File No. P-17024/15/2020-RC (FMS- 371917)

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

Krishi Bhavan, New Delhi Dated the 05th April, 2022

PRE-EC - MINUTES

Sub: Minutes of the Meeting of Pre-Empowered Committee to discuss the project proposals for PMGSY-III, submitted by the State Government of Maharashtra for the 2021-22 (Batch-IV)-reg.

The undersigned is directed to enclose herewith the minutes of the meeting of the Pre-Empowered Committee held on 08th March, 2022 at 01:00 PM to discuss the project proposals submitted by the State Government of Maharashtra for the year 2021-22 (Batch-IV) under PMGSY-III.

2. It is requested that a compliance report on all the observations of the Committee may be sent to the Ministry/NRIDA.

(Devinder Kumar) Director (RC)

Tel: 011-23070129

Distribution:-

- 1. The Secretary, Rural Development Department, Government of Maharashtra, Bandhkam Bhawan, 7th Floor, 25, Marzban Road, Fort, Mumbai-400001, Maharashtra.
- 2. The Chief Engineer, Rural Development Department, Government of Maharashtra, Bandhkam Bhawan, 7th Floor, 25, Marzban Road, Fort, Mumbai-400001, Maharashtra.
- 3. All Directors, NRIDA.

Copy for information to:-

> PPS to AS (RD).

MINUTES OF THE PRE-EMPOWERED COMMITTEE MEETING HELD ON 8th MARCH 2022 AT 1:00 PM TO CONSIDER THE PROJECT PROPOSALS SUBMITTED BY GOVERNMENT OF MAHARASHTRA UNDER PMGSY-III, (BATCH-IV, 2021-22)

A Meeting of the Pre-Empowered Committee (RC) was held through Video Conference on 8th March 2022 at 1:00 PM under the Chairmanship of Additional Secretary (RD) & DG, NRIDA to consider the project proposals submitted by the State of Maharashtra under Pradhan Mantri Gram Sadak Yojana-III (PMGSY-III) (Batch-IV) of 2021-22. The following officials were present in the meeting: -

Additional Secretary (RD), MoRD & DG, NRIDA
Director (RC), MoRD
Consultant/Director (Tech), NRIDA
Director (Projects-I), NRIDA
Director (F&A), NRIDA
Director (Projects-II&III), NRIDA
Secretary, MMGSY
Chief Engineer, PMGSY
Financial Controller, PMGSY
SQC, PMGSY
ITNO, PMGSY
SE, PMGSY Pune
SE, PMGSY Konkan
SE, PMGSY Nashik

2. Details of Proposal

The current proposals of the State Govt. under PMGSY-III, Batch-IV of 2021-22 are as under:-

As per States proposal					As per OMMAS as on 08.03.2022			
Item	Nos	Length (in km/ m)	Cost (Rs. in Crores)	Avg. Cost/km (Lakhs)	Nos	Length (in km)	Cost (Rs in Crores)	Avg. Cost/km (Lakhs)
Roads		i i	ē		577	3492.74	2496.5	71.48
LSBs				,	-	-	-	-
Total					577	3492.74	2496.5*	71.48

*MoRD Share: Rs. 1492.22 Crores

State Share: Rs. 994.81 Crores

Target:- 6550 Km

Sanctioned:- 2925.922 Km

Balance:-3624.07 Km

3. General Observations

All proposals are scrutinised on OMMAS by STAs. The scrutiny of proposals is yet to be carried out by PTA. State should conduct 10% PTA scrutiny of all the proposals on OMMAS immediately.

4. Carriageway width wise and Average cost wise details of roads

The State of Maharashtra has submitted proposals for 577 road works of 3,492.74 km. Out of 577 roads, 17 roads of 68.585 km length have been proposed with 3.00 m carriageway width with average cost of Rs. 79.76 lakhs/km, 1 road of 2.5 km length has been proposed with 3.5 m carriage width with average cost of Rs. 75.99 lakhs/km, 528 roads of 3214.73 km length have been proposed with 3.75 m carriageway width with average cost of Rs. 69.03 lakhs/km and remaining 31 roads of 206.93 km length have been proposed with 5.50 m carriageway width with average cost of Rs. 106.67 lakhs/km.

It was observed by Pre-Empowered Committee (Pre-EC) that in case of 5.50 m carriageway width roads, average cost of Rs.106.67 lakhs/km is much more than Rs.96.12 lakhs/km of PMGSY-III sanction of 2020-21. NRIDA should examine this issue in detail and bring out the specific reasons, why it is so.

5. Length wise proposal details

Sl No	lltome		U	Pavement cost (Cr)	Cost/km	Total cost in (Cr)	Average cost/km
	2.5-3 km	04	9.3	4.58	49.24	6.71	72.1
	3 to 5 km	203	801.185	384.68	48.01	569.34	71.06
	5 km and above	370	2682.25	1344.58	50.12	1920.45	71.6
	Total	577	3492.74	1733.84	49.64	2496.5	71.48

Out of 577 roads 4 roads are less than 3 Km in length, 203 roads are 3 to 5 Km in length and 370 roads are more than 5 Km in length. Average Candidate road length is 9.12 km and average proposed road length is 6.05 km, which is very less. State should justify the inclusion of roads of length less than 5 Km in proposal. They should all be verified on Geo sadak whether they fulfill the objectives of PMGSY-III. Roads less than 5 Km in such large number may not be justified to be included in the proposal.

6. Surface wise details of existing roads

Out of total proposed length of 3492.74 km, 2.45 km is brick soling, 627.70 km is track, 252.464 km is gravel/moorum, 477.502 km is WBM, 2087.228 km is BT and 45.401 km is CC.

Pre-EC directed to conduct detailed scrutiny of the roads where track/gravel/Moorum/WBM surface is more than 15% (277 roads) of the length; whether these are part of core network and how these roads are eligible to be considered in PMGSY-III. These roads need to be examined critically by the State to ensure that these roads are meeting the objectives of PMGSY-III. NRIDA will examine these roads on satellite map/GIS and see if they are as per PMGSY-III guidelines. How these kutcha roads are part of TR/MRL in a developed state like Maharashtra needs more elaboration.

7. Distribution of roads based on Traffic category

	Distribution of roads based on Traffic Category									
	3.00 m/3.5m/ 3.75 m carriageway width				5.5 m carriageway width					
SI.No	Traffic	Nos	Length in km	Pavement cost/ Km	Total Cost/km	Nos	Length in km	Pav Cost/km	Avg cost/km	
1	T4	7	44.83	48.79	69.30	-	-	-	-	
2	T5	64	353.64	45.40	67.94	1_	-	-	·	
3	Т6	417	2505.02	46.90	68.83	1	5.47	42.80	62.37	
4	T7	42	276.66	51.51	72.12	4	18.29	67.27	92.35	
5	Т8	1	4.34	52.43	79.77	-	-	-	-	
6	Т9	15	101.34	58.80	76.20	25	165.58	83.45	106.48	
6	IRC 37	-	-		-	1	17.60	110.36	137.18	
	Total	546	3285.82	47.53	69.26	31	206.93	83.24	106.67	

It has been observed by Pre EC that distribution of roads based on the basis of traffic is abnormal in respect of T-5 & T-6 category, the State needs to conduct proper traffic survey so as to get proper traffic distribution. The current traffic distribution seems to be an statistical anomaly. State should also carry out the axle load survey and traffic survey (ATCC) for all T9 and IRC 37 category roads. In case of 5.5 m wide roads, the average cost of T7, T9 category and IRC 37 road is abnormally on higher side. State should give detailed justification of component wise cost of these roads. NRIDA should send teams to the State to examine the DPRs.

8. Details of roads with pavement cost per km

In 3 m carriageway width, 6 roads have pavement cost more than 50 lakh/km, in 3.50 m carriageway width, 01 road has pavement cost more than 50 lakh/km, in 3.75 m carriageway width, 85 roads have pavement cost more than 55 lakh/km and in 5.50 m carriageway width, 21 roads have pavement cost more than 70 lakh/km.

State is requested to examine all the above DPRs of high pavement cost in general and to furnish proper justification along with breakdown details for the same road wise. NRIDA should also examine the cost of pavement (layer wise) and find out where it is more and bring out the outliers. New technology solutions, such as Full Depth Reclamation (FDR) and/or cement stbilization etc, should be adopted to bring down the cost, while improving performance.

9. Details of roads with non-pavement cost per km

Most of the roads have very high non-pavement cost. Detailed justification is required for such abnormal high non pavement cost. NRIDA should send teams to the state to examine DPRs, to do field inspections and suggest ways to bring down the cost.

10. Details of roads with PCU/day

In case of 3.75 m carriageway width road, 11 roads have PCU more than 2000 and in case of 5.5 m width carriageway roads, 9 roads have PCU more than 6000. There are 16 roads of 5.5 m width where PCU is less than 2000. NRIDA should critically examine these 16 roads on Geo Sadak, why for such low PCU width of proposed road is 5.5 m. State needs to conduct proper traffic survey as per sound engineering practice (during peak season) through (ATCC) to get get actual PCU/day.

In both cases of 3.75 m and 5.5 m wide roads, State should identify the roads where PCU/day is more than 2000 and 6000 respectively. State should examine critically those roads for lane width requirement where PCU/day> 2000 for 3.75 m wide roads.

In case of 5.5 m wide roads where PCU/day> 6000, extra width beyond 5.5 m may be required and as per PMGSY guidelines State has to bear cost for extra width of road beyond 5.5 m. State should clarify its stand for these roads where PCU/day is more than 6000.

State should revisit both these types of roads and assess possibility of widening for these roads. NRIDA should also check these roads in Geo Sadak.

Independent 3rd party traffic survey and axle load test survey reports need to be provided where the roads designed with projected traffic more than 1 MSA.

11. Distribution of roads based on widening to various carriageway widths

Pre-Empowered committee observed that the State has proposed widening of 326 roads from 3 to 3.75 m, 17 roads from 3.75 to 5.50 m, 1 road from 3 to 3.5 m and 8 roads from 3 to 5.5 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 widened portion, especially for roads of 3 m to be widened to 3.5/3.75m. It was also pointed out that the state should explore the use of Full Depth Reclamation (FDR)/ stabilization etc as it will probably be more economical than conventional method, especially for widening of roads and also result in better quality and compaction.

12. Trace Map ranking

Min. Trace Map Rank	Numbers of Proposals	0/0
1 to 15	344	59.62
16 to 50	147	25.48
51 to 100	66	11.44
> 100	20	3.46
Total	577	

^{*}All proposals greater than Trace Map rank 50 needs to be justified by the State. NRIDA should also send team to the State for inspection.

13. Planning Audit (Proposals)

- i. All the Proposals have not been uploaded on GeoSadak (Current & Sanctioned) Proposal alignment of previously sanctioned and few from current batch is still pending to be approved/ uploaded on Geo Sadak.
- ii. Out of total 1090 proposals uploaded on OMMAS, 955 proposal alignment have been drawn on Geo Sadak.
- iii. Total 164 Sample proposals are audited at NRIDA for their utility as TR/MRL under PMGSY-III & out of which 124 proposals were flagged for justification/ modification.
- iv. From the sample trace maps, the following observations were made:
 - a. The road, parallel to existing BT road does not benefit any habitations (T02 MH 29119-Mangal Wedha).
 - b. The road, parallel to existing BT road and MDR, does not benefit any habitations (MRL 04 MH 2176-Bhoom).
 - c. The road, parallel to MDR roaddoes not benefit any habitations (T 09 MH 2672-Jath).
 - d. The road, parallel to existing SH road does not benefit any habitations (MRL08 MH 18147-Loha).
 - The road, parallel to expressway does not benefit any habitations (MRL20 MH20137-Sinner).

State was asked to re-check these roads and justify as to how they meet PMGSY-III objectives. NRIDA to examine these issues in detail and comment. The state must upload the proposal on Geosadak. These roads should be deleted.

14. Proposal checks

It was also observed that in 21 proposals, proposed length is more than the eligible length and the variation is more than 15%. State was asked to delete proposals with non-eligible length.

15. High Priority roads skipped in CUCPL

It was observed that several high priority roads have been skipped citing different reasons. Committee however observed that these roads should not have been skipped until these are being constructed by the owner department or otherwise, they can be included under PMGSY-III. State needs to provide road-wise justification with necessary documents if they are being taken by other departments for upgradation.

16. Proposals with good existing surfaces

2 roads with good existing surface have been proposed for upgradation. It was mentioned that roads having PCI >3 is not eligible under PMGSY-III. State was asked to either drop these roads or give road -wise justification with geo-tagged videos and cost economy. It was also asked to the State that the DPRs should be verified at the SRRDA level. SRRDA may please scrutinize at their level and submit video of proposed alignment.

17. DPR Issues

- i. State should provide a copy of SLSC approval, MP-I, MP-II and MP-III formats and consent letters of Hon'ble MPs on final proposal.
- ii. State should certify that the roads proposed in current batch are not PMGSY roads which are under design life.
- iii. Latest Proforma-C (2021) part-1, part-2, and 3 have not been attached in the DPR and filled up properly by designated officials.
- iv. 3rd party traffic verification as per recent advisory should be done by the State adopting ATCC for traffic considered more than 1 MSA and the reports should be attached with the DPRs which has not been received at NRIDA.
- v. State has proposed Bituminous Macadam (BM) for some of the roads having traffic category below T9, however as per the IRC-SP:72-2015, BM should only be proposed for T9 traffic category, Hence, the provision needs to be deleted.
- vi. In most of the DPRs, CBR reported is less than 5%. The design CBR taken is also less than 5% and designed the Pavement. As per Para 1.6.3 of SP: 72:2015, the minimum CBR of Subgrade soil for Rural Roads should be 5. The State has also proposed catered soil for embankment without mentioning its CBR and the State may explore the possibilities of using soil stabilization techniques as per site feasibility for subgrade improvement. The design of pavement should be based on the improved CBR of the subgrade and the economy should also be considered while choosing between different design alternatives.
- vii. To achieve economy, crushable GSB need to be replaced by moorum or moorum blended with sand, having CBR of 20%, if available. Moorum may also be explored to be used as screening material in WBM.
- viii. State should ensure to propose surface course with Surface Dressing (SD) for the proposals with traffic category T5 and less; and around 50% on roads of T6/T7/T8 categories.

- ix. The provision and cost of Pucca Drainage on the higher side (around Rs. 10,485/m). Drains should be designed as per IRC SP 20 and only these should be proposed in the habitation area. (e.g. MH1699)
- x. RCC protection wall is proposed without mentioning the proper changes of the provision. The State needs to re-assess the requirement as per site condition and rationalize the provision proposed. Other alternatives such as Masonry walls, Gabion walls, etc. should also be explored to achieve the economy.
- xi. State has proposed higher numbers of CDs. State needs to explore the possibility of maintaining existing good CDs with minor repairs instead of reconstruction, wherever possible.
- xii. The provision for metal beam crash barrier shall be avoided and other options like parapet/Guard posts shall be explored since metal beam crash barriers are required for steep slopes of hilly terrain region.
- xiii. State should provide location, quantity calculation and typical layout for the Cat eye proposed in the DPR. Requirement of Cat eye should be as per IRC-35 and IRC-SP 73.
- xiv. State has proposed conventional CC road, a cost-effective new technology methodology such as RCCP/Panelled concrete/Cell Filled concrete etc. shall be propose.
- xv. Provisions for excavation of hard rock have been provided in format F-6. Same is required to be justified with clear coloured photographs.
- xvi. Cost relating to shifting of electric poles & telephone poles, land acquisition etc. are to be considered under the higher specification cost.
- xvii. Provision for road safety should be as per the recommendation of RSA only. It needs to rationalize as per site requirement such as sharp curve etc. and also the road safety guideline issued by NRIDA needs to be referred and response from the PIU should also be filled in the RSA report.

18. Maintenance

The State has proposed a 5-year routine maintenance cost of Rs. 162.2674 crore which is 6.5% of construction cost and 6th year renewal cost of Rs. 462.9615 crore which is 18.54% of construction cost. State has been advised that 6th year's renewal cost should be accompanied by a post 5-year routine maintenance period and such cost should be part of the DPRs.

19. R&D Proposals

State has proposed construction of 506 roads 1372.93 km (39.30%) 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 Plastics	128	364.568	10%
	Sub Total	128	364.568	
В	,			*
	Coir Technology for Subgrade improvement	25	44.685	25%
	Surface Dressing	1	8.250	
	Roller Compacted Concrete Pavement	5	4.880	
	fly ash subgrade	2	7.020	
	Gravel with Slag	8	1.295	
	Iron Slag for Subgrade improvement	1	2.895	
	Geotextile for Subgrade improvement	7	4.595	
	Lime Stabilization	47	78.814	-
	Sub Total	352	882	
С				
	Nanotac	5	35.810	
	Zycosoil Nanotechnology	1	5.050	
	Nano Technology for Water proffing	11	41.640	3%
4	Mechanical Stabilization	1	5.900	J 70
	CMR Bitplast Wet Process	5	33.770	
	Sub Total	23	122	
D				
	Other Technologies	3	4.360	0.12%

The State was advised to propose more roads (at least 50% length) for construction using waste plastics.

All CC roads should be proposed using Cell Filled Concrete/ Panelled Cement Concrete/RCCP/other new technology. Overlay on old CC should not exceed 100-110 mm.

Nanotechnology waterproofing alone is not encouraged. State should ensure, nanotechnology is also proposed in sub-base/base layer (stabilized).

State should explore new technology like Full Depth Reclamation (FDR) for roads proposed to be widened from 3 to 3.5/3.75m and also for high pavement cost roads, so as to attain economy and proper compaction.

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.

<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.

20. Progress of PMGSY Works

Annual physical target of the State is 1000 Km, out of which, only 102 Km has been completed. The details of work sanctioned, completed, and pending under PMGSY-I, II & III and RCPLWEA are given below.

Roads

	San	ctioned	Con	npleted	Balance		Unawarded	
Scheme	Nos.	Length (Km)	Nos.	Length (Km)	No. of Roads	Length (km)	No. of Road	Length (km)
PMGSY I	5,610	24,782.91	5,547	24,011.11	63	207.01	0	0.00
PMGSY II	385	2,618.91	382	2,585.41	3	2.63	0	0.00
PMGSY III	430	2,925.92	0	1.00	430	2,924.92	91	596.87
RCPLWEA	46	619.68	6	125.46	40	494.22	0	0.00
Total:	6,471	30,947.42	5,935	26,722.98	536	3,628.77	91	596.87

LSBs

Scheme	Sanction (Nos.)	Completed (Nos.)	Balance (Nos.)	Unawarded (Nos.)
PMGSY I	685	645	40	-
PMGSY II	108	108	0	-
PMGSY III	-	-	-	-
RCPLWEA	108	15	93	-
Total:	901	768	133	-

Out of the total works sanctioned under PMGSY-I, II & III, 91 roads remain un-awarded as on date. State needs to expedite the tender process of these works. State has assured that all the balance works under PMGSY-I&II will be completed before the deadline of 30th September 2022.

21. e-Marg

Out of total 535 packages pushed to e-MARG, 57 (11 %) packages are pending for locking, 69 (13%) packages are pending for manual entry expenditure (MEE). 237 roads are eligible for routine inspection in February 2022, 128 roads (54%) are pending for routine inspection (RI). 386 (83%) packages are pending for payment for >3 months. 224 (58%) packages are pending for payment for first payment for > 3 months. Payment of Rs.17.95 core has been done using e-MARG in FY 2021-22. Total expenditure of Rs. 3.75 crore has been done on bills having liability

of FY 2021-22. The state was asked to saturate 100% roads on eMARG before sanction of projects.

22. Maintenance of roads under DLP

During 2020-21, against the liability of Rs.35.43 crore, expenditure of Rs. 12.03 crore has been done which is 33.95% of liability. For the current financial year 2021-22, the maintenance liability is 31.79 crore and as on 07.03.2022, the expenditure is Rs. 19.13 crore. State has not updated/credited any amount in SRRDA's account from 2020-21 to 2021-22. Therefore, State was asked to intimate/update the fund released to SRRDA under DLP during the above-mentioned periods.

23. Quality

- (a) Out of 431 ongoing packages, QC labs have not been established in 325 packages.
- (b) Number of active SQMs are 81 against requirement of 61 SQMs. During 2021-22, 2246 SQM inspections are targeted and till date, 580 inspections have been conducted. There are 8 works which have not been inspected even once. The State needs to increase the pace of SQM inspections and meet the target.
- (c) 5 ATRs are pending at State Level. State should show substantial compliance for these pending ATRs before they come for sanction of projects.
- (d) Unsatisfactory grading by NQM from March 2019 to February 2022 for completed works is 11.11%, for ongoing works it is 4.41% and for maintenance works it is 33.33% which is quite unsatisfactory. The State was advised to take immediate corrective action and show some improvement in the aforesaid indicators.
- (f) Some anomalies noticed in SQM inspections are as under:
 - i. 180 reports have not been uploaded by SQMs during Financial Year 2021-22.
 - ii. Information boards are rusted and no comments from SQM during inspection. (Package No. MH09144, MH09139)
 - iii. Wrong way to checking the thickness of PMC. (Package No.MH10140)
 - iv. GSB & WBM were checked only at one location instead of three locations as per guidelines. (Package No. MH1973)
 - v. Inadequate size of pit for conducting Quality Control test. (Package No. MH33104, MH3168)

State was advised to take immediate corrective action and show some improvement in the aforesaid issues.

24. Financial issues

- a. State has not submitted audited balance sheets of F.Y 2020-21.
- b. Interest recovery of Rs. 3.58 Cr. is also pending for recovery from Bank for F.Y 2010-11 to 2019-20.
- c. Interest verification certificate has also not been submitted for FY 2020-21.

- d. State has not submitted PMGSY financial reconciliation report.
- e. State share budget is not reflected in PFMS TSRY-07 report.
- f. Financial closure of 3 no of works is pending for more than 180 days. The State may take immediate action and expedite pending financial closure of completed works.

The State was asked to look into these financial issues and take appropriate action.

25. It has been observed by Pre-Empowered Committee that there are lots of issues with the proposals brought by the state. There are proposals uploaded on OMMAS where alignments have not been drawn on Geo Sadak. Out of 164 sample proposals, audited by NRIDA for their utility as TR/MRL, 124 proposals were flagged for justification/ modification which is a serious issue. State has skipped several high priority roads from the list of proposals citing unconvincing reasons. Out of total proposed length of 3492.74 km, 882.61 km is earthen track/gravel/moorum which is more than 25% of the proposed length.

In view of the above Pre EC decided that there will be another Pre EC meeting due to large number of issues involved in the proposals. Pre EC directed NRIDA to send several teams to the state to check all the issues discussed in this meeting and a fresh Pre EC meeting shall be held again for above proposals.

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