RURAL DEVELOPMENT PROGRAMMES IN INDIA: A LITERATURE REVIEW

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ABSTRACT

In India poverty is a serious problem and for which various development programs has run by the Indian government such as PMGSY, MGNREGA) etc. In this paper, we are working on the pradhan mantra gram sadak yojna (PMGSY) and also presenting the review of literature work for the development of rural economy with the help of PMGSY. Pradhan Mantri Gram Sadak Yojana (PMSGY) is one of them which are defined in term of 'road connectivity' for rural poor remedies by policy makers. This govt. policy plays significant role in the eradication of poverty from India. Under this scheme, we seeks this program is how much effective in enhancing the economy of India and what factors influence.

Keyword *PMGSY, Poverty, MGNREGA, Employment and Income, Connectivity, Development project*

1. INTRODUCTION

Poverty in India is a serious problem, for which many poverty eradication programs have been run by the government. However it has been observed that such schemes cannot be permanent solutions to the employment problem because of the very high cost and less productivity nature of the type of works taken up under such programmes. The ultimate solution for the employment problems in rural areas lies in creating infrastructure, better connectivity and increased employment opportunities by connecting such areas to the markets and to places of employment in abundance. The availability of roads will facilitate more business in the villages thereby increasing the employment opportunities as well as helping people to travel outside for jobs.[2] It has been observed that better connectivity can also result in increase in production capacities of the existing enterprises in the villages as well as creation of new opportunities in the villages, both will result in more people getting jobs in these enterprises. Rural roads play an important role in creating employment for unskilled workers and social awareness. Effective transport system is essential for sustainable economic development and modernization; there is no doubt that transport has an important role in the overall development of the country's economy. This is not only the main infrastructure for the development process, but also plays an important role in maintaining national integration. High rate of growth will definitely indicate high transport demand. It is believed that the growth of GDP and transport sector is a positive relationship. Policy maker have been given great importance to road connectivity for rural poor remedies. Efforts have been made to reduce poverty by connecting the rural area with road connectivity through the launch of Pradhan Mantri Gram Sadak Yojana (PMGSY) in 2000.[2]

Pradhan Mantri Gram Sadak Yojana (PMGSY)

Pradhan Mantri Gram Sadak Yojana (PMGSY) is a key program of the Government of India (GoI) to provide road connectivity in rural India. It was launched on December 25, 2000, under the Ministry of Rural Development (MoRD). It was funded by the central government through the Central Road Fund. It sought to provide all-weather road access for all Habitations of population of more than 1000 by 2003 and greater than 500 in plains and greater than 250 persons in desert, hilly and tribal areas and 250 persons and above in hill States, the tribal and the desert areas by the end of the Tenth Five Year plan in 2007 (World Bank (WB) Executive summary, November 2010).

The PMGSY permits both new construction (NC) and upgradation (UG). Unlike in the past, specific standards for construction and upgradation have been specified under PMGSY. The first priority is providing connectivity to the unconnected Habitations. PMGSY covered 2,15,143 Habitations, with a road length of 4,70,858.50 km, and an expenditure of Rs 140, 09,348.60 lakhs. [1]

PMGSY-II was launched to consolidate the existing rural road network. This proposed to cover during the 12th five-year plan period, 50,000 km road length by upgradation of existing roads at an estimated cost of Rs 33,030 cr (at 2012-13 prices). The costs were to be shared between the Centre and States/UTs on 75:25 for the plains and 90:10 basis for the special areas.

With effect from April 1, 2015, the costs of construction of all PMGSY roads are shared between the central government and the states. While centre: state ratio is 90:10 in respect of NE states and hill states of Himachal Pradesh, Jammu & Kashmir and Uttarakhand, it is 60:40 for other states.

All PMGSY roads involve a five-year maintenance contract, entered into along with construction contract, with the same contractor. Maintenance funds to service the contract are budgeted by the state governments. On expiry of the five-year post-construction maintenance, the state governments make the necessary budget provision to place such roads under zonal maintenance contracts. [1]

The National Rural Road Development Agency (NRRDA) set up on January 10, 2002 to provide management and technical support to the states in implementing PMGSY. At the state level, the State Rural Road Development Agencies (SRRDA) monitor PMGSY works, which are implemented by Public Works Departments (PWD), Rural Development Department and similar agencies. [3]

With the perspective that rural roads are a critical infrastructure to improve rural livelihood, and alleviate poverty, the WB has collaborated with the GoI for supporting PMGSY. In the first phase, the Bank's Rural Road Project I (RRP I) was implemented in select districts of Jharkhand, Himachal Pradesh, Rajasthan and Uttar Pradesh. RRP I was approved for 2004-2012 with an outlay of $400 million. The second phase RRP II (2010-2015) focuses on providing all-weather roads to villages in eight states. These include the low income states of Rajasthan, Uttar Pradesh, Jharkhand and Bihar, the special category upland states of Himachal Pradesh, Uttarakhand and Meghalaya, and Punjab as per the PMGSY guidelines.

The current study focuses on the eight RRP II states. Figure 1.1 gives the map of India, showing the covered states.

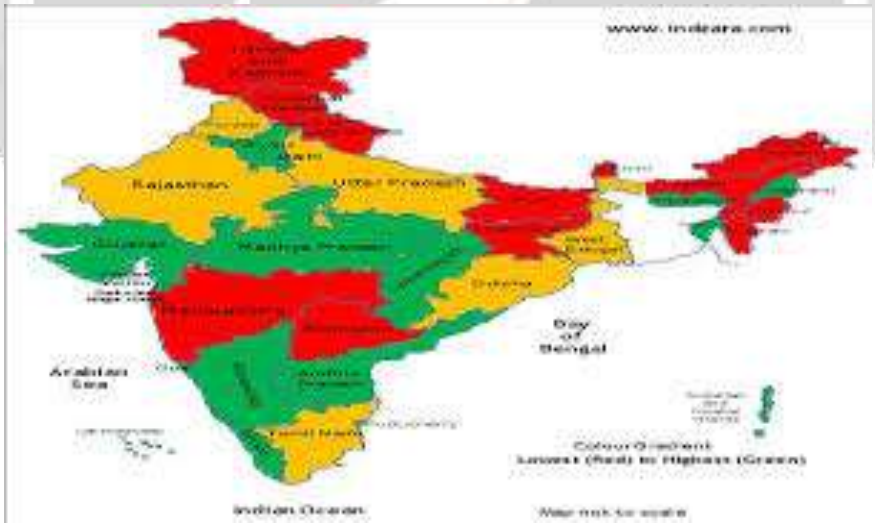

Fig. 1: Map Showing Covered States

2. HISTORY OF PMGSY

Rural Road Connectivity is not only a key component of Rural Development by promoting access to economic and social services and thereby generating increased agricultural incomes and productive employment opportunities in India, it is also as a result, a key ingredient in ensuring sustainable poverty reduction. Hence, Government launched the Pradhan Mantri Gram Sadak Yojana on 25th December, 2000 to provide all-weather access to unconnected habitations. The Ministry of Rural Development along with state governments is responsible for the implementation of PMGSY.[4]

2.1 PMGSY Phase-1

PMGSY - Phase I was launched in December, 2000 as a 100 % centrally sponsored scheme with an objective to provide single all-weather road connectivity to eligible unconnected habitation of designated population size (500+ in plain areas and 250+ in North-East, hill, tribal and desert areas, 00 - 249 population in LWE districts as per Census, 2001) for overall socio-economic development of the areas.
Also, upgradation (to prescribed standards) of the existing roads in those Districts where all the eligible Habitations of the designated population size have been provided all-weather road connectivity was to be taken up. However, Upgradation is not central to the Programme. In Upgradation works, priority was to be given to Through Routes of the Rural Core Network, which carry more traffic.
Under the scheme, 1,35,436 habitations were targeted for providing road connectivity and 3.68 lakh km. for upgradation of existing rural roads (including 40 % renewal of rural roads to be funded by the States) in order to ensure full farm to market connectivity.[5]

2.1.1 Principles of PMGSY and Definitions

1. The spirit and the objective of the Pradhan Mantri Gram Sadak Yojana (PMGSY) is to provide good all-weather road connectivity to unconnected Habitations. A habitation which was earlier provided all-weather connectivity would not be eligible even if the present condition of the road is bad.
2. The unit for this Programme is a Habitation and not a Revenue village or a Panchayat. A Habitation is a cluster of population, living in an area, the location of which does not change over time. Desam, Dhanis, Tolas, Majras, Hamlets etc. are commonly used terminology to describe the Habitations.
3. An Unconnected Habitation is one with a population of designated size located at a distance of at least 500 metres or more (1.5 km of path distance in case of Hills) from an All-weather road or a connected Habitation.
4. The population, as recorded in the Census 2001, shall be the basis for determining the population size of the Habitation. The population of all Habitations within a radius of 500 metres (1.5 km. of path distance in case of Hills) may be clubbed together for the purpose of determining the population size. This cluster approach would enable provision of connectivity to a larger number of Habitations, particularly in the Hill / mountainous areas.
5. The eligible Unconnected Habitations are to be connected to nearby Habitations already connected by an All-weather road or to another existing All-weather road so that services (educational, health, marketing facilities etc.), which are not available in the unconnected Habitation, become available to the residents.
6. A Core Network is that minimal Network of roads (routes) that is essential to provide Basic access to essential social and economic services to all eligible habitations in the selected areas through at least single all-weather road connectivity.[6]
7. A Core Network comprises of Through Routes and Link Routes. Through routes are the ones which collect traffic from several link roads or a long chain of Habitations and lead it to Marketing centres either directly or through the higher category roads i.e., the District Roads or the State or National Highway. Link Routes are the roads connecting a single Habitation or a group of Habitations to Through Routes or District Roads leading to Market Centres. Link routes generally have dead ends terminating on a Habitation, while Through Routes arise from the confluence of two or more Link Routes and emerge on to a major Road or to a Market Centre.
8. It should be ensured that each road work that is taken up under the PMGSY is part of the Core Network. While keeping the objective of Connectivity in view, preference should be given to those roads which also incidentally serve other Habitations. In other words, without compromising the basic objective (covering 1000+ Habitations first and 500+ Habitations next and 250+ Habitations where eligible, last), preference should be given to those roads which serve a larger population. For this purpose, while Habitations within a distance of 500 metres from the road is considered as connected in case of plain areas, this distance should be 1.5 km (of path length) in respect of Hills.
9. The PMGSY shall cover only the rural areas. Urban roads are excluded from the purview of this Programme. Even in the rural areas, PMGSY covers only the Rural Roads i.e., Roads that were formerly classified as 'Other District Roads' (ODR) and 'Village Roads' (VR). Other District Roads (ODR) are roads serving rural areas of production and providing them with outlet to market centres, taluka (tehsil) headquarters, Block headquarters or other main roads. Village Roads (VR) are roads connecting villages / Habitation or groups of Habitation with each other and to the nearest road of a higher category. Major District Roads, State Highways and National Highways cannot be covered under the PMGSY, even if they happen to be in rural areas. This applies to New Connectivity roads as well as Upgradation works.[7]

10. The PMGSY envisages only single road Connectivity to be provided. If a Habitation is already connected by way of an All-weather road, then no new work can be taken up under the PMGSY for that habitation.
11. Provision of connectivity to unconnected Habitations would be termed as New Connectivity. Since the purpose of PMGSY inter alia is to provide farm to market access, new connectivity may involve 'new construction' where the link to the habitation is missing and additionally, if required, 'Upgradation' where an intermediate link in its present condition cannot function as an all-weather road
12. Upgradation, when permitted would typically involve building the base and surface courses of an existing road to desired technical specifications and / or improving the geometrics of the road, as required in accordance with traffic condition.
13. The primary focus of the PMGSY is to provide All-weather road connectivity to the eligible unconnected Habitations. An All-weather road is one which is negotiable in all seasons of the year. This implies that the road-bed is drained effectively (by adequate cross-drainage structures such as culverts, minor bridges and causeways), but this does not necessarily imply that it should be paved or surfaced or black-topped. Interruptions to traffic as per permitted frequency and duration may be allowed.
14. There may be roads which are Fair-weather roads. In other words, they are fordable only during the dry season, because of lack of Cross Drainage (CD) works. Conversion of such roads to All-weather roads through provision of CD works would be treated as Upgradation. It must be noted that on all the road works of the PMGSY, provision of necessary CD works is considered an essential element
15. PMGSY does not permit repairs to Black-topped or Cement Roads, even if the surface condition is bad.
16. The Rural Roads constructed under the Pradhan Mantri Gram Sadak Yojana will be in accordance with the provision of the Indian Roads Congress (IRC) as given in the Rural Roads Manual (IRC:SP20:2002). In case of Hill Roads, for matters not covered by the Rural Roads Manual, provisions of Hills Roads Manual (IRC:SP:48) may apply.

2.1.2 Planning for Rural Roads

- Proper planning is imperative to achieve the objectives of the Programme in a systematic and cost effective manner. The Manual for the Preparation of District Rural Roads Plan and the Core Network shall be treated as part of the Guidelines and would stand amended to the extent modified by the present Guidelines. The Manual lays down the various steps in the planning process and the role of different Agencies including the Intermediate Panchayat, the District Panchayat as well as the State Level Standing Committee. In the identification of the Core Network, the priorities of elected representatives, including MPs and MLAs, are expected to be duly taken into account and given full consideration. The Rural Roads Plan and the Core Network would constitute the basis for all planning exercises under the PMGSY.
- The District Rural Roads Plan would indicate the entire existing road network system in the District and also clearly identify the proposed roads for providing connectivity to Unconnected Habitations, in an economic and efficient manner in terms of cost and utility. The Core Network will identify the roads required to assure each eligible Habitation with a Basic Access (single all-weather road connectivity) to essential social and economic services. Accordingly, the Core Network would consist of some of the existing roads as well as all the roads proposed for new construction under the PMGSY.
- In proposing the new links under the District Rural Roads Plan, it would be first necessary to indicate the weightage for various services. The District Panchayat shall be the competent authority to select the set of socio-economic / infrastructure variables best suited for the District, categorise them and accord relative weightages to them. This would be communicated to all concerned before commencing the preparation of the District Rural Roads Plan.
- The Plan would first be prepared at the Block level, in accordance with the directions contained in the Manual and the priorities spelt out by the District Panchayat. In short, the existing road network would be drawn up, unconnected Habitations identified and the roads required to connect these unconnected Habitations prepared. This shall constitute the Block Level Master Plan.
- Once this exercise is completed, the Core Network for the Block is identified, by making best use of the existing and proposed road facilities in such a manner that all the eligible Habitations are assured of a Basic access. It must be ensured that every eligible Habitation is within 500 metres (1.5 km of Path length in the Hills) of a connected Habitation or an All-weather road (either existing or planned). In drawing up the proposed road links, the requirements of the people must be taken into account, through the socio-

economic/infrastructure values (Road Index) suitably weighted and the alignment having the higher Road Index ought to be considered for selection.

- The Block level Master Plan and the Core Network are then placed before the Intermediate Panchayat for consideration and approval of the Core Network. They are simultaneously sent, along with the list of all unconnected Habitations to the Members of Parliament and MLAs, for their comments, if any. After approval by the Intermediate Panchayat, the Plans would be placed before the District Panchayat for its approval. It will be incumbent on the District Panchayat to ensure that the suggestions given by the Members of Parliament are given full consideration within the framework of these Guidelines. Once approved by the District Panchayat, a copy of the Core Network would be sent to the State-level Agency as well as the National Rural Roads Development Agency. No road work may be proposed under the PMGSY for New Connectivity or Upgradation (where permitted) unless it forms part of the Core Network.

2.2 PMGSY - Phase II

The Phase II of PMGSY was approved during May, 2013. While the ongoing PMGSY - I continued, under PMGSY phase II, the roads already built for village connectivity was to be upgraded to enhance rural infrastructure. For the 12th Five Year Plan period a target of 50,000 Km length under PMGSY-II. 75 per cent of the cost of the upgradation was by the Centre and 25 per cent by the state. For hill states, desert areas, Schedule V areas and Naxal-affected districts, 90 per cent of cost was borne by the Centre.[11]

Road Connectivity Project for Left Wing Extremism Area (RCPLWEA)

Government launched Road Connectivity Project for Left Wing Extremism affected Areas in the year 2016 as a separate vertical under PMGSY to provide all-weather road connectivity with necessary culverts and cross-drainage structures in 44 districts (35 are worst LWE affected districts and 09 are adjoining districts), which are critical from security and communication point of view.

Under the project, construction/upgradation of 5,411.81 km road and 126 bridges/Cross Drainage works was targeted to be taken up at an estimated cost of Rs.11,724.53 crore in the above district. The fund sharing pattern of LWE road project is in the ratio of 60:40 between the Centre and States for all States except for eight North Eastern and three Himalayan States (Jammu & Kashmir, Himachal Pradesh & Uttarakhand) for which it is 90:10.[12]

2.3 PMGSY - Phase III

he Phase III was approved by the Cabinet during July 2019. It involves consolidation of Through Routes and Major Rural Links connecting habitations to Gramin Agricultural Markets (GrAMs), Higher Secondary Schools and Hospitals. Under the PMGSY-III Scheme, it is proposed to consolidate 1,25,000 Km road length in the States. The duration of the scheme is 2019-20 to 2024-25.

The funds would be shared in the ratio of 60:40 between the Centre and State for all States except for 8 North Eastern and 3 Himalayan States (Jammu & Kashmir, Himachal Pradesh & Uttarakhand) for which it is 90:10.

3. REVIEW OF LITERATURE

Clive Bell et al. (2015) investigated the effects of India's rural roads program (PMGSY) on morbidity, using data on 279 households drawn from 30 villages in upland Orissa. The households were surveyed in 2010 and 2013, yielding an unbalanced panel of 1580 individuals, 1076 of whom were present in both years. By 2013, ten villages had received a direct all-weather road connection since the inception of PMGSY in 2004. Treating the village as a unit within the whole network of roads and medical facilities, the provision of a connection, whether direct or in the neighbourhood, is estimated (random effects) to have reduced an inhabitant's probability of falling sick by 4.3 percentage points, and the expected duration of incapacitating illness by 0.54 days, for each km of unpaved track so replaced. The fixed-effects estimates are qualitatively the same, but less precise. A simple indicator variable for the presence or absence of such a connection yields qualitatively similar estimates, but with very large standard errors, which confirms the importance of employing fine measures of the network regressors.[13]

Santanu Panda and Arup(2013) Majumder (The Rural development generally refers to the process of improving the quality of life and economic well-being of people living in relatively isolated and sparsely populated

areas. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is considered as a "Silver Bullet" for eradicating rural poverty and unemployment, by way of generating demand for productive labour force in villages. It provides an alternative source of livelihood which will have an impact on reducing migration, restricting child labour, alleviating poverty, and making villages self-sustaining through productive assets creation such as road construction, cleaning up of water tanks, soil and water conservation work, etc. For which it has been considered as the largest anti-poverty programme in the world. In this paper, based on the secondary data, an attempt has been made to comprehensively understand the development effort to rebuild the rural life and livelihood on the basis of various secondary data.[10]

Madhukar Itewar, Dr. Utasav Anand(2019) Pradhan Mantri Gram Sadak Yojana (PMSGY) is one of them which are defined in term of 'road connectivity' for rural poor remedies by policy makers. A successful effort has been made to reduce poverty by connecting the rural area through this program PMSGY. Therefore, to understand the realism of this program, this study is designed. Under this study, an attempt has been made to see how much this program has been helpful in increasing the income and employment opportunities for non-agricultural labourers. In order to fulfill the objective of the study, primary data has been collected from 50 non-agricultural workers from 5 different villages of Sagar district. These villages are connected by the PMGSY. The regression analysis has been used to measure the impact of PMGSY on employment and income of non- agricultural labourers through SPSS version 16. The result of this study shows that PMGSY have a significant impact on increasing the employment and income opportunities of the people. This study will contribute the role of the road in the study of rural employment and income opportunities.[9]

Madhukar Itewar (2019) An effective transport system is essential for sustainable economic development and modernization; There is no doubt that transport plays an important role in the overall development of the country's economy. This is not only the main infrastructure for the development process but also plays an important role in maintaining national integration. A high rate of growth will definitely indicate high transport demand. It is believed that the growth of GDP and transport sector have a positive relationship. Through the Pradhan Mantri Gram Sadak Yojana programme in 2000, the Government of India has endeavored to intensify the rural economy. The success of this effort will be achieved when all the villages are well connected with all-weather roads. To know the status of connectivity, this study is designed. The objective of this research paper is to understand the connectivity status of Pradhan Mantri Gram Sadak Yojana in India. Quantitative analysis has been done using secondary data. Percentages and correlation are calculated using SPSS.[8]

Sannalingappa Heraka et al. (2016) Rural roads constructed under PMGSY provide good connectivity to schools, health and market centers. The impact of huge investments made under PMGSY is very significant in influencing institutional strengthening of local construction industry. A survey has been carried out in Karnataka to assess the impact of PMGSY on construction industry. The findings indicate, 1.5 times increase in engineers employed by the contractors to maintain and monitor the quality on site. Seven fold increase in the vibratory rollers, 2.3 times increase in the hot mix plants,2.8 times increase in pavers, 2.7 times increase in earth movers and 3.3 times increase in crusher plants owned by the contractors is observed in ownership of equipment resources is influenced by PMGSY. 35 % response indicated no cost overrun in maintenance of PMGSY roads. About 65% responses indicate that the scheme require up gradation to newer technologies for speedy execution.[14]

4. CONCLUSIONS

The significant perseverance of investment of the government will comprise rural area in to the foremost stream of development process by cumulative obtainability of all-weather rural road connectivity through PMGSY. Continuity and incessant connectivity provide by PMGSY opened up all-weather flow of goods and amenities to the villages and consistent and faster access to amenities outside the villages for the villagers. Two significant dimensions of improvement are salary and employment. In this study, the Pradhan Mantri Gram Sadak Yojana on these dimensions has been studied and it has been concluded that the Prime Minister Gram Sadak Yojana has a positive impact on the employment and income opportunities for non-agricultural laborers. PMGSY help to upsurges numbers of employed days, an annual income of labours, means of transport to reach the workplace, change in principal occupation, made easy up-down for the worker and last but very important, this road construction helping to increases the employment opportunities for women hence rural roads under PMGSY help to attain the overall development of the country and its citizens. In future maintenance of the road continues from time to time, so the labours require less time to reach the workplace and to be free from the fear of accidents. This plan is working very well, whose positive impact has been studied, therefore, it should be extended for a few years and connectivity should be provided to all the villages.

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