CHAPTER –II

COMPLIANCE AUDIT – ECONOMIC SECTOR

Chapter II

Compliance Audit – Economic Sector

Irrigation and Command Area Development Department

2.1 Avoidable expenditure due to re-tendering of work

Lack of technical competence of Department in managing EPC contract led to delay in commencement of work and avoidable expenditure of ₹ 76.86 crore.

Under Engineering, Procurement and Construction (EPC) agreements, changes in basic parameters of projects can be made only with prior approval of Government¹⁸⁶. The contractor carries the entire risk of the project for schedule and budget, in return for a fixed price.

Administrative approval for the Dindi Balancing Reservoir (DBR), a component of Srisailam Left Bank Canal¹⁸⁷ (SLBC), was accorded for ₹2,813.00 crore in August 2005. Technical sanction for DBR was accorded (April 2008) for ₹211.00 crore (7.5 *per cent* of ₹2,813.00 crore). The work was awarded (February 2009) to a contractor for ₹157.74 crore, stipulated for completion in 36 months (February 2012). The basic parameters of the agreement stipulated construction of spillway with radial gates for Maximum Flood Discharge (MFD) of 8,580 cumecs i.e., the spillway could withstand a flood with a maximum discharge of 8,580 cumecs.

During scrutiny (March 2017) of records pertaining to the said work in the Project SLBC Circle, Gandhamvarigudem, Nalgonda, the following observations were made:

The contractor submitted (March 2009) designs and drawings to the Department in accordance with the basic parameters i.e., MFD of 8,580 cumecs. In the course of approval of designs, the Chief Engineer, Hydrology, however, assessed (November 2009) the magnitude of MFD as $18,625^{188}$ cumecs. Accordingly, the Superintending Engineer (SE)¹⁸⁹ ordered (December 2009) the contractor to resubmit designs with MFD of 18,625 cumecs within the agreed value. Being an EPC contract the contractor carried the entire risk of the project for schedule and budget, in return for a fixed price and so any change in basic parameter of the project would necessarily require Government's prior approval, which was not taken. The contractor requested (January 2010) for additional payment of ₹ 150.97 crore (at Standard Schedule of Rates - SSR 2007-08), due to increase in scope of work. This request was denied (January 2010) on the grounds that

¹⁸⁶ Circular Memo No. 34843/Reforms/2006 dated 7th May 2008.

¹⁸⁷ A project contemplated to provide irrigation facilities to three lakh acres in drought prone areas of Nalgonda District and drinking water to fluoride affected villages enroute.

¹⁸⁸ There was a flood in 2009. As per the estimation of Chief Engineer, Hydrology, it was estimated that the flood of 2009 was of the order of 18,625 cumecs.

¹⁸⁹ A.M.R. Project Circle No.1.

the work was awarded under EPC contract¹⁹⁰ and no financial implication would be entertained. Although the contractor submitted the designs for a discharge of 18,625 cumecs, he did not commence the work, pending clear commitment with regard to compensation on the differential cost.

Faced with resistance from the contractor to commence the work, the Chief Engineer requested (November 2010) the Government to accord permission for the change in the basic parameter. Government referred (January 2011) the matter to the State Level Standing Committee (SLSC). The SLSC opined¹⁹¹ (April 2012) that the spillway was to be constructed for 8,580 cumecs only as laid down in the agreement. A breaching section was also recommended by the SLSC to divert flood waters in excess of the MFD before it hits the spillway (which could rejoin the main course at a point downstream after the spillway).

The Department communicated (May 2012) the instructions of the SLSC to the contractor and directed him to submit designs and drawings as well as a proposal for extension of time. The contractor insisted (May 2012) for revision of agreement value to \gtrless 272.59 crore (increase of 73 per cent) due to change in SSR¹⁹² (2011-12), since the validity of the agreement had expired in February 2012. Without addressing this issue, the SE directed (June 2012) the contractor to commence the work within 14 days, failing which action as deemed fit, would be initiated as per agreement and rules in vogue.

Aggrieved by this, the contractor filed (August 2012) a civil suit at the Hon'ble City Civil Court, Hyderabad¹⁹³ for an injunction against being forced to undertake the work by the Department. There was, however, no injunction against the Department. It was observed in audit that the contractor had given his consent to the Department (December 2012) for "no objection" for calling of fresh tenders. It took more than two years for Government to permit (February 2015) the Chief Engineer to invite fresh tenders, pending receipt of Government orders for closure of the existing EPC contract. In May 2015, Government terminated the agreement and accorded permission to finalise the fresh tenders. The contractor withdrew (June 2015) his petition and gave consent letter to close the contract at no costs.

The Department awarded (June 2015) the same work to another contractor for an agreement value of \gtrless 349.45 crore (SSR 2014-15) with MFD of 8,580 cumecs. Lack of technical competence of the Department to handle the EPC contract led to cost and time overrun as follows:

¹⁹⁰ Clause 39.3.2 of the agreement supported the contention of the SE. It stated, "Entrustment of the additional items contingent on the main work will be authorised by the employer and the contractor shall be bound to execute such additional items at no extra cost to the employer and the cost of such items shall be deemed to have been included in the contract price quoted."

¹⁹¹ SLSC opined that 'in view of huge cost involved in construction of spillway with Probable Maximum Flood (PMF) of 18,625 cumecs and observation of the previous flood history of the River, the spill way and earth dam may be checked for Standard Project Flood (SPF) and a breaching section may be provided at right side of the dam at a convenient location for disposing the balance flood water between PMF and SPF'.

¹⁹² At the time of the agreement, SSR 2007-08 was in vogue.

¹⁹³ The contractor also claimed compensation of ₹ 31.77 crore.

Escalation in the costs of work by \gtrless 76.86 crore¹⁹⁴ (\gtrless 349.45 crore – \gtrless 272.59 crore) and delay in work of 76 months (more than six years). The extra cost did not add any value to the work as the revised contract was for the same MFD of 8,580 cumecs, which was originally envisaged.

On being pointed out by Audit, the Department replied (March 2017 and October 2018) that the claim of the contractor was unacceptable as per the terms of the agreement. It was also stated that the Department did not make changes to the basic design of the project without the approval of the Government as pointed out by Audit. The fact, however, was that the contractor had submitted the designs and drawings in accordance with the basic parameters i.e., MFD of 8,580 cumecs to the Department in March 2009 as per the EPC agreement. Moreover, in violation of Government orders, the Department changed the basic project parameters without obtaining prior approval of Government, leading to delays and avoidable extra expenditure. The same work with same basic parameter was re-awarded at an avoidable excess expenditure of ₹ 76.86 crore.

Thus, lack of technical competence of the Department in managing an EPC contract led to delay in commencement of work and avoidable expenditure of ₹ 76.86 crore.

2.2 Loss of revenue due to inefficient disposal of de-silted soil and additional expenditure on lead charges

By dumping the de-silted soil without usage, contrary to Government instructions, the Department suffered revenue loss of \gtrless 30.59 lakh, besides incurring an additional expenditure of \gtrless 28.07 lakh on lead charges¹⁹⁵in transporting the silt to the dumping site.

The ancient Minor Irrigation tanks built by the rulers of Kakatiyas had become defunct or shrunk due to silting and improper maintenance over the years. Government took up (September 2014) "Mission Kakatiya"¹⁹⁶ to restore these Minor Irrigation tanks in the State. The Mission was to restore irrigation to 10 lakh acres of command area. An important component of the Mission was desilting of tanks for restoration to their original water storage capacity.

As per the guidelines¹⁹⁷,

(i) private persons are permitted to buy de-silted soil that is unsuitable for agriculture purposes on payment of seigniorage charges¹⁹⁸ at ₹ 30.00 per cum. Should demand for such de-silted soil be high, open auction is to be conducted at Gram Sabha level and sold after due payment of cost of desilted soils, fixed by the Gram Sabha. Of these receipts, seigniorage

¹⁹⁴ For payment at enhanced rates with SSR 2011-12 against the rates of SSR 2007-08 adopted in the contract agreement.

¹⁹⁵ Charges for transportation of earth/ soil/ stone/ sand from/ to the site to/ from the dumping area/ place of origin of the material.

¹⁹⁶ The name 'Mission Kakatiya' was given to programme in remembrance and tribute to the Kakatiya rulers, who developed large number of irrigation tanks.

¹⁹⁷ Contained in Government Memo.No.5414/MI-T/A2/2015-1 dated 17th June 2015.

¹⁹⁸ Royalty charges payable to the Government for usage of naturally available minerals such as ordinary earth/ gravel, sand, metal, etc., in the work, fixed by the Government from time to time.

charges at the rate of \gtrless 30.00 per cum are to be paid to Government exchequer and the balance amount is to be utilized on development activities of the village.

(ii) Wherever the desilted soil could be useful for agricultural purpose, it is used by the farmers. The balance soil left is to be disposed off as mentioned at (i) above.

In July 2016, the Government sanctioned¹⁹⁹ the work of restoration of the tank 'Thimmakka Cheruvu' in Medak District under Mission Kakatiya– Phase II. During execution of the work, 1,18,455 cum of silt was excavated.

The Assistant Director, Soil Testing Laboratory, Sanga Reddy certified (April 2017) that the de-silted soil in the instant case was saline in nature but useful for agricultural purposes, if mixed with farm yard manure and subject to providing proper drainage facility.

In May 2017, the Deputy Executive Engineer concerned reported to the Executive Engineer, North Tanks Division, Hyderabad, that there was a demand for the desilted soil for use in brick manufacturing. But no further action was taken.

Based on the Superintending Engineer's directions (May 2017), the Executive Engineer disposed off (May 2017) 16,500 cum of silt to the farmers. The remaining 1,01,955 cum of de-silted soil was, however, dumped in the low lying areas, without earning any revenue, as required under the instructions of the Government.

This resulted in a loss of revenue of ₹ 30.59 lakh (@ ₹ 30.00 per cum) to the exchequer. Audit further observed that the Department incurred an additional expenditure of ₹ 28.07 lakh²⁰⁰ towards lead charges in transporting the silt to the dumping site.

The Government (December 2018) replied that the de-silted soils were mixed with industrial waste and chemicals and thus could not be used for any purpose including manufacturing of bricks. Hence, the de-silted soils could not be auctioned/ utilised and had to be dumped within permissible lead. Further, there was no provision in the sanctioned estimate for mixing with farm yard manure and Department could not ensure proper drainage facility and the desilted soils could not be used for agricultural usage without suitable treatment.

It was, however, observed that the reasons offered by the Government regarding mixing of industrial waste and chemicals in the de-silted soil were not found on record. Further, absence of proper drainage facility was no reason for non-distribution amongst farmers, as the farmers had already lifted 16,500 cum of silt.

Thus, by dumping the de-silted soils without any usage, contrary to Government instructions, the Department suffered a revenue loss of \gtrless 30.59 lakh. This also resulted in additional expenditure of \gtrless 28.07 lakh on lead charges.

¹⁹⁹ Vide G.O.Rt.No.628 dated 6th July 2016.

²⁰⁰ Lead charges @ ₹27.53 per cum.

2.3 Non-recovery of mobilization advances

Failure to recover mobilization advances, consequent to pre-closure/ termination of contracts, resulted in non-recovery of ₹ 428.98 crore.

As per Government orders²⁰¹, contractors can be provided with mobilization advance, up to 10 *per cent* of the contract value. Recovery of advance and interest thereon shall be made from Running Account (RA) Bills submitted by the contractors during various stages of execution. The recovery shall commence from the RA bill after executed value of the work reaches 10 *per cent* of the contract value. The agreements provide for payment of mobilization advances to the contractors against Bank Guarantee (BG) of an equivalent amount obtained from a scheduled Bank. The BG so provided by the contractors should remain valid until the entire advance, including interest, is recovered from them.

State Public Works Department Code²⁰², requires a contractor to pay 2.5 *per cent* of contract value, at the time of concluding agreement, towards Earnest Money Deposit (EMD). The EMD shall be retained by the Department till the completion of works including rectification of defects noticed during the defect liability period.

During audit (September 2017 and May 2018) of Superintending Engineer, Dummugudem Project Circle, Khammam, it was observed that the Department failed to effect recovery of mobilization advances along with interest amounting to ₹ 428.98 crore from the Contractors in respect of three projects, as detailed in **Table 2.1**:

	Name of the scheme	Period of Administrative approval	Stipulated period of completion	Period providing Mobilisation advance	Mobilisation advance given	Interest
					(₹ in Crore)	
А.	Rajivsagar Dummugudem Lift Irrigation Scheme ²⁰³ (RDLIS) Indirasagar Dummugudem Lift Irrigation Scheme ²⁰⁴ (IDLIS)	May-September 2007	August 2011 and March 2012	June 2007 to November 2008	7.59	7.87
В.	Jyothirao Phule Dummugudem Nagarjunasagar Sujala Sravanti ²⁰⁵ (JPDNSS)	June 2008 to October 2009	November 2011 and April 2013		276.56	
Sub Total Total					284.15	144.83
					428.98	

Table 2.1: Details of Mobilisation Advances pending for recovery

²⁰¹ Erstwhile Composite AP Govt. Memo No. 22500/Reforms/2008-1 dated 20.08.2008 duly adopted by GoTS.

- ²⁰² Para 154(iii) of Section 4 of erstwhile AP Public Works Department Code adopted by GoTS.
- ²⁰³ Administratively approved in March 2005 to irrigate 4,00,000 acres in Khammam district by drawing water from River Godavari.
- ²⁰⁴ Administratively approved in March 2005 to irrigate 200000 acres in Khammam, Krishna and West Godavari districts by drawing water from the back water of Polavaram Reservoir.
- ²⁰⁵ Administratively approved in May 2007 to ensure full supply of water at the tail end of irrigated 14.13 lakh acres of Ayacut under the Nagarjuna Sagar Project.

A. In the works of the RDLIS and IDLIS, mobilization advances were granted after obtaining BGs for equivalent amounts. The Department also collected EMDs in the form of BGs aggregating \gtrless 9.00 crore from the said contractors.

Government of Telangana, subsequent to its formation (June 2014), re-designed (February 2016) the two projects into a single project viz., Sitarama Lift Irrigation Scheme. Due to slow progress²⁰⁶, works on the various packages included in all the existing agreements were pre-closed (February 2017).

Audit found that mobilization advances amounting to $\mathbf{\xi}$ 7.59 crore along with interest of $\mathbf{\xi}$ 7.87 crore were, however, not recovered till date (December 2018). The value of BGs covered the mobilization advances but not the interest. Further, Government also returned (July 2017 to September 2018) the BGs amounting to $\mathbf{\xi}$ 9.00 crore obtained towards EMD, thereby entailing loss of an opportunity to recover the amount.

B. In respect of JPDNSS, the contractors were granted (July 2008 to May 2014) with mobilization advances against BGs for equivalent amounts. EMD in the form of BGs amounting to $\mathbf{\overline{T}}$ 333.74 crore was also collected from the contractors.

Consequent upon its formation, Government of Telangana reviewed the project at the instance of public representations questioning advantages of the projects to Telangana State. As the progress on works was slow ranging from 1.75 *per cent* to 3.6 *per cent*, Government terminated (April 2015 to August 2015) nine agreements.

The mobilization advances amounting to ₹ 276.56 crore along with interest²⁰⁷ of ₹ 136.96 crore were, however, not recovered till date (December 2018). The Department also returned (September 2016 to January 2017) the BGs amounting to ₹ 333.74 crore obtained towards EMDs to the contractors at the instance (August 2016) of Government. This rendered the possibility of recovery of the amount remote.

Thus, mobilization advances amounting to \gtrless 428.98 crore (Principal: \gtrless 284.15 crore and Interest: \gtrless 144.83 crore) remained unrecovered, even after 3.5 to 4 years of pre-closure/ termination of contracts. By returning the BGs obtained for EMD, the Government has put at risk the possibility of recovery of the amounts. Unless banks are approached to invoke the BGs (towards mobilization advance) before expiry of their validity, the recovery of advances also would become bleak.

²⁰⁶ Ranging between one *per cent* and 7.63 *per cent* in respect of RDLIS and between 2.10 *per cent* and 4.38 *per cent* in respect of IDLIS up to February 2017.

²⁰⁷ Calculated at the rate of 8 *per cent* per annum (as mentioned in Package 3 of JPDNSS) from the date of last recovery / payment of mobilisation advance, as the case may be.

In the reply, Government confirmed (October 2018) the facts and stated that the mobilization advance of \gtrless 276.56 crore along with accrued interest would be recovered in due course of time. The details of recovery of amounts are still awaited from the Department (June 2019).

Sudhafajan

(SUDHA RAJAN) Accountant General (Audit) Telangana

Hyderabad The **17 July 2020**

Countersigned

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(RAJIV MEHRISHI) Comptroller and Auditor General of India

New Delhi The **24 July 2020**