

Chapter-2

**Performance Audit of
Pradhan Mantri Gram Sadak Yojana
Panchayat Raj and Rural Development
Department**

2.1 Introduction

Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched by Government of India in December 2000 with 100 *per cent* central funding with the objective of providing all-weather road connectivity in rural areas. This programme aimed at covering all the unconnected rural habitations with a population of 1,000 and above by 2003 and those with a population of 500 and above by the end of 2007. PMGSY permitted upgradation of existing roads in those districts where all the eligible habitations had already been provided all-weather road connectivity. This programme was implemented in Andhra Pradesh in 10 phases during December 2000 to March 2013.

2.2 Organisational set-up

Andhra Pradesh State Rural Roads Development Agency (APSRRDA) was set up as an autonomous body in March 2003 to advise Government on technical specifications, project appraisal and fund management of PMGSY. While APSRRDA has the Minister for Panchayat Raj as its Chairman and the Principal Secretary, Panchayat Raj & Rural Development (PR&RD) Department as its Vice Chairman, the empowered officer/programme implementing officer for PMGSY is the Engineer-in-Chief (ENC). He is assisted by Superintending Engineers and Executive Engineers in implementation of the programme.

2.3 Audit Framework

2.3.1 Audit Objectives

The objectives of undertaking this performance audit were to assess whether:

- Planning for programme was as per the procedure prescribed in Operations Manual for preparation of District Rural Roads Plan and Core Network for providing all-weather road connectivity to unconnected habitations;
- Adequate funds were provided and utilised for effective implementation of programme;
- Tendering and contract management, at all stages of programme implementation, followed canons of financial propriety and transparency;
- Construction of roads was taken up and completed within timeline specified in PMGSY guidelines and according to specifications of Indian Road Congress (IRC) without involving any cost overrun;
- Road maintenance contracts were implemented effectively and State Government took institutional measures to build capacity and devolve funds and functionaries to District Panchayats for sustainable maintenance of roads; and
- The envisaged three tier quality control mechanism and monitoring system were effective.

2.3.2 Audit criteria

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

- Budget of State Government during relevant period;
- GoI guidelines and Operations Manual on PMGSY;
- Rural Roads Manual and IRC specifications;
- Orders/guidelines/circulars issued by GoI and State Government from time to time;
- District Rural Roads Plan, Core Network, Comprehensive New Connectivity Priority List (CNCPL) and Comprehensive Upgradation Priority List (CUPL);
- Andhra Pradesh Public Works Code; and
- Andhra Pradesh Financial Code.

2.3.3 Audit Scope and Methodology

Performance Audit of PMGSY was carried out during May – July 2013 and covered execution of rural road works sanctioned during 2008-13. Audit methodology involved examination of records of PR&RD Department in Secretariat and Office of ENC and 11¹ Programme Implementation Units (PIUs). An Entry Conference was held in April 2013 with the Principal Secretary, PR&RD Department wherein audit scope, objectives, criteria, methodology including conduct of joint site inspection were explained and their inputs obtained. Exit Conference was held in March 2014 to discuss audit findings and Government response has been incorporated in the report at appropriate places.

2.3.4 Audit Sample

Audit sample for detailed scrutiny involved selection of 125 works on stratified sample basis² in seven districts viz., Adilabad, Anantapur, East Godavari, Guntur, Khammam, Medak and Prakasam. In addition to these districts, all works where expenditure was more than rupees three crore (six in all) were selected from across the State for scrutiny. The expenditure on 131 works constitutes 30 *per cent* of total expenditure on works sanctioned during 2008-13. Apart from scrutiny of records, physical inspection of site along with departmental representatives was also conducted and photographic evidence was taken where necessary to substantiate audit findings.

2.4 Follow-up on earlier Performance Audit

Implementation of PMGSY in Andhra Pradesh was earlier reviewed and reported through paragraph 3.1 of Comptroller and Auditor General's Audit Report (Civil) for the year ended 31 March 2005. Significant findings of earlier Performance Audit included absence of a detailed survey of roads while launching the programme leading to incorrect assessment of unconnected habitations, execution of works in

¹Adilabad (3 PIUs), Anantapur (2 PIUs), East Godavari (1 PIU), Guntur (1 PIU), Khammam (1 PIU), Medak (2 PIUs) and Prakasam (1 PIU)

²Stratified on expenditure criteria and included 75 initiated works, 15 works awarded but with zero expenditure and 35 works sanctioned but not awarded

Phases I and II without preparation of District Rural Roads Plan (DRRP) and without formulating Core Network of roads, non-compliance with programme norms in construction of works and poor monitoring of execution of road works both at the Central and State level.

Government in its Explanatory Notes to the Report tabled in March 2006 replied that all the works from Phase III onwards were taken up from the approved Core Network and assured that necessary precautions would be taken hereafter as per guidelines of GoI. However, measures taken by Government with regard to issues pointed out by Audit earlier were not adequate, as evidenced from persistence of these lacunae during current audit. Also, there were several instances relating to contract management where GoI guidelines were not complied with as brought out in paragraph 2.8.

Audit findings

2.5 Planning

2.5.1 District plans and Core Network

As per programme guidelines, planning for rural road connectivity involves preparation of District Rural Roads Plan (DRRP) indicating existing road network in the district and identifying eligible unconnected habitations. Based on DRRP, a Core Network is to be prepared for constructing roads to provide basic access to essential socio-economic services to each of the eligible habitations. DRRP and Core Network are undertaken at block/mandal level and consolidated at district level before forwarding to State level agency (APSRRDA) and National Rural Roads Development Agency (NRRDA) for approval. Based on the approved Core Network, new connectivity to be taken up is prioritised through a Comprehensive New Connectivity Priority List (CNCPL) and Comprehensive Upgradation Priority List (CUPL) (with regard to proposed upgradation works). CNCPL/CUPL thereby form the basis for selection of road works.

Audit findings in this regard are as follows:

2.5.2 Non-prioritisation of upgradation works

Out of 36 upgradation works test checked in Audit, three works each in Nalgonda and Karimnagar districts were taken up although these did not figure in CUPLs of respective districts. Further, works were not selected in the order of priority accorded to them. Government in its reply (March 2014) accepted audit finding relating to Karimnagar district. With regard to Nalgonda, it was contended that these works featured in Core Network. However, stipulation is that upgradation works are to be prioritised as per CUPL, which was not done in these cases. Further, Government has not furnished (March 2014) specific reply for not selecting works in order of priority.

2.5.3 Non-construction of bridges

Government reported³ completion of 1,093 road works under PMGSY during 2000-13. However, audit scrutiny revealed that several of these roads were not fully operational due to absence of bridges (both cross drainage and long span) connecting them. While 298 bridges were sanctioned by GoI during 2010-11, State Government identified (April 2012) need for 272 more such bridges to operationalise concerned roads. Therefore, Government's claim that all these roads were completed under PMGSY was doubtful. Government in reply (March 2014) accepted audit finding and stated that it would pursue with Ministry of Rural Development (MoRD), GoI for sanction of the additional bridges.

2.5.4 Cart track roads categorised as all-weather roads

Core Network prepared by State Government in 2003-04 depicted cart track roads and gravel roads over 9,986 kms connecting 5,219 eligible habitations (population of 500 and above) as all-weather roads. Although State Government sought approval of GoI in November 2007 to revise Core Network to enable these left out habitations to be connected under three different categories⁴, NRRDA cleared only roads proposed under 'cart track' (Category-I) to be included in Core Network and accordingly sanctioned (2008-09) only 395 new connectivity works (1,526.72 km) to provide connectivity to 410 habitations. NRRDA stated (January 2009) that verification and inclusion of roads shown under other categories would be taken up during general revision of Core Network of all States during 2009-10. This revision has not taken place as of March 2014. Government in its reply (March 2014) accepted audit finding but did not furnish any specific reasons for categorising cart track roads as all-weather roads. It was further stated that action would be taken to upgrade these roads when funds were available.

2.5.5 Data inconsistencies

Reliable data is imperative for proper planning and successful implementation of any programme. Audit scrutiny of data relating to eligible unconnected habitations revealed several inconsistencies. While ENC records show that 556 habitations were yet to be connected in habitations having population between 250 and 499, Audit scrutiny in seven (out of 22) districts revealed that there were 578 unconnected habitations in this category. Similarly, while ENC records show 340 excess connected habitations in category of population between 500 and above, State Level Standing Committee (SLSC) figures show 1,714 unconnected habitations in this category. In the seven test checked districts, there were 685 unconnected habitations in this category.

³ Monthly Progress Report (April 2013) of ENC submitted to NRRDA

⁴ **Category-I:** 461 Cart track roads with 2,054.33 km length covering 839 habitations, **Category-II:** 1,928 roads with nominal gravel covering the length of 5,006.53 km involving 3,065 habitations and **Category-III:** 750 gravel and cart track roads (more than 50 *per cent* of the road) with the length of 2,925.36 km covering 1,315 habitations

In reply (March 2014), Government stated that there was misrepresentation initially with regard to status of connectivity and stated that reconciled data has now been submitted to GoI.

2.6 Financial performance

2.6.1 Funding pattern

PMGSY is funded 100 *per cent* by GoI and funds are provided through three windows *viz.*, Programme fund (related to payments for works), Administrative fund (related to administrative costs) and Maintenance fund (for meeting maintenance expenditure).

Funds for sanctioned projects are made available to State Government in two installments - first installment amounting to 50 *per cent* of value of projects (or annual allocation whichever is lower) after clearance of projects by GoI and second installment subject to utilisation of 60 *per cent* of available funds and completion of at least 80 *per cent* of road works awarded during previous year as well as 100 *per cent* of awarded works of all years preceding that year and fulfilment of other conditions if any, stipulated while releasing previous installment.

During the five year period 2008-13, GoI released ₹2,930 crore for implementation of PMGSY against which, State could spend only ₹2,476 crore. Unspent balances amounting to ₹454 crore were lying in APSRRDA account as of June 2013.

2.6.2 Non/Short release of State share

As per guidelines, State Government has to meet expenditure towards cost escalation and tender premium as well as cost of individual bridge works exceeding a length of 50 meters (75 meters in selected tribal and backward districts under Integrated Action Plan). Audit scrutiny of records of APSRRDA revealed the following:

- i. In respect of 298 bridge works cleared by GoI in September 2010, corresponding State share (*prorata* cost of work) amounting to ₹210.73 crore had not been released by State Government as of June 2013 despite completion of 149 of these works.
- ii. Further, State share of ₹10.21 crore due in respect of works sanctioned during 2012-13 was also not released.

In reply (March 2014), Government assured that it would release its share of programme funds.

2.7 Programme implementation

2.7.1 Preparation of Detailed Project Reports (DPRs)

As per programme guidelines, Programme Implementation Units (PIUs) are to prepare DPR for each work indicating land availability, details of transect walk⁵,

⁵ Undertaken to determine the most suitable alignment, sorting out issues of land availability (including forest land), assess any adverse social and environmental impact and elicit necessary community participation in the programme

conformity to CNCPL/CUPL, full justification for new constructions exceeding 45 Commercial Vehicles Per Day (CVPD), separate DPR where cross drainage (CD) span exceeds 25 meters, economy design, including use of gravel surfacing, local materials and fly ash and preparation of estimates for five year routine maintenance. In order to ensure that disputes relating to alignment do not arise subsequent to finalisation of DPRs, GoI provided for a 'Transect walk' of identified area by Panchayat Pradhan, local Patwari, AE/JE and Forest officials (where forest land is involved).

Audit scrutiny revealed that DPRs were prepared in respect of all road works sanctioned by GoI. However, due to inadequate preparatory work and surveys while preparing DPRs, 18 works sanctioned during 2008-09 and 2010-11 had to be dropped subsequently on various grounds as shown in Table 2.1 alongside. Government confirmed (March 2014) audit finding.

Table 2.1

Reasons for dropping works	Sanctioned	
	2008-09	2010-11
Repetition of works	5	-
Land problem	1	1
Completion of works through NABARD and other grants	2	2
Transfer of works to R&B Department	-	3
Non-requirement of bridge works	-	4
Total	8	10

Source: ENC records

Test-check of works in PIUs of Adilabad, Anantapur, Karimnagar, Mahbubnagar, Medak and Warangal districts revealed a variation of ₹11.17 crore in cost of works as per contract value and actual execution in respect of 23 completed works⁶. These variations occurred essentially due to changes in specifications relating to length of road, CD works, vents, shoulders etc., from originally proposed items with differences in cost ranging from 3 to 81⁷ per cent, indicating that DPRs were not prepared with due care. Government agreed (March 2014) with audit finding.

2.7.1.1 Defective DPRs

Audit scrutiny of records and physical verification of road work revealed that road work from **Bodilanka to Turruwada** in East Godavari district with a length of 8 km was taken up (October 2009) at contract value of ₹2.02 crore for providing connectivity to three habitations viz., Turruwada, Chavadikota and Munthamamidi. After executing stretch up to 3.925 km and 5.525 km to 6.800 km at an expenditure of ₹1.09 crore, work was stopped (July 2012) without completing the stretch from 3.925 km to 5.525 km (hilly terrain) as this portion involved steep gradient and laying of CC pavement in the ghat section. Non-feasibility of completing this work was confirmed by EE in May 2013. Government agreed (March 2014) with audit finding and stated that an alternative alignment was identified and that action would be taken to complete this work with State funds.

⁶ Adilabad (5), Anantapur (4), Karimnagar (1), Mahbubnagar (1), Medak (11) and Warangal (1)

⁷ Adilabad (6 to 25 per cent); Anantapur (3 to 6 per cent); Karimnagar (26 per cent); Mahbubnagar (17 per cent); Medak (12 to 81 per cent) and Warangal (13 per cent)

2.7.1.2 *Non-consideration of single connectivity*

Programme guidelines provide for only a single road connectivity to a habitation. Core Network indicates shortest single connectivity required to be provided to unconnected eligible habitations based on position of connectivity of habitations in DRRP. Audit scrutiny of records and physical verification of road works revealed that road work providing **BT road from PWD Road to Bangla Venkatapur** in Gazwel mandal of Medak district was executed to connect three villages (Bangla Venkatapur, Rangampet and Dharmareddy Palli), which already had all-weather connectivity. Government replied (March 2014) that the road was laid to reduce distance to State capital by 15 km. But objective of PMGSY is to provide single connectivity to unconnected habitations. Therefore, expenditure of ₹2.70 crore incurred on this road work is not justifiable under the programme.

2.7.1.3 *Inadequate Transect Walks*

Audit scrutiny revealed that 16 works⁸ were initiated without undertaking/adequate transect walks. Consequently, works remained incomplete, abandoned mid-way or not commenced and dropped due to various reasons like lack of forest clearance, improper investigation, delay in approval of designs, land disputes etc., as discussed below:

A. Non-completion of works due to lack of forest clearance

- i. Road work from **Vetukuru to Siripuram** in East Godavari district was taken up (February 2009) to provide connectivity to 11 habitations covering 28 km. Work was stopped (March 2011) midway after laying WMM road (0 to 1.200 km) and BT road (4.600 to 25.785 km) for want of clearance from Forest Department. Government replied (March 2014) that it would initiate proposals for obtaining clearance under Forest Conservation Act. Hence, despite incurring ₹7.42 crore, objective of providing connectivity was defeated.
- ii. Similarly, road work from **GNT road to K. Kothuru (via) Vajrakutam** in East Godavari district was taken up (February 2009) for providing connectivity to three habitations viz., U.J.Puram, Vajrakutam and K.Kothur over a total length of 8 km. However, work was stopped (November 2011) midway after laying road up to 5.675 km for want of clearance from Forest Department. Consequently, only Vajrakutam was provided with connectivity leaving other two habitations unconnected. Besides, expenditure of ₹23.59 lakh incurred on the length of road from 4.400 km (Vajrakutam village) to 5.675 km i.e., end point up to which road was laid, also remained unfruitful. Government replied (March 2014) that proposals would be initiated for forest clearance under Forest Conservation Act.
- iii. Further, road from **Kancharagunta to Minchalampadu** in Guntur district was taken up (February 2009) to provide all-weather connectivity to three habitations viz., Minchalampadu, Kancharagunta and Kakirala and the work was completed in

⁸ Adilabad (1), Anantapur (6), East Godavari (3), Guntur (1), Khammam (2), Medak (2) and Prakasam (1)

April 2010 with an expenditure of ₹4.81 crore. It was however, noticed that the road from 9.800 km to 10.700 km (0.90 km) was not completed due to lack of clearance from Forest Department for passage of construction equipment and machinery. In reply, Government stated (March 2014) that with the WBM surface laid in forest area, entire road could be qualified as all-weather road.

B. Improper connectivity through existing damaged bund

Work of providing BT on road from *Angarajpally to Mutharaopally via Sunderashala* in Chennur mandal of Adilabad district was undertaken (August 2009) at a contract value of ₹2.72 crore to provide connectivity to nine habitations and completed in June 2010 at an expenditure of ₹2.88 crore. Audit scrutiny revealed that instead of laying a new road as envisaged, connectivity was provided *via* existing bund which was damaged and not traffic worthy. Thus, the objective of providing all-weather road to targeted habitations could not be achieved even after spending ₹2.88 crore. Government did not furnish (March 2014) specific reply for not laying new road. It was however, stated that action had been initiated to obtain sanction for repairing the existing road.

2.7.1.4 Non-possession of ownership of land

As per Operations Manual of PMGSY, State Government may lay down guidelines for voluntary donation, exchange or other mechanism to ensure availability of land for constructing rural roads. Details of land made available should be reflected in local land records to avoid dispute. Voluntary donations should be documented through agreements with a copy forwarded to local revenue officials for making necessary changes in ownership/possession of land and an affidavit is to be obtained to this effect.

- i. In respect of 12 test checked works in Medak district, the above stipulated provisions were not complied with. As ascertained from beneficiaries of PT Venkatapur and Sekharraopet in the district, their land was acquired by Government for execution of road works without obtaining affidavits from them. Government stated (March 2014) that land owners had not come forward to donate their lands in writing. But the guidelines envisage that donations of land should be documented through agreements to avoid land disputes at a later stage.
- ii. In respect of road from *CPT-NRT R&B road – Veluru* in Guntur district, the work was undertaken (March 2009) over a length of 12.5 km to provide all-weather connectivity to two habitations *viz.*, Girijan colony and Veluru, and completed in March 2010 by incurring an expenditure of ₹4.94 crore. Physical verification of work along with departmental officials revealed that a portion of road work in Girijan colony was not taken up. Government replied (March 2014) that entire village along with Girijan colony population had been covered while execution. However, audit found that the said portion of road was not taken up as seen during physical verification.

2.7.1.5 Non-consideration of traffic intensity of proposed roads

In respect of road work from **Bodilanka to Turruwada** in Maredumilli mandal of East Godavari district (length of 8 km) sanctioned in 2008-09 and awarded (October 2009) at a contract value of ₹2.02 crore for providing connectivity to three habitations viz., Turruwada, Chavadikota and Munthamamidi, although there was a mining quarry at 5.800 km of the road, traffic intensity due to movement of heavy mining vehicles (proclainers etc.) was not considered at the time of preparation of estimates. This resulted in damage to the roads due to movement of heavy vehicles. Further, road laid from 3.400 km to 3.925 km was also damaged (May 2013) completely. Government replied (March 2014) that there was no mining activity prior to preparation of DPR. However, audit noticed that Government order for mining lease was issued in July 2007 and construction of road was taken up in October 2009.

2.8 Tendering and Contract Management

As per Standard Bidding Document (SBD) prescribed by GoI for construction and maintenance of roads under PMGSY, a two envelope tendering process consisting of Technical and Financial bids was to be followed. The SBD also specified (i) time frame for various activities in tendering process, (ii) clear qualifications for contractors to qualify for bidding and (iii) evaluation of bidding capacity in each case, etc.

Audit observations relating to tendering process followed in test checked projects are discussed below:

- i. **Invitation of tenders prior to technical sanction:** As per guidelines, notice inviting tenders should be issued only after projects are scrutinised by State Technical Agency (STA), cleared by NRRDA and are accorded technical sanction by the competent authority in the State. However, in respect of 47⁹ out of 96 awarded works, tenders were invited either in advance of technical sanction (46 works) or on the day of technical sanction (1 work). Government contended (March 2014) that though tender notice was released in news papers prior to the date of technical sanction to save time, bids were published on e-procurement platform after according technical sanction.
- ii. **Award of works with variation without approval of NRRDA:** Although approval of NRRDA is to be obtained where variation between cost of work as per DPR and technical sanction exceeds 10 *per cent*, three works where variation ranged from 13 to 34 *per cent* were awarded in East Godavari and Khammam districts without obtaining approval of NRRDA. Government had not furnished (March 2014) specific reply in this regard.
- iii. **Award of works with excess time for completion:** As per programme guidelines, all road works are to be completed within nine months from the date of issue of work order. Where a package comprises more than one road work, total time given for completion of package should not exceed 12 calendar months. Audit

⁹Adilabad (6), Anantapur (3), East Godavari (5), Guntur (5), Karimnagar (1), Khammam (1), Krishna (1), Mahbubnagar (1), Medak (11), Prakasam (12) and Warangal (1)

scrutiny revealed that 12 works¹⁰ in the test checked districts were given excess time for completion ranging from 3 to 6 months. Government had not furnished (March 2014) specific reply in this regard.

- iv. **Expiry of insurance policies prior to defect liability period:** As per general conditions of contract¹¹, contractor is to provide insurance coverage for works and equipment. Audit scrutiny of 11 works in Adilabad (2), Anantapur (4) and Medak (5) districts revealed that insurance policies had expired prior (32 to 62 months) to completion of defect liability period as well as maintenance period. Government accepted (March 2014) the observation and stated that insurance policies were being obtained from contractors.
- v. **Authorisation of bills without withholding Further Security Deposits:** Bills related to 50 ongoing works in East Godavari, Khammam and Medak districts preferred by PIUs during 2009-12 were authorised without withholding amounts towards 'Further Security Deposits' (FSD) at 5 per cent of total value of work done as envisaged in programme guidelines. As FSD amount withheld from bills of contractors were due to be released only on expiry of defect liability period, non-withholding of amount facilitated contractors to realise their security deposits in advance to the extent of work done in all 50 cases. The possible risk of non-recovering the amounts in case of default by the contractors cannot be ruled out. Government replied (March 2014) that PIU, Medak has not recovered due to oversight and PIU, Khammam was recovering FSD. No specific reply was furnished in respect of PIU, East Godavari.
- vi. **Non-recovery of Performance Security Deposit:** Recovery towards Performance Security Deposit amounting to ₹45.38 lakh was not effected by PIU, Medak as per guidelines¹² from contractors in respect of six¹³ test checked works. Government replied (March 2014) that this was due to oversight.
- vii. **Non-revalidation of Bank Guarantees:** Validity of Bank Guarantees (BGs) amounting to ₹31.79 lakh¹⁴ expired in advance of construction and maintenance periods in respect of three works in East Godavari, Srikakulam and Vizianagaram districts. However, PIUs concerned did not take any action to get them revalidated. Government replied (March 2014) that letters for revalidation were addressed by PIU, Srikakulam district and assured revalidation in respect of works relating to PIU, East Godavari. No specific reply was furnished in respect of Vizianagaram district.

¹⁰ Karimnagar (1), Krishna (1), Mahbubnagar (1) and Medak (9)

¹¹ Clause 13 of General conditions of contract enclosed to Standard Bidding Document and Para 9.3.1 of Operations Manual

¹² Para 8.13 of Operations Manual and Clause 46 of General conditions of contract enclosed to Standard Bidding Document

¹³ PT Venkatapur to Munigadapa, Teegul to Yousufkhanpally, PWD road to Bangla Venkatapur, Mundrai to Mandapalli, Bridge at Thipparam and Matindla to Ibrahimpur

¹⁴ East Godavari: Road formation from Bodilanka to Turruwada (₹5.07 lakh), Srikakulam: Formation of BT to the road from Kusumapuram to Kalingapatnam (₹7.63 lakh and ₹1.90 lakh) and Vizianagaram: Providing BT from SD road to Yeguvaganjabadra (₹3.44 lakh and ₹13.75 lakh)

2.9 Execution of works

2.9.1 Status of works

Programme guidelines stipulate completion of all works within 15 months from their date of sanction by GoI. Status of works cleared by GoI during 2008-13 is given in Table 2.2.

Table 2.2

Year	Details of work	Number of works				Status of works				Expenditure as of March 2013 (₹ in crore)	
		Cleared by GoI	Awarded	Not awarded	Proposed for dropping	Works completed	Works completed with delay	Delay in months (range)	Works in progress	Completed works	Works in progress
Phase-VIII (2008-09)	Road works	431	420	3	8	397	47 (12%)	1-68	23	471.54	11.48
Phase-IX (2010-11)	Bridges	298	262	27	9	149	2 (1%)	1-50	113	50.41	82.78
	Road works	187	186	0	1	143	0	0	43	92.87	19.72
Phase-X (2012-13)	Road works	266	233	33	0	0	0	0	233	0	0
	Road works	188	0	188	0	0	0	0	0	0	0
Total		1370	1101	251	18	689	49	1-68	412	614.82	113.98

Source: Data furnished by ENC

Out of 1,101 works awarded, 689 works (63 per cent) were completed and there was delay of one to 68 months in completion of 49 works.

ENC attributed (May 2013) non-award of works sanctioned during 2008-13 and delay in completion of sanctioned works to non-receipt of forest clearance, extremists problem and non-approval of revised administrative sanctions owing to change in rates or change in alignments.

As per the records of ENC, out of 131 sampled works, 96 works were initiated and 35 works though sanctioned had not commenced as of March 2013. Of the 96 works initiated, 70 works were completed within stipulated time, six works were completed with delay ranging from 4-10 months, two works were terminated and 18 works were in-progress as of June 2013. In reply, Government accepted (March 2014) audit observation.

State Government reported (March 2013) that 35 works were sanctioned but not initiated. However, audit scrutiny revealed that out of these 35 works, four works were completed and 12 works were in progress indicating incorrect reporting. The remaining 19 works¹⁵ were not initiated due to delay in finalisation of designs, lack of clearance from Forest Department etc. Status/details of sampled works are given in *Appendix-2.1*.

¹⁵ Dropped (5), not awarded (12), not a sanctioned work (1) and awarded but not commenced (1)

Significant Audit findings with regard to execution of test checked works are discussed in the succeeding paragraphs.

2.9.2 Works executed without providing full connectivity

As per programme guidelines¹⁶, PIUs were to ensure proper embankment, drainage, causeways, culverts and bridges where necessary, to provide all-weather connectivity to targeted habitations. Audit scrutiny of test checked works followed by physical verification revealed that though some works were completed, targeted habitations were not provided with all-weather connectivity due to non-construction of causeways, culverts, bridges, roads to complete stretch etc., as per approved DPRs. Therefore, objective of providing all-weather connectivity to all the targeted habitations was only partially fulfilled. Significant instances in test checked works are given below:

2.9.2.1 Non-construction of bridges

- i. Road work from **Venkatapur to Motlaguda** in Adilabad district was taken up for providing all-weather connectivity to nine habitations and was completed in April 2011 at a cost of ₹5.47 crore. Another road work from **'Rampur to Digda'** was also completed in August 2010 at a cost of ₹2.07 crore. Audit scrutiny revealed that a bridge on Erravagu to connect four habitations viz., Girivalli, Karigi and Rampur (included in first work) and Digda (included in second work) was taken up separately. Due to non-completion (June 2013) of proposed bridge on Erravagu, objective of providing connectivity to all the habitations proposed in both works remained unachieved. In reply, Government stated (March 2014) that finalisation of designs for bridge was under process.
- ii. Construction of road from **49.700 km of T02 to Udumudilanka** in P. Gannavaram Mandal of East Godavari district was taken up (August 2009) for providing connectivity to two habitations viz., Udumudilanka and G. Pedapudilanka. Work was completed in March 2010 at a cost of ₹1.25 crore. Physical verification of road along with departmental officials revealed that no connectivity was provided (1.237 km and 1.335 km) to targeted habitations due to non-construction of bridge on river bed. People have to cross the river by foot, that too only during fair weather season. Government replied (March 2014) that bridge work was sanctioned (September 2010) and work was in tender stage.

2.9.2.2 Non-laying of road to complete stretch

- i. Work of formation of road from **Garisepudi to Chinagollapalem** in Krishna district was taken up in February 2009 and completed in February 2011 at a cost of ₹3.51 crore. Physical verification revealed that one habitation (Eti power/Eti Mondi Palli Palem) existed beyond 9.16 km. Though road was laid from 6.00 km to 9.16 km, it did not cover any habitations except sea belt. Thus, the targeted habitation was not in effect provided with all-weather connectivity. In reply,

¹⁶ Para 8.5 (v) of the guidelines

Government agreed with audit observation and stated (March 2014) that road in the village portion would be executed with local grant.

- ii. Work of providing BT on road from **R&B road to Dabbanuthala** in Khammam district was taken up (September 2010) for providing connectivity to Kothuru and completed (March 2013) at a cost of ₹1.93 crore. Audit noticed during physical verification that though road was laid up to 8 km, proposed habitation was located 400-500 meters away from the end point of the road. Government replied (March 2014) that proposal was initiated to take up the road in village portion with local grant.

2.9.3 Improper execution of works

Audit scrutiny of test checked road works as well as physical verification revealed several issues in execution of works such as abandonment of works midway due to inadequate work experience, non-compliance with geometric design standards, deviation from approved designs, poor quality of construction, non-provision of connectivity to proposed habitations, etc. Significant Audit observations in this regard are discussed below:

2.9.3.1 BT road connectivity to Yeguvaganjabadra (Vizianagaram district)

BT road work from SD road @ 19.000 km to Yeguvaganjabadra in Salur Mandal of Vizianagaram district was undertaken (July 2010) at a contract value of ₹6.87 crore for providing connectivity to five habitations viz., Kotiya, Sompigam, Kothavooru, Pulivala and Yeguvasambi.

- i. **Non-completion of work by contractor:** Although road formation involves plain terrain and hilly terrain (5.200 km to 10.500 km), since work experience on hilly terrain was not a precondition, after executing work valuing ₹6.39 crore, contractor abandoned work at hilly terrain in November 2011 and it was terminated in March 2013. Leftover works (₹1.51 crore as per working estimates) included pavement from 10.800 km to 14.200 km, shoulders from 5.400 km to 14.200 km and CD works from 6.200 km to 14.200 km. Government replied (March 2014) that action was being initiated against the contractor for stopping work and that leftover works would be taken up after calling tenders.
- ii. **Improper execution:** Though CC pavements were constructed by expending ₹1.73 crore, gravel shoulders were not provided due to which road was eroded. Warning slogans indicating ‘danger to use the road’ were displayed at some places by the Department. Further, road width was not increased at curves to facilitate free movement of vehicles. Government replied (March 2014) that these would be rectified.
- iii. **Termination of contract without rectification of defects:** National Quality Monitors (NQM) who inspected (January 2013) the road declared it unsatisfactory (sub-grade, sub-base and WBM as poor; uneven BT and poor CDs) and suggested replacing the sub-standard items. Government terminated (March 2013) the

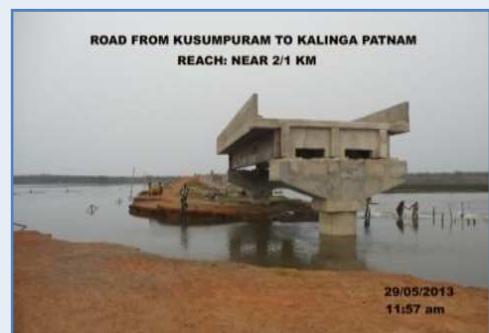
contract without rectification of defects. Government replied (March 2014) that rectification works were being taken up at the cost of contractor.

- iv. **Blasting works undertaken without approval:** An amount of ₹66.47 lakh was paid for excavation of hard rock in hilly areas with blasting material by mechanical means at chainages 3.000 km to 3.100 km without obtaining permission for blasting from competent authority. Government replied (March 2014) that it was not aware about taking permission and assured that care would be taken to avoid such lapses in future.
- v. **Non-coverage of all the targeted habitations:** Although the road work was proposed for providing connectivity to five habitations as per ground verification report enclosed to DPR, it was noticed that the road passed through three other habitations viz., Nerellavalasa, Dhulibhadra and Sarika and ended with only one targeted habitation i.e., Yeguvasambi. Therefore, all the other targeted habitations were not provided with connectivity. Government replied (March 2014) that except Kotiya habitation, all others were provided connectivity with branched out roads to the said road. But inspection of the site by Audit in April 2014 revealed that only a kutchra road was laid.

2.9.3.2 Road connectivity to Kalingapatnam (Srikakulam district)

This road work in Kaviti Mandal of Srikakulam district was awarded (July 2010) at a contract value of ₹3.79 crore. Audit scrutiny of relevant records and physical verification of the work revealed the following:

- i. **Delay in finalisation of designs:** The work was sanctioned in February 2009. However, design for construction of bridge (length: 125.75 mts with six vents of 16.5 mts with pile foundation) was approved only in April 2011. DPR was also approved without finalisation of designs, which was irregular. Government replied (March 2014) that the delay was on account of modified designs which were approved in April 2011.
- ii. **Non-completion of works:** Contractor after executing works valuing ₹3.58 crore stopped further execution in December 2011 for which no reasons were on record. The work was terminated in December 2012. Thus, due to non-completion of bridge work, connectivity to targeted habitation could not be provided as can be seen from photograph given alongside. In reply, Government stated (March 2014) that balance works would be taken up on receipt of revised administrative sanction.



- iii. **Extension of price adjustment clause despite non-completion of work:** As per Government orders¹⁷, price adjustment amount can be paid only when the work is

¹⁷ GO Ms.94 dated 16 April 2008, T.R&B(T1) Department

completed within agreement period or within extended period. Despite non-completion of work, Department paid (August – December 2011) ₹34.70 lakh towards price adjustment for change in prices of cement, steel, emulsion and bitumen etc. Government stated (March 2014) that action would be initiated to recover the amount from the contractor.

- iv. **Non-recovery of penalty:** While extending deadline to contractor in November 2012, an amount of ₹19.25 lakh was levied as penalty. However, agreement was terminated in December 2012 and the penal amount was not recovered (May 2013). Government replied (March 2014) that penalty would be recovered from the contractor.

2.9.3.3 Non-construction of complete revetment (Road connectivity to Brahmasamedhyam and Chirrayanam - East Godavari district)

Work in Katrenikona Mandal of East Godavari district was taken up in November 2009 and completed in March 2012 by incurring an expenditure of ₹4.25 crore. Since the road passed through a water logged area affected by back waters of sea, slopes of the road were prone to erosion due to tidal waves during high tide and cyclones, NQM warned (November 2010) about possible wash out



or scouring of road work at any time, if the revetment was not provided. Audit however, noticed (May 2013) during physical verification of road along with the departmental officials that many risk prone stretches were left without construction of necessary revetment works, causing erosion of slopes as can be seen from photograph given above. In reply, Government stated (March 2014) that it had initiated proposal for taking up protection works to road slopes from other grants.

2.9.3.4 Execution of work on single metal layer (Road connectivity from Kaleshwaram to Palugula - Karimnagar district)

Work in Mahadevpur Mandal of Karimnagar district was taken up (September 2009) at a contract value of ₹2.50 crore for providing connectivity to four habitations viz., Pushkapalli, Palugula, Kuntlam and Maddulapalli and was completed in September 2010 by incurring an expenditure of ₹3.16 crore. Although as per Operations Manual, bituminous items of work should be executed after laying of WBM Grade-II and WBM Grade-III metal, WBM Grade-II metal layer was not laid and bituminous items were executed on single metal layer i.e., WBM Grade-III metal. Government replied (March 2014) that work was executed as per DPR approved by STA. But the fact remained that above provisions were made contrary to Operations Manual.

2.9.3.5 Construction of dam at earthen road outside the purview of the reach (BT road from Mundrai to Mandapally - Medak district)

Work was undertaken (August 2009) at a contract value of ₹2.05 crore for providing connectivity to three habitations viz., Mundrai, Mandapally and Tekulapally which

was completed in August 2010 at a cost of ₹2.61 crore. Audit scrutiny followed by physical verification revealed that a vented road dam (15 vents of 900 mm dia RCC pipe) was constructed outside the purview of the reach at a cost of ₹37.64 lakh at Chainage 1.000 km on the **road from Mandapally to Rajiv Rahadari Road via Gundlacheru village**, which was a mud road. Government stated (March 2014) that the upgradation of road from earthen to all-weather road would be taken up from State funds.

2.9.3.6 Non-achievement of all-weather connectivity (Road to Ravindernagar - Adilabad district)

The work undertaken (2008-09) for providing all-weather road connectivity to two habitations viz., Ravindernagar and Nagapur was completed in July 2010 at a cost of ₹1.47 crore. Audit noticed that one culvert constructed at the entrance of habitation was washed away (2010) in floods. As the damaged culvert was not yet reconstructed (May 2013), targeted habitations could not be provided with all-weather road connectivity. Further, the bridge at 5.150 km was not executed as of May 2013. Government replied (March 2014) that a notice was issued to the contractor for rectification of damaged culvert and further stated that revised administrative approval was accorded for construction of bridge work.

2.9.4 Non-compliance with programme guidelines/provisions

2.9.4.1 Non-execution of side drains

PMGSY Operations Manual stipulates that when road passes through a village, care should be taken to ensure that there are side drains on either side of the road to drain away water. During physical verification of works in Medak district, Audit noticed that side drains were not laid in respect of two works viz., road from **PWD Road to Gopya thanda** and road from **Alladurga Metalkunta PWD Road to Muslapur via Bairandibba**. Government in reply stated (March 2014) that there was no requirement. The fact remains that as per guidelines, side drains are to be provided to ensure proper drainage and prevent water from entering into dwellings.

2.9.4.2 Usage of technologies in rural road construction

NRRDA forwarded (September 2009) a list of new materials/technologies¹⁸ suitable for use in rural road construction as accredited by IRC, New Delhi and instructed APSRRDA to circulate it to PIUs for preparation of project proposals of at least 2-3 per cent of roads with use of such materials/technologies. This was not complied with by APSRRDA and no reasons were on record for ignoring these instructions. Government replied (March 2014) that six works in Adilabad district were now being taken up with new technology and the same were under tendering process.

¹⁸ RBI Grade 81 – Soil Stabilizer, Recron 3 S Dossier, Zycosoil TM Nano Technology, Renolith Based Technology, Jute Geo textiles, Wacker BS Dry soil, Imperial Smelting Furnace (ISF) slag, Soil Fix – Bound Pavement Stabilizer, Metallurgical Slag (Waelz Kiln Slag) and Copper Slag, etc.

2.10 Quality Control

A three tier quality control mechanism was envisaged in PMGSY with the PIU and State Quality Monitors (SQM) being the first and second tier respectively to ensure that material utilised and workmanship conformed to the prescribed specifications and that all prescribed tests were carried out at specified time and place by the specified person/authority. At the third tier, NRRDA is to engage National Quality Monitors (NQMs) for inspection of roads at random. Inspections are to be planned in such a way that every road work is inspected at least three times.

Details relating to supervision of the first tier quality management and monthly returns of tests conducted by PIUs and compliance reports obtained by State Quality Co-ordinator (SQC) have not been produced to audit for verification. Government replied (March 2014) that instructions were given to all the PIUs to maintain records in this regard.

Test check of functioning of quality control mechanism relating to second and third tiers in sampled units revealed the following:

- i. **Non-maintenance of Complaint Register:** Complaint Register for recording complaints received from public and through GoI/NRRDA, was not maintained by SQM. Government replied (March 2014) that this would be done.
- ii. **Engagement of SQMs from implementing agency:** Contrary to guidelines, State Government engaged SQMs from implementing agency itself which defeated the purpose of instituting an independent quality control mechanism. Government replied (March 2014) that they have initiated inspection with outsourced SQMs from July 2013.
- iii. **Non-submission of Action Taken Reports (ATRs) on NQM inspections:** In case inspected works were graded 'unsatisfactory' by NQM, State Government was to ensure replacement of material or rectification of workmanship to ensure that grading is 'satisfactory'. However, out of 108 Action Taken Reports (ATRs) required to be sent on NQM inspections during April 2011 to April 2013, State Government submitted only 84 ATRs as of July 2013. Government informed (March 2014) that 94 ATRs were submitted and remaining ATRs would be submitted in due course.
- iv. **Inadequate inspection:** SQM inspected 788 completed works during March 2007 to March 2013. Of these, 650 works were inspected once, 120 works twice and 18 works more than twice against three inspections to be carried out. In reply, Government stated (March 2014) that inspections could not be conducted due to staff constraints.



2.11 Maintenance

Guidelines provide for maintenance of PMGSY roads for a period of five years by contractor. Funds for the purpose are to be provided by State Government from its

own resources and placed at disposal of APSRRDA in a separate maintenance account.

Audit scrutiny revealed that State Government received proposals for ₹1,104.10 crore (as of June 2013) for BT renewals and routine maintenance of roads against which it released only ₹99.86 crore. Further, APSRRDA could utilise only ₹35.36 crore since inception of programme. Due to non-release/non-utilisation of funds, roads constructed at a cost of ₹3,871.67 crore were not maintained, thereby exposing them to damage, causing risk to public. In reply, Government stated (March 2014) that it was taking steps to achieve targets relating to maintenance of roads.

Physical inspection of roads in test checked districts revealed poor maintenance and damaged condition like erosion of bituminous layer, non-maintenance of road shoulders, etc. Illustrative instances are given below:

Work	Road from R & B road – Cheruvulopalem	
District	Guntur	
Sanctioned	2008-09	
Completed	July 2010	
Expenditure	₹1.61 crore	
Audit observation	BT on road was eroded and potholes (2.200 km to 2.600 km) were affecting riding surface	
Work	Road from Petlurivaripalem – Lingamguntla	
District	Guntur	
Sanctioned	2008-09	
Completed	October 2010	
Expenditure	₹2.52 crore	
Audit observation	BT on road was eroded and riding surface was completely damaged	

Government replied (March 2014) that the road surface was restored to good riding surface. However, re-inspection of above sites in April 2014 revealed that roads at Cheruvulopalem and Lingamguntla were further damaged.

2.12 Financial Management and Internal Controls

2.12.1 Maintenance of Fund Accounts

APSRRDA and PIUs keep separate account of receipts and expenditure for Programme fund, Administrative fund and Maintenance fund as per prescribed procedure. Audit scrutiny revealed following deficiencies in maintenance of accounts in APSRRDA as well as in test checked PIUs.

- Non-adjustment of advances:** PIUs of five test checked districts have not adjusted an amount of ₹2.92 crore¹⁹ incurred on preparation of DPRs, to Programme fund. Concerned PIUs could not furnish details relating to this

¹⁹ Adilabad: ₹0.62 crore; Anantapur: ₹1.11 crore; East Godavari: ₹0.22 crore; Khammam: ₹0.57 crore and Medak ₹0.40 crore

- expenditure. Government replied (March 2014) that action was initiated for adjustment of DPR advance.
- ii. **Cost of DPR debited to grant without clearance of projects:** APSRRDA issued (October 2010, February 2012 and March 2012) release orders for debiting cost of DPR for works amounting to ₹52.33 lakh²⁰ without clearance of these projects by GoI in respect of PIUs of Krishna and Srikakulam districts. Government replied (March 2014) that action would be initiated to utilise DPRs for sanctions in other grants and that DPR charges would be debited to respective grants. However, debiting cost of DPRs to Programme fund without clearance of projects is contrary to guidelines.
 - iii. **Expenditure in excess of permissible limits:** As per guidelines, administrative funds released by GoI are meant for usual office expenses, expenditure relating to operation of Online Management and Monitoring System (OMMS), computers and their maintenance. APSRRDA incurred an expenditure of ₹94.28 lakh in excess of the prescribed limit of ₹50 lakh per year during 2010-11 and 2011-12 without any recorded reasons. Government replied (March 2014) that ₹1.03 crore was incurred towards Geographical Information System (GIS) as one time expenditure. But concurrence of GoI should have been obtained for incurring expenditure from administrative fund.
 - iv. **Non-reversal of time barred cheques:** There were 219 cheques amounting to ₹3.59 crore which were time barred from 2005 to 2011 (details thereafter were not furnished). No action was initiated in this regard as of July 2013. Government replied (March 2014) that all the cheques were reversed. However, documentary evidence to this effect was not made available.

2.12.2 Non/Improper maintenance of key registers

Review of internal controls in test checked PIUs disclosed that key control registers were not maintained during the period under review. Specific instances in this regard are detailed as follows:

- i. PMGSY envisages maintenance of various registers like Register of Works, Contractors Ledger, Debit and Credit Register, Statutory Deductions, Interest Bearing Securities/Bank Guarantees, Miscellaneous Works Advances, EMD and Security Deposit, Statutory Liabilities, Sanctioned Estimates, Measurement Books, Cheque books/Money Receipts books, Detailed completion report, Travelling Expenses, Cheques/Receipt Books, Unpaid Bills, Durable assets etc. However, none of the test checked PIUs maintained these registers.
- ii. In violation of Accounts Manual (Para 4.1.1), separate sets of books of accounts were not maintained for Programme fund, Administrative fund and Maintenance fund account in prescribed form by any of the test checked PIUs during 2009-12. Therefore, Audit could not verify correctness of transactions.

²⁰ Srikakulam district ₹37.45 lakh (details of works not made available) and Krishna district ₹14.88 lakh for 71 works

Government replied (March 2014) that relevant data is available in OMMS with regard to Programme and Administrative funds. It was further stated that records in all PIUs would be got audited by Internal Auditors and all relevant registers would be maintained.

- iii. In violation of Accounts Manual (Para 7.6.1), PIU, East Godavari did not maintain cash book for Maintenance fund during 2008-12 and a combined cash book was maintained thereafter along with Programme fund. Cash books for Administrative fund and Programme fund were not closed during 2008-13 and opening and closing balances were not exhibited. Reconciliation with bank transactions was also not done. Government did not furnish (March 2014) specific reply in this regard.
- iv. As per Accounts Manual, accounts were to be prepared monthly and annually and submitted to Governing Council for approval. However, APSRRDA had not prepared accounts (monthly as well as annual accounts) for Maintenance fund for the period 2008-13 despite specific instruction of NRRDA to this effect in 2007. Government replied (March 2014) that annual accounts up to March 2013 were prepared in November 2013. However, it could not provide any documentary evidence to this effect.

2.13 Impact Assessment Study

As per programme guidelines, NRRDA will provide 100 *per cent* assistance for independent studies to establish impact of new rural connectivity in a district from time to time. Audit however, observed that no such studies were conducted in respect of any of the test checked districts. Government stated (March 2014) that impact analysis of rural connectivity would be taken up.

2.14 Conclusion

Programme implementation was based on unreliable data and without ensuring envisaged planning process like preparation of Core Network and proper DPRs. Consequently, a number of habitations remained unconnected in the State. Several road works were initiated/awarded without adequate preparatory work and surveys while preparing DPRs, leading to works remaining abandoned/dropped/not awarded/incomplete due to lack of forest clearance, land disputes, change of alignments, designs and non-approval of revised administrative sanctions. There were several cases where works were tendered before obtaining technical sanction. Several deficiencies were noticed in execution of works such as works having been completed without providing full connectivity to identified habitations and execution of works in violation of programme guidelines. Quality control inspections were not effective and appropriate action was not taken to rectify defects pointed out during such inspections. Financial management was ineffective and was marked by non-release of sufficient funds for maintenance of roads, non-adjustment of advances, non/improper maintenance of key registers etc. Impact assessment was not carried out as envisaged.

2.15 Recommendations

- Government should ensure strict adherence to planning process as envisaged in programme guidelines for smooth and early completion of road works. Effective co-ordination with other Departments responsible for granting clearances should also be ensured.
- Tendering process as prescribed in programme guidelines should be strictly complied with to ensure that works are awarded in a timely manner.
- Release of funds for execution of works and their utilisation should be monitored closely. Also, adequate funds should be earmarked for maintenance of roads for sustainability of assets.
- Government should ensure strict compliance with regard to quality control checks to be exercised at various stages by different authorities. Immediate steps should be taken to ensure that defects pointed out during quality control checks are rectified promptly.