

9th February, 2009

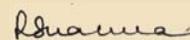
Dear (surname)

Subject: Guidelines for Convergence between NREGS and PMGSY.

1. The Ministry of Rural Development is responsible for the flagship programmes of the Government, vis., the Pradhan Mantri Gram Sadak Yojana (PMGSY) being solely targeted towards it and NREGS including rural connectivity as one of its permissible works. More than 16% of NREGA works, currently, relate to rural connectivity. Possibilities of convergence between NREGA and the PMGSY of MoRD were discussed and based on these discussions convergence areas and modalities were identified.
2. Detailed Guidelines for convergence between NREGA and PMGSY convergence are attached. These instructions are meant to optimize synergies between NREGA and PMGSY of MoRD. They are suggestive in nature and should be used to encourage innovative convergence projects at the district level, enabling a more efficient and sustainable use of resource.
3. I would request you to convene a meeting of the officers responsible for implementing NREGA and PMGSY to discuss these guidelines. This should be followed by a joint meeting of the officers in charge of the NREGA and PMGSY. The districts officers meeting should aim at firming up processes for operationalising the Convergence Guidelines in a time bound manner.
4. I would appreciate an acknowledgment of this communication and intimation of the action initiated.

With regards,

Yours sincerely


(Rita Sharma)

To

All Rural Development Secretaries/Principal Secretaries of States/UTs

1. Pradhan Mantri Gram Sadak Yojana (PMGSY)

Providing a good road network is very essential for the development of the any country. Government of India has launched a programme for connectivity of villages of designated population in the name of Pradhan Mantri Gram Sadak Yojana (PMGSY).

The PMGSY programme has its own guidelines and quality control and contract management systems. Ministry of Rural Development has issued a vision document in the name of Rural Road Development Plan: Vision 2025 with the objective of connecting all habitations above 250 populations in the country by year 2021-2022.

2. Convergence between NREGA and PMGSY

National Rural Employment Guarantee Act (NREGA) has also provision to take up rural connectivity to provide all weather access. The convergence of NREGA and PMGSY may be instrumental in achievement the goals of Rural Road Development Plan: Vision 2025 by Ministry of Rural Development. In the interest of providing proper connectivity to all villages/ habitations of the country and, convergence of both these schemes of NREGA and PMGSY may provide better alternatives in planning of rural connectivity. Convergence between NREGA and PMGSY is mutually beneficial.

(a) The PMGSY programme has a target to connect unconnected habitations up to 500 populations in normal areas and 250 population in case of hilly, tribal or desert areas under the programme guidelines. Large numbers of other habitations may not be covered because of this population threshold limit. These habitations may be taken up for rural connectivity under NREGA as per PMGSY standards.

(b) The PMGSY envisages only single basic connectivity to unconnected habitations. More than one route to connect habitation to market centre or growth centre may not qualify for taking up in PMGSY. In such case, need based multiple connectivity beyond PMGSY core network can be considered for rural connectivity under NREGA.

(c) PMGSY guidelines provides for connectivity of habitation within built-up area and 50 meters. on either side within habitation. Construction or improvement of other village internal roads or lanes by means of paving or other local pavement material may be considered under NREGA.

(d) About 1.80 lakh kms of road length is constructed or upgraded under PMGSY. The programme has a provision of planting fruit bearing and other suitable trees on both sides of the roads to be taken up by State Government. or Panchayat from their own funds. This activity needs more attention now. Convergence of these two schemes can be considered in the form of planting fruit and other trees on PMGSY roads through NREGA.

3. Modalities and parameters of convergence as per NREGA

3.1. Monitoring and evaluation

Joint monitoring and supervision of activities should be planned. Baseline assessment, concurrent appraisal and documentation and evaluation of impact of PMGSY and NREGA on a set of indicators for eco-restoration as well as for local community needs could be initiated. Quantification of benefits of works undertaken could also be taken up.

3.2.Planning

Works/ activities: A list of project activities with specifications to be planned for rural connectivity under NREGA / PMGSY includes inter alia:

3.2.1. Selection of roads

- i) Selection of roads be made from, Block -wise core network, which is available with the agency implementing PMGSY in the state.
- ii) Demarcation of land for the proposed road be made with the help of Patwari / Tehsildar and boundary pillar fixed. States are obtaining additional land width on voluntary donation basis.
- iii) Road works in forest areas shall be taken up after obtaining approval of the forest department.

3.2.2. Geometric design standards

Improvement of features, like grade, curvature and widening of cross drainage works at a later date under convergence can be very expensive and sometimes impossible in remote and hilly area. It is therefore necessary that ultimate geometric requirement of rural road and specified under PMGSY are followed right from the beginning. The design standards of Rural Road Manual for geometric design may be followed.

The design standards recommended are absolute minimum. However, the minimum value should be applied only where serious restrictions are implied from technical or economical considerations. General efforts should be to exceed the minimum values as far as possible.

Roads should be designed so as to have minimum number of curves and the total number of curves in one kilometre should generally be less than 6.

Minimum radius of curves specified in IRC SP-20 should not be reduced further. This is required from road user safety considerations.

i) Formation width, road land width, building and control lines, roadway width, carriageway width, curves & gradients norms be followed as laid down in IRC:SP:20-2002' Rural Roads Manual".

Few important ones are as follows:-

(a) **Road Land width: (in meter)**

Road classification	Plain and Rolling Terrain (0- 25 percent cross slope of the country)				Mountainous and Steep Terrain (25- 60 percent cross slope of the country)			
	Open Area		Built-up Area		Open Area		Built-up Area	
	Normal	Range	Normal	Range	Normal	Range	Normal	Range
	15	15-25	15	15-20	12	12	12	9

The lower values of road land width may be adopted where the traffic intensity is less than 100 motorised vehicles per day and not likely to increase.

(b) **Roadway Width**

Terrain classification	Roadway Width (m)
Plain and Rolling	7.5
Mountainous and Steep	6.0

The 6m width may be adopted in case of plain and rolling terrain, where the traffic intensity is less than 100 motorised vehicles per day and not likely to increase. The habitations of 250 populations may fall in this category.

(c) **Carriageway Width**

Road Classification	Carriageway Width (m)
Rural Roads	3.75

The 3m width may be adopted where the traffic intensity is less than 100 motorised vehicles per day and not likely to increase. The habitations of 250 populations may fall in this category.

3.2.3. Embankment construction

For embankment construction, the specifications and guide lines, from the book, "Specifications for Rural Road" issued by MoRD may be followed.

- i) The foundation for embankment construction be prepared after removing top soil/ unsuitable material.
- ii) Material for embankment (Earth) to be in accordance with the," Specification for Rural Road" issued by MoRD.

Following types of soils are not suitable for embankment construction:

- a) Expensive clays with swelling index > 50%, clay with LL > 70 and PI > 45
- b) Materials from swamps, marshes & bogs
- c) Peat, log, stump and perishable materials
- d) Materials susceptible for spontaneous combustion
- e) Salty or salt infested soils with pH>8.5 (Sodic soils)
- f) Materials prohibited in clause 301.2.3 of MoRD specifications
- iii) Thickness of each layer not to exceed 15 cm or 20cm depending on the type of roller (Static or Vibratory) used for compaction as per clause 301.5.5 of MoRD specifications.
- iv) Compaction under Optimum Moisture Content (OMC) is must with the use of:
 - a) Trailer mounted water browser
 - b) Static smooth-wheeled roller of 80 to 100 kn static weight
- v) The OMC & maximum dry density to be determined in advance for type of soil available & to be used, by qualified person or laboratory.
- vi) Compacted density of each layer to be measured using sand replacement method or core cutter, before proceeding to the next layer.
- vii) Stage passing would be the key activity for ensuring the utility of earth embankment for future development of rural roads for its durability and serviceability. As such records of such tests are to be maintained by Junior Engineer and checked by Assistant Engineer or Executive Engineer before next layer is laid. The AE/EE is expected to conduct tests of degree of compaction and surface regularly before stage passing.
- viii) Side slope of the earth embankment should be stable & guidelines of IRC: SP: 20—2002' Rural Roads Manual be followed.
- ix) In case of Sandy & Silty soil, erosion to be protected by grassing of side slope.
- x) Camber is necessary so that rain water does not stagnate on the embankment.
- xi) As prescribed above, some minimum equipment support for ensuring quality control is required. Availability of these equipment with the field agencies which would execute project as well as their training has to be ensured.

Recommended Camber for Different Surface Types

Surface Type	Camber (percent)	
	Low Rainfall (Annual Rainfall less than 1000 mm)	High Rainfall (Annual Rainfall more than 1000mm)
Earth road	4.0	5.0
WBM and Gravel Road	3.5	4.0

- xi) The borrow pit should be at least 1.5 meter away from toe of the embankment.
- xii) Depth of borrow pit should not be more than 100 cm.
- xiii) In case of fertile soil in the borrow pit area, top 15 cm of earth should be stripped and stacked aside. Thereafter, soil may be dug to a further depth not exceeding 30 cm. The topsoil shall than be spread back on the land.

3.2.4. Cross drainage Work

- i) Cross drainage work should be included as part of the Scheme. ii) The opening of culvert (waterway) should be as per IRC: SP: 20—2002' Rural Roads Manual.
- ii) Slab Culvert up to 6.0 meters span or pipe culvert of minimum internal diameter 90.0 cm be constructed by the agency, who is executing this work under NREGA and should follow the “Specifications for Rural Road” issued by MoRD. However, for longer span, agency that is responsible for construction of bridges in the state should be assigned this work.
- iii) Minimum cushion over the pipe be ensured.

The Roadway width on cross drainage should be as follows:

Roadway Width On Cross drainage (m):

Location	Terrain	
	Plain and Rolling	Mountainous and Steep
Culverts	7.5 (inclusive of parapet)	6.0 (inclusive of parapet)
Causeway and Submersible Bridges	7.5	6.0
Bridges	5.5(exclusive of parapet)*	
	* The 4.25 m width may be adopted where the motorised traffic intensity is less than 100 vehicles per day and not likely to increase	

Therefore, a project covering all the areas will be prepared. Works required and covered under NREGA will be selected under NREGS. Works not allowed under NREGA but permissible under PMGSY will be selected under PMGSY.

3.2.5. Minimum testing equipment required

- i) Sand replacement kit: Sand Pouring Cylinder with tray complete for field density test.
- ii) Compaction testing kit

4. Stages of works

Works under NREGA may be at three levels: (i) Works approved in the current shelf but not yet started (ii) Ongoing works and (iii) Works completed (iv) Works yet to be selected for the next financial year (as part of the annual planning process). Therefore, convergence would need to be planned, keeping these varying stages of works.

The operation may be undertaken at three levels. In case of the first scenario, where works have been included in the shelf of projects, but not started yet, the Shelf of Projects formulated under NREGA may be re-scrutinized to assess the feasibility of road work selected. The nodal/ implementing department of PMGSY may share their data base on roads in that area/district so that it may be assessed that the selection of roads is appropriate. If any correction is required it may be done. In case of the second and third scenarios, the expertise of the nodal/implementing department of PMGSY should be marshaled for quality supervision, and in planning the next set of activities. In case, the technical advice of the nodal/ implementing department of PMGSY may be considered for planning the next set of activities. The list of roads completed/ taken up will be shared with nodal/ implementing department of PMGSY which will plan to take up for value addition by making it pucca.

5. Convergence through works may be affected in some of the following ways

- i) Gap filling: Through NREGS road side plantation on the roads constructed under PMGSY.
- ii) Area Approach: Nodal/ implementing agency of PMGSY and resource group will plan roads required for integrated development of area. Roads permitted under PMGSY may be taken up under PMGSY and remaining roads not covered under PMGSY but covered under NREGA can be taken up under NREGS as it will ensure uniformity and quality.
- iii) Value addition through PMGSY to NREGA roads: For it to become the basis of sustainable development backward-forward Linkages have to be worked out and the entire work be conceptualized as a project. The project approach must have a two fold objective: (a) ensuring that the work under NREGA is made durable through appropriate inputs (not permitted under NREGA). This may normally imply moving from kuccha to pucca (b) Using the physical assets created under NREGA for economic activities in a way that the labor that has worked on that asset is able to earn an income from it by better mobility.

6. Implementation agencies

Beside the Gram Panchayat, the executing agencies of PMGSY may also be the implementation agencies in States where PMGSY work is more or less complete. In States, where Project Implementation Units (PIUs) are fully tied up in execution of ongoing PMGSY projects, in such States, PIUs of PMGSY may be made responsible for providing necessary technical support for planning, project preparation and quality control of the 'convergence projects' and to take up a demonstration project in each district.

7. Funding will be through NREGA and PMGSY