सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF RURAL DEVELOPMENT

ILO-PMGSY RURAL ROAD PROJECT

# MOBILIZING ADDITIONAL FUNDS FOR MAINTENANCE OF RURAL ROADS

## A Guidance Note for States

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*Submitted by*
International Labour Organization,
New Delhi

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# Mobilizing Additional Funds for Rural Roads Maintenance: Guidance Note for States

## Introduction

Rural roads are essential for providing access to habitations in rural areas. Along with water, electricity and telecom infrastructure, roads are enablers of rural growth and they serve as an entry point for poverty alleviation. With launch of Pradhan Mantri Gram Sadak Yojana (PMGSY), a standard policy for provision of rural connectivity was established. The states follow the engineering practices on the lines of PMGSY in their own programmes as well. The success of the programme is widely acknowledged. It is to be appreciated that it is maintenance that ensures availability of benefits of access on a sustained basis. Regular and effective maintenance of rural roads needs to be an integral part of poverty reduction strategies. Several states have recently instituted their own maintenance policy in respect of rural roads maintenance. Now, there is growing recognition among states regarding the need to mobilize additional financial resources towards maintenance of rural road assets being created at a huge cost to the economy. The asset value of rural roads in states may range from Rs. 15,000 crore to Rs. 30,000 crore depending upon the size of the state road network.

As a thumb rule, 2 to 3 percent of cost of construction or upgradation is required for routine and periodic maintenance. Studies have shown that Rs. 10 lakh spent on routine maintenance saves Rs. 20 lakh in periodic maintenance. Rs. 20 lakh spent on periodic maintenance saves Rs. 40 lakh in rehabilitation. It would therefore make good economic sense for state governments to invest in maintenance of roads. The states need to mobilize additional funds for maintenance of rural roads based on size and condition of road network.

Brief explanatory notes are provided in the succeeding sections for supporting the states in their endeavours on mobilizing additional funds for maintenance covering the following elements:

(i) National and International Experiences

(ii) Key Learnings

(iii) Assessing Funding Requirements and Current Gap

(iv) Proposed Strategies for Mobilizing Additional Funds

(v) Dedicated Road Funds and their Management

## National and International Experiences

### National Experiences

Basically, the states have been relying on budgetary allocations (Non-Plan) for maintenance of rural roads. The 12th and 13th Finance Commissions did recommend additional central grants to supplement the state resources.

A few states have taken the initiative of creating state level road maintenance fund. The main source of funding has been levy of additional taxes on fuel, cess (see Annex1) on agricultural produce, user charges and fees, transport tax revenues. Uttar Pradesh set up Dedicated Road Fund for maintenance in 1998 by levy of additional sales tax on petrol and high speed diesel. Rajasthan set up Road Fund for both construction and maintenance and primarily for undertaking PPP state highway projects. Maharashtra and Kerala earmark a portion of current user charges and goods carriage taxes for financing specific needs of the sector.

For rural roads, Punjab levies a cess on agricultural produce and rural development fee. Haryana and Madhya Pradesh have similar system of market committee fee (see Annex 2). Karnataka created a fund called Chief Minister Grameen Abhivrudhi Nidhi (CMGRAN) for rehabilitation of rural roads. The market committee fee in Punjab is 2 percent on all crops except cotton and maize on which it is one percent. Punjab also levies a Rural Development Fee which is 2 percent on all crops except cotton on which it is one percent.

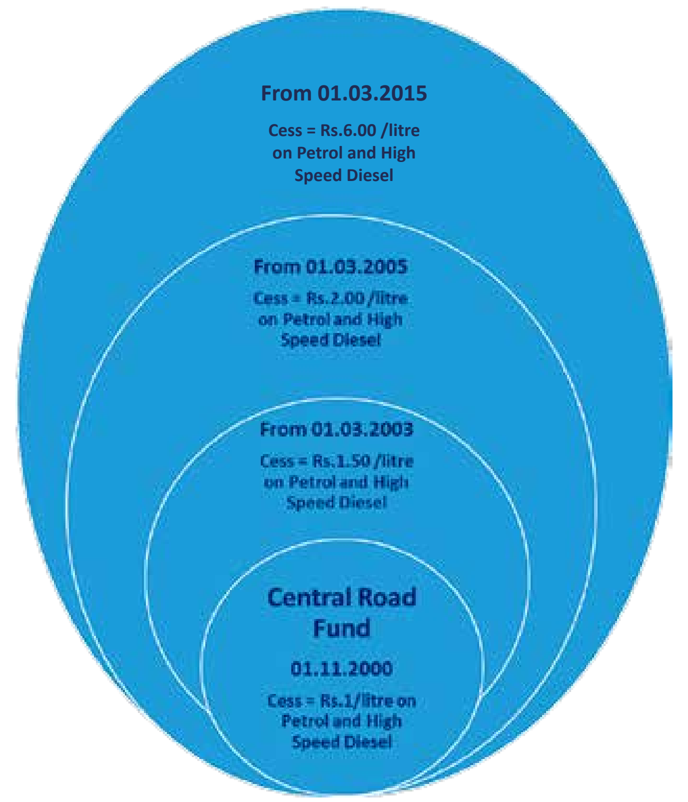
Other sources of mobilizing funds can be through earmarking a portion of current user charges from road transport or taxes on carriage of goods by road, entry tax etc.

The Government of India revamped the Central Road Fund in the year 2000 by levy of additional excise and customs duty on petrol and High Speed Diesel (HSD). At that time, the rate was Rs. 1.00 per litre on both petrol and HSD. Currently, the rate is Rs. 6.00 per litre. As per the current policy, the annual accruals to the CRF are allocated as under:

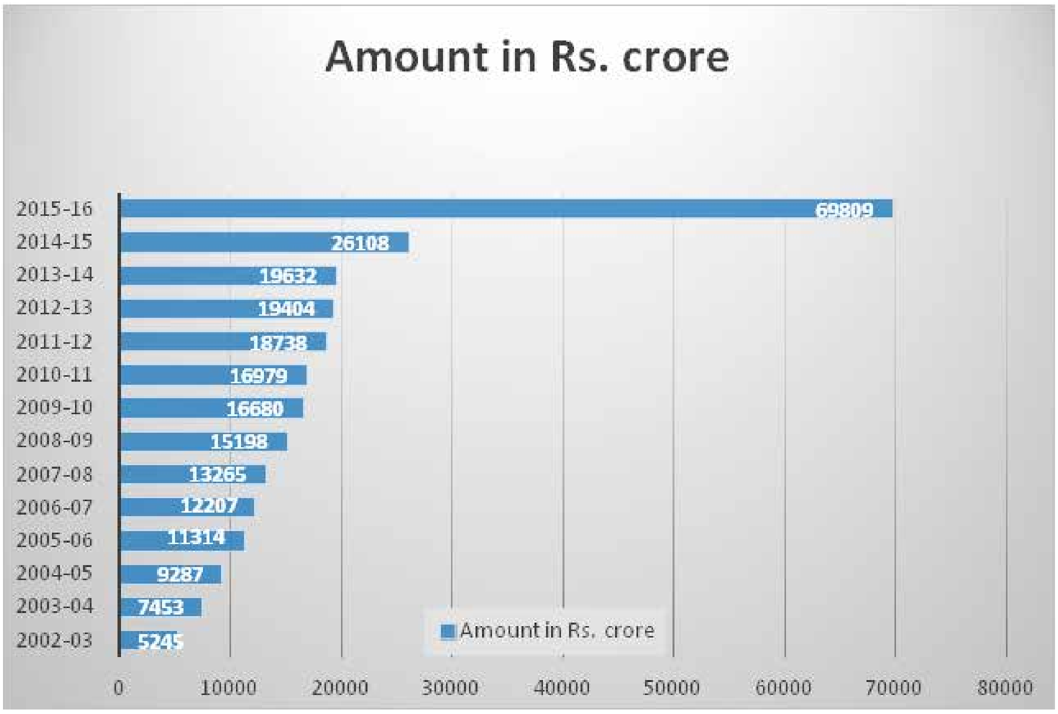
| | | |
|---|---|---|
| a. Development and Maintenance of National Highways | - | 41.5 percent |
| b. Development of Rural Roads | - | 33.5 percent |
| c. Development and Maintenance of State Roads of Inter-state and Economic Importance | - | 10.0 percent |
| d. Railway Safety and other works | - | 14.0 percent |
| e. Development and Maintenance of roads in border areas | - | 1.0 percent |

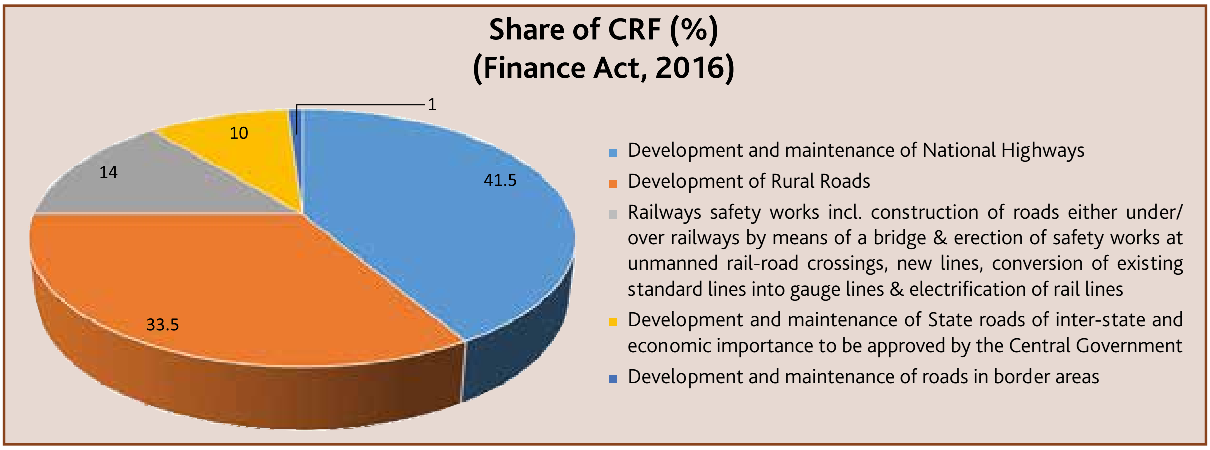
It may be noted that for rural roads, current accruals do not consider maintenance as permissible charge. However, very good financial support is being extended to the states by the Central Government under the PMGSY for new connectivity and upgradation projects.

**Graph-1:** *CRF - Progressive Increase in Fuel Cess*




**Graph 2:** *CRF - Annual Accruals*






## International Experiences

A UN-ESCAP report (2005) points out that in Latin America, the countries were losing from one per cent to three percent of their annual GNP owing to inadequate funding support for maintenance of their road assets. Funds allocated for maintenance are lower compared to new road construction as politically the former is less attractive. Some countries do not factor the economic consequence of neglect in road maintenance while allocating budget for maintenance. For example, an ADB report indicates that Rs.100 spent on maintenance of road assets saves Rs.200 to Rs. 300 of vehicle operating costs. Countries like USA, Japan and European countries are exception to this. These countries consciously allocate adequate resources for maintenance of their road assets.

Some of the countries in Latin America created Road Funds through earmarked taxes, especially on fuels used by motor vehicles (see Box 1). However, many of these funds could not be sustained. The reason was that the government authorities began utilizing these funds for other purposes. Clearly, apart from adequate funding, proper management of fund is equally critical.

**Box 1: *Sustainable Financing and Management of Roads in Latin America***

*For the last several years, roads have been the backbone of Latin America's freight and passenger transport system with road networks continuing to grow rapidly throughout most of this period. However, in recent years the rate of expansion has slowed and ageing of road networks has proceeded rapidly. Scarcity of resources, has contributed to an ever-decreasing amount of money allocated to road maintenance.*

*Road conditions in the region vary from country to country. However, generally only one third of the paved main road network is in good condition, one third in fair and one third in poor condition. The condition of unpaved roads is even worse. These conditions have not changed much over the last 10 years. Past efforts to increase financing levels for road maintenance either failed or were not sustained.*

*Some of the countries used to finance road construction, rehabilitation and maintenance through earmarked taxes, especially on fuels used by motor vehicles. However, none of these funds could be sustained in the long run. The main problem was that Governments began utilizing these funds for other purposes. This was especially true in times of crisis. As many of these crises were never resolved, dedicated road maintenance funds have effectively been permanently reallocated.*

*The main lesson learned is clear. An appropriate institutional arrangement for adequate financing and management of road maintenance can make a substantial improvement in road conditions. It is necessary to address the two main underlying causes related to financing mechanisms and institutional arrangements for road maintenance.*

***Source: UN ESCAP Report 2005***

In Nepal, Road Fund has been created without full attention to the future funding needs for maintenance. Only about 20 per cent of the requirements are met.

Road Funds in African countries did help in containing the problem of maintenance. Mostly, these funds were meant for maintenance. Setting up such funds were accompanied by creation of Road Boards/Road Fund Boards to manage effective utilization of funds. A strong secretariat supports the day to day management of the fund. The Board includes not only government departments but also representatives of users (truck, bus associations, farmers etc).

Several countries took up the programmes under the Road Maintenance Initiative. Arrangements for financial and technical audits were made to enhance visibility of maintenance outcomes.

## Key Learnings

The key learnings flowing from national and international experiences on mobilizing funds for rural road maintenance are as under:

(i) Setting up dedicated and non-lapsable Road Fund at state level for maintenance of the road network ensures that the sector receives funds that can help prevent premature deterioration of the road network through regular maintenance. The fund may be set up on a legal basis through an Act of State Legislature followed with framing of clear rules for distribution of funds for various maintenance activities.

(ii) Incentivizing states to adopt an asset management approach which prescribes equal emphasis on preservation and maintenance of rural road assets as for new connectivity and upgradation, so that benefits of access remain available on a sustained basis to the rural population.

(iii) The Road Fund is managed by a high level empowered group such as a Road Board or Road Management Board with oversight on the road authorities entrusted with planning and execution of road maintenance activities. The Board may include senior officers from the department of finance, planning, transport and roads as also a few representatives from user groups, farmers associations, academia.

(iv) Guidelines and standard operating procedures are established for rational allocation of funds for various activities- routine maintenance, periodic maintenance, special repairs, emergency works based on credible assessment of road network condition, traffic expected and importance of road. The maintenance plan prepared by the road authority can be submitted to the Road Board for approval. Steadily, asset management principles for the entire rural road network are introduced and adopted.

(v) Timely release of funds to the road departments and their project implementation units helps in arresting accelerated damage and deterioration of road network.

(vi) Side by side, with creation of Road Fund, attention is paid to capacity building and strengthening of road departments in efficient and cost effective delivery of the maintenance plans and strengthening of the local contractors in execution of road maintenance works.

(vii) Monitoring & Evaluation (M&E) system is put in place for better information on the performance and impact of the fund on the health of the rural road network at block/ district level in each state. Regular technical and financial audits of maintenance are taken up on sample basis.

## Assessment of Funds Required

### For PMGSY Rural Roads

The states are estimating the requirement of funds for maintenance in two parts. Part-1 comprises the requirements for first five years as per PMGSY contracts for construction of roads under new connectivity and those for upgradation of existing roads. Part-2 comprises the maintenance funds required after five years of routine maintenance post construction or up-gradation. Apart from routine maintenance, funds are required for periodic maintenance, special repairs and emergency works.

Several states have established their own norms for maintenance of rural roads based on Guidelines for managing maintenance prepared by the International Labour Organization under the World Bank assisted NRRDA – ILO PMGSY project. These norms need to be regularly reviewed in the light of actual execution of maintenance interventions by the PIUs of the respective SRRDAs in the states.

### For Non-PMGSY Rural Roads

For non-PMGSY rural roads, the states may divide these roads into core roads and non-core roads. For core-roads, requirements of funds may be assessed based on the maintenance norms worked out by the states as prescribed in the Rural Roads Maintenance Policy of the state.

As regards non-core roads, the states may like to entrust the maintenance works to the Panchayati Raj Institutions. A document on strengthening capacity of these institutions in such interventions prepared by the ILO has already been circulated to the states for favour of suitable action at their end.

## Strategies for Mobilizing Additional Funds

The states would need to make a state specific assessment of the current gap in availability of funds for maintenance against the requirement estimated for PMGSY and non-PMGSY rural roads. Strategies for mobilizing additional funds would need to be identified and undertaken, at the level of each state, so as to ensure regular and effective maintenance of the rural road network.

Needless to add that requirement of additional funds would vary from state to state depending upon the initiatives already taken or being taken by them to face this challenge. Learnings from national and international experience point to the following potential sources that can be considered by the states.

a. Levy of additional sales tax on petrol and high speed diesel.

b. Levy of fee on agricultural produce

c. Levy of rural development fee

d. Earmarking certain portion of user fees on motorized vehicles and taxes on carriage of goods and passengers and other taxes, revenues.

The Central Government may also consider providing additional financial support to the states by the following opportunities:

a. Permit certain percentage of CRF allocated for rural roads to be earmarked for maintenance.

b. Routine maintenance of non-PMGSY core roads in some cases could be undertaken as permissible works under MGNREGS (see Annex 3). These funds can also be utilized for maintenance of rural roads built under this scheme.

c. Encourage NABARD to provide financial assistance for periodic maintenance of those rural roads out of Rural Infrastructure Development Fund (RIDF) window as are being constructed out of such funds.

## Set State Road Fund and Operationalize Road Fund Rules

The states may set up Road Funds either adopting the legal route as for CRF Act or through a government gazette notification after necessary approval of the competent authority. As a follow up, Road Fund Rules may be notified to facilitate effective operationalization and utilization of such fund. A recent World Bank Report (April 2017) on "Assessment of PMGSY" has also recommended that at the state level, the SRRDAs should evolve towards becoming the Asset Management Agency for all the rural roads (see Box 2). The Report further suggests that states create a "Road Development Board" to create, manage and operate Dedicated Funds.

**Box 2: *Excerpts from World Bank Report***

*"Assessment of PMGSY" April 2017*

*While at the state level, the SRRDA should evolve towards becoming the asset management agency for all rural roads, there is a need for a still larger institutional mechanism, which can combine the asset management with the asset utilization function. The latter function, including the legislative framework in the form of the Motor Vehicles Act, is currently performed independently, and to a large extent without adequate coordination. It is suggested that states create a "Road Development Board" to bring together the diverse stakeholders of the sector.*

Side by side of creating dedicating fund for maintenance of rural roads, a High Level Management Board or Road Board may also be constituted side by side to manage the fund. Relevant excepts from the World Bank Report referred to above are given in Annex 4. This may serve as an example for the states to notify constitution of such a Board. Essential elements may be as under:

(i) Members selected from concerned departments of the state, PRIs and user groups.

(ii) Board assisted by a strong but lean secretariat.

(iii) Guidelines established for preparation of annual maintenance plans based on assessment of the health of the rural road network, importance of road and maintenance management principles in conformity with the State Rural Roads Maintenance Policy.

(iv) Promoting technically sound methodology for delivery of maintenance works including performance based maintenance contracts and community contracting.

(v) Establish procedures to enhance transparency and governance in execution of maintenance works.

(vi) Instituting regular technical and financial audits and even social audits

(vii) Ensure timely release of funds to various districts and PIUs as per the approved plans.

(viii) Formulate performance indicator framework for the PIU and SRRDA in planning and delivery of rural road maintenance.

(ix) Institute system of annual awards for the best performing contractors and PIUs

## Forward Path

State have already formulated their own rural roads maintenance policy signifying their commitment to ensure regular maintenance on a sustainable basis. With a view to now operationalizing and implementing the policy, they may consider the strategies brought out here for mobilization of additional funds for maintenance of rural roads. The states may establish dedicated and non-lapsable road fund for maintenance together with road fund rules. Side by side, a high level Road Board may also be set up for efficient and effective management of road fund and exercising oversight on the road authorities entrusted with planning and execution of road maintenance activities. These strategies would help in ensuring that benefits of access may continue to be available for poverty alleviation and socio-economic growth of our rural masses.

*Annex–1*

# Dedicated Funds for Roads at the State Level in India

## Kerala

The state of Kerala created Kerala Road Fund in the year 2001 for development and maintenance of the state road network to mobilize non-budgetary resources. Box 3 gives a summary of salient features of the Road Fund in Kerala.

**Box 3: *The Road Fund in Kerala***

***Legal Position:*** *The Kerala Road Fund was created to demonstrate greater commitment to the development and maintenance of the PWD road network and to mobilize greater non-budgetary resources (user charges, private sector involvement and external funding). It was constituted under the Kerala Road Fund Act 2001 which became law on 23rd November 2001.*

***Purpose:*** *The purpose of the Road Fund is to finance:*

- *routine recurrent and periodic maintenance of PWD roads;*
- *development of existing road network system including upgrading of roads maintained by the PWD;*
- *construction of new roads wherever necessary;*
- *such road safety projects as are found essential for safe and smooth traffic;*
- *research related to maintenance and development of roads, and*
- *Any cost-sharing, donor-funded projects intended for all or any of the purposes mentioned above.*

***Source:*** *The Road Fund shall consist of:*

- *all moneys received from the Central Road Fund established under the Central Road Fund Act, 2000;*
- *the contribution made by the Government;*
- *all fees, fines and other amounts collected by the Government according to the provisions of the Kerala Highway Protection Act, 1999;*
- *all payments made by the concessionaire as per the concession agreement;*
- *all amounts standing to the credit of the Bridges Fund established under section 12 of the Kerala Tolls Act, 1976;*
- *the user fees collected by the Government agency or the statutory body under the Kerala Road Fund Act;*
- *grants or loans or advances made by GOI, Government of Kerala or other institutions;*
- *all returns on investments made by the Road Fund Board directly or through a Government agency or statutory body;*
- *any amount borrowed by the Road Fund Board, and*
- *Any other amount authorized for credit to the Fund under the provisions of the Road Fund Act or rules made thereunder or any other law for the time being in force.*
- *The Government shall contribute to the Fund every year an amount equal to 10 percent of the tax collected by them in the previous year under the provisions of the Kerala Motor Vehicles Taxation Act, 1976, and the said amount shall be charged on the Consolidated Fund of the State.*

***Projects:*** *Projects under the Road Fund can be taken up in association with private entrepreneurs or financing institutions on a cost and benefit sharing basis. If proposed projects are not considered rewarding enough to attract private participation, incentives in the form of a share of the costs involved could be given.*

***Management:*** *The Board shall consist of the following members:*

- *Chief Minister-ex-officio, who shall be the Chairman of the Board*
- *Minister in charge of Public Works - ex-officio, who shall be the Vice-Chairman of the Board*

– *Minister in charge of Finance - ex-officio*

– *Minister in charge of Transport - ex-officio*

– *Principal Secretary to Government in charge of Public Works Department - ex-officio, who shall be the Member Secretary of the Board*

– *Law Secretary - ex-officio*

– *Chief Engineer, Roads and Bridges - ex-officio*

– *Three persons nominated by the Government from among the heads of financial institutions engaged in the business of infrastructure, scheduled banks or technical or engineering personnel working in National level institutions.*

*There shall be an executive committee consisting of (a) Minister in charge of Public Works (Chairman of the Executive Committee), (b) Principal Secretary to Government in charge of Public Works Department (Vice Chairman of the executive committee), (c) Finance Secretary to Government, (d) Law Secretary, (e) Chief Engineer, Roads & Bridges, and (f) Two members nominated by the Board from among the nominated members of the Board.*

## Madhya Pradesh

The state of Madhya Pradesh has recently created a Kisan Sadak Nidhi (Farmer's Road Fund) by levy of a cess on agricultural produce and earmarking 85 percent of these proceeds for improvement and maintenance of major district roads and rural roads. An amount of Rs.120 crore (US$ 28 million) per year is available out of this fund.

## Karnataka

The state of Karnataka has recently created a dedicated fund for rehabilitation and maintenance of rural roads. The fund is called Chief Minister's Grameen Raste Abhivrudhi Nidhi (CMGRAN) – rural roads rehabilitation fund. An amount of Rs.300,000 per km for periodic renewal and Rs.40,000 per km per annum for routine maintenance for black-top rural roads is allocated to Zilla Parishads (District Panchayats – district level local bodies). For Water Bound Macadam and gravel roads, the norms for routine maintenance are Rs. 25000 and Rs.20000 per km per year. This is a good scheme for protecting the investments being made in development of rural roads in the state.

## Uttar Pradesh

The state government of Uttar Pradesh created a dedicated fund for maintenance of state roads in 1998. The source of funds is increase in sales tax on motor spirit and high speed diesel. Oil companies after collection, transfer the proceeds to the consolidated fund of the state. Then the funds are allocated to the state road fund. These funds are managed by an Advisory Committee headed by the Minister of Public Works. Rules and regulations for use of funds for different categories of roads have been formulated and got approved from the Accountant General of the state. Current accruals are estimated to be around Rs. 500 crore and marks a significant increase in allocations for maintenance. Planning and implementation arrangements are being strengthened for efficient use of funds and effective delivery of maintenance operations.

## Assam

The state of Assam has adopted Assam Road Maintenance (ARM) Policy along with Assam Road Maintenance Fund Rules in Sept.'2014 to make the task of road maintenance sustainable through a Policy Framework and Systematized Procedures. The government has established a dedicated **Assam Road Maintenance Fund (ARMF)** with funds received/collected from various sources as may be considered appropriate by GoA to provide funds on a sustainable and dependable basis for maintenance of roads, such as

- Central and State Government grants,
- User charges and Fees, Cess levies, tax revenues etc.

Apart from the above sources of fund options for various other modalities including performance based-PPP and Concession Agreement for BOT, BOOT etc. As envisaged by ARM policy, a dedicated road maintenance fund viz. 'ARMF' has been set up to provide funds on a sustainable basis to enable regular maintenance and timely repair of the roads and the ARMF Rules adopted by GoA.

Objectives of the Fund:

- Dedicated for maintenance of the roads in the state.
- Provide funds to the Assam State Road Board (ASRB) on a sustainable and dependable basis for maintenance of State Roads as per ARMOP.
- Achieve regular routine maintenance and timely repair works, thereby reduction of expenditure due to maintenance in the initial state of damage.
- Ensure priority for maintenance of the Core Road Network

Management of the Fund:

- Administered and managed by ASRB in accordance the objectives of the Fund and the ARMF Rules.
- ASRB have powers to adopt detailed Operational Policies Procedures to ensure proper maintenance of State Roads within the jurisdiction of PWRD

ARMF (non-lapsable) may consists of all or any of the following:

- Allocation for maintenance of the road from the Consolidated Fund of the State under the Non-Plan Head 3054 or any other Head as prescribed by GoA;
- Allocation for maintenance of road from the funds received for the SH and MDR from the CRF as prescribed by GoA;
- All money received for maintenance of road for state roads as per the central grants recommended/awarded by the Finance Commission from time to time;
  - Any other sum or grant as may be decided from time to time for the purpose of road maintenance by the GoA;
  - Any grant, aid, bequest, donation , gift, subscription , loan or other sum lawfully received by the Board; and
  - Any other income accruing to the Fund including by way of investments or interest accruing from Fund balances.

*Annex–2*

# Marketing Committee Fees on Agriculture Produce

Some states in India levy cess on food grains through their market committees and proceeds utilized, among other items, for construction of link roads and their maintenance in rural areas. There is wide spread appreciation among farmers that with a good road network in their areas, they would fetch a better price for their produce besides their having incentive to increase the production as size of market gets bigger with a well maintained road system. It also then helps them to obtain their items of consumption at cheaper cost. They also have increased access to education, health and market facilities.

Punjab and Haryana started these practices in early 1970's. Rajasthan followed immediately thereafter. They went a step forward. The Government of Rajasthan decided to pool all the resources meant for rural development programmes of the Centre and the State and for the portion allocated to roads, a strategy was adopted to convert earth roads undertaken through employment programmes into durable assets by putting their own money for extra road metal and cross drainage works.

Similarly, in sugarcane belts of some States, a cess is levied on sugar and roads repaired out of such proceeds. In Uttar Pradesh, for example, the routine maintenance of rural roads in the sugarcane belt is met entirely from the cess on sugar. When such roads require up gradation or strengthening overlays, 20 percent amount is met out of such proceeds and balance 80 percent from state funds.

The State of Punjab had a programme of repairing 10500 km of rural roads from 1987 by providing profile correction course and 20 mm premix carpet. Funds for this purpose were provided by the Punjab Mandi Board and 143 Market Committees spread throughout the State, who collect funds at 2 percent of the sale price of various agriculture produce resulting in a total income of about Rs.80-90 crore out of which about 40-50 per cent funds are earmarked exclusively for maintenance and renewal of the road surface. The Mandi Board prepares the annual programme of renewal of roads in each market. It has been a good experience and is worthy of consideration by other States for adopting some similar approach.

*Annex–3*

# Extracts from ILO-MORD/NRRDA Report on "Strengthening Capacity of Panchayati Raj Institutions for Managing Maintenance of Rural Roads"

## Rural Road Connectivity Works under the MGNREGS

The Mahatma Gandhi National Rural Employment Guarantee Act being implemented since February 2006 as a right-based, demand-driven and self-selecting scheme marks a paradigm shift in India's efforts to create employment opportunities in rural areas. Its basic aim is to enhance livelihood security by guaranteeing rural households not less than 100 days of paid employment per financial year provided the adult members volunteer to do unskilled manual work. Its other goals also have potentially far reaching social and economic ramifications besides serving as an instrument for strengthening of the Panchayati Raj Institutions. The core objectives of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) are:

(a) Providing not less than one hundred days of unskilled manual work as a guaranteed employment to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability.

(b) Strengthening the livelihood resource base of the poor

(c) Proactively ensuring social inclusion

(d) Strengthening Panchayati Raj Institutions

During the period 2006-2015, the works taken up under the MGNREGS have generated over 18 billion person-days of work at a total expenditure of Rs.2812 billion. The share of SC/ST families has been 50-55 percent. About 40-45 percent of workers have been women. Major expenditure under the MGNREGS has been on water conservation and water related works (about 50 percent) and rural road connectivity (about 30 percent). This reflects the felt need for roads by the Gram Panchayats and Panchayat Samities. Under this scheme, the PRIs have been undertaking works on internal village roads and some non-core rural roads such as footpaths, footbridges, earth work and gravelling or metalling thereafter.

In some cases, drains and pipe culverts have also been provided. The roads are passable by light vehicles. However, instances are not lacking where compromises during execution were made on quality of assets, especially as regards to compaction and provision of camber and adequate drainage works. If the earthworks are not compacted properly to the specified standards, it leads to avoidable extra cost when such roads are taken up for further development through stage construction by line departments. There is perhaps a need to make a detailed assessment of the extent to which such inadequacies exist on the roads constructed under this programme as these would constitute a sizeable network of local access roads. It may also be pointed out that on some of these roads, further improvement works have been executed out of funds made available from other centrally sponsored and state government schemes such as the Backward Region Grant Fund, MP/MLA Local Area Development Funds, State Finance Commission funds and Decentralised Planning allocations. Correct and quality construction of local roads under such programmes is equally important.

The list of permissible works has recently been reviewed and expanded (Refer MORD Notification dated 3rd January 2014) in response to demands of the states for greater location-specific flexibility. Schedule I of MGNREGA has accordingly been modified. For road connectivity, the following works are relevant:

I. Category A: Public Works relating to National Resources Management

(v) Tree plantation and horticulture in road margins with right to usufruct to the households

IV Category D: Rural Infrastructure

(ii) Providing all-weather rural road connectivity to unconnected villages and to connect identified rural production centres to the existing pucca road network; and construction of pucca internal roads or streets including side drains and culverts within a village

(iv) Works for improving disaster preparedness or restoration of roads

(viii) Maintenance of rural public assets created under the Act

(ix) Any other work which may be notified by the Central Government in consultation with the state government in this regard.

The scheme also expects the state government to take concrete steps to achieve effective inter-departmental convergence with other programmes so as to improve the quality and productivity of assets and also to ensure that before starting new works, the ongoing or incomplete works are completed first.

This scheme also stipulates that the state government shall ensure deployment of adequate technical personnel to complete the work within the stipulated period. Suitable persons from the families of workers may be trained or skilled and deployed as barefoot technicians with appropriate delegation of technical powers and paid wages as skilled workers. The MORD in its circular dated 2.1.2015 issued guidelines to the states for identification, training, equipping and payment to the barefoot technicians. The Ministry proposes to train them with support of the ILO (Annex 14).

Other conditions of work include:

(i) Link the wages, without any gender bias, with the quantity of work done and to be paid according to the rural schedule of rates fixed after time and motion studies for different types of work and different seasons and revised periodically.

(ii) A separate Schedule of Rates (SOR) to be finalised for women, the elderly, people with disabilities and people with debilitating ailments so as to improve their participation through productive work.

(iii) The SOR of wages for various unskilled labourer's to be fixed in a manner so that an adult person having worked for eight hours, which include an hour of rest, will earn a wage which is equal to the stipulated wage rate.

(iv) The working hours of an adult worker shall be flexible but shall not spread over more than twelve hours on any day.

(v) Payment shall be made based on the measurements taken at the worksite by the authorized personnel within three days of closure of the muster roll (system of e-Muster introduced).

The scheme also expects the State Government to take steps to organize, either through its own machinery or working with Civil Society Organisations (CSO), the workers into formal groups/labour cooperatives to improve their participation in implementation and to ensure provision of entitlements under the Act.

There is to be a Capacity Building Plan, Informal Education Communication Plan and a plan for strengthening Panchayats as part of the Scheme.

It will be seen from the list of permissible road connectivity works given in para 7.3 earlier that maintenance of those rural roads which have been or are being constructed under the MGNREGS can be taken up out of funds available under the programme. Routine maintenance of rural roads has a high labour content and low material content. It is, therefore, proposed that as an immediate step, routine maintenance of all such roads as have been constructed or are being constructed under the MGNREGS may be got ensured from the Gram Panchayats as part of the MGNREGS. It is possible that some of the rural roads constructed earlier under the Scheme may require some rectification works before making them maintainable. Such works may be taken up by the states after proper assessment and identification of suitable rectification measures.

# Setting up of Proposed State Road Development Board (Excerpts from World Bank Report "Assessment of PMGSY" April 2017)

**DRAFT**

**Government of…………**

**Resolution**

**Subject: Constitution of the …………… State Road Development Board**

**PREAMBLE (To be State Specific – please choose relevant information from the key challenges in rural roads maintenance and funding given below)**

Rural road connectivity is a key component of rural development. It promotes access to economic and social services and generates increased agricultural incomes, productive employment opportunities and ensures sustainable poverty reduction. Most of all, it promotes inclusivity as a social and an economic concept. In this context, Pradhan Mantri Gram Sadak Yojana (PMGSY), a 100% Centrally Sponsored Scheme was launched on 25th December, 2000 by Government of India to provide all-weather access to eligible unconnected habitations. This scheme is being implemented by states through an institutional framework laid down in the PMGSY Guidelines. Each state has identified the Nodal Department for the purpose and has created the State Rural Roads Development Agency or a similar agency for the planning and executional management of the programme.

The Central Government, which funds the PMGSY programme through the Ministry of Rural Development (MoRD), has similarly created the National Rural Roads Development Agency (NRRDA) to lay down the technical and management standards and oversee the programme.

In the last 15 years, over 3,12,695 km of rural roads have been constructed under PMGSY and another 1,60,000 km of unserviceable or poor quality rural roads have been upgraded to PMGSY standards. In this process, states have dedicated significant technical and engineering and management resources for the programme, both in-house and outsourced through consultant firms for designing and project supervision. Many stakeholders have developed around the various aspects of the programme, including industry and the service sector and local governance and community and civil society organizations interested in the poverty reduction outcome.

**Maintenance:** The current situation on maintenance of rural roads is broadly as under:

(a) There is a multiplicity of agencies handling the work of rural roads but without nodal responsibility for many important aspects. A few states have taken the initiative recently in setting up dedicated funds for roads. Some other states have set up road funds for both development and maintenance. As a result, budget allotments for maintenance are now showing an upward trend. But there is still a wide gap between availability of funds and those required for proper maintenance.

(b) There is virtual absence of an institutionalized system of inventory and condition survey and planning and management system for rural roads, which can identify and prioritize maintenance interventions for the core network. Development of a simple Asset Management Systems (AMS) can at the very least, use existing resources more efficiently.

(c) The PRIs are not raising any funds for maintenance. Although they are expected to be ultimately made responsible for maintenance, they are not being provided with funds for maintenance by the state. Moreover, they do not have adequate technical support to undertake such activities; and

(d) About 80 percent of rural roads are in poor condition due to a combination of several factors, lack of funds and poor quality of construction. The culture of quality construction of rural roads is now improving with the PMGSY setting up three tier quality control systems.

**Rural Road Financing:** Funds for roads development are provided through the State Government budget, and in the past, funding has tended to be preferentially applied to the higher order roads for construction, renovation and maintenance, particularly for State Highways, because of their economic importance. The extent to which the General Budget should be the source and the extent to which stakeholders, i.e. the road users, should bear the cost has to be balanced in each state based on state level dynamics. Some of the issues in this regard are:

(a) *Independent road fund:* The poverty reduction impact of rural connectivity and the need to reduce regional imbalances in road connectivity have been major factors for the intervention of the Government of India to provide 100 percent grant to states for rural roads under the PMGSY programme.

(b) *Access to Long-term Loans:* As part of the strategy of promoting rural investment, the banking sector has earmarked funds for rural credit and the unutilized portion of this credit is available at low interest as a long term loan to State Governments under a facility called Rural Infrastructure Development Fund (RIDF) maintained by the National Bank for Agriculture and Rural Development (NABARD). As stated above, The World Bank and the ADB also extend loan assistance for the road sector; including the rural roads sector as part of their poverty alleviation strategy.

(c) *Market Committee Funds:* Some states levy cess on food grains through their market committees and utilize part of the proceeds for construction and maintenance of roads in rural areas, for example, in Punjab, Haryana, Rajasthan, Madhya Pradesh and Uttar Pradesh. In sugarcane belts, cess is levied on sugarcane, and roads are constructed and repaired out of such proceeds. It is also possible to levy market fee or rural development cess on agriculture produce, and a part of the funds can be used for maintenance of rural roads.

(d) *Development grants:* Funds for roads are also available from other employment oriented schemes such as MGNREGA, Command Area Development Agencies, Local Area Development funds of Members of Parliament and Members of State Legislative Assembly. However, in many cases the nature and quantum of the funds, conditions attached and the implementation mechanism available make them suitable only for non-engineered roads/tracks.

(e) *Stamp Duty on Land Transactions:* There have been suggestions that since land values close to roads tend to increase sharply, beneficiaries may be expected to share by way of paying stamp duty on sale of land.

(f) *Vehicle Fees:* In addition to taxes on fuels, additional funds can be generated through special purchase tax on two wheelers, cars and agricultural tractors, since such sales are a consequence to network development. Part of the funds so collected may be allocated for rural roads and provision of road transport services in rural areas.

**Need for an overarching co-ordinating mechanism:**

Rural transport is part of a transport chain with one end in the agricultural fields and the other on the local market. It is also the transport chain from the main highway network up to the local market. Development of rural roads cannot be viewed in isolation from the needs of higher categories of roads and even changes affecting the urban landscape. National highways serve the mobility function as they criss-cross the whole country connecting capitals of the states, major ports, industrial and tourist centres. Rural roads serve the accessibility function. They feed traffic into and receive traffic from the secondary system (State Highways and Major District Roads: SH and MDR), which in turn is supported by and supports the primary system (National Highways: NH). The secondary system contributes both to the rural economy and to industrial development. It combines the mobility and access function. The road transport system can function efficiently only if all the three groups of roads are developed harmoniously and integrated into one another. No single class of road can function efficiently if its linkages with the other are deficient.

The Road Development Plan Vision: 2021 prepared by the Indian Roads Congress for the Ministry of Shipping, Road Transport and Highways (2001) has laid down targets for development and expansion of national highways, state highways and major district roads. A few states have accelerated the programme of upgrading the state highways with external assistance from the World Bank and the Asian Development Bank. Though a two-lane pavement is a minimum required for a State Highway, only about one-third of the length has such a width, the remaining being just single lane carriageway. Only a small length, about one percent, has four-lane width or more. The bulk of the state highway network has an inadequate pavement thickness and fair to poor riding quality. This results in inefficiency of transport movement. The condition of the Major District Roads is even worse. These roads are mostly single-lane and are in a state of disrepair. There is an urgent need to address the issue of maintenance and upgradation of this category of roads as part of network efficiency as well as for their own sake.

Each component of the hierarchy of roads in the country has its own administrative and management system. While the National Highways are the responsibility of the central government, all other roads including rural roads are financed and administered by the state governments. The presence, for historical reasons, of several agencies responsible for different segments and hierarchies of roads has often resulted in lack of planning, allocation of resources, setting of priorities and maintenance of assets. With the present emphasis on rural roads for poverty reduction, and the realization that this should encompass the entire road network to achieve the intended farm-to-market connectivity in an economic rather than a physical sense, a scientific and coordinated approach to network planning, construction and asset management is slowly evolving. The importance of involving all stakeholders, including community and local governance institutions is also being better understood. The momentum needs to be reinforced by institutionalized coordinating mechanisms, in the form of a State Road Development Board as hereinafter provided, explicitly recognizing the poverty reduction and infrastructure multiplying role of the road network, and the role of local community and governance institutions.

**The Road Development Board:**

Having regard to the above, the Government has resolved to create the …… State Road Development Board with the following composition:

| | | |
|---|---|---|
| (i) | Chief Minister ……………… | Chairman |
| (ii) | Minister of Rural Development… | Vice-Chairman |
| (iii) | Minister of Transport……….. | Vice-Chairman |
| (iv) | Chief Secretary ……………… | Member |
| (v) | Secretary PWD………………. | Member |
| (vi) | Secretary Finance…………… | Member |
| (vii) | Secretary Transport…….. …… | Member |
| (viii) | Secretary Revenue………… | Member |
| (ix) | Secretary of important stakeholder depts. ( e.g. Mining ;Tourism; Forest)…... | Member |
| (x) | Engineer-in-Chief, PWD….. | Member |
| (xi) | CEO SRRDA…………………. | Member |
| (xii) | DG Police/ADG (Traffic) ……... | Member |
| (xiii) | Representative of the Ministry of Road Transport and Highways not below rank of Joint Secretary…... | Member |
| (xiv) | DG NRRDA or his representative not below rank of Director……. | Member |
| (xv) | 3 non official experts with wide experience in the social, economic and techno-economic aspects of the transportation sector……. | Member |
| (xvi) | Secretary Rural Development & Panchayati Raj….. | Member Secretary |

The terms of reference of the Board shall be as follows:

(a) To develop a Vision and Perspective Plan for the entire road sector in the state; to coordinate Departmental Plans for different segments and hierarchies of the Network in accordance with such a Plan and Vision; and to make recommendations on improving the organizational structure and management practices for the better achievement of the Vision and Plan.

(b) To ensure optimum allocation of resources for development, improvement, upgradation and maintenance for all categories of roads in the state, within a rational "asset management framework" system and to identify new and innovative sources of funding.

(c) To ensure development and enforcement of service standards for different categories of roads, with regard to road quality and maintenance and road safety, accident prevention and casualty management; and to create or strengthen regulatory agencies for the purpose.

(d) To plan the development of rural areas based on the best utilization of the road connectivity for urbanization, agriculture and industry and livelihoods promotion, passenger transportation, access to socio-economic services etc.

(e) To strengthen the local community and governance institutions to play a proactive role in planning, maintenance, public transportation services, and road safety.

(f) To create, manage and operate Dedicated Funds such as Road Development Fund or Road Maintenance Fund or Asset Management Fund for the above purposes.

**Operational matters:**

(i) The Board may co-opt additional Members, invite experts and commission studies including evaluation studies.

(ii) The Board shall work in close coordination with the State Road Safety Council and other statutory and regulatory bodies in the sector.

(iii) The Board (and its Committees) shall be serviced by the Department of Rural Development through the SRRDA. The Government will make available the budget for the purpose.

(iv) The Board may decide its own procedures.

(v) The headquarters of the Board shall be located in … The Board shall meet at least once in 6 months.

(vi) The Board shall prepare an Annual report of its activities which shall be placed before the State Legislature within 6 months of the close of each financial year.

(vii) The Board shall maintain a public website and shall place all its information and reports in the website.

**Committees of the Board:**

There shall be the following permanent Committees of the Board:

(i) Committee on public transportation infrastructure:

- o Secretary (Transport)… Chairman
- o Secretary Rural Development
- o Engineer-in-Chief PWD
- o CEO SRRDA
- o Commissioner Transport…Member Secretary
- o 2 experts
- o 2 representatives of CSOs

The Committee will look into issues of adequacy of public transport services, and the associated infrastructure including public amenities, particularly for the remoter and far-flung areas. The Committee may also look into issues of road safety in so far as they impinge on the standards of public transportation services.

(ii) Committee on Asset management and maintenance:

- Secretary PWD... Chairman
- Finance Secretary or his representative
- Secretary Rural Development and Panchayats
- CEO SRRDA
- Commissioner Transport
- Engineer-in-Chief PWD Member Secretary
- 2 experts
- 2 representatives of CSOs

The Committee will oversee the development of asset management principles and the operationalization of asset management systems (AMS) based on these principles. The Committee may also look into issues of adequacy of funds and potential for new and innovative sources of funding AMS.

**Other Operational matters:**

(i) The Board may set up Committees for various other purposes from time to time.

(ii) Committees shall meet at least once in 3 months.

(iii) The Committees may submit reports on specific issues from time to time and shall submit an annual report of activities to the Board each year within 3 months of the close of the financial year.

(iv) The proceedings of the Committees in the form of Minutes, and the Reports of the Committees shall be made available on the Board website.

(v) Committees may co-opt experts, make field visits, call for information from Govt. departments and get evaluation or other studies conducted.

BY ORDER
Chief Secretary
Govt. of .......

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INTERNATIONAL LABOUR ORGANIZATION
ILO DWT for South Asia and Country Office for India
India Habitat Centre
Core 4B, 3rd Floor, Lodhi Road
New Delhi–110 003, INDIA

NATIONAL RURAL ROADS DEVELOPMENT AGENCY
Ministry of Rural Development, Government of India
5th Floor, 15-NBCC Tower
Bhikaji Cama Place
New Delhi–110 066, INDIA