No. P-17024/4/2019-RC(Part) (FMS-368978) Government of India Ministry of Rural Development Department of Rural Development Rural Connectivity (RC) Division

New Delhi, the 21th August, 2023

MINUTES

Subject: Minutes of the Meeting of Pre-Empowered Committee held on 4th August, 2023 to discuss project proposals of State of Bihar under PMGSY-III (Batch-I, 2023-24)-reg.

The undersigned is directed to enclose herewith the Minutes of the Pre-Empowered Committee meeting held on <u>04thAugust</u>, <u>2023 at 4:00 PM</u> under the Chairmanship of Joint Secretary (RD) & DG, NRIDA (through Video Conferencing) to discuss the project proposals submitted by the State of Bihar under PMGSY-III (Batch-I, 2023-24).

2. This issues with the approval of the competent authority.

(K.M Singh)

Director

Tel. No: 011-23070308 Email: km.singh@nic.in

Distribution:

- i. The Secretary, Rural Works Department, Government of Bihar, 5th Floor, Vishveshwaraiya Bhawan, Bailey Road, Patna- 800015, Bihar.
- ii. Shri Rajeev Ranjan, Nodal Officer, PMGSY, SRRDA, RWD, Govt. of Bihar, Vishveshwaraiya Bhavan, Bailey Road, Patna- 800015.
- iii. All Directors in NRIDA.

Copy forwarded for information to:-

PPS to JS (RC)

Minutes of the Meeting of Pre- Empowered Committee held on 4th August, 2023 to discuss project proposals of State of Bihar under PMGSY-III (Batch-I, 2023-24)

A meeting of the Pre-Empowered Committee was held on 4th August, 2023 at 4:00 PM through VC under the Chairmanship of Joint Secretary (RD) & DG NRIDA to consider the project proposals of State of Bihar under PMGSY-III (Batch-I, 2023-24).

The following officials were present in the meeting: -

MoRD/ NRIDA representatives									
Shri Amit Shukla	Joint Secretary (RD) & DG (NRIDA)								
Shri K.M. Singh	Director (RC)								
Shri Rajeev Rana	Under Secretary (RC)								
Ms. Anjali Yadav	Assistant Director (RC)								
Shri B.C. Pradhan	Consultant/Director, (Technical) NRIDA								
Shri Pradeep Agrawal	Director (Projects-I), NRIDA								
Dr. I.K. Pateriya	Director (Projects-III), NRIDA								
State Government representatives									
Shri Pankaj Kumar Pal	Secretary-cum-CEO, BRRDA								
Shri Bhagwat Ram	Chief Engineer-cum-Senior In-charge, PMGSY, BRRDA								
Shri Kumar Rajeev Ranjan	Nodal Officer, PMGSY, Bihar								
Shri Anand Prakash	EE, PMGSY, BRRDA								
Shri Prashank Kumar	ITNO, PMGSY, BRRDA								
Shri Prabhat Kumar	Financial Manager, BRRDA								

Pre-Empowered Committee meeting to discuss the project proposal submitted by the state of Bihar under PMGSY-III (Batch-I, 2023-24), was held on 04.08.2023.

2. The details of the proposal of the State Govt. under PMGSY-III, Batch-I of 2023-24 are as under: -

	As per States letter dated 2.5.23				As per OMMAS dated 3.8.2022			
Item	No	Length (in km/m)	Cost (Rs in Crores)	Avg. Cost per km/m (Lakhs)	No	Length (in km/m)	ı	Avg. Cost per km/m (Lakhs)
Roads	46	381.448	300.04	78.65	37	310.291	236.047	76.07
bridges	433	14864.91	1354.07	9.12	471	18298.669	1696.0034	9.27
Total	46 roads + 433 bridges	381.448 km roads + 14864.91 m bridges	1654.11		37 roads + 471 bridges	310.291 km roads + 18298.669 m bridges	1932.0504*	

*MoRD share: Rs. 1,158.0341 Crore State share: Rs 774.0167 Crore

Target: 6,162.50 km Sanctioned: 6,000.669 km

3.75 m width road - 32 Nos & Length - 265.788 km - Rs. 68.47 Lakhs/km 5.50 m width road - 05 Nos& Length - 44.503 km - Rs. 121.50 Lakhs/km

3. General Observations

- i) The current proposal is for 37 roads of 310.291 km and 471 bridges of 18,298.669 m at an estimated cost of Rs. 1,932.0504 crore (Central Share- Rs. 1,159.23 crore and State share-Rs. 772.82 crore).
- (ii) The State of Bihar has been allocated target length of 6,162.50 Km under PMGSY-III, out of which 6,000.669 km has already been sanctioned to the state. The balance target for the state under PMGSY-III is 161.831 km, however, the state has proposed 148.46 km in excess of the balance target. On inquiry state informed that they propose to drop 105.445 km from the sanctioned PMGSY-III works. Still the proposal is 42.85 km in excess of the balance roads and the proposed roads to be dropped. State was asked to send the dropping proposal of 105.445 km and only after these roads are dropped the excess works will be considered. Further 42.85 km of roads which are in excess need to be deleted before the matter is placed before EC. Short closure of roads is not considered against the target.
- iii) 32 roads of 265.788 km length are of 3.75 m width with average cost of Rs. 68.47 Lakhs/km and 05 roads with 44.503 km length are of 5.50 m width with average cost of Rs. 121.50 Lakhs/km. All 37 road proposals have been uploaded onto GeoSadak. However there would be material change when the excess roads proposed by the State are deleted.
- iv) All proposals uploaded and scrutinized by the STAs on OMMAS. PTA scrutiny not done yet. State was asked to get the PTA scrutiny done.

4. Trace Map Cut- Quality of Roads

i) It was observed that whereas 35 roads are having trace map rank lower than 50, 1 road has trace map rank of 51-100 and 1 road has trace map rank of greater than 100. The state needs to provide justification for the two roads. State informed that most roads under higher utility value have already been taken up under PMGSY-III. NRIDA explained that this scenario will also changed after deletion of the excess roads state has proposed.

5. Planning Audit

- i) 46 proposals were audited by NRIDA team for their utility as TR/MRL under PMGSY-III. State has removed 09 roads proposals from the current batch having planning issues on the recommendations of NRIDA / taken up under state scheme. All 37 road proposals have been uploaded onto GeoSadak..
- ii) It was observed that, out of 471 bridges, 23 bridges are not drawn/approved by SRRDA on Geosadak. State was requested to upload the 23 bridges on Geo Sadak. Barring the 23 proposals, others have been examined and 6 bridges were not found to be on the alignment of PMGSY-III road. State has accepted to delete these 6 bridges. Details are given below:

District	Block	Package Number	Year	Bridge Name	Bridge Length (mtrs)
Kishanganj	Thakurganj	BR18THRB24	2023 - MECHI (MANGLI CHOWK 2024)TO KARUAMANI AT CH- 15.800KM		625
Madhubani	Khajauli	BR21AA07	2023 - 2024	Construction of RCC Box Bridge At Ch 13+400 k.m in Chandradih To SidhapkalaChowk Via Marukia	26.4
Muzaffarpur	Katra	BR23MG237	2023 - 2024	Budhkara to Dumri via Basant,Khangura Ch 10+100	60.91
Araria	Sikti	BR01SKB2	2023 - 2024	BRIDGE AT MRL09-PWD ROAD TO LETI AT CH- 3.260 KM	17.5
East Champaran	Ghorasahan	BR11KNK013	2023 - 2024	Construction of RCC Box Culvert at Ch 7+230 in T05- Ghodashan To Renginiya Path	17.95
East Champaran	Ghorasahan	BR11KNK009	2023 - 2024	Construction of RCC Box Culvert At Ch-6+000	17.95

6. Existing Surface

i) It was observed that 29 roads have BT/CC in 95-100% of its surface and 4 roads have BT/CC in 85-95% of its surface and remaining 4 roads have 75-85%.

7. High Priority Roads skipped in CUCPL

i) It was observed that, 136 high priority roads have been skipped due to ownership with different departments and 433 roads skipped due to being under constructions sanctioned under state scheme. State was asked to provide road-wise justification with necessary documents. State informed that the related information was furnished in previous EC meeting and this needs to be looked into . Most of the high priority roads have already been taken up under state scheme, hence not much roads are available. The state mentioned that in fact these roads have not been left out, rather these have been taken up under state scheme. It was decided to modify the distribution chart and make two more categories: one for roads taken up under maintenance policy of state and another for works sanctioned under other state scheme To replace.

8. <u>Distribution of roads based on traffic category</u>

i) 2 roads (5.5 m width) in T6 traffic category have average total cost of Rs. 110.75 lakh/ km and 3 roads (5.5 m width) in T7 traffic category have average total cost of Rs. 128.53 lakh/ km, which is very high. Best date was requested to provide justification for the same.

9. PCU/ day details

i) It was observed that all the 32 roads in 3.75 m width category have PCU/ day less than 2000 and 5 roads of 5.5 m width category have PCU/day between 2000-3500.

10. Average Cost Trends

i) It was observed that, the average cost of 3.75 m wide roads in 2020-21 was Rs. 70.61 lakh/km, during 1^{st} batch of 2022-23, it was Rs. 63.75 lakh/km and it is Rs. 68.47 lakh/km for the current proposal. The average costs of 3.75 m wide roads were found to be within the acceptable variation.

However for roads of 5.5 m width category, the average sanctioned cost in 2020-21 was Rs. 109.18 lakh/ km, in 2022-23(Batch-II), it was Rs. 109.9 lakh/km and now the same is Rs. 121.5 lakh/ km for the current proposal. On inquiry the state informed that since only five roads are there in 5.5 m width category, hence the average cost has increased. Earlier there used to be many roads hence the average cost used to be on lower side. State was asked to examine and justify the abnormal increase in average cost of roads. It was decided that after deletion of the excess roads, it would be easier to scrutinize all the DPRs to find out the exact cause of higher average cost. State apprised that the cost has also increased due to increase of the cost of bitumen. It was seen that in all the cases pavement cost is more than 90 lakh/km. The State was requested to re-examine these DPRs.

- ii) The average sanctioned cost of bridges under PMGSY-III in 2020-21 was Rs. 5.64 lakh/ m, it was Rs. 7.41 lakh/ m in 2022-23 and the same is Rs. 9.27 lakh/ m for the current proposal. State was asked to explain the reason for abnormal increase in the average cost of bridges. State mentioned that the reasons for increase in the cost of bridges is enhancement in price of steel, cement, bitumen and labour. Also deep foundation design has been done in consultation with NIT Patna who is also the STA. It was explained that some bridges had experienced distress which were under construction under PMGSY-III and subsequently a detailed analysis was done. Based on the recommendations, design change as well as the steps to strengthen the soil have been recommended and which have been accommodated in the current DPRs. These DPRs were scrutinized by bridge expert.
- iii) Committee asked about the approved SoR for the year 2019-20 and emphasized for need of approval of current SoR. P1 division, PI Division, NRIDA mentioned that, the same is under examination and some information has been called for from the state. In the current proposal, the State has adopted the ongoing rate. State was asked to get their DPRs checked for material cost also. After the SoR is approved by NRIDA, the state will have to correct the DPR accordingly and the revised cost will be examined by NRIDA before EC meeting.

11. <u>District wise details of current proposals</u>

i) The average cost of the roads in the following districts were observed as outliers in respect of pavement cost:-

Roads of 3.75 width category

- Gopalganj- Rs. 73.89 lakh/ km
- Muzaffarpur- Rs. 82.36 lakh/ km
- Rohtas- Rs. 73.68 lakh/ km

Roads of 5.5 m width category

- Araria- Rs. 104.41 lakh/ km
- Banka- Rs. 99.23 lakh/ km
- Darbhanga- Rs. 104.28 lakh/ km

State told that variations of cost is due to the existing condition of roads. If pavement condition is not so good, it requires more works relating to strengthening. If the requirement is overlaying the cost will be higher. State was asked to analyze the reason for such high pavement cost in these districts and provide road-wise justification for the same. Technical Division, NRIDA was also requested to compare the DPRs and check the provisions.

12. Pavement cost/km wise details

- It was observed that, 4 roads in 3.75 m width category have pavement cost more than Rs. 70 lakh/km, 2 roads have pavement cost between Rs. 65-70 lakh/km and 4 roads in 5.5 m width category have pavement cost more than Rs. 95lakh/km, which is on higher side. State was asked to submit, how many of these roads have been proposed with new technology/FDR and how many with conventional technology. State informed that existing road surface of some roads are badly damaged and hence it would need to be re-laid. PTA scrutiny of 5.5 wide roads needs to be done. Also cost analysis of these roads vis a vis FDR roads to be carried out by the state. State raised some reservation about FDRs implementation due to its special geographical conditions. It was explained that these issues should have been raised before issue of sanction. It was decided to arrange a visit of PTA to Patna to discuss the issue point wise.
- ii) State was asked to rationalize the existing/proposed box culverts, slab culverts, Causeways portion in pavement quantity and avoid duplication of quantities.

13. Non-Pavement cost/km wise details

i) It was observed that 2 roads in 3.75 m width category have non-pavement cost of more than Rs. 20 lakh/ km. Similarly, 2 roads in 5.5 m width category have non-pavement cost of more than Rs. 30 lakh/ km. State was requested to examine rationalization of these costs.

14. Road DPR Observations

Package No.: TN-18102:

- i) State has provisioned Seal coat (Serial no 13 of detailed estimate), instead of surface dressing (Serial No.12). State has done correction in DPR and the same needs to be corrected on OMMAS.
- ii) State has proposed new CD at Rd 0/159; however photo does not show any damage to CD. State informed that the CD will be reviewed as per present site condition since survey was done on 04.12.2021.
- iii) As per State, two new CD have been proposed at Rd 8/260 & 8/640 due to breach in the embankment which has created the necessity of proposing these 02 new CD structures.

Package No.: BR10P149:

- iv) It was observed that two RCC slab of 2m length each is proposed at chainage 2700 and 8400. The proposed length was found to be on higher side. State has reassessed the proposed length of culvert and found that 2-meter length RCC culvert is required at Ch. 8400m and 1m Hume Pipe culvert is required at Ch.2700 m.
- v) In Hydraulic calculations the design discharge was found to be more than the design capacity and the design was shown to be safe. It seems that there is an error in the hydraulic calculations. State has carried out necessary correction for every culvert.
- vi) For existing 2 HPC, 3 HPC, and 4 HPC vent state has proposed 2m RCC slab culvert for all existing site. State need to reassess the requirement as per site and propose the culvert as per site conditions and according to discharge flow.

Package No.: BR03MG104:

vii) It was observed that CD structures are very high in this road and State was asked to remove the same. The total no of CDs usually should not be more than 3-4 in nos per km of the road. State in its compliance has informed that they have re-verified the site and good condition CD have been retained with minor repairs by State. Also quantities for embankment construction and for an upgradation road which are not required shall be removed. It was also observed that Metal Crash Barrier should be used as per site conditions and from safety point of view wherever admissible, also guard walls could be adopted wherever it is needed. State was advised to retain the provisions for turfing with sods as it will protect erosion.

Package No.: BR28RLK05:

- viii) It was observed that in this road the existing CC length is 580m while state has proposed 1310 m length. There are habitations from ch.18.810 to 19 only but state has given CC till 18.81 to 19.385. State informed that in some locations, habitations and small village market have got developed alongside the Road. Hence CC pavements have been proposed. The existing CC Pavements is already damaged from Ch. 18810 to 19385 m.
- ix) From ch.18600 to 19000, shoulders shall not be provided since there is no width available due to dense habitation.
- x) State has removed quantities for constructions of embankment from DPR.

State was asked to check the estimates once again and go for repair of the roads wherever necessary so as to reduce the cost. Justification by the state should be supported by accurate images as per the site condition. NRIDA was also asked to send teams in the state to check the high cost DPRs, i.e DPRs with high CC provision and high non-pavement cost may be examined. These teams will examine 100% DPRs with state officials and PIUs.

15. Bridge DPR Observations

Package No.: BR-37-PI-03

i) It was observed that Pile foundation is proposed for both the abutments and pier. For pier number of piles provided is 6 with 1200mm dia. Depth 22m. This is to be rechecked. Further provisions for both POT-PTFE and elastomeric bearing has been made in DPR. As per State, it was re-verified and found that the design is safe. As per State, the Elastomeric

bearing is used as a pad to resist the horizontal force, POT bearing is given for vertical load, so both the bearings are proposed in DPR & Drawing.

NRIDA's comments: Both Strip seal and POT-PTFE cannot be combined together. For bridge having span less than 30.00 m Elastomeric bearing is to be used and in case of span is >30.00m only POT-PTFE can be adopted. The same is to be used across all the bridges.

State informed that since the design has been approved by STA, they will consult STA and propose.

Package No. BR-36-PI-22

ii) It was seen that length of bridge given is 18.129 m but the span given is 2x7.00 m. This span length of 7m was to be verified. Reply of State was not found to be convincing and relevant. Further Provision for both strip seal and filler joint is made in DPR. As the expansion joint gap is 20mm, filler joint will serve the purpose. As per State, Strip Seal Expansion Joint is a mechanical device adapted for sealing an elongated gap formed between two adjacent road slab sections by providing a continuous support for vehicles crossing.

NRIDA's comments: Need site inspection verification.

Package No. BR-36-P-I18

- iii) Provision of lead for different materials was found to be on the higher side. State informed that Lead will be re-verified during Technical Sanction.
- iv) Vertical clearance provided in DPR 0.60m. But as per IRC 5-2015, clause 106.8.2, minimum vertical clearance is to be 0.900m. State responded that vertical clearance depend on discharge as per IRC 5-2015, clause 106.8.2, Provided clearance as per discharge.

In this regard, State said that STA will go through it as per requirement.

NRIDA's comments: Need site inspection verification

Package No. BR-38-P-152

- v) It was observed that Pile cap thickness in drawing and in levels differs. State has corrected it. Further Inclination of drainage spout pipe is to be away from outer side of girder. State in its compliance informed that drainage spouts are given on the outer side of the girder which is mentioned in the drawing.
- vi) Metal beam crash is to be used as per site requirements. Detailed justifications should be given in such cases.

Package No. BR 11 P109

vii) For a span of less than 18.75m, the provision of POT- PTFE bearings is not justified as the same shall be provided for longer spans and heavier structures. Moreover, design of POT-PTFE bearing is not given, size of bearings and load capacity, bearing fixation arrangement and Layout plan of POT/PTFE bearings is also not given. As per State, POT bearing for one span has been given in anticipation that when traffic will increase in future it will require a new design and expense of State Government will increase. POT/PTFE bearings are more durable, long term serviceability and heavy load suspensibility. Hence, Provision of POT/PTFE has been made. The design of POT-PTFE bearing has been attached.

NRIDA's comments: POT-PTFE is not required for 18.75m span. Elastomeric can be provided.

State informed that they will discuss with STA and will come with a solution.

Package No. BR30 FLBL05:

viii) Mismatch in the seismic zone shall be checked, in Abutment zone-V, Elastomeric Bearing design in Zone-II, Pier Zone-V, Longitudinal girders Zone- IV and in Proforma C, Zone-IV. Advised to decide the zone. As per State, bridge lies in zone V and abutment and Pier accordingly design checked and found safe. As per NRIDA, it can be agreed.

State was asked to check the site of the bridges and to check, if the provision of approach road has been properly made or not.

16. FDR Proposal

- i) State has provisioned 38.6 km with FDR technology. DG emphasized on the use of new technology viz. using waste plastic, cold mix, mechanized surface dressing, paneled cement concrete/white topping as per vision document 2022.
- ii) As per vision 2022, 70% length out of the eligible proposed length involving Hot Mix process should be using waste plastic, whereas length proposed is only 13.16%.
- iii) Mechanized surface dressing wrt T-6 to T-8 should be 50%, as against the proposed 36.89% length.
- iv) DG emphasized on the use of new technology viz. using waste plastic, cold mix, mechanized surface dressing, paneled cement concrete/white topping as per vision document 2022.

17. R&D Proposals

- i) State has proposed 20.89 Km (T-1 to T5 100%) with mechanized surface dressing.
- ii) State has proposed 59.576 km (92.13%) with paneled cement concrete/ white topping. Committee asked the state to propose 100% road length with new technology. The provision of normal pavement concrete may be removed and 100% should be proposed with paneled cement concrete.
- iii) The state needs to take more roads with waste plastics. In general, New Technology Vision 2022 should be complied with.

18. Maintenance

i) Maintenance liability during the year as per OMMAS and State is Rs. 108.00 crore and Rs 99.78 crore respectively. Expenditure (DLP) as per OMMAS and State is Rs 13.72 cr and Rs 13.97 cr. This needs to be increased to match the liabilities.

19. Physical Progress

- i) 3 roads of 15.73 km and 3 bridges are still un-awarded under PMGSY-I.
- ii) 275 roads of 2547.55 km and 79 bridges are still un-awarded under PMGSY-III. State was asked to award these works at the earliest.

iii) It was observed that, status of maintenance liability, fund credited, expenditure incurred on DLP maintenance and renewal length data have not been updated on OMMAS. State was requested to update the same on OMMAS.

20. eMarg

- i) In eMarg, it was observed that 262 packages are pending for locking on eMarg, MEE is pending for 341 packages, routine inspection (RI) has been missed in July on 161(11.04%)packages and 3071- total packages with pending payment for >3 months(out of packages on which MEE done), 664(21.6%)packages are pending for first payment. State was asked to look into it and improve the progress on eMarg.
- ii) The expenditure done through eMarg in FY 2022-23 is Rs. 13.93 crore of which, only Rs 1.49 crore has been spent on liability of FY 2022-23. State was asked to make all the payments through eMarg only and ensure payment of current year's liability this year only.

21. Quality

- i) 713 Packages are in Progress and Lab has not been established in 24 packages. State was asked to establish labs in all the packages.
- ii) Total 5400 SQM inspections were targeted in the state during FY 2023-24, against which, 1480 SQM inspections have been conducted so far. State was asked to increase the pace of SQM inspections, so as to achieve the annual target.
- iii) During NQM inspections conducted from August 2020 to July 2023, 9.27% completed works, 9.05% ongoing works, 26.15% maintenance works and 3.54% bridge works have been graded as unsatisfactory by NQMs. The unsatisfactory percentage is much above the national average. State was asked to look into the quality aspect.
- iv) During SQM inspections conducted from August 2020 to July 2023, 3.81% completed works, 3.65% ongoing works, 21.44% maintenance works and 6.81% bridge works have been graded as unsatisfactory by SQMs. There is much difference between the grading of NQM and SQM inspections. State wasrequested to look into the quality of SQM inspections.
- v) State was asked to recruit bridge experts and ensure that the quality of bridges does not get compromised. *Unsatisfactory percentage in bridges both by NQMs and SQMs is alarming*. State representative mentioned that, they are taking utmost care in ensuring the quality. They stop payment of the consultant, whenever unsatisfactory is being reported by him/ her. *Committee requested the state to fix the responsibility of poor quality on PIUs and not just on consultants, as it will result in false satisfactory reporting.*
- vi) 113 ATRs of NQM inspections are pending from the state. State was asked to submit the ATRs at the earliest. ATRs pending for more than a year shall be marked as non-rectifiable.
- vii) Comments/ATR of the state are pending on 6 complaints. State was asked to send the comments at the earliest.

- viii) State was asked to take action against SQMs whose grading pattern appears to be outlier.
- ix) State was asked to ensure total number of ongoing works with QCR uploaded against total number ongoing works in various districts where it is very less specially in respect of Bhagalpur, Gaya and Jamui districts.

22. Financial Issues

- i) Internal Audit report of Financial Year 2022-23 has not been submitted. State was asked to expedite the submission of same.
- ii) Interest verification certificate for FY 2004-05 to 2009-10 and FY 2020-21 to 2022-23 has not been submitted by the state. State was asked to submit the same at the earliest.
- iii) Interest recovery of Rs. 22.76 crore is pending from bank. State was asked to get the interest re-covered at the earliest.
- iv) ATR for Financial Year 2021-22 has not been submitted. State was asked to submit at the earliest.
- v) Audit Committee minutes has not been submitted. State was asked to do needful as regards Statutory/Internal/CAG audits at the earliest.
- vi) 136 works pending for financial closure for more than 180 days as on 03-08-2023. State was asked to get these works financially closed at the earliest.
- 23. The State was asked to furnish the compliance report on the observations of the Pre-Empowered Committee urgently so that the proposal could be placed before the Empowered Committee at the earliest.

Meeting ended with Vote of Thanks to and from the chair.