

CHAPTER – II
PUBLIC WORKS
DEPARTMENT

Chapter-II PUBLIC WORKS DEPARTMENT

Compliance Audit on “Fund Management and Construction & Up-gradation of Major District Roads through New Development Bank Loan in Madhya Pradesh”

Summary

Audit scrutinized the records relating to Construction & Up-gradation of Major District Roads (MDR) carried out through the loan assistance from the New Development Bank (NDB) during the period 2018-19 to 2020-21. Eighteen Public Works Divisions had received loan assistance, out of which, seven Divisions were selected for detailed scrutiny. In addition, office of the Executive Engineer, Maintenance Division, who is the designated Drawing & Disbursement Officer in this case, and the office of the Engineer-in-Chief were also audited. During the scrutiny of records, Audit noticed the following:

- *Vagueness in the process of road selection.*
- *Department created a financial liability due to delayed payment of contractors' Bills, and Irregular provisioning & execution of backfilling.*
- *Execution of inferior item of Cement Concrete Interlocking Blocks, Execution of below specification work, short deduction of royalty from contractors, and Payment for works not executed.*

These instances of shortcomings, in aggregate, involved an overall impact of ₹ 94.43 crore.

2.1 Introduction

In Madhya Pradesh, the works of construction of Buildings, Roads and Bridges are carried out mainly by the Public Works Department (PWD). The Major District Roads provide connectivity to the District Headquarters with the major towns of a District and also to the headquarters of the other Districts. They connect rural interiors with National Highways and State Highways as well. PWD carries out construction & up-gradation of major district roads in Madhya Pradesh with State budgetary support, assistance provided by the Government of India in the form of grants, and loans obtained from the internal and external financiers.

In May 2018, the Government of Madhya Pradesh (GoMP) had approved ₹ 3,250 crore for construction & up-gradation of 87 Major District Roads, consisting of 2,142.98 kms, to be carried out by 18 Divisions¹ with loan assistance from the New Development Bank (NDB)². The NDB accorded approval (October 2018) on a loan of ₹ 2,275 crore (*i.e.*, 70 per cent of the project cost). The remaining amount of ₹ 975 crore (*i.e.* 30 per cent) was to be borne by the State Government.

According to the Project Agreement signed (October 2018) between the Department and the NDB, the project expenditure was, at first, to be incurred out of the sum allocated by the State

¹ Barwani, Bhind, Chhindwara, Dhar, Dindori, Gwalior, Hoshangabad, Jabalpur, Katni, Khandwa, Kargone, Panna, Ratlam, Shivpuri, Shajapur, Ujjain, Umariya and Vidisha.

² The New Development Bank is a multilateral development bank established by BRICS countries. It provides loans to the member countries. A loan agreement has been executed between the Department of Economic Affairs, Ministry of Finance, Government of India and the New Development Bank.

Government in its budget and was to be reimbursed by the Bank later in a phased manner, on being claimed through Controller of Aid Accounts and Audit³. The loan was to be paid back in 20 years with interest⁴ in 30 semi-annual instalments commencing from September 2023 to March 2038.

2.2 Organisational Set up

The Principal Secretary is the administrative head at the state level while the Engineer-in-Chief is the technical head of the Department. The regional offices of the Department are called Zonal Offices. There are Circle Offices under the Zonal Offices. The Circle Offices supervise the work of Divisional Offices. The Engineer-in-Chief is assisted by the Chief Engineers of the Zonal Offices, by the Superintending Engineers of the Circle Offices and by the Executive Engineers of the Division Offices.

2.3 Budget Allocation and Expenditure

During the period from 2018-19 to 2020-21, an amount of ₹ 1,480.86 crore had been allocated for construction of the Major District Roads against which an expenditure of ₹ 1,424.40 crore had been incurred. The details are given in **Table 2.1** below:

Table 2.1: Year-wise Allotment and Expenditure

| Year | Budget Proposal | Budget Allotment | Expenditure |
|--------------|-----------------|------------------|----------------|
| 2018-19 | 300.00 | 208.85 | 170.55 |
| 2019-20 | 1,000.00 | 490.00 | 482.33 |
| 2020-21 | 475.00 | 782.01 | 771.52 |
| Total | 1,775.00 | 1480.86 | 1424.40 |

(Source: Records of Public Works Department)

2.4 Audit Approach

Audit scrutinized the records relating to construction & up-gradation of Major District Roads carried out through the loan assistance from the NDB during the period 2018-19 to 2020-21 in nine units. Eighteen Divisions had received loan assistance, out of which, seven⁵ were selected by applying Stratified Random Sampling method. In addition, office of the Executive Engineer, Maintenance Division, who is the designated Drawing & Disbursement Officer in this case, and the office of the Engineer-in-Chief (E-in-C) were also audited.

Audit findings

Audit findings which are related to deficiencies in contract management and internal control mechanism are given in succeeding paragraphs.

³ Controller of Aid Accounts and Audit, Department of Economic Affairs, Ministry of Finance, Government of India.

⁴ The interest shall be payable at the interest rate which shall be a sum of Reference Rate (Six months London Inter Banking Offered Rate in line with the General Conditions) and the Spread, which shall mean 1.10 per cent per annum.

⁵ Chhindwara, Dindori, Gwalior, Khargone, Ujjain, Umari and Vidisha.

2.5 Financial Management

2.5.1 Creation of financial liability

As per Clause 14.8 of General Conditions of Contract, if the contractor does not receive payment in accordance with Sub-clause 14.7 of the contract data, the contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. These financing charges shall be calculated at the annual rate of three *per cent* above the discount rate of the central bank.

During the scrutiny of records of seven divisions, Audit observed that as against total value of work done (from January 2020 to June 2021) amounting to ₹ 607.38 crore by contractors, an amount of ₹ 225.60 crore ranging from four *per cent* to 100 *per cent* was withheld from the Running Account Bills, due to paucity of fund from January 2020 to May 2021 as detailed in **Appendix 2.1**.

Further, out of the above ₹ 225.60 crore, an amount of ₹ 205.13 crore was released (June 2021), the contractors have demanded financing charges as per the contractual clause. The financing charge as mentioned above has put an additional load amounting to at least ₹ 3.31 crore (**Appendix 2.1**). Thus, the Department has incurred the above liability due to delayed payment of contractors' Bills.

In reply, Government stated (July 2022) that due to the shortage of allotment of funds because of COVID 19 pandemic, the liabilities were created. However, delays on the part of contractors were also condoned due to the pandemic and no penalties were imposed on contractors subject to the fact that no contractor would claim financing charges for delayed payments. Hence there was no liability towards financing charges.

The reply is not acceptable as the contractors have already demanded financing charges (May 2021).

2.6 Planning and Estimation

2.6.1 Vagueness in road selection process

According to Para 2.016 of the Works Department Manual, for any new road/ bridge to be constructed or any existing road to be raised in class, the Executive Engineer shall submit the requisite proposals giving information regarding the class or type, the length of the road or bridge and the estimated cost (Stage I) of the works for obtaining the Administrative Approval from the Government. The estimate shall be accompanied by an index plan⁶ approved by the Collector and the Commissioner.

Despite repeated requests by Audit, the Department failed to provide records related to selection of roads, proposals submitted by the Executive Engineer, the estimates (Stage I) submitted to the Government and the index plan. As such, Audit could not derive assurance that the processes to be followed for construction of roads were actually followed.

In reply, Government stated (July 2022) that approval of District Collector is required for the new alignment and NDB Project is for the upgradation of existing Major District Roads only.

The reply is not acceptable as the Department upgraded several other district roads to Major District Roads, for which the provision of Works Department Manual Para 2.016 was to be followed which the Department failed to do.

⁶ The index plan shows proposals of other roads in the neighborhood.

2.6.2 Irregular provisioning and execution of backfilling

Clause 304.1 of the Specifications for Road and Bridges issued by the Ministry of Road Transport & Highways, provides that excavation for structures (inclusive of piped culverts) shall consist of backfilling and clearing up to the site and disposal of all surplus material up to 1000 m. Therefore, the contract unit rate shall be paid in full for the item of excavation including full compensation for these operations.

Audit observed in five⁷ Divisions, that the item of backfilling (58,936.47 Cu. M.) was included additionally in the estimates for construction of hume pipe culverts although it was a part of the item of excavation. This resulted in undue financial benefit of ₹ 3.58 crore to the contractors, as detailed in **Appendix 2.2**.

In reply, Government stated (July 2022) that the payment made for backfilling in hume pipe culvert works shall be reconciled in the next bills.

2.7 Execution

Audit observed the following irregularities in execution of road works:

2.7.1 Execution of inferior item of Cement Concrete Interlocking Blocks

Audit observed in Gwalior and Khargone Divisions that the item of Cement Concrete Interlocking Blocks amounting to ₹ 15.38 crore was executed over 1,85,423 sq.m. as provided in the estimates. However, in other Divisions, this item was replaced by Cement Concrete Pavement on the ground of lesser durability of Cement Concrete Interlocking Blocks. Further, the Major District Roads are to be constructed with a designed period of 20 years and the Cement Concrete Interlocking Blocks would not be able to sustain till the end of the designed period. Thus, an amount of ₹ 15.38 crore was expended on execution of inferior work.

In reply, Government stated (July 2022) that being economically cheaper and technically suitable Cement Concrete Interlocking Blocks were executed. Furthermore, no diversion is required for construction of Cement Concrete Interlocking Blocks.

The reply is not acceptable as the Government itself admitted in its reply that Cement Concrete Interlocking Blocks do not provide enough strength to bear the load and that the Cement Concrete Interlocking Blocks had been replaced by Cement Concrete Pavement in other Divisions.

2.7.2 Execution of below specification work

As per Clause 6.5 of IRC:94, the Dense Bituminous Macadam surface can be opened for traffic after being covered by a suitable wearing course and when it has cooled down to the surrounding temperature.

Audit observed in four Divisions⁸ that contrary to the above specification, the Dense Bituminous Macadam surface (35,087.02 Cu.M.) was covered by the next course, Bituminous Concrete after a lapse ranging between one month and 15 months, without laying any other course in between to protect the Dense Bituminous surface. Thus, due to delay in execution of Dense Bituminous Macadam, the possibilities of premature damage of road cannot be ruled out. This resulted in below specification work amounting to ₹ 54.15 crore as detailed in **Appendix 2.3**.

⁷ Chhindwara, Dindori, Gwalior, Khargone and Umaria.

⁸ Dindori, Gwalior, Umaria and Vidisha.

In reply, Government stated (July 2022) that the works were delayed due to COVID 19. However, the defects wherever noticed on the Dense Bituminous surface were rectified by the contractors at their cost before execution of the next course.

The reply is unacceptable as the Dense Bituminous Macadam work was to be protected by laying the next wearing course within 48 hours and COVID 19 could not be held as the reason for preventing the laying of next wearing course in view of simultaneous execution.

2.7.3 Short deduction of royalty from contractors

As per Schedule of Rates, 2017 applicable in Public Works Department and provisions of the agreements, the rate of an item to be executed in a work is inclusive of royalty charges. Further, as per Rule 68 (1) of Madhya Pradesh Minor Mineral Rules, 1996 and orders of the Government (February 2003), the final bill of the contractors shall be paid for the work only upon production of No Dues Certificate of royalty issued by the Mining Department, failing which, the royalty will be deducted from the bills and deposited in the Mining Head.

Audit observed in the selected seven Divisions⁹ that royalty of ₹ 31.74 crore was to be recovered from the contractors for the minor minerals used in the works, but these Divisions had deducted ₹ 15.22 crore only from their bills. This resulted in short deduction of royalty amounting to ₹ 16.52 crore, as detailed in **Appendix 2.4**.

Further, out of the deducted amount of royalty of ₹ 15.22 crore, ₹ 8.83 crore was kept in Civil Deposit head instead of depositing it in the revenue head concerned. This resulted in violation of Government's order and blockage of Government revenue.

In reply, Government stated (July 2022) that the retention money shall be released to the contractors only after submission of Royalty Clearance Certificate as provided in the Agreement and the employer can any time recover the royalty from any amount due if the royalty is not deposited.

The reply is not acceptable as royalty was short recovered from the contractors. Further, Government specifically stated (February 2003) that royalty should be deposited in the Mining Head, instead of Civil Deposit Head, resulting in blockage of Government revenue.

2.7.4 Payment for works not executed

During the scrutiny of records of the Executive Engineer, Gwalior, Audit observed that for construction of a District road¹⁰, 6324.75 sq. m. of Cement Concrete Interlocking Block amounting to ₹ 48.83 lakh¹¹ was shown as utilised in different reaches of the road and accordingly recorded in the Measurement Book and the contractor was paid (March 2021) on the basis of the measurements recorded. In case of another District Road under the same division (awarded the same contractor), it was observed that 1128.62 Cu. M. of Bituminous Concrete work (in Chainage 0.9 km to 7.74 km of the road¹²) amounting to ₹ 99.66 lakh¹³ was recorded as utilised in the Measurement Book and payment was made (June 2021) on the basis of the recorded measurements.

However, during joint physical inspection of the aforesaid roads, none of the two works were found executed. Thus, the Department irregularly recorded the quantity of materials consumed in the Measurement Books and irregularly paid an amount of ₹ 1.49 crore to the contractor for works not executed.

⁹ Chhindwara, Dindori, Gwalior, Khargone, Ujjain, Umaria and Vidisha.

¹⁰ Maharajpur to Shanichara & Old Jail to Shanichara Road, Gwalior Division.

¹¹ 6324.75 sq m × ₹ 772 sq m.

¹² Nayagaon Moch Richor Banwaar Puravanvaar Tekpur Chinor Road, Gwalior Division.

¹³ 1128.62 Cu. M. × ₹ 8,831 per Cu. M.

In reply, Government stated (July 2022) that the work of Cement Concrete Interlocking Blocks had suffered due to COVID 19. The work has now been done completely.

The reply is silent about incorrect entries of items in Measurement Books resulting in excess payment. Further, no action has been initiated against the concerned officials for wrongful measurement and payments.

2.8 Internal Audit

According to the order issued (April 2011) by the State Government, the Superintending Engineer and the Chief Engineer shall respectively carry out inspections of the works involving expenditure of ₹ three crore or more, at least once in one month and two months.

Audit observed in all the seven Divisions that there was shortfall of 93 inspections by the Superintending Engineers concerned and 187 inspections by the Chief Engineer.

As per Para 7.2.6 of Indian Roads Congress 58: 2015, dowel bars are to be provided at the contraction joints.

Audit observed between Chainage 3700 and 3900, and Chainage 13000 and 13190 of Udaypura-Bamora-Pathani Road under Vidisha Division, the item of Pavement Quality Concrete (M-40) was executed with thickness of 250 mm without dowel bars which was required under the specifications. Consequently, cracks had occurred on the road surface resulting in execution of sub-standard work.

In reply, Government stated (July 2022) that the all the NDB funded Projects are supervised by appointed State Quality Control Consultants, and by the Chief Engineer and the Superintending Engineers also.

The reply supports audit contention that despite the provision in place for periodic inspections, the concerned officials failed to discharge their duties resulting in execution of below par quality work.

2.9 Conclusion

The Audit of Fund Management and Construction & Up-gradation of Major District Roads through New Development Bank Loan in Madhya Pradesh revealed the following issues:

- Provisions for timely payment to the contractor were not strictly followed resulting in extra financial liabilities to the State Ex-chequer.
- Selection of roads was not made in a proper manner.
- Compliance of Road Specifications and Manual were not adhered to during the entire execution process.
- Monitoring of construction of roads was not done as per norms and there were incorrect entries in Measurement Books.

2.10 Recommendations

- The Department should ensure a strict mechanism for the timely payment to the contractors to avoid contractual obligations of financing charges to be paid to the contractors.
- The Department should develop a real time process for the selection of roads to ensure maximum benefits to the people.

- The Department should strictly adhere to follow the compliance of Road Specifications and Manual during the entire execution process and should monitor the construction works as per prescribed norms.
- The Department should fix responsibility and initiate departmental enquiry against the erring officers for short recovery of royalty from the contractors.