

Chapter-4 : Programme Implementation

4.1 Introduction

The Programme Implementation Units (PIUs) are required to prepare the detailed project report (DPR) for each proposed road work in consultation with the local community. The proposals of each state are to be considered by the Empowered Committee of the Ministry and after their clearance; works should be tendered as per Standard Bidding Document. The execution of work and management of the contract is required to be done strictly as per condition of the contract. All PMGSY roads should be covered under five year maintenance contract along with construction contract. Maintenance funds are to be budgeted by the state governments.

4.2 Detailed Project Reports

The guidelines prescribe that detailed project report (DPR) for each of the proposed road work needs to be prepared in accordance with the Rural Road Manual, Indian Road Congress (IRC) specifications and instructions issued from time to time. The DPR should be based on detailed survey and investigations, design and technology choice. It should be of such detail that the quantities and costs are accurate and no cost over-run takes place due to changes in scope of work or quantities at the time of execution. Audit observed instances where due procedures were not adopted while preparing the DPRs as discussed below.

4.2.1 Transect walks not organised

Programme guidelines prescribe that Programme Implementation Units (PIU) will organise transect walk to discuss and finalize the issues relating to alternative alignments, land requirements for the road and its impact on land owners, etc., with the members of the local community. A copy of the proceedings along with digital photographs of the transect walk shall be attached with the finalised DPR.

In 17 states (**Andhra Pradesh, Assam, Bihar, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Meghalaya, Nagaland, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh and West Bengal**), transect walk was either not organised or required certificate/documents were not found attached with DPRs.

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Failure to implement this significant procedure at the time of project preparation led to dropping or abandoning of works mid-way due to land disputes, non-availability of required land and other reasons.

The Ministry stated (April 2016) that the advisories regarding transect walk were issued to the states. The reply is not acceptable as the Ministry has not taken steps to ensure that states mandatorily conduct transect walks.

Case Study-Madhya Pradesh

Tender for upgradation of road “KM 014 of T04 to Mukki” (package no. MP0180) was invited (August 2008) without forest department permission. DPR did not mention that the road would pass through Kanha National Park. Since, the road was under buffer zone area of National Park, the state nodal agency accepted the request of Project Implementing Unit (PIU) (August 2012) for dropping the road work.

This indicated that transect walk was not organised to ensure availability of land and targeted habitation remained unconnected.

Case Study- Tripura

In district Dhalai, construction of road from AA road to Sikaribari was taken up (May 2011) at a contract value of ₹ 0.72 crore for providing connectivity to six habitations (Khagendra Roaja Para, Tilak Kr Para, Brinda Kr Roaja Para, Budhiram Para, Dhansing Para and Sambhunath Para) with total population of 1,815. The work was completed at a cost of ₹ 0.50 crore in April 2014. Joint physical verification showed that there was no habitation at the entire stretch of road. This indicated that project was finalized without survey of the site.

4.2.2 Works dropped/abandoned

In 12 states {**Assam** (5), **Bihar** (12), **Gujarat** (14), **Jharkhand** (23), **Madhya Pradesh** (73), **Meghalaya** (2), **Odisha** (268), **Telangana** (20), **Tripura** (16), **Uttar Pradesh** (13), **Uttarakhand** (56) and **West Bengal** (36)}, 538 works were not commenced and were subsequently dropped or proposed to be dropped due to non-availability of land or land disputes. Besides this, 372 works in 11 states

{**Andhra Pradesh** (1), **Assam** (22), **Chhattisgarh** (1), **Madhya Pradesh** (2), **Maharashtra** (5), **Meghalaya** (1), **Odisha** (107), **Rajasthan** (213), **Telangana** (4), **Uttar Pradesh** (7) and **West Bengal** (9)}, were abandoned/proposed to be abandoned mid-way on similar grounds after incurring expenditure of ₹ 280.01 crore.

Further, in 13 states {**Andhra Pradesh** (27), **Assam** (2), **Bihar** (319), **Gujarat** (11), **Jammu & Kashmir** (53), **Jharkhand** (278), **Karnataka** (19), **Kerala** (50), **Madhya Pradesh** (253), **Tripura** (8), **Uttar Pradesh** (502), **Uttarakhand** (3) and **West Bengal** (25)}, 1,550 works were dropped or proposed to be dropped for the reasons such as works executed under other state schemes, transfer of roads to other departments, deficient planning, remote location to carry the material, works already sanctioned in earlier years, works executed by other agencies, naxal problem, no response to the bid, etc.

In **Kerala**, out of 503 works in hand as of March 2015, 56 works valued at ₹ 40.94 crore (which included works sanctioned from 2001-02 onwards) were identified as 'non-feasible for execution', 'taken up by other agency', etc., and proposed to be dropped from the list of works in August 2015. Out of these 56 works, an expenditure of ₹ 2.40 crore had already been incurred on 17 works rendered wasteful.

This indicated that project preparations were deficient.

The Ministry replied (April 2016) that a circular was issued to states in November 2013 for recouping the amount incurred on dropped roads under the PMGSY. The reply of the Ministry was not acceptable as the deficiencies in the preparation of DPRs continued and no remedial action was taken to minimize the dropping of projects.

Case Study-Mizoram

NRRDA sanctioned (June 2004) the construction of a new road connecting Kawlhem to Vaikhawtlang village for ₹ 6.73 crore and Works Executing Agency incurred an expenditure of ₹ 6.58 crore during April 2005 to March 2008 towards formation cutting works in first phase. In June 2008, the pavement works (Stage-II) was sanctioned at ₹ 11.70 crore. However, the work executing agency did not execute the work of Stage-II and handed over (19 October 2010) the road to the Border Roads Organisation for their use, after dropping it from the PMGSY.

Case Study -Assam

The construction of road from Suapata Pt-III to Nayeralga Pt-III (length: 15.50 km) including CD works (HPC: 5; RCC Bridge: 5- package no. AS 05-25) in PIU Dhubri was awarded (August 2007) at a tendered value of ₹ 11.66 crore. As of February 2013, work of 7.80 km was completed. One RCC bridge was completed, one of the bridge works was dropped due to non-feasibility of site and two bridges were under construction. The works were delayed and there were some irregularities. An investigation by National Quality Monitor (NQM) in May 2014, stated *inter-alia* that most of the road work was damaged due to defective DPR which had been prepared without taking into account the ground reality. Subsequently, the package was terminated (August 2014) on the grounds of damage of the road devastated by flood and land dispute at three locations. The Empowered Officer instructed the implementing agency to submit the proposal to foreclose the package.

Thus, due to defective preparation of DPR and non-ensuring the availability of required land, etc., an expenditure of ₹ 5.03 crore incurred on the project was rendered infructuous and also defeated the purpose of providing connectivity to five eligible habitations having 16,661 rural population.

4.3 Tendering process

4.3.1 Incorrect technical specifications

Rural roads constructed under the programme are required to meet the technical specifications and geometric design standards given in the Rural Roads Manual of the Indian Roads Congress (IRC). Execution of works with higher technical specifications than the standard design would entail avoidable expenditure whereas lower specifications would affect sustainability of roads for designed life (10 years).

In five states (**Bihar, Himachal Pradesh, Tripura, Uttar Pradesh and Uttarakhand**), 490 road works were executed/upgraded with incorrect technical specifications. State-wise details are given in **Annex-4.1**.

Other state specific irregularities are discussed below:

In **Chhattisgarh**, in three districts (Raipur, Bilaspur and Rajnandgaon), pavement design of 54 roads was prepared and executed with California Bearing Ratio (CBR) as seven instead of more than seven¹ due to which extra thickness of Granular Sub Base (GSB) was provided. This resulted in extra cost of ₹ 1.18 crore.

¹ CBR value of transported soil as per Schedule of Rates

In **Gujarat**, in district Dahod, 180 roads were sanctioned during 2009-10 with carriage width of 3.00 metres as against 3.75 metres required for plying current traffic and future traffic growth. Similarly, in **Uttar Pradesh**, upgradation of 52 roads was carried out without widening the existing pavements of 3.00 metres to 3.75 meters despite requirement as traffic density was more than 100 motor vehicles per day.

In **Uttarakhand**, in three districts (Chamoli, Nanital and Pauri), Stage-II work (Granular Sub-base) of 22 projects, as per IRC specifications was provisioned to be prepared with natural occurring/local material. Instead of applying Schedule of Rates (SoR) of natural occurring/local material, SoR for using well graded material was applied which resulted in extra financial burden of ₹ 16.50 crore on the PMGSY.

In **Uttar Pradesh**, in upgradation works sanctioned during December 2012, the PIUs arbitrarily recorded the existing thickness of sub-base and base courses as between 75 mm and 180 mm in the DPRs without obtaining required details from the parent divisions or surveyed and recorded the existing thickness of the sub-base/base course in the measurement/level books. Thus, the process of ascertaining the existing thickness of sub-base and base course was defective.

The Ministry replied (April 2016) that reasons for incorrect technical specifications were sought from the states.

4.3.2 Irregularities in inviting tenders

According to para 11.1 of the programme guidelines, after the project proposals have been cleared and technical sanction has been accorded the Executing Agency would invite tenders.

In 11 states {**Andhra Pradesh (35), Haryana (1), Himachal Pradesh (14), Jammu & Kashmir (138), Jharkhand (38), Manipur (69), Meghalaya (58), Rajasthan (158), Telangana (15), Tripura (4)** and **Uttarakhand (78)**}, tenders for 608 works were invited prior to their technical sanction by the competent authority.

According to provision 8.2 of the OM, in cases where variation between DPR and technical sanction exceeds 10 *per cent*, prior approval of the NRRDA is required to be sought before tendering the works. In six states {**Assam (12), Himachal Pradesh (3), Kerala (30), Tamil Nadu (163), Telangana (1)** and **Tripura (4)**}, despite variation ranging from 11 to 500 *per cent* in 213 road works/packages, prior approval of the NRRDA was not obtained before inviting tenders.

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Further, as per para 7.11 of the OM, tendering process shall begin within 15 days of getting approval of the proposals by the Ministry.

In nine states (**Arunachal Pradesh** (16), **Jammu & Kashmir** (161), **Jharkhand** (94), **Manipur** (469), **Meghalaya** (65), **Rajasthan** (3767), **Telangana** (1), **Uttar Pradesh** (132) and **West Bengal** (467)}, tenders for 5,172 works/packages, were invited with a delay ranging between 2 to 971 days which in turn delayed the award and execution of works.

The Ministry replied (April 2016) that reasons for delay were sought from the states.

4.3.3 Irregularities in award of contract

In nine states, other irregularities in awarding contracts were observed as detailed in **Table-4.1**.

Table-4.1

State	Observations
Arunachal Pradesh	In districts Anjaw and West Siang, three road works (i) Bajigam to Tabretung (Chakka) Stage-I (ii) PWD road to Glotong Stage- I and (iii) 18 th km point Patum Rumgong road to Molom costing ₹ 32.02 crore, ₹ 29.25 crore and ₹ 14.39 crore respectively were awarded to the contractors who were eligible for tender up to ₹ 10 crore, ₹ 15 crore and ₹ 10 crore respectively.
	In three districts, Papum Pare, Anjaw and Lohit, 18 works with an estimated cost of ₹ 140.04 crore were awarded without obtaining the required certificates issued by nationalized bank. Thus, credit worthiness of 18 contractors against these works was not secured before execution of projects.
Chhattisgarh	The state nodal agency relaxed the assessment criteria for bid capacity of contractors for IAP districts (Naxal affected districts) to promote local contractors having good experience of work. However, this relaxed criteria was also adopted in the tenders floated for non-IAP districts.
Jharkhand	NPCC, Deoghar invited tender (June 2013) for construction of road work from Bhudhai to Jeetpur and Bhiknadih was the targeted habitation. However, in place of said road the tender was finalised for road named Pathaljore to Mahanadih for Karipahari as targeted habitation at a cost of ₹ 0.72 crore. The execution of this work (Pathaljore to Mahanadih) was against the provisions of the guidelines as the said road was already sanctioned during 2001-02 and physically completed in 2004 at an expenditure of ₹ 1.19 crore.
Manipur	The Standard Bidding Document (SBD) was modified by inserting a new clause which restricted the minimum quoted bid on the lower side (not below five <i>per cent</i> of the estimated cost) without approval of NRRDA. Bid quoted below five <i>per cent</i> of the estimated cost were rejected as unreasonable. This modification resulted in loss of ₹ 1.04 crore based on the difference between the quoted rates by the lowest technically qualified bidders and the rates at which the tenders were awarded.
Odisha	In 10 packages (OR-13-ADB-22/T-III, 24/T-III, OR-02-ADB-53, 56, 61, 64, 65, 66, 71 and 75), tenders were not finalised within the validity period due to administrative reasons resulting in re-tendering of works. The accepted cost of re-tendered works was ₹ 4.64 crore higher as compared to the previous lowest bids of ₹ 26.23 crore by the technically qualified bidders.

State	Observations
Sikkim	Work of construction of 16 bridges under Phase VIII and X was allotted at a cost of ₹ 32.01 crore without tendering process to the same contractors who were constructing the roads.
Telangana	In district Khammam, technically unqualified bidder was allowed for price bid and awarded (October 2014) the road work from Venkatapur R&B road to Edjerlapally for ₹ 3.73 crore. PIU made an excess provision for ₹ 0.57 crore in six ² works over and above two <i>per cent</i> of estimated cost of work for unforeseen expenditure in contravention to Article 117-A of PWD Code.
Tripura	While awarding the contract of Gandacherra to Kalajhari, the performance security amounting to ₹ 0.67 crore for unbalanced bid as worked out by the evaluation committee was not remitted by the contractor before award of work. Unbalanced tender value was not evaluated in construction of road from Manikpur to Hazirai including RCC bridge and work was awarded without imposition of any additional performance security though the agency has no experience certificate for bridge construction.
Uttar Pradesh	In the sampled districts, though 59 contracts were entered into at less than the estimated cost, the additional performance security as per provisions of the bid documents was not obtained.

In three states {(Himachal Pradesh (1), Punjab (6) and Tripura (18)}, 25 packages/works were awarded on single tender without approval of Administrative department, recording justification or approval of State Level Standing Committee.

The Ministry replied (April 2016) that reasons for irregularities in award of contract were sought from the states.

4.3.4 Delay in issuance/award of works

The OM stipulates that formalities such as issue of tender notice, finalisation of tender and award of works shall be completed within 71 days and in case of re-tender, 120 days from the date of advertising the press notice.

In 14 states {Andhra Pradesh (29), Arunachal Pradesh (9), Bihar (189), Gujarat (36), Himachal Pradesh (48), Jammu & Kashmir (57), Jharkhand (229), Manipur (46), Punjab (3), Rajasthan (104), Telangana (22), Tripura (51), Uttarakhand (85) and West Bengal (2053)}, 2,961 tenders were finalized with delays extending up to 974 days. The delay was attributed by the department to administrative reasons, execution of large number of works, non-availability of sufficient qualified contractors, non-availability of funds, etc. Delay in completion of tendering process in turn delayed the execution of works in the field.

² Kottaanjanapuram to Jamla thanda (₹15.20 lakh), Rajupalem to Kasaram (₹ 21.64 lakh), Mumunur to laxmipuram (₹ 10.32 lakh), R&B road to Duddepudi (₹ 4.06 lakh), ZP road Tadikalapudi to Kokya Thanda (₹ 2.52 lakh) and Ammapalem to Jagya Thanda (₹ 3.12 lakh)

4.4 Execution of works

4.4.1 Non-provision of insurance cover

According to para 9.3.1 of the OM and Clause 13 of General Conditions of Contract, the contractor at his cost shall provide insurance cover from the start date up to the end of defect liability period for loss of or damage to the equipment, property and personal injury or death due to contractor's risk.

In six states (**Assam, Gujarat, Jammu & Kashmir, Manipur, Uttarakhand and West Bengal** (four out of five test checked districts)), contractors did not provide the required insurance cover.

In 10 states (**Andhra Pradesh** (11 works), **Haryana** (27 works), **Himachal Pradesh** (2 packages), **Jharkhand** (117 works), **Madhya Pradesh** (264 packages), **Mizoram, Punjab** (42 works), **Rajasthan** (11 packages), **Sikkim** (49 works) and **Telangana** (eight works)), in 531 works/packages, the contractors did not provide the required insurance cover.

In four states (**Himachal Pradesh** (2 packages), **Jharkhand** (83 packages), **Rajasthan** (40 packages) and **Sikkim** (2 works)), contractors did not provide insurance cover for five year (defect liability period) after completion of construction.

Thus, failure to enforce the insurance cover led to undue financial benefit to the contractors in the form of lower insurance premium paid.

4.4.2 Non-recovery of mobilisation and equipment advance

As per para 9.4 of the OM, the contractor is required to mobilize men, material and machinery within 10 days after the date of issue of the work order. Further, clause 45 of the General Conditions of Contract provides that the employer will make interest free mobilisation advance (five *per cent* of the contract cost) and equipment advance (up to 90 *per cent* of the cost) to the contractor. These advances shall be repaid by deducting proportionate amounts from payments otherwise due to the contractor. Guidelines of the Central Vigilance Commission (April 2007) provide that recovery of interest free mobilisation advance shall be time-based and not linked to the progress of work.

In five states (**Assam** (₹ 0.37 crore), **Bihar** (₹ 0.50 crore), **Himachal Pradesh** (₹ 0.25 crore), **Mizoram** (₹ 0.30 crore) and **Sikkim** (₹ 0.38 crore)), ₹ 1.80 crore of mobilisation and equipment advance in respect of eight road works/packages was not recovered despite termination of contract/dropping of work.

In four states {**Haryana** (₹ 2.75 crore), **Jammu & Kashmir** (₹ 0.44 crore), **Jharkhand** (₹ 1.51 crore) and **Uttar Pradesh** (₹ 4.76 crore)}, ₹ 9.46 crore remained unrecovered even after initial stipulated date of completion of work.

In **Sikkim**, in 50 works, mobilisation and machinery advance of ₹ 18.06 crore was not recovered due to non-commencement of works even after one to six years of their sanction.

Audit also observed irregular grant of mobilisation and equipment advances as given below:

In **Rajasthan**, PWD Circle, Dungarpur, under package RJ-14-WB-BN-12, machinery advance of ₹ 0.44 crore was given for the machinery hypothecated to a private bank.

In **Uttarakhand**, in 16 cases, mobilisation advance of ₹ 4.91 crore was provided in excess of maximum ceiling of five *per cent* of the initial contract prices. Bank guarantee was not obtained from the contractor against mobilisation advance of ₹ 0.66 crore in two cases³ and equipment advance of ₹ 0.64 crore in one case⁴. Further, in one case, invoice of machine purchased was not obtained for equipment advance of ₹ 0.58 crore.

Thus, undue benefits were extended to the contractors in the above cases.

4.4.3 Non-revalidation of bank guarantee

According to Clause 32 of the Standard Bidding Document, the performance security is to be delivered by the successful bidder within 10 days of the receipt of letter of acceptance in the form of unconditional bank guarantee issued by any scheduled bank or fixed deposit receipts in the name of the employer. Bank guarantee should be valid for the construction period and for five years after completion of work.

In nine states {**Haryana** (five works), **Himachal Pradesh** (10 works), **Jammu & Kashmir** (13 works), **Jharkhand** (two works), **Mizoram** (one case), **Punjab** (one work), **Sikkim** (51 cases), **Telangana** (11 works) and **West Bengal** (78 works)}, the validity of bank guarantees in 172 works was either allowed to expire or not revalidated during the defect liability period. Thus, government interest was not adequately safeguarded.

Other state specific irregularities are given below:

³Kanth-ki-Nav to Ajoli Talli MR' (PIU: Salt) of district Almora and 'Kunar Bend to Ghes MR' (PIU: RES, Karanprayag) of district Chamoli.

⁴ Kunar Bend to Ghes MR (PIU: RES, Chamoli).

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Para 13.2 of the PMGSY Accounts Manual prescribes that it is the duty of the officer accepting the bank guarantee to obtain confirmation of its genuineness directly from the bank issuing the bank guarantee, without any third party intervention. In **Assam**, the work executing agencies found that 18 bank guarantees/special term deposit receipts submitted by different contractors/firms valued ₹ 6.56 crore were fake. In PIU Lakhimpur (package no. AS-15-65, AS-15-23) and Silchar (package no. AS-03-67) advances of ₹ 3.78 crore were obtained by contractors by producing fake bank guarantees. Failure to comply the instructions, PIUs, on termination of contracts could recover only ₹ 1.12 crore leaving ₹ 9.22 crore unsettled.

In **Mizoram**, in package no. MZ-01 66(B) (construction of Zohmun-N. Tingmun road, National Highway Division-II, Aizawl) required performance bank guarantee of ₹ 0.09 crore was not obtained. In package no. MZ-02-WB-01, construction of Khuangleng-Bungzung road, PWD, Champhai Division, Term Deposit of ₹ 0.15 crore could not be encashed after termination of contract (June 2015) as it was a false document.

The Ministry replied (April 2016) that a circular was issued to states in February 2008 for acceptance of bank guarantees compatible with the guidelines of Reserve Bank of India to ensure the genuineness. However, despite issue of instructions, submission of fake bank guarantees by the contractors and non-revalidation of bank guarantees still persisted.

4.4.4 Deviation from approved technical specification

As per para 8.2 of the OM, after technical sanctions, works will be tendered as such, and no changes shall be made in the works without the prior approval of the NRRDA.

In six states (**Maharashtra, Rajasthan, Telangana, Tripura, Uttarakhand and West Bengal**), technical specifications were deviated in 44 works during execution of works without approval of the NRRDA (**Annex-4.2**).

Other state specific cases are given below:

In **Jharkhand**, in district Deoghar, work of 11 bridges was awarded (October 2012) to a contractor at cost of ₹ 35.35 crore. During execution of work, discrepancies were observed between DPR specifications and site condition. Consequently, a Committee formed for re-investigation of work sites after joint inspection with the contractor suggested reduction in length of bridges by 24 metres to 142 metres in five cases, reduction in number of pillars in six cases and changes in foundation work in three cases. This indicated that technical specifications were not prepared as per site conditions.

In **Uttarakhand**, in four works⁵ in districts Almora and Pauri, ₹ 0.88 crore was incurred for execution of those items of works⁶ which were either not sanctioned or pertains to a portion of other existing roads constructed by the PWD.

4.4.5 Non-construction of cross drainages and bridges

The primary focus of the PMGSY is to provide all-weather road connectivity, which can be used in all the seasons of the year.

In eight states (**Andhra Pradesh, Assam, Bihar, Chhattisgarh, Jammu & Kashmir, Karnataka, Rajasthan** and, **Telangana**), irregularities such as less number of bridges/cross drainages (CDs) were constructed, bridge constructed with reduced length, RCC bridges were either replaced by RCC box culvert or cross drainage structures, etc., are given in **Annex-4.3**. This indicated that the DPRs were not prepared as per site conditions or required number of bridges/CDs were not constructed.

Other state specific findings are as under:

In **Assam**, under package no. AS 25-59, out of six bridges, contractor abandoned (December 2013) work of four bridges at foundation stage and did not commence construction of other two bridges. Consequently, expenditure of ₹ 34.61 crore incurred on road works to provide connectivity to the targeted habitations was rendered futile.



Incomplete RCC Bridge No. 3/2 on Chapaguri-Odalguri Road at Ch. 2.850 km (Chapaguri side)



Incomplete RCC Bridge .No.2/1 on Tengabari Gumergaon Road at Ch. 1.80 km. (Tengabari Side)

In **Chhattisgarh**, five roads constructed during April 2006 to March 2014, under package no. CG 1429 (Raipur), CG 0268 (Bilaspur), CG 1554, 1509(a),

⁵ PWD-Salt(Almora)- Saundhar to Panwadokhan (Stage-II) and Kanth-ki-Nav to Ajoli Talli (Stage-II); ID-Srinagar (Pauri)- Chopra-Nalai (Stage-II) and Chakhisain to Jakh (Stage-II)

⁶ Hill side cutting and pavement work on other roads, protection of houses and electric polls, work on a portion of already constructed (by PWD)/painted surface (BT) of roads

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and 1556 (Rajnandgaon) at a cost of ₹ 9.71 crore, did not provide all-weather road connectivity to the targeted habitations due to non-construction of required bridges.

In **Gujarat**, in district Banaskantha, road work from Dhanpur- Bamaria of 3.390 km completed (August 2010) at a cost of ₹ 1.68 crore was without required bridges. This deprived the targeted habitations with all weather road connectivity.

In **Himachal Pradesh**, in Kaza division of district Lahaul and Spiti, road costing ₹ 0.59 crore (Chicham to Kibber of 5.05 kms) constructed in October 2006 was not opened for vehicular traffic due to non-construction of 111.10 metre span steel truss bridge over Samba Lamba *nallah*. An expenditure of ₹ 3.22 crore was incurred on the construction of the bridge, but the same was not completed as of March 2016.



In **Jammu & Kashmir**, in two districts (Kathua and Rajouri), three road projects were shown completed during April 2011 to July 2014 at a cost of ₹ 12.11 crore without construction of bridges and vented causeway. These road projects did not serve the purpose of all weather road connectivity to the proposed habitations *viz.*, Katni, Daghani and Bhella.

In **Jharkhand**, in Deoghar, 11 bridge works costing ₹ 13.11 crore was awarded (November 2012) to a contractor to be completed by May 2014. Due to deficiencies in DPRs, these were re-sanctioned in June 2013. As of September 2015, three bridges were completed. In respect of four bridges, work was not started as two bridge sites fell under the Dam area and one bridge work was stopped due to Naxal problem and one bridge was found

constructed by another agency. In the remaining four bridges, work of approach road was not completed.

In five districts (Deoghar, Garhwa, Hazaribagh, Jamtara and West Singhbhum), where the roads were constructed at a cost of ₹ 30.00 crore desired connectivity to 18 habitations was not provided due to non-provision for construction of 22 bridges (approx. length 15 to 400 meters) over the rivers crossing the roads.

In **Odisha**, in seven districts (Balasore, Bolangir, Kalahandi, Dhenkanal, Jajpur, Mayurbhanj and Sundargarh), 35 roads constructed during December 2002 to February 2015 at a cost of ₹ 65.41 crore, did not provide all weather road connectivity to targeted habitations due to non-construction of bridges over rivers/nallahs.

In **Telangana**, three works of Khammam ('R&B road from Turubaka to Whitenagaram', 'ZP road from Cinthonichelka to Mellamadugu' and 'ZP road Tadikalapudi to Kokya Thanda') were closed without taking up work of eight link bridges/culverts as per DPRs, rendering the expenditure of ₹ 1.98 crore unfruitful.

In **Uttar Pradesh**, in Jhansi, upgradation work of Erich to Kuretha road costing ₹ 6.82 crore (length: 15.860 km) was completed (March 2015) to serve four habitations having population of 5,899 persons but the road did not serve the purpose for want of required cause-way, leading to water logging.

In Sitapur, work of construction of three roads⁷ was taken up in March 2013 at a cost of ₹ 2.59 crore was to be completed by March 2014. The work was stopped after incurring ₹ 0.82 crore for want of causeways which were not included in the DPRs.

In district Mahrajganj, construction of road from Dashrathpur Tedhi Ganga to Khaihava Tola, sanctioned in September 2009 to provide connectivity to Konahava having population of 1,503 persons was not taken up as required bridge of 150 metre span was yet to be sanctioned by the state government.

In selected districts, 84 works were shown as completed at ₹ 143.15 crore during 2010-15 without constructing 5 to 100 *per cent* of the CD works as provisioned in DPRs Due to non-execution of CD works, the constructed

⁷ T-03 (km 4) to Pasinpurwa link roads and T-03 (km 4) to Naseerpur Sarkar link road under package no. 66114; and T-03 (km 8) to SikriMafi to Bijwari link road under package no. 66113.

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roads did not serve as all-weather road and sustainability of roads for the designed life was not assured.

The Ministry replied (April 2016) that mechanism to detect the variance between the progress of implementation of the programme and the progress reported manually/electronically by the states, on real time basis, satellite imageries technology is being used for planning and monitoring of PMGSY roads. The reply is not relevant as the reasons for non-construction of cross drainages and bridges were not furnished.

Case Study- Tripura

In PIU, Dhalai, the work Manikpur to Hazirai (TR 04 165) comprising 20.359 km road and one major RCC bridge was taken up in February 2012 at a cost of ₹ 19.38 crore. However, the Department, in March 2015, observed that alignment of the road beyond 17.925 km was not feasible for connecting village Hazirai and it was changed after resolution drawn up by public representatives and technical advisor of PIU. Meanwhile, the construction of bridge at 17.75 km was already taken up and expenditure of ₹ 1.30 crore was incurred on it. As per the revised layout, the bridge was not part of the new alignment.

Thus, expenditure of ₹ 1.30 incurred for construction of bridge was rendered wasteful without yielding any benefits to the targeted habitation.

4.4.6 Non-use of locally available material

The OM stipulates that specifications for pavement materials in various layers of rural roads should be as economical as possible, consistent with the traffic expected to use the road, climatic conditions, etc. Local materials which are cheaper to extract and involve minimum haulage cost should be used to the maximum extent feasible. Further, use of fly-ash wherever possible and available within a radius of 100 km of thermal plants is mandatory subject to adherence to technical norms and relevant Codes of Practice.

In three states (**Andhra Pradesh, Punjab** and **Telangana**), fly ash, though available, was not used in construction of roads.

In **Meghalaya**, locally available materials were not utilized as there was no complete geological mapping of the district or state as a whole, with details of soil classification, strength characteristics and other relevant properties of all material at different quarries and their land availability.

In **Uttarakhand**, in 14 works of nine PIUs in four districts, conventional well-graded hard stone aggregates were provisioned instead of local/naturally occurring low grade materials which resulted in avoidable expenditure of ₹ 12.29 crore.

The Ministry replied (April 2016) that circulars were issued to states on this matter in May 2013 and January 2016. However, the fact of non-use of locally available material remained the same.

4.4.7 Supply of material departmentally

The PMGSY Accounts Manual Programme Fund read with the OM, prescribes that issue of material to the contractors is not allowed.

In **Himachal Pradesh**, Karchham division received (March 2007) ₹ 0.44 crore for procurement of material for four PMGSY works⁸. Out of this, ₹ 0.17 crore was utilised for procurement of material and ₹ 0.27 crore was lying unutilized (August 2015).

The CE (South) Shimla procured (March 2006) material (140 TSR construction) costing ₹ 0.89 crore for construction of a bailey type portable steel bridge on the alignment of Wangtoo to Panvi road over Burcha Nallah. The entire material was transferred (between October 2006 and September 2014) to eight other works.

In **Sikkim**, an advance of ₹ 7.16 crore for procurement of stock material released to the State Trading Corporation was not adjusted (March 2015). This included ₹ 5.58 crore for material of 55 bridges of which 20 bridges in East District were cancelled due to change in site.

In **Tamil Nadu**, during 2010-14, eight Districts Rural Development Agencies⁹ issued material to the contractors.

The Ministry replied (April 2016) that from 2010-11 onwards, no centralised procurement was being done. The reply of the Ministry was not acceptable as instances of supply of material departmentally to the contractors still persisted.

⁸ Tapri (Choltu) to Jani road (PKG No. 05-22: ₹ 0.12 crore) , Tapri (Choltu) to Punag road (PKG No. HP-05-21: ₹ 0.05 crore), Choura Majgoon road PKG No. HP-05-027: ₹ 0.20 crore, Nigulsari to Taranda (PKG No. HP-05-17: ₹ 0.07 crore).

⁹ District Rural Development Agency Kancheepuram, Tiruvannamalai, Dindigul, Udhamandalam, Kanniyakumari, Ariyalur, Krishnagiri and Pudukottai

4.4.8 Delay in execution of works

According to para 13.1 of the guidelines, the projects sanctioned had to be executed by PIUs and completed within a period of 12 calendar months from the date of issue of the work order including rainy season.

In 26 states (**Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand and West Bengal**), 4,496 works were delayed for periods ranging from one month to 129 months as detailed in **Annex- 4.4**. The delays were attributed to land disputes, non-receiving of forest clearance, paucity of funds, non-availability/difficulty in transportation of material, shortage of labour, delay in mining permission, etc.

4.4.9 Non-recovery of liquidated damages

As per the OM and conditions of the Standard Bidding Document, contractors are liable to pay liquidated damages for delay in completion of works. Further, if the contract is terminated because of a fundamental breach of contract by the contractor, the percentage apply to the value of the work not completed will be recovered as liquidated damages.

In 16 states {**Andhra Pradesh (1), Assam (33), Bihar (108), Chhattisgarh (12), Haryana (1), Himachal Pradesh (9), Madhya Pradesh (107), Manipur (20), Meghalaya (4), Mizoram (2), Nagaland (51), Odisha (7), Punjab (3), Rajasthan (75), Tripura (6) and Uttarakhand (20)**}, in 459 works/packages recovery of liquidated damages amounting to ₹ 131.56 crore was not imposed.

In **Sikkim**, 20 works were delayed by the contractors without assigning any reasons. The work executing agencies did not impose liquidated damages on the defaulting contractors.

4.4.10 Excess expenditure due to cost overrun

In 11 states (**Chhattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Mizoram, Odisha, Tripura and Uttarakhand**), in 47 works, the sanctioned cost of the works was escalated by ₹ 56.87 crore on account of retendering of balance work at higher rates after rescinding of previous contract, revision of Schedule of Rates, excess provision of CC pavement, deviation in length, price escalation, etc., as detailed in **Annex-4.5**.

4.4.11 Works shown as completed without complete connectivity to targeted habitations

The intended benefit of the programme can only be achieved if the targeted habitations are provided complete connectivity through an all-weather road.

In seven states (**Bihar, Gujarat, Jharkhand, Madhya Pradesh, Tamil Nadu, Tripura** and **West Bengal**), 73 road works were executed and shown as completed without providing complete connectivity to the targeted habitations due to non-availability of required land, non-clearance by railways, non-construction of required bridges, etc. Out of this, 72 road works were executed at a cost of ₹ 120.03 crore.

Other state specific cases are discussed below:

In **Assam**, construction of road from Bihpuria Islampur to Besapatti *via* Islampur no. 2 (package no. AS 15-34) was restricted to 4.650 km instead of proposed length of 4.850 km due to shortage of funds. The work was foreclosed after incurring ₹ 2.53 crore defeating the purpose of all weather road connectivity to the targeted habitations.

In another case, construction of road from Khanajan Khagori (package no. AS 15-48), was restricted to 2.05 km against the sanctioned length of 3.36 km as quoted rates in retendering the work were higher than the sanctioned amount. The work was completed at a cost of ₹ 1.82 crore. The balance unconnected portion of 1.310 km to connect habitation 'Khagori' was proposed for foreclosure, hence desired connectivity to the targeted habitation was not provided.

In **Jharkhand**, in two districts, Simdega and Hazaribag, three roads were constructed during 2011-13 at a cost of ₹ 1.80 crore to provide connectivity to five habitations. Instead of providing connectivity to targeted habitations, three other habitations were provided connectivity as the targeted habitations were already connected. Separate DPRs were prepared to connect the remaining two targeted habitations.

In district Garhwa, construction of road from L031 to Atiyari was reduced by 326 metres to adjust the cost of seven CDs works added during execution so as to complete the work within agreed cost.

In **Kerala**, in district Kannur, in package no.KR 0442- Padamkavala-Anara Road (2490 metre), 810 metre (from chainage 0/000 to 0/810) was not constructed for want of permission of forest department to widen the road and ease the gradient to the required norms. Upgradation of the road was

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carried out between chainage 0/811 to 2/490. The portion between 0/000 and 0/810 remained raw and non-motorable condition with high gradient.

In **Manipur**, under package no. MN 0671, work to connect Saikotjang Part-II from NH 39 to Saikotjang (7.77 to 15.37 km) was completed (May 2011) at a cost of ₹ 3.33 crore. Joint physical verification showed that the road started from NH 39 at chainage 0.00 km onward at another site of the road contra to that recorded in the measurement book. The road so constructed (NH 39 to Saikotjang from chainage 0.00 to 7.77 km) earlier proposed under package no. 0652 during 2009-10 in Phase VI was not approved by NRRDA.

In **Rajasthan**, against 154.275 km of road works sanctioned during 2010-15, PIUs executed works in only 109.67 km at a cost of ₹ 31.19 crore due to non-acquisition of private/forest land. The Work Executing Agency, however, treated these works as completed without construction of proposed length of roads required to connect the targeted habitations.

In **Sikkim**, rural connectivity from Tsalamthang to Lower Treythang in East District was sanctioned for ₹ 4.64 km for construction of road length of 7.88 km. The work, after a delay of 33 months, was completed in January 2014. Joint physical verification showed that only 6.28 km road was constructed at the site. The remaining 1.60 km was constructed at another location viz., PWD road to Amba which was about three km away from the location as work on 30 metre span foot over bridge in the alignment of the road was yet to be initiated.

In **Tripura**, in district Dhalai, road from Dhumacherra to Chandrahasa Para (package no TR-04-61) for providing connectivity to five habitations (Nitai Kumar Para, Ratan Roaja Para, Krishna Dayal Para, Madhu Roaja Para and Chitrasen Para) was reported as completed in March 2013 at a cost of ₹ 5.92 crore leaving the last habitations two km away. The incomplete stretch was taken up under a different package (TR 04 206) in December 2014.

In **Uttarakhand**, 10 habitations¹⁰ of districts Nainital and Pauri having population of 3,889 remained unconnected even after construction of roads as these habitations were either not exactly situated on the alignments or it was not possible to connect these habitations as per the ground reality of that area.

¹⁰ Block Okhalkanda- Kundal (370) & Harishtal (416), Block Baitalghat- Bargal(463), Koflota(573) Siltona (524) of district Nainital, Block Bironkhal- Kota (262), Block Dwarikha- Majokhi (266), Chandpur (429) & Khark (258), Block Khirsu- Pokhari (328)

4.4.12 Incomplete works

In five states (**Assam, Himachal Pradesh, Jammu & Kashmir, Jharkhand and Madhya Pradesh**), 68 works remained incomplete due to land disputes, non-clearance from forest department, damaged by flood, etc. ₹ 132.20 crore incurred on these projects remained unfruitful as targeted habitations were not provided all weather roads connectivity {**Annex-4.6 (a)**}. Besides this, in four states (**Assam, Jharkhand, Mizoram and Tripura**), after incurring ₹ 36.94 crore, 27 works remained incomplete as the contracts were terminated due to breach of contractual obligations by the contractors {**Annex-4.6(b)**}. Thus, the expenditure of ₹ 36.94 crore was remained unfruitful.

Other state specific cases are as below:

In **Himachal Pradesh**, three works, (one work sanctioned prior to 2010 and two in 2010-11) costing ₹ 2.80 crore were not taken up for execution due to involvement of forest land. Further, after incurring expenditure of ₹ 10.95 crore, 10 works (seven works sanctioned prior to 2010 and three in 2010-11) were lying incomplete for periods ranging from seven to 105 months due to involvement of forest land, non-finalisation of tenders, contractors' fault, etc

In **Manipur**, in two districts (Tamenglong and Ukhrul), six works remained incomplete or were closed due to slow progress, non-construction of bridges, court case, etc.

In **Uttrakhand**, in district Chamoli, two works (Udamanda-Rauta -Stage-I work and Saiji-Lagaa-Maikot-Baimro, Stage-I work under two contracts) remained incomplete since October 2008 and September 2010 respectively as the contractors were not interested in executing the remaining works and ₹ 4.36 crore on account of excess payment, advance payment and liquidated damages was still to be recovered from the contractor.

The work of Stage-II of Udamanda-Rauta MR was awarded to another contractor in June 2013 without completion of Stage-I work. The contractor also left the work (May 2015) on the ground that about 15 km road did not have the desired road width and there were no cross drainage structure constructed along the road. An advance of ₹ 1.08 crore was outstanding against the contractor.

4.4.13 Premature release of security deposit and performance security

As per provisions of the Standard Bidding Document, performance security and security deposit aggregating to 10 *per cent* of the contract price is to be released when the defect liability period is over.

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In **Arunachal Pradesh**, performance security of ₹ 0.30 crore was released in road works from Kherem to Mankao (district Lohit) and Tabasora to Pidi Rime (district West Siang) before expiry of defect liability period.

In **Himachal Pradesh**, in Hamirpur division, in four packages¹¹, the balance performance security of ₹ 0.13 crore was not recovered from the running account bills.

In Hamirpur division, the security deposit of ₹ 0.06 crore was released before the expiry of the defect liability period.

In **Kerala**, in district Idukki, the validity of bank guarantee of ₹ 0.24 crore, obtained for release of performance security in respect of four works (package no. KR 0317 and KR 0328) expired before the end of defect liability period.

In **Mizoram**, in 13 works under eight packages in five PIUs, security deposit of ₹ 1.38 crore which was deducted from the contractors' bills, were irregularly repaid to the contractors in full before the end of third year of defect liability period without ensuring rectification of the defects.

In two states, **Karnataka**, in district Kalaburosi (₹ 0.10 crore) and **Telangana**, in districts Khamammam and Mahbubnagar (₹ 0.15 crore), security deposit of ₹ 0.25 crore was short deducted.

4.4.14 Payment without execution/inflated measurement of works

In three states (**Manipur, Nagaland and Tripura**), ₹ 6.36 crore was paid to contractors without execution of work or without/inflated measurement of works as tabulated below:

Table: 4.2

State	Package	Particular	Amount involved (₹ in crore)
Manipur	MN 420- construction of road from Luwangsangbam Jn. to Kameng in district Imphal East	Deficiencies in carriageway width i.e., 2.7 metres instead of the prescribed width of three metres from Ch 3.20 km to 4.70 km.	0.02
	MN 0691-construction of road from Willong Khunou to Chakha via Rajamei (0-10.33 km)(Stage-II) in district Senapati.	Less execution of two NP3 (1000 mm dia) pipe culverts and short execution of road length by 330 metres	0.05
	MN 0671 construction of road from NH 39 to Saikotjang part II (7.77 to 15.37 km) in district Senapati	Recording of excavation of earth in hilly soil in plain area with no raised surface for around 600 metres	0.03

¹¹ HP-03-05, HP-03-57, HP-03-47 and HP-03-107

State	Package	Particular	Amount involved (₹ in crore)
	MN 0946 construction of road from BRTF Road/T 02-Chahong Khullen Part-I district Ukhrul	Short execution of 12 pipe culverts/cross drainages	0.19
Nagaland	Road from T-01 to Yezami	The construction of 11 km road costing ₹ 6.72 crore from T-01 to Yezami was taken up and the contractor was paid in full for the entire stretch of 11 km though work was executed only in 6.80 km from T-01 to Nltoqa on Suruboto-Yangli state high way and a distance of 4.8 km of road from state highway to Yexam was abandoned after formation, cutting and widening.	1.08
	Construction of 11.20 km road from Tizu river to Titha river road (T-01) to Lithsumi village	Work of second phase was awarded in March 2012 at a cost of ₹ 3.55 crore and ₹ 2.44 crore was paid to the contractor up to the 2 nd running bill. However, joint physical verification showed that the contractor abandoned the work after execution of formation cutting and GSB work of around 900 metres valued at ₹ 0.07 crore.	2.37
Tripura	AA road to Khadaban para (package no. TR-04-64) and Baibuncherra to Alendrapara (package no. TR-04-128) and KA road to Balaram (package no. TR-04-158)	Inflated measurement of execution of sub base and base course	0.44
	Road work from Chawmanu to Arunda (2.891 km) under package No. TR-04 -126)	On re-awarding of work, the second contractor executed Water Bound Macadam (WBM) work of full length (2.75 km) even though same work had already been executed by first contractor up to 2.49 km.	0.20
	Upgradation of KMA road to Kachucherra (Part-II)	Up to the 4 th running bill, ₹ 7.27 crore was paid to the contractor. However, in the 5 th running and final bill the value of work came down to ₹ 5.63 crore. Thus, acceptance of contractor's claim and payment without actual execution of work and without proper measurement resulted in undue benefit of ₹ 1.64 crore to the contractor.	1.64
	Kamalpur to Kachucherra (Part-I) under package no. TR 04 35 (UG)	Three items of works viz., clearance of site and setting out, protection work and sub base and base course (without bitumen) were executed by the second contractor without provision in the estimates as these works were already executed by the first contractor before termination of contract.	0.34
	Total		6.36

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In **Chhattisgarh**, the work of supervision, quality check and recording measurement, etc., was awarded to M/s Meinhardt (Singapore) Pvt. Ltd and M/s Theme Engineering Services Pvt. Ltd at a cost of ₹ 18.17 crore and ₹ 10.52 crore respectively. This was against the provisions of para 11.2.8 of PMGSY Accounts Manual and para 4.034 of Works Department Manual of the state which stipulate that measurements should be ordinarily taken by the Executive Engineer or subordinate officials authorised by him. In district Bilaspur, under package CG-02-46 and CG-02-51, ₹ 7.98 crore was paid to the contractors on inflated measurement and sub-standard work. The amount was still to be recovered from the defaulting contractors.

In **Sikkim**, due to incorrect working out of rate of item 'providing and laying of plum concrete 1:2:4' for execution of works under Phase VIII, one of the sub-component viz., formwork was taken as 27.87 square metre instead of 15.12 square metre. This resulted in increase in rate of component by ₹ 484.20 per cubic metre. The incorrect calculation of rate resulted in undue benefit of ₹ 0.30 crore to the contractors in 22 works of Phase VIII.

4.4.15 Avoidable expenditure on construction of roads

In **Odisha**, in district Mayurbhanj (RW Division, Rairangpur), against the sanctioned length of 7.7 km, three link routes were constructed for 6.716 km during 2007-09 in three separate packages¹² at a cost of ₹ 2.36 crore. The same road length of 6.716 km was again taken up as a part of road length in three different packages¹³ sanctioned during 2011-12 and 2013-14.

In **Rajasthan**, in district Churu, (package no. RJ 11 WB-04 and WB-01), two road works to connect the targeted habitations were executed with a length of 6.922 km. Joint physical verification showed that required length to connect the eligible habitations was only 4.362 km and no habitation was connected with the roads constructed in excess length. Thus, expenditure of ₹ 0.58 crore incurred on construction of excess length of roads was avoidable.

In **Uttarakhand**, five works¹⁴ in districts Almora and Pauri were sanctioned as link roads for 61.49 km but their proposed alignments were those of a through road (both end connectivity from existing all-weather roads). Audit observed that all the eligible habitations of these roads could be connected with construction of only 22.355 km road length had the alignments been

¹² Package no. OR 21177 road from RD Road to Malikedam, OR 21308A road from SH 49 to Khejuria, OR 21311 road from ODR to Pahadpur

¹³ Package no. OR 21417 road from RD Road to Kuldiha, OR 21402 road from SH49 to Tileghutu, OR 21 ADB14 road from ODR to Pahadpur

¹⁴ Road Number: L-032 & L-021 of district Almora and L-23, L-024, and L-025 of district Pauri

taken from the nearest available point on the existing all-weather roads as a link road project. Thus, the construction of through roads instead of link roads of shorter lengths in violation of the PMGSY norms resulted in extra expenditure of ₹ 26.61 crore.

In four districts (Almora, Chamoli, Nainital and Pauri), proposal of 15 roads were inclusive of road length for those habitations which were either ineligible as per the population norms of the PMGSY or the habitation was already connected by a road from another end. The proportionate cost of additional length of 100.99 km beyond the last eligible/targeted habitation(s) including three bridges was ₹ 50.74 crore, which was avoidable/irregular under PMGSY norms.

4.4.16 Multiple connectivity of habitations

Para 3.10 of programme guidelines envisage that only single road connectivity will be provided to eligible unconnected habitations. If a habitation is already connected by way of an all weather road, then no new work can be taken up under the PMGSY for that habitation.

In nine states (Arunachal Pradesh, Gujarat, Jammu & Kashmir, Jharkhand, Karnataka, Nagaland, Rajasthan, Uttar Pradesh and West Bengal), 36 habitations were provided with more than one connectivity. Out of this, 31 habitations were provided multiple connectivity at a cost of ₹ 29.49 crore.

4.5 Maintenance of roads

Institutional measures to ensure systematic maintenance and providing adequate funding for maintenance of the rural CNW, a key to the continuance of the PMGSY, have been specifically incorporated in the programme guidelines.

4.5.1 Release and utilisation of maintenance fund

According to para 17 of the guidelines, state governments are required to undertake the maintenance of the entire CNW and develop sustainable sources of funding for undertaking the maintenance functions.

It was seen that details of maintenance fund collected from state governments showed variations in the figures of release and expenditure as compared to the figures maintained by the NRRDA (**Annex- 4.7**).

Information provided by NRRDA showed that 27 states¹⁵ released ₹ 3,018.10 crore in maintenance fund from 2010-11 to 2014-15 as against requirement of ₹ 3,279.97 crore (**Annex-4.8**). In three states (**Bihar, Haryana and Punjab**)

¹⁵ Except Goa; figures of Telangana are included in Andhra Pradesh

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short release was more than 40 *per cent* of the fund required for maintenance. States as a whole utilized 66 *per cent* of the requirements during this period. However, in seven states (**Andhra Pradesh, Assam, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand** and **Tripura**), less than 50 *per cent* of the fund required was used. The audit observation was confirmed by NQMs who found that out of 7,144 road works, 1,370 works were not maintained at all and 3,095 works were poorly maintained.

Thus, inadequate provision towards maintenance besides its poor utilisation defeated the purpose of creating institutional measures to ensure systematic maintenance. Non/poor maintenance of the roads may be evident from the photographs taken during joint physical verification, as discussed in Chapter-7.

The Ministry accepted (April 2016) the audit observation.

4.5.2 Diversion of maintenance fund

In three states (**Himachal Pradesh** (₹ 0.20 crore), **Tripura** (₹ 30.00 crore), and **Uttarakhand** (₹ 3.52 crore)), ₹ 33.72 crore was transferred from maintenance fund to programme fund and also to maintain roads not constructed under the programme.

4.5.3 Maintenance of roads during defect liability period

According to para 17 of the programme guidelines, for the roads constructed/upgraded under the programme, five year routine maintenance are contracted with the same contractor along with the construction contract.

In 12 states {**Arunachal Pradesh** (4), **Assam** (243), **Bihar** (498), **Haryana** (1), **Himachal Pradesh** (2), **Jharkhand** (119), **Manipur** (262), **Meghalaya** (69), **Odisha** (199), **Uttar Pradesh** (82), **Uttarakhand** (8) and **West Bengal** (103)}, maintenance of 1,590 road works/packages during defect liability period was not carried out.

In **Himachal Pradesh**, in three test checked divisions, roads constructed under four packages during October 2008 and September 2010 were maintained by the department by incurring expenditure of ₹ 0.97 crore.

In **Jharkhand**, the records of six districts showed that the defect liability period for completed roads was not being enforced to contractors and during 2010-15, state government incurred ₹ 6.27 crore on maintenance of roads.

In **Sikkim**, roads were maintained by the Rural Management and Development Department (RMDD) as no maintenance contracts were entered into with the contractors.

In **Tamil Nadu**, in districts Kanyakumari and Udhamandalam, roads were maintained by the works executing agency as contractor failed to execute maintenance work.

In **Tripura**, in district Dhalai, the contractor did not take up maintenance of roads constructed in January 2011 to connect four habitations (Jitendeb Para, Sushipal Para, Das Para and Deb Para) and the work was terminated in February 2014. The repair of pavement of road including CD structure which was damaged, was awarded to another contractor at a cost of ₹ 0.38 crore in January 2015, but was yet to be taken up (July 2015).

The Ministry replied (April 2016) that reasons for non-maintenance of roads during defect liability period were sought from the states.

4.5.4 Absence of zonal maintenance contract

As per para 17.3 of the programme guidelines, on expiry of five years post-construction maintenance, Through Routes, as they carry larger traffic and keeping them in good condition is important, shall be placed under zonal maintenance contract consisting of five years maintenance including renewal as per cycle.

In 18 states (**Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Manipur, Punjab, Rajasthan, Sikkim, Telangana, Tripura, Uttar Pradesh, Uttarakhand and West Bengal**), zonal maintenance contracts were not entered into after expiry of five years of defect liability period.

The Ministry replied (April 2016) that it had put in place institutional measures to ensure systematic maintenance through regular training to engineers and contractors. In addition, states were asked to notify state specific rural road maintenance policy. So far, 12 states had notified such policies. The reply of the Ministry did not address the issue of non-execution of maintenance contract.

Conclusion

The execution of road work suffered due to non-organisation of transect walk. This led to dropping and abandonment of works due to land disputes, non-availability of required land and other reasons. Deficiencies such as incorrect/non-workable alignment, incorrect design and technical specification, etc., were observed. Implementing agencies failed to obtain

insurance cover of the work to ensure risk coverage, thereby giving undue benefit to the contractors. Substantial amount of mobilisation/ equipment advances and liquidated damages remained unrecovered from the contractors. Contractors obtained mobilisation advances against fake bank guarantees. Works were shown completed without providing complete connectivity to the targeted habitations. Instances of providing multiples connectivity to habitations were also observed. Maintenance funds were not adequately provided and utilised. Roads constructed under the programme were not properly maintained.

Recommendations

- i. Ministry may impress upon the state governments that Detailed Project Reports are prepared with due diligence by adopting proper laid down procedure.
- ii. Ministry may ensure that works are completed in all respect with required bridges and cross drainage structures so as to provide desired all-weather connectivity to the targeted habitations.
- iii. The programme implementing authorities should be made responsible for every case of undue advantage to the contractors, poor execution of work and delay in completion of works.
- iv. Maintenance of constructed roads may be ensured for their optimum use.