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Assessment of Pradhan Mantri Gram Sadak Yojana

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Abstract: ***In India, Rural Road Connectivity, has been appreciated as a key component of Rural Development, which promotes access to economic and social services and generates increased agricultural incomes as well as strengthens rural livelihoods. In this context, Pradhan Mantri Gram Sadak Yojana (PMGSY), was launched in December, 2000 as a special intervention of the Government of India with the broad objective of ensuring sustainable poverty reduction. The scheme aims to provide good quality all-weather single connectivity to every eligible habitation. Rural roads are a state subject under the Constitution and as such are the basic responsibility of the states. However under the PMGSY, the construction of good quality and well-engineered roads are fully funded by the Government of India. Maintenance of these roads is the responsibility of the states. The year 2013 saw the launch of PMGSY-II with the objectives of consolidating the existing rural road network and upgrading existing rural roads that provide connectivity to rural growth centres. PMGSY-II envisages sharing of construction costs between the Centre and the states with maintenance costs continuing to be funded fully by the states.***

Keywords:
1) ***On-farm : Income and related private sectors exist inside agricultural system***
2) ***Off-farm : : Income and related private sectors exist outside the agricultural system***
3) ***Assessment : Analysing, interpreting and using information for learning and development***
4) ***PMGSY : Pradhan Mantri Gram Sadak Yojana***
5) ***Distinctive : Quality or characteristics that makes a thing different from others***
6) ***Stipulate : To make an agreement or not beyond limits of (a period of time)***

I. INTRODUCTION

PMGSY is a huge Central Investment in the State Sector as part of a poverty reduction strategy. This investment is likely to be useful only if the main rural road network, particularly the rural Core Network is maintained, for a long time in good condition. In this context, empirical studies, like the present one are important because they provide evidence of such sustained maintenance of rural roads on access to markets, education and health care facilities as well as on–farm and off– farm activities. Such studies also serve as advocacy tools for long term investments in proper maintenance of rural road network. The potential of rural roads in transforming rural India has been well established by many impact assessment studies in the past. Road investments have made significant impact on reducing poverty, improving incomes and access to health and education facilities. In India the thrust on rural roads development was intensified by launching of the Pradhan Mantri Gram Sadak Yojana (PMGSY) in December, 2000. This scheme's distinctive quality management system and provision of composite construction contract including maintenance have resulted in better quality roads across the country.

Under PMGSY more than 4.50 lakh km of all-weather rural roads have been constructed targeting more than 1.67 lakh unconnected habitations of population more than 500 persons in plain areas and 250 persons in hilly areas, deserts and tribal areas. To sustain the benefits arising from this improved connectivity, NRRDA with funding support from respective states, has also introduced a mechanism of integrated 5 year maintenance of the roads constructed or upgraded under PMGSY. According to PMGSY-III guidelines the fund sharing pattern of construction cost under the Central and State Government will be the same as currently applicable to PMGSY–I & PMGSY-II. All States except 8 North-East States and 3 Himalayan States (Jammu & Kashmir, Himachal Pradesh & Uttarakhand) is 60% Centre and 40% State, 8 NE States including Sikkim and Hill states of Himachal Pradesh, Jammu & Kashmir and Uttarakhand 90% Centre and 10% State will be share. Cost of Maintenance covering routine maintenance for initial 5 years after construction and also for further 5 years including periodic renewal as per requirement, special repairs and emergency maintenance shall be fully borne by the respective State/ Union Territories (UTs).

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II. LITRATURE REVIEW

This is an overview of previous studies related to PMGSY and its impact in rural areas.

A. Impact On Agriculture

The construction of the PMGSY roads has greatly benefited the farmers. Before construction of the PMGSY roads in the years 0f 2000-2005, farmers found it difficult to sell agricultural goods in the bigger markets that are located at a distance from their villages. Due to lack of transport, the farmers had to often physically carry the baskets of agricultural goods on their heads and could thus transport only a small amount of agricultural produce to the market at the high cost of travel time. Thus, the whole process was not profitable.

However, the construction of the PMGSY roads has resulted in increased and easier movement of farmers and their produce and has thus increased agricultural profit.

B. Impact On Employment Generation

After the construction of PMGSY roads, an improvement in the employment situation in terms of more job opportunities, more avenues for self-employment, etc. were observed. On-farm employment opportunities have increased due to shift from grains to cash crops and also multiple cropping, particularly in the states of Tamil Nadu, Madhya Pradesh and Mizoram. More people are going to nearby towns and villages for odd jobs like selling wood, vegetables, dairy products and locally made items like pickles, papad, etc.

Non-farm opportunities like opening of shops, small business, cottage industries has increased in the States of Himachal Pradesh, Madhya Pradesh, Mizoram, Tamil Nadu and Uttar Pradesh. Besides, road connectivity has led to expansion of local industries, which in turn has generated employment opportunities.

C. Impact On Industry

There has not been much impact in the industrial sector in terms of new small industries as it is too early to measure change. However, an impact on the existing small industries was observed in terms of easier access to raw materials, availability of commercial vehicles to transport bulk product to the markets etc. This has led to economies of scale, particularly in the state of Assam and Mizoram.

Beneficiaries reported that the pottery and brick making industry of Orissa has benefited from the PMGSY roads. Perceived benefit of PMGSY roads was also reported in the cottage industries of Tamil Nadu, Handloom industry of West Bengal and Agro industry in Assam.

D. Impact On Education Sector

Beneficiaries reported that the PMGSY road connectivity had led to an increase in the number of girls going to schools in the States of Assam, Madhya Pradesh, Orissa, Tamil Nadu and West Bengal. Most parents mentioned that they were now more confident about sending their daughters to schools unescorted.

Another noteworthy impact has been in terms of regular attendance of the teachers throughout the year and greater inclination of parents to send boys and girls for higher studies and college education.

E. Impact On Urbanization

Tend towards urbanization of an area as an immediate and direct impact of providing rural road connectivity was observed in course of the study. The study areas have seen some rapid changes from traditional to modern ways of life .For instance, the phenomenon of neon light attraction has drawn the villagers to the town entertainments; there has been increased use and ownership of television and other electrical gadgets.

The states of Mizoram, Tamil Nadu, and West Bengal reported conversion of kuchcha houses to pucca houses. Beneficiaries in all the States mentioned that the most visible change was in term of sudden escalation of prices of land adjacent to the PMGSY roads. This had led to an increase in the sale of land for commercial purposes.

F. Impact On Health

Positive impact was observed with regard to increase in accessibility to preventive and curative health care facilities; better management of infectious diseases and attending to emergencies due to faster access to health facilities and increase in frequency of visits by health workers.

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III. METHODOLOGY

The study has been conducted based on data collected from habitations connected by rural roads both PMGSY and other schemes, which were maintained and equal number of such habitations, but not maintained roads. In order to assess net impact of any developmental intervention, the true assessment is only possible when the current data is compared with the baseline information. In the absence of any available baseline and to determine whether the results are of specifically the roads and their maintenance, a comparison by assessing the impact on the same set of key indicators in the control habitations has been done. The use of participatory tools was a decision for each field team depending on the nature of stakeholders and circumstances of each habitation. The topics covered were complementary, thus the same or similar questions were asked of groups through participatory settings as were asked of household respondents through a structured questionnaire. Classification of the data enabled analysis to be undertaken according to State, District and socio-economic characteristic of the respondents. This approach enabled aggregation of results within the States and for the study as a whole. The following tools were used in this study.

A. Desk review
B. Focused group discussions

IV. RESULTS AND DISCUSSION

The Rural development generally refers to the process of improving the quality of life and economic welfare of people living in relatively isolated areas. This development is associated with Pradhan Mantri Gram Sadak Yojana. It has initiated lot many changes through its connectivity of rural areas to new developments. For these developments the scheme has to go through many steps of procedure like approvals, proposals, funds, clearance, sanctions, tendering, executions including agencies like NRRDA, SRRDA. The outcome of this scheme is mainly impacting agriculture, employment, industry, health, transportation, education sectors in a positive manner. The scheme has also resulted as a rise in the income levels of the rural population which also indicates that there is rapid decrease in the growth rate of poverty. Each road work taken up under PMGSY is a part of Core Network. A Core Network is that minimal a network of roads (routes) that is essential to provide basic access to essential social and economic services to all eligible unconnected habitations through at least single all-weather road connectivity. Core Network comprises Through Routes and Link Routes.

The Manual for the Preparation of District Rural Roads Plan and the Core Network, shall be treated as part of the Guidelines which 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. District wise allocation of funds is done by both State and Central Government communicated to NRRDA and STAs every year. The scheme focuses to bridge the gap between urban areas and rural areas on the basis of infrastructure development.

Using the real-time data of PMGSY roads available on the Online Management Monitoring and Accounting System, an analysis was made to find the delay occurrence in the construction projects of the study area and the effect of various parameters with respect to delay. Global Positioning System (GPS) and Geographical Information System (GIS) are very useful in development of efficient planning of roads in rural areas. All PMGSY roads will be covered by 5-year maintenance contracts, to be entered into along with the construction contract, with the same contractor, as per the Standard Bidding Document. Maintenance funds to service 38 the contract will be budgeted by the State Government and placed at the disposal of the SRRDA in a separate Maintenance Fund Account within the stipulated time i.e. 50% by 31st May and remaining 50% by 30th November of each financial year. Safety Manual has been prepared by the NRIDA and circulated to all SRRDAs to construct safer rural roads. The Manual covers guidance on accident data records, safer road design, road safety audit checklists, community awareness and education.

V. CONCLUSION

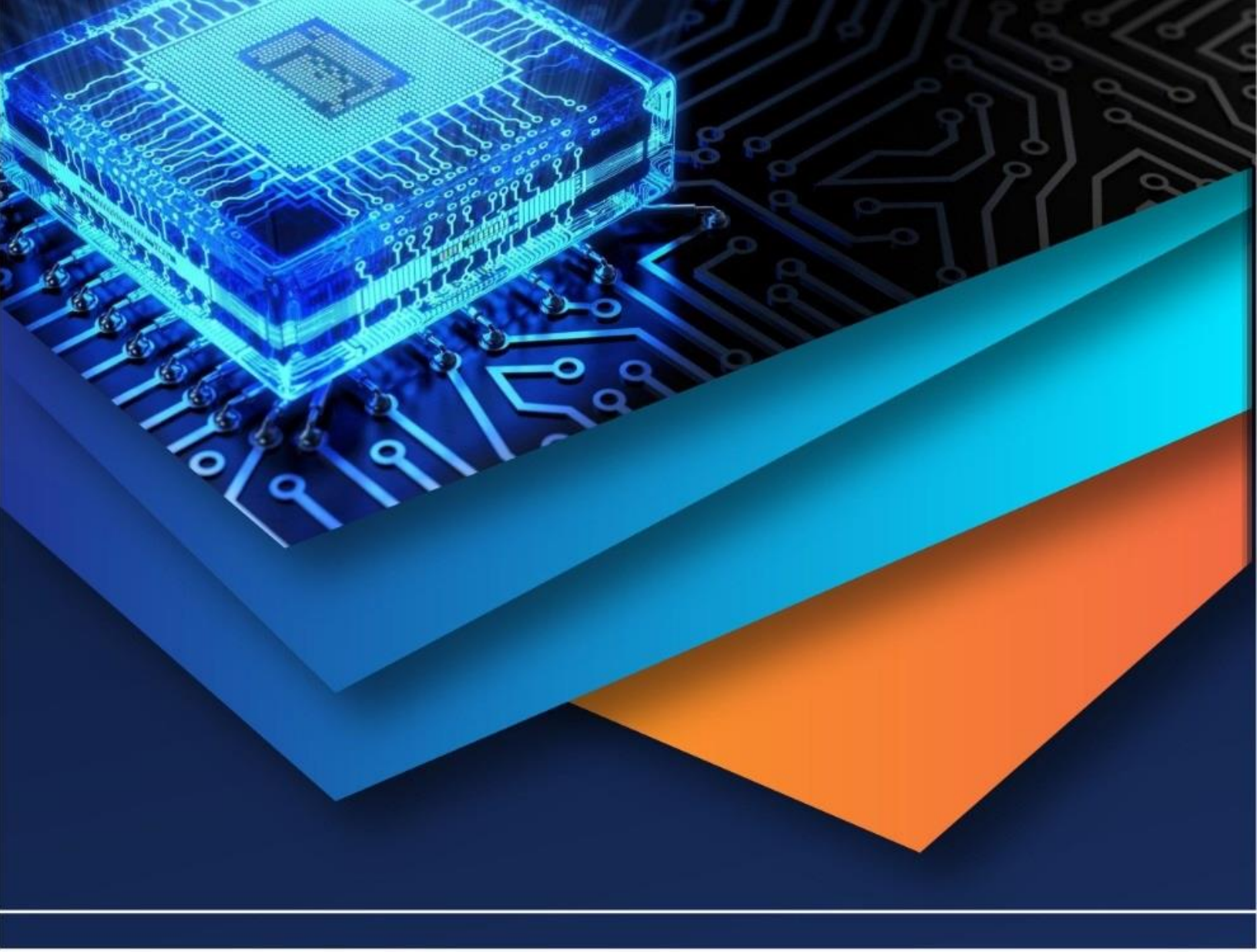
A. Study has been conducted with the help of participatory tools like desk review and focused group discussions.
B. Each road work taken up under PMGSY should be part of Core Network.
C. The On-line Management, Monitoring and Accounting System (OMMAS), developed for the purpose is the chief mechanism for monitoring the Programme.
D. There is also need to involve beneficiary citizens/people during planning, construction and maintenance of PMGSY roads.

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REFERENCES

[1] https://pmgsy.nic.in, https://en.wikipedia.org/wiki/Pradhan_Mantri_Gram_Sadak_Yojana
[2] Pradhan Mantri Gram Sadak Yojana- Manual for District Level Functionaries.
[3] Journal of the Institution of Engineers (India) (2021), "Delay in Rural Road Construction: Evidence from Pradhan Mantri Gram Sadak Yojana in Shimoga District, Karnataka, India"
[4] IOSR Journal of Humanities and Social Science (IOSR-JHSS) Volume 24, Issue 7, Sec. 8 (2019)
[5] Geojournal volume 85 (2019), "Impact of rural road construction on the local livelihood diversification: evidence from Pradhan Mantri Gram Sadak Yojana in Jhunjhunu district, India".
[6] "Rural Livelihood Challenges: Moving out of Agriculture."
[7] Transportation in Developing Economies volume 3 (2017).
[8] Shoke K Sarkar (2007), "Impact of PMGSY Roads on the Traffic Safety of School-Going Children in Rural Areas".
[9] Nandan Dawda (2018)"PMGSY: A successful attempt of transforming rural India to Model India".
[10] Transportation in Developing Economies volume 3 (2017).
[11] MADHUSUDAN GHOSH (2017), "Infrastructure and Development in Rural India".
[12] A study on Improvement of Rural Highways Maintenance System in India, "Rural Highways part in India".
[13] Dr. Shiv Raj Meena (2017), "Analysing the impact of rural road connectivity in Gangapur city block of Sawaimadhopur District (Rajasthan)".

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