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## Role of Rural Road Connectivity (Pradhan Mantri Gram Sadak Yojana) in Accelerating Development & Improving Quality of Life

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### **Abstract:**

*In the State of Orissa, PMGSY has been in operation in all 30 districts of the State, but the Ministry of Rural Development (MORD) have identified 5 district of the state such as Anugul, Balasore, Puri, Rayagada and Sambalpur for under taking an impact evaluation. As the research project is on Puri district, nearly 39 roads are envisaged in the plan for construction under II Blocks in Puri district the PMGSY is working in Puri Sadar and Brahmagiri.*

*PMGSY developed a strategy to make it successful in all spheres. In order to define its role and responsibilities PMGSY has a separate cell known as IAS (Impact Assessment Study). The main function of this cell is to suggest on the basis of the key findings of the assessment., risk factors involved, and is to find out whether or not there has been any perceptible change in the quality of life of the people in the habitation getting access by the roads by compared to the condition that prevailed before the construction of the roads and finally to find out the impact of PMGSY on the Socio- economic lives of the rural people as a result of enhanced rural connectivity provided under the programme.*

**Keywords:** PMGSY (Pradhan Mantri Gram Sadak Yojana) Social Benefits, Improvement, Rural Road

### **1. Introduction**

India now has more than a billion people. It has, however, only 40 million telephones and three million Internet connections. Further, as these are mostly concentrated in the urban areas, the rural areas are getting left behind as the world races towards an information-led global economy. Rural Connectivity is a key component of Rural Development in India. Rural roads contribute significantly to generating increased agricultural incomes and productive employment opportunities, alongside promoting access to economic and social services. Rural Roads are the virtual lifelines for the vast multitude residing in rural areas. However, even today, only about 60% of villages/ Habitations in the country are connected by roads Keeping in view the socio-economic benefits accruing from providing road connectivity to the villages, there is a need to impart greater thrust to providing road connectivity. Government of India have launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) on 25th December, 2000, with the objective of providing Road Connectivity through good All-weather roads to all unconnected Habitations having a population of more than 1000 persons by the year 2003 and those with a population of more than 500 persons by the end of the Tenth Plan Period (2007).

Growth with social justice have been basic objective of planning in India. The Government views Rural Development as critical to India's economic and Social Development. The policy objective is to achieve "Samagra Gramin Vikas" addressing all the issue of basic needs of the people in the rural areas. In this direction the PMGSY aims improving the life-both individuals and community of the rural people. Besides the construction and maintenance of rural roads the PMGSY have some specific objectives so this study focuses on such things they are

- It can help provide the Basic services to the habitations and benefit the people as a result of construction and up-gradation of the existing roads.
- It can help the villagers for easy transpiration of their products to markets and can get them a higher price.
- It can help commute transport throughout the year to the habitations.
- It can also appreciate the land price of the locality
- It will help the investors to set up large number of industries in the locality thereby generating employment opportunities for the villagers.
- To assess and measure the socio-economic impact of PMGSY roads on the lives of rural people in selected habitations/villages

- To find out the changes and improvement brought about by PMGSY roads at individual, family and village level.
- To narrate the incidents and anecdotes related to the aforesaid impact.

## 2. CAG Report & PMGSY

CAG recommended that before taking up a programme like PMGSY with all India coverage requiring huge funding and full participation by the states, the targets to be achieved need to be firmed up and the funding requirements assessed realistically in order to give the programme a realistic chance of succeeding and delivering the expected outcome. The Ministry may now firm up the targets to be achieved on the basis of funds that can actually be provided and utilized for the remaining years besides striving to mobilise the required funds through all possible means. The Ministry may in coordination with the state governments ensure that all instances of diversion, idling of funds, short or delayed releases are reviewed critically and the programme monitored closely so that these did not recur. The states should be advised to support the project proposals with the correct and relevant documents in support of the availability of land and clearance from the forest and the railway authorities instead of relying merely on certificates which were only general in nature. The states should be advised to take prompt action against the contractors where the work was behind schedule and also in cases of inadmissible payment of lead charges and tender premiums so as to improve the pace of implementation of the works in progress and ensure efficient fund utilization. The system of independent quality assurance should be reinforced by involving independent research and educational institutes which have adequate testing facilities to act as state quality monitors and national quality monitors instead of entrusting the work to individuals so as to enhance the quality of the delivery system and ensure the accountability of the agencies. In the meantime, quality inspection by national level monitors could include some percentage of laboratory testing of material. The ministry may issue suitable directives/guidelines to state agencies to pay greater attention to the preparation of detailed project report and ensure compliance with the directives already issued. The Ministry should periodically review the extent of checks exercised by the National Rural Road.

## 3. Is A Continuation of PMGSY Socially Profitable?

This question must be posed, even if a stop is politically unthinkable. For there are always alternative uses of public funds, and scrutinising any given proposal using a common procedure imposes a measure of discipline on the thinking that leads up to decisions, if not on the decisions themselves. It indicates that providing roads to villages in the hilly states is probably not socially profitable at the discount rate of 10 percent. Yet the net returns in the other participating states easily make good these shortfalls, even without an appeal to 'growth effects' generated by the larger economy, or to the existence of net, positive external effects produced by rural roads on the larger economy. On balance, there are such effects, but the magnitude of the net benefit is shrouded in uncertainty. The formal estimates of the benefits generated in the spheres of education and health are substantial in size, though the method used to arrive at them has its weaknesses. The respondents in the Orissa survey ranked these benefits roughly on a par with the commercial ones, as did many of the villagers with whom I spoke on my field-trip. When a passable road may well be decisive in life-and-death emergencies, people will indeed value it highly. At all events, it is reassuring that two such radically different approaches to estimating a vital magnitude yield broadly similar results.

## 4. Privatization under PMGSY

The State Government under the dynamic leadership of Shri. Naveen Patnaik has decided to entrust construction of roads under the Pradhan Mantri Gram Sadak Yojana (PMGSY) in the Naxal-affected areas to interested private companies. Though crores of rupees are being spent under the PMGSY in laying road network in rural Orissa, communication facilities were found to be in a shambles in Rayagada and other backward tribal districts recently during outbreak of cholera. The State Government has so far provided roads to 6,514 habitations out of the total 9,948 which did not have connectivity. The slow progress of construction of roads in these districts is attributed to Maoist threats. As the ultras have killed a number of contractors in Malkangiri, Rayagada and other districts, there are few takers for contracts under the PMGSY. It has been found that there is no participation in the tender process of the PMGSY roads in Malkangiri, Gajapati, Rayagada, Sundargarh, Mayurbhanj, Keonjhar and Kandhamal districts due to the 'Red' threat. Situation has deteriorated to such an extent that less than five kilometres of roads have been laid in Naxal-affected Kandhamal, Gajapati and Malkangiri districts. As central public sector undertakings (PSUs) are also not interested to take up construction work in these areas, it was decided that private companies and Orissa Construction Corporation (OCC) will be entrusted to do roadwork in these regions. It was decided that as 3,204.86 km length of roads have been completed in five years, their maintenance will be handed over to Panchayati Raj and other departments concerned. Besides roads under the Rural Development, roads under Panchayati Raj, Water Resources, Works and Environment and Forests departments are being constructed under PMGSY.

Temporary wooden bridges will be constructed on small nullahs in interior districts as people find it difficult to communicate during the rainy season when these overflow. The Centre has so far sanctioned Rs 9958.74 crore for construction of 29,289.43 km of roads under the PMGSY. Out of this, Centre has released Rs 5,751.82 crore. The State Government has constructed 16,666.64 km roads with an expenditure of Rs 6,132.95 crore. It has been decided that 4,500 km of roads will be laid with an expenditure of Rs 2,200 crore during 2010-11. Chief Secretary Bijay Kumar Patnaik, Additional Development Commissioner RN Senapati and senior officials were present.

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### 5. Education & Employment Pattern under PMGSY

With the construction of PMGSY roads, there has been an improvement in the accessibility to education facilities. This has resulted in increased school enrolment and school attendance in all the states, especially, in the number of girls going to schools in 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. Moreover, regular attendance of the teachers throughout the year is observed and greater willingness is evident among parents to send boys and girls for higher studies and college education outside their village

Habitation Code	Habitations	Block Code	Block Name	Increase
02885500	Manijipur	0002	Delanga	3
02885600	Dakapara	0002	Delanga	3
02885700	Delangakothabar	0002	Delanga	5
02885800	Ramachandrapur	0002	Delanga	6
02885900	Beraboi	0002	Delanga	15
02954400	Dihanata	0011	Astaranga	4
02954500	Nagar	0011	Astaranga	9
02954600	Petapada	0011	Astaranga	7
03012200	Narasinghpurpatna	0005	Brahmagiri	9
03012300	Narasinghpatana	0005	Brahmagiri	11
03012400	Sipasurubili	0005	Brahmagiri	2
02936700	Kusupur	0009	Gop	4
02936800	Bisarpur	0009	Gop	6
02936900	Jirikana	0009	Gop	8
02957300	Othaka	0010	Kakatpur	4
02957400	Patapur	0010	Kakatpur	2
02957500	Sadenga	0010	Kakatpur	6
02980800	Nuapada	0003	Kanas	5
02980900	Manapur	0003	Kanas	5
02981000	Gaupada	0003	Kanas	7
03039000	Bankijala	0004	Krushnaprasad	9
03039100	Satapada	0004	Krushnaprasad	10
03039200	Alupatna	0004	Krushnaprasad	2
02918000	Kanapur	0008	Nimapada	1
02918100	Bhuan	0008	Nimapada	4
02918200	Garapada	0008	Nimapada	5
02887100	Maliapa	0001	Pipili	5
02887200	Kalyanapur	0001	Pipili	3
02887300	Haripur	0001	Pipili	13
03003900	Maltipatpur	0006	Puri- Sadar	19

03004000	Jagannathballava	0006	Puri- Sadar	22
03004100	Purusottamballav	0006	Puri- Sadar	8
02986000	Chalisabatia	0007	Satyabadi	5
02986100	Basantapur	0007	Satyabadi	3
02986200	Dasabidyadharpur	0007	Satyabadi	3

Table 1: shows in the increase in the number of (College) Students joining colleges from habitations after the new road construction

Employment Opportunities before	Total
Agriculture, Labour	27
Bunding of the fields, Grazing, Agriculture, Labour	1
Dairy, Agriculture, Labour	1
Dairy, Teachers, Agriculture, Labour	1
Dairy, Agriculture, Labour	2
Dairy, Ghee Making, Agriculture, Labour	1
Horticulture, Agriculture, Labour	1
Pot Making, Agriculture, Labour	1

Table 2: shows the pattern of employment, before the road came, in the 35 villages was as follows

## 6. Good Governance & PMGSY

The road connectivity has increased the frequency of visits by government officials and grass root level functionaries like health workers/Auxilliary Nurse and Midwives (ANMs), Village Level Workers (VLWs) and Village Anganwadi Worker (VAWs) in Orissa, Himachal Pradesh, Madhya Pradesh, and West Bengal. There has been an improvement in accessibility to banks, the Post and Telegraph offices, and quicker access to the police

Now there is an increase in the frequency of visits of members of government machinery. The percentage increase in the number of visits per year made by them is documented below. All weather connectivity has made it easier for BDOs, Agricultural Extension Officers and Veterinary Doctors. ANMs, Health Workers, Gram Sewaks and ICDS Supervisors have also begun to visit the village often. It is to be noted that Health workers and Gram Sewaks can come to the village on some vehicle to the village than earlier suffering the drudgery of walking to the village which was a serious disincentive,

% of Increase in BDO Visits	% of Respondents
-100	3
0	40
33	4
100	4
200	7
233	4
300	22
500	3
Increase , no magnitude	13
	<b>100</b>

Table 3: Increase in the number of the visits per year of the BDO or equivalent (CEO) to the village habitation

% of Increase in AEO Visits	% of Respondents
0	33
100	5
133	3
200	3
500	9
1100	3
1200	3
Increase , no magnitude	9

Table 4: Increase in the number of the visits of the agricultural extension officer to the village habitation in a year.

% of Increase Veterinary Doctor Visits	% of Respondents
0	50
50	3
100	3
150	3
200	6
233	3
300	3
1200	3
Increase , no magnitude	14
No change	3

*Table 5: Increase in the number of the visits per year of the veterinary doctor to the village habitation*

% of Increase in Gram Sevak Visits	% of Respondents
0	31
100	13
133	3
200	3
300	3
400	3
600	3
1000	6
1200	8
Increase , no magnitude	3
No change	12

*Table 6: Increase in the number of the visits per year of the gram sewak to the village Habitation*

% of Increase in ICDS Visits	% of Respondents
0	19
100	3
110	3
120	3
133	3
Increase , no magnitude	33
No change	3
No Anganwadi	3

*Table 7: Increase in the number of the visits per year of the icds supervisor to the village habitation*

## 7. Finding & Conclusion

Where already roads have been developed to varying degrees, the social impacts are not as massive as from opening a new road, but still significant. A recent study in India (where road connections and connectivity of some kind exist in most regions) showed that the socio-economic development of areas , considering education, health , family planning, employment, income and other variables, were generally positively correlated with the type and condition of the roads. In other words, areas with poor accessibility were worse off compared to areas with better road access, the highest social and economic progress occurring in areas with established paved roads for a long time.

- When to measure social benefits: I believe that since measuring social benefits is difficult , this needs to be done only if transport cost savings and time savings approach ( the traditional methodology for transport projects) does not provide enough justification in terms of ERR ( economic rate of return) estimates. Where such traditional ERR is high enough to satisfy the threshold, references can be made to the nature and extent of social benefits from the project, without measuring them. Efforts in measuring them may not be essential in such cases. If relevant case studies are available, and if norms or correction factors are already available and allowed by the funding agency, these can be applied as a correction to the basic estimate. However, for low volume roads, the standard ERR estimates will not be able to justify investments in most cases. If international funding agencies will initiate scientifically designed case studies in different countries and geographical areas, covering a variety of situations, a sufficient body of evidence can be built up in the next 4-5 years, to argue successfully for



using a correction factor for social benefits based on these studies. This strategy will give a rational basis for future use in many countries and situations, without repeating studies to justify each project.

- Nature of social benefits: Social and economic benefits are mixed to a large extent. As mentioned, many of the social benefits can be quantified as they express themselves through economic impacts/parameters. In addition to economic benefits such as increased profitability of currently marketed goods, incentives for larger production and greater diversity of farm and non-farm production, better access will promote: (1) labor mobility and larger employment opportunities; (2) improved access to health, more work days available due to reduced morbidity and sick days per person; (3) better access to schools and higher percentage of people with basic education and literacy, which has been associated with better productivity and acceptance of change in farm and other production methods; (4) more girls receiving education with attendant benefits of improved, and healthier home management and better bringing up of children; greater acceptance of family planning which will subsequently reduce overpopulation; (5) greater personal transport and increased social mobility with transfer of knowledge, more opportunity for new businesses and entrepreneurship etc. Above all, better access increases income and employment and also helps alleviate poverty in many ways. Raising people above the threshold of poverty is a major social impact. The Study in India referred below calls these multiple sectoral benefits from improved rural access as increase in the level of KAP (Knowledge, Attitude, and Practices) of a community. This study makes a detailed analysis of these impacts through education, health etc., using survey data of several villages and households under different levels of road connectivity.
- Not necessarily causal relationship: Two aspects are important to note: Road connectivity is often only one of many factors that influence change in the state of development, social and economic, of a community. There are several other factors which are at work simultaneously (including resource endowment, political factors etc). Moreover, it is often not possible to establish a causal relationship between the road and the social and economic changes in its area of influence. Very often what a study can establish is simply that the road connectivity, along with other factors, are positively correlated with a given change. Multivariate analysis can be designed to indicate the extent of change due to road connectivity alone. However to conclude, PMGSY program is a huge success in Odisha. Thanks to the present ruling dispensation.

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