly compliance reports submitted to MoE,F&CC were not made available to audit. Also, as of March 2021, TSMDCL was to incur capital expenditure of ₹78.89 lakh and cumulative revenue expenditure of ₹1.66 crore. Details of expenditure incurred on EPM were also not furnished to audit.

Management replied (September 2022) that there was no environmental impact due to sand mining since the operations were carried out manually, up to the specified depth, non-release of effluents and non-removal of plants. Hence, the conditions mentioned in Schedule A of the CFE and CFO are not applicable to sand mining activity. It was further stated that (a) due to presence of guide bund along the de-siltation area, there was no need for barricading, (b) farmers objected to plantation at stockyards because they had to use the land for cultivation after dispatches from stockyards, (c) seep traps were provided and water was sprinkled at required locations to avoid dust emissions, (d) scientific study of annual sand deposit ratio was conducted, (e) the dredged areas were located in areas which were safe in terms of ground water levels and (f) expenditure of ₹1.66 crore was incurred on EPMs. However, TSMDCL would maintain separate record of expenditure incurred for EPMs.

In its reply (January 2023) and in the Exit Conference, Government concurred with the reply of TSMDCL.

Reply is not acceptable because while obtaining the ECs, TSMDCL committed to undertake EPMs by incurring the specified amount of expenditure. However, TSMDCL failed to undertake any steps for protecting the environment. Further, the reply is also contradictory to the suggestions made by TSMDCL in the EIAD Report. The reply is also silent about the formation, functioning of EMC and submission of the required reports by TSMDCL to the MoE,F&CC.

Recommendation 7: Government may direct TSMDCL to comply with the conditions governing Environmental Clearance, the SSMM Guidelines and the TSSM Rules.

2.4.3 Non-promotion of 'Manufactured Sand' as an alternative to natural sand

The NSM Policy and the TSSM Rules identified Crushed Stone Sand or Manufactured Sand (M-Sand) as a viable alternative to reduce the pressure on ordinary/ riverbed/ natural

sand in the State. It was also proposed to mandate the Government Departments to use at least 50 *per cent* of M-Sand in Government constructions. Further, certain incentives like industry status, Value Added Tax and power subsidies were proposed to be provided to 100 *per cent* M-Sand manufacturing units to make M-Sand available at affordable cost to meet the requirement of bulk consumers. The annual demand for sand in Telangana State was estimated (March 2018) at 125 lakh CBM as against its availability of 70 lakh CBM. The availability of M-Sand capacity was assessed at 40 lakh CBM.

The M-Sand Manufacturers Association (MSMA) in its representation (October 2017) to the Government stated that three stage crushing, shaping, and screening plants produce M-Sand in the ratio of 50 *per cent* coarse aggregates and 50 *per cent* M-Sand. Due to factors like rock index and installed plant technology, production of 100 *per cent* M-Sand is practically not possible. The MSMA also suggested exemption from mining royalty, Goods and Services Tax (GST) for a specified period and priority in allocation of mines besides making use of M-Sand compulsory for all Government projects. The GoTS could have considered reduction of the limit of 100 *per cent* M-Sand production as requested by M-Sand manufacturing industry. The GoTS however, issued (May 2018) orders merely directing all its engineering works departments to use M-Sand and natural sand in the ratio of 50:50.

Audit observed that the GoTS did not properly address the concerns raised by the MSMA by not reducing output ratio of M-sand from 100 *per cent* to 50 *per cent* and as a result, they are not eligible for the incentives and concessions envisaged under the NSM Policy and TSSM Rules. The DLSCs of the districts covered by the selected POs of Jayashankar Bhupalapally, Bhadradi Kothagudem and Karimnagar did not discuss any issues for promoting the manufacture and use of M-Sand as per the orders issued by the GoTS.

Audit also noticed that TSMDCL proposed (October 2017) to establish a crusher for manufacture of road metal aggregates and sand in 33.50 acres of land taken (November 2008) on lease for 15 years (annual dead rent was ₹31.89 lakh) in the Bandaraviryala mining zone, Hayatnagar mandal, Ranga Reddy district. On receipt (June 2018) of GoTS permission to undertake quarry operations, TSMDCL applied for EC and other statutory clearances to the Telangana State Pollution Control Board (TSPCB). However, TSMDCL could not conduct public hearing and obtain the statutory clearances till date (March 2022).

Audit observed that despite incurring unfruitful expenditure of ₹4.15 crore on dead rent for 13 years (₹2.23 crore for seven years since the announcement of NSM Policy), TSMDCL did not establish a crusher for manufacturing M-Sand even though the lease period was due to expire in November 2023.

Management replied (April 2022) that though public hearings were planned to be conducted, the same could not be held due to Greater Hyderabad Municipal Corporation (GHMC) elections (December 2020) and non-availability of police protection (January 2021). It was further stated that TSMDCL did not have information about other M-Sand manufacturing units in the State.

The DM&G replied (December 2021) that stone crushing units did not come forward to manufacture M-Sand due to cheap availability of river sand and high cost involved in maintenance of M-Sand manufacturing units.

Government reiterated (January 2023) that TSSM Rules mandated Government departments to use at least 50 *per cent* of M-Sand in Government constructions.

The reply is not acceptable because the DM&G did not take constructive steps to promote M-Sand and restricted the policy to a mere prescription for use of M-Sand for the Government projects. Thus, the objective of NSM Policy to promote the M-Sand as an alternative to natural sand was not achieved.

Recommendation 8: Government may consider framing suitable guidelines for extending the benefits envisaged under the NSM Policy and TSSM Rules to the M-Sand manufacturers.

2.4.4 Diversion of Road Damage Charges

In addition to sand cost, the GoTS permitted (March 2016) TSMDCL to collect Road Damage Charges (RDC) ranging between ₹150 and ₹250 based on the carrying capacity (measured by the number of tyres) of vehicles used for transportation of sand. The RDC receipts were to be kept in separate account and utilised for the development, refurbishment and maintenance of roads leading to TSMDCL stockyards. The GoTS also advised TSMDCL to evolve a mechanism to periodically monitor the receipts and payments of RDC from the separate account and inform the result thereon to the Government.

Accordingly, the BoD of TSMDCL approved (July 2016) the following guidelines for utilisation of the RDC funds.

- (i) To take up any new work of laying approach road from stockyard to connecting main road for sand transportation at the de-siltation sand reaches and specified sand bearing areas,
- (ii) To take up repair and maintenance of the existing approach road from stockyard to connecting main road for sand transportation at the de-siltation sand reaches and specified sand bearing areas,
- (iii) To relay the road, if needed by the road owning department based on their estimates, by TSMDCL itself duly following the tender process, and
- (iv) To take up road work for *patta* lands in an exceptional situation when the assessed sand quantity is huge.

The GoTS further directed (April 2018) TSMDCL to meet the expenditure on payment of compensation to accident victims due to sand lorries from RDC fund.

Details of RDC collected and utilised during the years 2016-17 to 2020-21 were as given in the **Table 2.1**.

Table 2.1: Details of RDC collected and utilised*(Amount in ₹ crore)*

Year	RDC collected	RDC utilised for specified purposes			RDC utilised for other purposes	Closing Balance
		Compensation paid to road accident victims	Road repairs	Total		
2016-17	12.64	0.00	0.29	0.29	11.64	0.71
2017-18	25.68	0.00	3.19	3.19	15.63	7.57
2018-19	70.87	0.15	0.19	0.34	77.70	0.40
2019-20	48.06	0.25	1.30	1.55	42.98	3.93
2020-21	14.07	0.40	0.02	0.42	14.32	3.26
Total	171.32	0.80	4.99	5.79	162.27	

Source: Records and information furnished by TSMDCCL

Audit noticed that out of ₹171.32 crore RDC funds collected during the period 2016-17 to 2020-21, TSMDCCL utilised ₹162.27 crore (94.71 per cent) for other purposes than the specified one like payment of statutory dues such as Income Tax, GST and general operational expenses. Thus, audit observed that TSMDCCL diverted the RDC funds for other purposes in contravention of the Government's guidelines. Such diversion of funds became possible because Government fixed the RDC far in excess of the actual requirement for the specified purposes. Consequently, the public consumers had to bear this extra burden.

Management accepted (September 2022) that funds were diverted from RDC account but stated that statutory dues were paid from RDC funds as their non-payment in time attracts penalties. It was also stated that these payments were made from RDC funds as ₹473.23 crore (as of May 2022) towards sand operational expenses, supporting charges were not received from the Government in time. On receipt of pending dues from the Government, the RDC fund would be recouped. Government concurred (January 2023) with the management's reply.

The diversion of RDC funds citing delay in receipt of operational expenses and support charges from the Government is not tenable.

In the Exit Conference, the Government concurred with the reply of TSMDCCL.

The fact remained that the purpose of collection of RDC was defeated as meagre (five per cent) funds were spent for road repairs, etc.

2.4.5 Irregular permission for de-casting of patta lands located in midst of the Godavari River without any statutory clearances

Sub Clause 8 of Rule 7 of TSSM Rules provided that the District Level Sand Committee (DLSC) shall allot *patta* lands located in the midst of riverbed/ course to TSMDCCL for de-casting sand only after TSMDCCL submits statutory approvals such as Approved Mining Plan (AMP) from the DM&G, EC from State Level Environment Impact Assessment Authority (SEIAA), Consent for Establishment (CFE)/ Consent for Operation (CFO) from Telangana State Pollution Control Board (TSPCB).

The Mandal Revenue Office, Manuguru Mandal, Khammam District assigned (2003) agricultural land *pattas* to an extent of 78.35 acres in the Godavari riverbed in Ramanujavaram Village to 64 *pattadars*/ villagers without assigning any survey numbers or effecting any changes in the Pahani or the Village Map. These lands were matted with sand during the Godavari floods in 2013. The assignees represented (December 2014) to the Minister for Mines and Geology, GoTS to permit for the de-casting of sand from their assigned lands to make them fit for agriculture. Accordingly, this issue was discussed in the DLSC of Khammam (February and July 2016) and it was decided to allow for the de-casting of sand.

The images obtained by audit from Google Earth Pro incorporating the geo co-ordinate boundaries of these *patta* lands showed that they were located in the midst of the Godavari River. Thus, de-casting of sand from these *patta* lands required obtaining of above statutory clearances by TSMDCCL from the respective authorities.

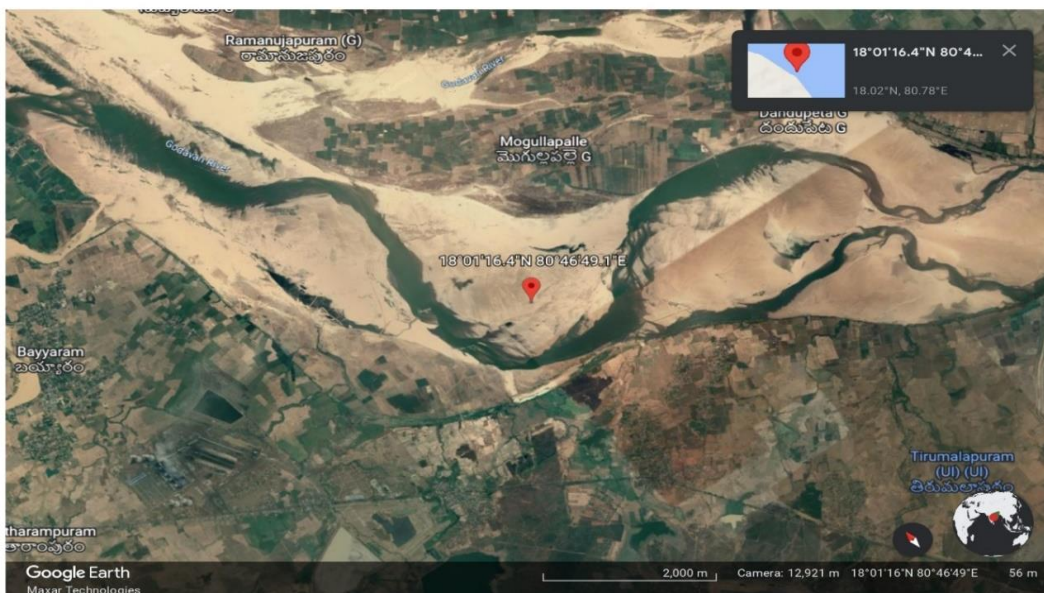


Figure 2.1: Photo taken from Google Earth Pro on 9 December 2021

However, DLSC, Khammam without directing TSMDCCL to get the necessary statutory clearances such as EC, CFE and CFO gave permission to TSMDCCL to commence the de-casting of sand. Accordingly, TSMDCCL entered into de-casting agreement (September to November 2016) with above *pattadars* for de-casting 6.38 lakh CBM of sand. Under these agreements, TSMDCCL excavated total 6.28 lakh CBM of sand. Audit observed that DLSC Khammam contravened the TSSM Rules by permitting TSMDCCL to de-cast sand from these *patta* lands located in the midst of the Godavari riverbed, before TSMDCCL obtained necessary statutory clearances.

Management replied (September 2022) that the condition to obtain Environmental Clearance, Consent for Establishment, Consent for Operation was not mentioned in the DLSC's approval. It was further stated that the exact location of these lands cannot be decided as per Google images without physical inspection. These lands were located

adjacent to the Godavari River and the River Authority namely, the Irrigation Department never mentioned that these lands were falling in the river course.

Government concurred (January 2023) with the management's reply.

In the Exit Conference, TSMDCL contended that the DLSC's approvals are based on the submissions of the representatives of the Irrigation Department who did not declare that these lands were lying amidst the river course. Government concurred with the views of TSMDCL.

The reply is not acceptable because as per the TSSM Rules, the TSMDCL was required to obtain necessary statutory clearances before excavating sand. Further, the TSSM Rules require the DLSC to identify the specific sand bearing area based on the geo co-ordinates to be fixed by the Ground Water Department and not the Irrigation Department as contended by TSMDCL. Based on the geo co-ordinates as indicated in the DLSC's approval letters, Audit also obtained the Google image of the location of the *patta* lands.

