No-P.17024/3/2021-RC (e-373948)

Government of India Ministry of Rural Development Department of Rural Development Rural Connectivity (RC) Division

> Room No.377 Krishi Bhavan, New Delhi Dated the 30th December, 2021

MINUTES

<u>Subject: Minutes of Empowered Committee to discuss the project proposals for PMGSY-III submitted by the State Government of Assam for the 2021-22 (Batch-I)-reg.</u>

The undersigned is directed to forward herewith minutes of the Empowered Committee Meeting held on 22nd December, 2021 under the chairmanship of Secretary, RD on the subject mentioned above for information and necessary action.

2. This issues with the approval of Competent Authority.

(R.K.Singh)

Under Secretary (RC)

Distribution:

- (i) The Commissioner & Special Secretary, Public Work Department, Government of Assam, Chandmari, Guwahati- 781003.
- (ii) Secretary (RWD), Govt. of Assam.
- (iii) Chief Engineer PMGSY, Govt. of Assam.
- (iv) The Adviser (RD), NITI Aayog Bhawan, Sansad Marg, New Delhi.
- (v) The Director, Central Roads Research Institute, Mathura Road, New Delhi.
- (vi) All Director in National Rural Infrastructure Development Agency (NRIDA), 15 NBCC tower, 5th Floor, Bhikaji Cama Place, New Delhi-110001.

Copy for information to:-

PPS to Secretary (RD), PPS to AS&FA (RD), PPS to AS (RD), PPS to JS(RC)

Minutes of the Empowered Committee Meeting held on 22.12.2021 for consideration of proposal of the State of Assam under PMGSY-III, Batch I of 2021-22

A meeting of the Empowered Committee for PMGSY was held on 22.12.2021 under the Chairmanship of Secretary (RD) to consider the project proposal submitted by the State of Assam for PMGSY-III, Batch-I of 2021-22. Following officials were present in the meeting: -

Shri Nagendra Nath Sinha	Secretary (RD)		
Dr. Ashish Kumar Goel	Additional Secretary & DG, NRIDA		
Sh. Devinder Kumar	Director (RC), MoRD		
Sh. B.C. Pradhan	Consultant/ Director (Technical), NRIDA		
Dr. I.K. Pateriya	Director (P-III), NRIDA		
Sh. Pradeep Aggarwal	Director (P-I) & P-III, NRIDA		
Sh. Deepak Ashish Kaul	Director (F&A), NRIDA		
Sh. Rajendra Goel	Consultant/ Director (P-II), NRIDA		
Sh. Ashish Srivatsava Joint Director (NRIDA)			
State Govt. Representatives			
Sh. Rajesh Kemprai	Commissioner and Special Secretary, PWRD, Assam		
Sh. D. Saharia	OSD, I/C PMGSY		
Sh. B.Talukdar	CE, PWD &Empowered Officer		
Sh. P. Barua	SE, PMGSY		
Sh. Bimal Kumar Seal	FC, PMGSY		
Sh. C. Sarmah	SQC, PMGSY		
Sh. N. S.Sinha	AE & ITNO, PMGSY		
Sh. P. Bhatacharjee	NMO, PMGSY		

2. Current proposals of the State Govt. under PMGSY-III, Batch-I of 2021-22 are as under: -

As per Pre EC dated 12.01.2021						As per OMMAS as on 15.12.2021			
Item	Nos Length (in km/m)		Cost (Rs in	Cost Avg. (Rs in Cost/km		Length (in km/m)	Cost (Rs in	Avg. Cost/km	
		, ,	Crores)	(Lakhs)			Crores)	(Lakhs)	
Up- Gradation -	248	1,581.21	1,033.95	65.39	244	1564.64	980.12	62.64	
Roads LSBs	120	5,035.08	290.54	5.77/m	120	5041.23	296.23	5.87/m	
Total	248 roads 120 LSBs	1,581.21 km roads 5,035.08 m LSBs	1,324.49	,	244 roads 120 LSBs	1,564.64 km roads 5,041.08 m LSBs	1276.35		

*MoRD Share: Rs. 1143.66 Crores

State Share: Rs. 132.69 Crores

Target: 4,325 km

Sanctioned till date: 2,760 km

Balance: 1,565 km

STA has scrutinized all proposals. PTA has scrutinized only 5 proposals on OMMAS and no bridge proposals are scrutinized by PTA. State should conduct 10% PTA scrutiny of all the proposals on OMMAS. State was asked to intimate the average length and length wise distribution of bridges proposed. EC also observed that on one hand the state was representing to hold EC meeting sooner, on the other hand the state has not been able to complete the preparatory activities related to the proposal.

Empowered Committee asked NRIDA to prepare length-wise distribution of LSBs sanctioned in NE states.

3. <u>Carriageway width wise and Average cost wise details of road:</u> 196 roads of 1,131.10 km length are 3.75 m width with an average cost of Rs 53.31 lakhs/km, 48 roads of 433.54 km are 5.50 m wide with an average cost of Rs.86.99 lakhs/km. There is a huge cost difference between 3.75 m and 5.50 m wide roads.

It was observed by Empowered Committee that in case of 3.75 m carriageway width roads, average cost is less than national average and for 5.5 m width, average cost is more than national average. NRIDA should examine this issue and bring out the specific reason why it is so.

4. <u>Details of roads with pavement cost per km</u>: In 3.75 m carriageway width, 63 nos of roads have pavement cost more than 50 lakh/km. Also, in 5.5 m carriageway width 45 roads have pavement cost more than 55 lakh/km.

Empowered Committee observed that despite detailed discussion in Pre EC, there was hardly any reduction in cost. One of the reasons is that the state is using cold mix which is costlier than hot mix. Therefore, state is requested to examine the DPRs of all above high pavement cost in general and to furnish proper justification along with breakdown details for the same. NRIDA should also examine the cost of roads (layer wise) and find out where it is increasing and bring out the outliers and suggest measures (new technology) to reduce the same.

5. <u>Details of roads with non-pavement cost per km</u>: In 3.75 m carriageway width, 28 nos of roads have non pavement cost more than 15 lakh/km. Also, in 5.5 m carriageway width 9 roads have non pavement cost more than 15 lakh/km.

Detailed justification is required for such high cost. *State should explore adoption of New Technology in protection works as well, to bring down the cost.*

NRIDA should send a team to the state to examine DPRs with high pavement/non-pavement cost, and suggest ways to adopt New Technology and bring down the cost.

6. <u>Length wise proposal details:</u> Out of 244 roads, 94 roads are 3 to 5 km in length with average cost Rs.58.13 lakhs/km and 150 roads are 5 km and above with average cost Rs.64.02 lakh/km. Average candidate road length is 8.46 km and average proposed road length is 6.23 km.

State should justify the inclusion of roads of length less than 5 Km in proposal. State to confirm whether these roads which are less than 5 Km in length are part of longer candidate road. Also examine their UV and justify their inclusion in proposal.

7. <u>Surface wise details of roads:</u> Out of the total proposed length of 1564.63 km length, 5.85 km is brick soling, 95.54 km is track, 87.23 km is gravel, 56.51 km is WBM, 1218.71 km is BT and 73.65 km is CC. Empowered Committee observed that only those roads having more than 75% BT/CC be considered.

State should justify high proportion of track/gravel/WBM/brick soling roads and as to how they are classified as MLR/TR. Road wise information should be presented in a tabular form in which BT and non-BT portion length and percentage should be mentioned, and detailed justification be given for taking up non-BT portion. Committee also decided that a team will be detailed from NRIDA which will examine these issues on satellite map/GIS. Team will also check whether these are eligible to be considered in PMGSY-III.

8. <u>Traffic wise details of road:</u> In 3.75 m carriageway width, 35 roads of 203.99 km are in T4&T5 category with average cost Rs 55.81 lakhs/km and 160 roads of 916.41 km are in T6 category with average cost Rs.52.77 lakh/km and 01 road of length 10.70 km is in T7 category with average cost Rs.51.70 lakh/km.

In 5.50 m carriageway width, 23 roads of 222.07 km are in T6 category with average cost Rs. 77.82 lakhs/km, 04 roads of length 30.32 km with average cost Rs.67.21 lakhs/km are in T6 category and 21 roads of length 181.15 km with average cost Rs 101.55 lakhs/km are in T9 category.

State should carry out the traffic survey through ATCC for all T9 category roads before sanction. Average cost of T9 category roads is abnormally on higher side. State should give detailed justification of component wise cost of road. The state should explore adoption of FDR methodology to bring down the cost. NRIDA should send a team to the state to examine DPRs and suggest ways to adopt New Technology and bring down the cost.

- 9. <u>Details of roads with PCU/day</u>: There are 13 roads where PCU/day is more than 2000 while the width of road is 3.75m. Since traffic will be more in these roads which will be road safety issue. As informed by the state adequate land width is not available for these roads. State should revisit these roads and assess possibility of widening for these roads. NRIDA should also check these roads in Geo Sadak.
- 10. <u>Long span bridges:</u> State has projected 120 LSBs of 5035.08 m length with an average cost 5.77 lakhs/m. State has proposed 2 nos of Baily Bridge, 3 nos composite bridges and rest all are RCC bridges.

Also cost of bridges increased now as compared to Pre EC. The State was asked to justify this increase of cost. The state should explore the use of new technology in bridges, such as modular bridges.

11. <u>Distribution of roads based on widening to various carriageway widths:</u>

Empowered committee pointed out that the State has proposed widening of 29 roads from 3 to 3.75 m. State should clearly indicate the kind of procedure to be followed while doing widening of roads so as to have proper compaction and also explain the methodology of compaction for the widened portion.

It was also pointed out that the state should explore the use of Full Depth Reclamation (FDR) as it will probably be more economical than conventional method, especially for widening of roads. All such widening should ideally be done through FDR/cement stabilization techniques.

12. <u>Average cost trends:</u> There are a few districts like Baksa, Barpeta, Golaghat, Hailakandi Kamrup Rural, Karbi Anglong, Lakhimpur, NC Hills, Dhubri, Nalbari, Morigaon and Sibsagar where average cost of road is higher as compared to the other districts.

13. Trace map ranking and High Priority roads: 77.87% of roads are falling under trace map ranking of 1 to 15, 15.16% roads are falling under trace map ranking of 16 to 50, 6.97% roads are falling under trace map ranking 50 to 100. All proposals of Trace Map rank of more than 50 have been audited on satellite imagery and found satisfactory. Some high priority roads have been excluded from the current proposal, mainly due to the ongoing schemes under state government. State should furnish proper justification and supporting evidence for skipping these high priority roads.

14. Maintenance

The State has proposed a 5-year routine maintenance cost of Rs. 146.31 Crore which is 13.20% of construction cost and Rs.328.07 Crore which is 29.61% of construction cost for 6th year renewal cost. However, the State was advised that the 6th year renewal cost should be accompanied by a post 5-year guarantee/maintenance period, and such cost should be a part of DPR.

15. R&D Technology

State has proposed construction of 312 roads 1299.73 km using green technology as per the following details.

Sl.No	Name of Technology	No of stretches/ roads	Length (in km)	Percentage of R& D roads with respect to total length
A	Main streaming of Technologies			
1	Waste Plastic	54	304.38	26.19 %
2	Cold Mix Technology	10	105.47	
	Sub Total	64	409.85	
В	Other Main Streaming technologi	es		
3	Lime Stabilization	2	52.00	39.39 %
4	Surface Dressing	129	564.28	
	Sub Total	131	616.28	
С	IRC Accredited Technology			
5	Nano Technology	29	106.81	17.49 %
6	RBI Gr 81	1	5.50	
7	TechGrid Geogrid system	1	1.30	
8	Terrazyme	19	99.26	
9	Cell filled concrete	66	59.23	
10	Jute Geo Textile	1	1.5	
	Sub Total	117	273.6	
	Total	312	1299.73	83.07 %

The State was advised to re-look the use of cold mix technology since it is costlier than OGPC and there are some quality issues also. It should be adopted only where there is cost and technical advantage. Quality and durability of road is of utmost importance.

The State Government was also advised to avoid mechanical distribution of R&D targets to the PIUs. It should be strictly as per the requirement of the location/ site. <u>State was also advised to furnish break-up of specific IRC accredited technologies road-wise with justification.</u> The State was further asked to ensure the following: -

- i. State must sign MoU with Technology Provider and NRIDA before physically starting the work for Performance Evaluation in all these cases.
- ii. State needs to provide performance evaluation reports of earlier sanctioned works and the roads have been completed. No interim reports have been received so far.

Before coming for sanction, NRIDA will check if the proposals have been uploaded om OMMAS with proper mention of new technology.

16. Maintenance of roads under DLP

ASRRDA has utilized just Rs. 106.37 crore against its Maintenance Liability of last 5 years of Rs. 259.23 crore which comes around 46.40%. Whereas 196.33 Cr has been credited in the SRRDA account in the same period. During 2020-21, against the liability of Rs. 49.55 crore no amount has been credited in the ASRRDA account. This is a serious situation, and the state should immediately take appropriate action. There was zero expenditure on 95% of roads during 2019-20 and 86% of roads during 2020-21. The State was advised to take immediate corrective action and credit adequate money for maintenance of PMGSY roads under DLP. Maintenance and renewal data should be updated on OMMAS. The amount credited and spent on DLP should be clearly mentioned in the compliance report, and also updated on OMMAS. Crediting of 100% requirement of funds for DLP is essential for sanction of new projects. Moreover, sufficient funds need to be provided for renewal of roads.

17. Progress of PMGSY Works

Annual physical target for the State during current Financial Year i.e. 2021-22 is 2200 Km of road length and connectivity to 117 unconnected habitations. As on date, State has completed road length of 945 km and connectivity for 52 habitations. The details of works sanctioned, completed and pending under PMGSY-I & II are as below:

ROADS

S.No	SCHEME	SANCTIONED		COMPLETED		BALANCE		UNAWARDED	
		Nos.	LENGTH (Km)	Nos.	LENGTH (Km)	No. of Roads	Length (km)	No. of Roads	Length (km)
1.	PMGSY I	8,381	26,987.25	8,024	26,680.97	357	171.69	0	0.00
2.	PMGSY II	251	1,724.35	113	1,703.54	138	20.81	0	0.00
3.	PMGSY-III	429	2,759.72	20	907.94	409	1,851.78	7	38.97
	Total:	9,061	31,471.31	8,157	29,292.45	904	2,044.27	7	38.97



S.No	SCHEME	Sanction (Nos.)	Completed (Nos.)	Balance (Nos.)	Unawarded (Nos.)
1.	PMGSY I	1,346	1,077	269	-
2.	PMGSY II	66	26	40	-
3.	PMGSY-III	0	0	0	-
	Total:	1,412	1,103	309	-

It has been observed that in PMGSY-III, tenders quoted by contractors are on the minus side of technical sanction amount. 01 bid is below 24-30% to technical sanctioned amount, 06 bids are below 18-24%, 44 bids are below 12-18%, 275 bids are 6-12% below. A detailed analysis of all these low bid works should be forwarded to NRIDA.

State should ensure strict quality control of all these low bid works, where bids are below 10%. There should not be any compromise with the quality of the work. More number of NQM/ SQM inspections should be planned for these works. Such action plan should be submitted as part of compliance report.

18. eMarg status

Under e-Marg, the state has reported that out of 3260 packages under DLP, 248 (7.6%) packages are pending for locking. 85% contractors have been registered and payment has been started in 31% packages. Till date State has released Rs.31.11 crore. The state was asked to saturate 100% roads on eMARG before sanction of projects.

19. Quality

- (a) Out of 864 ongoing packages, QC labs have been established in all the packages.
- (b) The strength of SQMs in Assam is 85 against requirement of 130. State has been advised to hire SQMs on contract basis to ensure quality construction of roads and bridges. State has reported that to increase the effectiveness of SQC cell, five more Assistant Engineers will be deployed in the cell. State should establish Quality Monitoring Cell (QMC) with requisite manpower for periodic performance evaluation of hired SQMs/proper examination of SQM reports/ guidance.
- (c) 5548 SQM inspections have been targeted during 2021-22 and 2489 inspections have been carried out. There is only one work which has not been inspected even once, which should be inspected and mentioned in the compliance report.
- (d) Unsatisfactory grading by NQM from November 2018 to November 2021 for completed works is 8.11%, for ongoing works it is 7.87% and for maintenance works it is 32.92% which is quite unsatisfactory. The State was advised to take immediate corrective action and show some improvement in the aforesaid indicators. A clear action plan to improve quality of works and inspections need to be put in place in the compliance report.
- (e) 42 ATRs are pending on NQM reports and out of which 18 are pending for more than 12 months. State should show substantial compliance for these pending ATRs before they come for sanction of new projects.

- (f) Some anomalies noticed in SQM inspections are as under:-
 - (i) Poor condition of information boards graded as 'Satisfactory' AS24178, AS24183, AS24173.
 - (ii) Compaction of sub grade is less than 100% but work graded as 'Satisfactory' AS24173.
 - (iii) Poor understanding of engineering practices, wrong way of checking super elevation. AS24268, AS01318, AS24164.
 - (iv) In many inspections the quality of road is ascertained only by seeing top layer, without conducting tests on structural layers.
 - (v) Out of 2489 inspections during 2021-22, 278 inspections PDF reports are not uploaded.

20. Financial Issues

- (a) Financial closure of 42 works is pending for more than 180 days, which is a very large number of works. The State was asked to take immediate action and expedite pending financial closure of completed works
- (b) The State budget reflected in PFMS TSRY-07 is not of 90:10 ratio. State was asked to look into this and take appropriate action.
- (c) Interest recovery of Rs.91.18 crore is pending from the bank from FY 2010-11 to 2019-20. State should expedite this issue after due liaison with bank authorities.
- (d) State has not submitted Format-I of PMGSY reconciliation report. State was asked to ensure the same before sanction of projects.

21. Recommendations of Empowered Committee

Subject to the above observations and concurrent action/compliance by the State Government as stipulated in the foregoing paras, the Empowered Committee recommended the above proposals as at Para-2 above.

The meeting ended with a Vote of thanks to and from the Chair.
