Socio- Economic Impact of PMGSY on Rural Habitant: A Case Study of Udhampur District

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Abstract: The present paper analyse the impact of rural roads constructed under PMGSY on the socioeconomic condition in rural areas. Beneficiaries mentioned that health conditions after road have improved and also road constructed under PMGSY have improved the level of education. After road number of institutional deliveries has increased. Construction of road has also increased the agricultural production which resulted into increase in the income level of the small farmers of the study area. Further the impacts of PMGSY on the fields like housing conditions, poverty women empowerment etc have been have been discussed in detail. Beneficiaries of the study area mentioned that they feel more confident to send their girl child outside the habitation to seek education after road. Construction of road helped the rural women to come up and progress with the nation. The study is based on the primary data. This study will contribute the role of roads on improving the socio-economic conditions of the rural habitants.

Introduction

Rural roads are the wealth of a nation, and also an instrument for, economic development and social inclusion. Rural road connectivity provide link to the rural communities and their agricultural output to the markets. Better rural roads reduce the transportation cost and also broaden the markets (Samanta, 2011). Rural road connectivity makes a crucial contribution to the growth and development of each and every economy, whether it is developed and underdeveloped and also brings important social benefits. Rural road infrastructure is an important factor which compensates the absence of other private and public assets. Once we get the road connectivity, we would get everything else like employment, post-office, telephone etc. (Reardon & Corral, 2001). Road connectivity plays a critical role not only in economic growth and development of the country but also in progressing the human development. Rural roads provides the access and the mobility for the rural dwellers, also provides social, economic, physical, and political links and facilitating the exchange of raw material of the rural areas and the products of the urban areas.(Bahadur, 2011). In other words, rural connectivity is the only means through which the country can get the all-round progress of rural people including accessibility of better education, banking, transportation and working facilities etc. (Barwell, 1996). The most considerable effect of rural road infrastructure could be on the changing attitude and values of the rural people. Transport and communication infrastructure development increases information and mobility of rural people through

decrease in time and cost, resulting into the increase in interaction of the rural people, which in turn helps to change in attitude and human development. These attitudinal changes are reflected in the decreasing faith in superstition and increasing adoption of family planning practices (Ahmed, 1996). Numerous positive impacts of roads like access to health care, education, more employment opportunities, scope for self-employment, and the increase in frequency of visits by government officials to number of government programs in rural areas has been observed after the construction of PMGSY (Jain, 2012).Rural road infrastructure has its great importance in India because the country is predominately rural in nature.

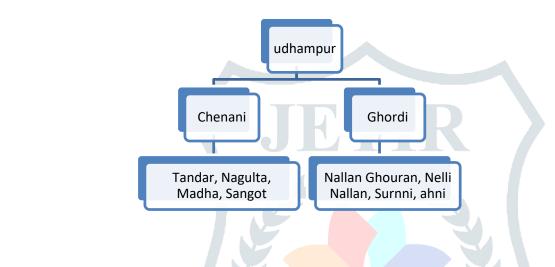
It has been seen that the investments in rural roads helps in lifting the rural people above the poverty line (Hossain & Ahmed, 1990). Rural roads are the key means to provide connectivity for the rural population to market. Rural connectivity is thus solves the first-mile problem of rural people by connecting their goods and services to markets which helps the rural poor in reducing the extent of poverty, overcome social exclusion. After the construction of rural roads parents are no longer in that state of mind to marry their children's in remote villages. The role of women increased day by day in the various social activities. (Gahlot, 2011). Better opportunities in education, employment, health as well as policy making leads to better well-being for women, which in turn contribute to social and economic well-being of the economy. Rural road plays an important role in the upliftment of the women by creating opportunities to access goods and services located in nearby village and town. Rural road also plays a key role in the overall development of the women by providing them the opportunities to access higher education and the employment is also being created for the female either directly or indirectly. PMGSY has also created the opportunity for self-employment and market accessibility for the women. Construction of roads under PMGSY had shown a slight change as the nonfarm employment opportunities in the village expands and the new work is also found outside of the village. Right from the initiation of Five Year Plans, the Government of India (GOI) has initiated number of programmes for the welfare and upliftment of the rural people and to improve the rural connectivity through massive Government investment in various schemes. In this perspective, the Pradhan Mantri Gram Sadak Yojana {PMGSY} is one of them. There was the need of the hour when the Government of India decided to launch the programme Pradhan Mantri Gram Sadak Yojana (PMGSY) on 25th December, 2000. PMGSY is a fully centrally sponsored scheme. The scheme was launched with the broad objective to provide all-weather road connectivity to unconnected habitations in a phased manner.

I. **Objectives and Methodology**

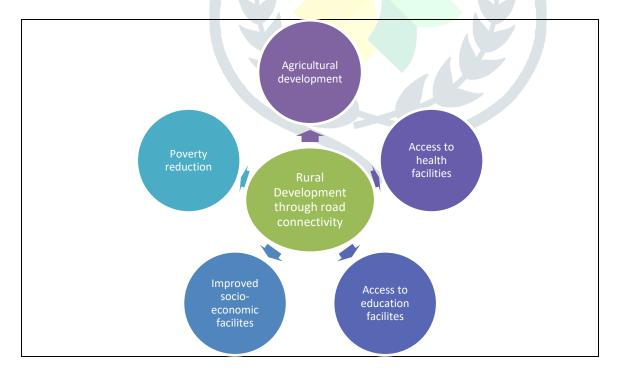
The focus of the present study is to analyse the impact of PMGSY on the socio-economic condition in rural areas. For analysing the impact of PMGSY before and after approach has been used. The conducting of this study in the selected area will help us to examine how far this scheme is helpful in improving the socio-economic conditions of the rural households in the study area.

The study is based on the primary data. The data has been collected through well-structured interview schedule. The study involves use of multi stage purposive random sampling. The respondent households have been selected by using random sampling method. Out of the 22 districts of Jammu and Kashmir, one district has been selected namely Udhampur. In the next stage two blocks Chenani & Ghordi has been selected randomly and in the next stage four villages from each block namely Tandar, Nagulta, Madha & Sangot from Chenani block and Nallan Ghouran, Nelli Nallan, Surnni & Mahni from Ghordi block have been selected purposely where road under PMGSY is constructed. In the last stage, from each village, 30 households have been selected for the study and the total size of sample for the study is 240.

Selection of sample:



II. **Analysis**



Source: Author's Observation based on literature

(a) Impact on Agriculture

After the construction of road under PMGSY agricultural output per kanal have been increased. Households mentioned that after road they can bring adequate amount of fertilizer, also use of tractor and ploughing machines become possible. Use of HYV seeds has been increased. Market connectivity has created various type of awareness among the rural households about the different types of benefits given by the government and also road connectivity make rural households aware about the price and quality of the input and output. Thus, use of tractor and ploughing machines has led to modernization of agriculture in the study area. Beneficiaries reported that cost of bringing agricultural inputs and selling output to the market have decreased considerably after the construction of road.



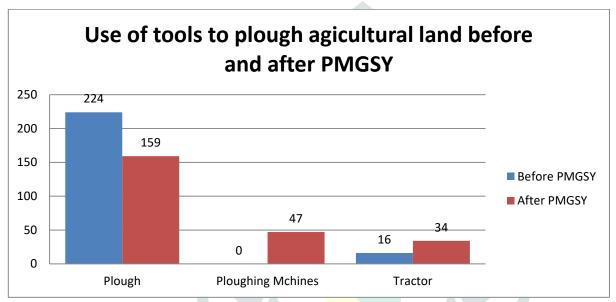
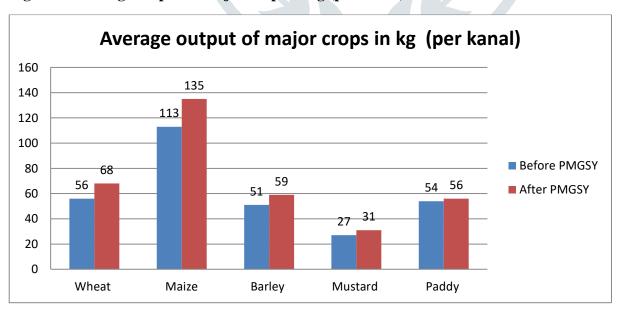


Figure 2: Average output of major crops in kg (per kanal) before and after PMGSY



From the above figure it can be observed that construction of road has increased the agricultural output of the major crops in the study area. Beneficiaries mentioned that increase in agricultural output became possible by using the adequate amount of fertilizer and HYV seeds after the construction of road. Construction of road has

created the awareness of various kinds among the rural household's such as quality of inputs, outputs and different schemes and benefits provided by the government. From the above figure t can also be seen that after the construction of road mode of ploughing agricultural land has changed. Many households after road have bought their own ploughing machines and also many households plough their land by using tractor.

(b) Impact of PMGSY on Heath sector

Rural road connects areas of weak health facility to the areas with improved health facility. Out of the selected sample 64 percent mentioned that after the construction of road under PMGSY in their habitation health conditions have improved. Improvement in the health services here means increase in accessibility to health centre, availability of ambulance or other kind of vehicle during emergency and also opening of new dispensaries/ health centre after road and regularity of staff employed in these health centres. One of the important benefits of the road is that road connectivity leads to increase in institutional deliveries which decrease the death rate of the pregnant women on the one hand and infant mortality rate on the other. The respondents of the study area mentioned that before road connectivity many households preferred delivery at home due to the lack of transport facility. People of the study area had no option other than to physically carry the pregnant women before the construction of road but road connectivity has changed the situation as shown in the below table there is an increase in number of institutional deliveries. New health centre/ dispensary have also been open in some villages after the construction of road. In village Nallan Ghouran new hospital have been built after the road connectivity. Beneficiaries of the study area also mentioned all this could not possible without road connectivity. Also regular attendance of the staff has been observed.

Table No.1: Number of institutional deliveries among the respondent households before and after PMGSY

Villages	Before PMGSY	After PMGSY	% Change after road
	(No of HHs)	(No of HHs)	
Nallan Ghouran	5	9	80
Nelli Nallan	9	14	56
Surnni	3	8	166
Mahni	12	15	25
Tandar	08	12	50
Nagulta	07	10	43
Madha	10	14	40
Sangot	06	11	83
Total	60	93	55

Source: field survey, June 2018

From the above table it is clear that after the construction of road number of institutional deliveries after the construction of road has increased. Before the construction of road in block Ghordi only 29 institutional deliveries happened among the total respondent which has increased to 46 after the road connectivity i.e. there

is 57 percent increase in institutional deliveries after road connectivity in block Ghordi. The highest percentage change experienced in village Surnni where there were only 3 institutional deliveries before the construction of road which has increased to 08 after the construction of road. Households have mentioned that they had to carry physically the person who got ill which took longer time to reach the hospital which was very risky and the probability of death was high. But, the construction of road under PMGSY has provided the facility of vehicle through which they can reach the hospital on time as a result probability of death has decreased. After road connectivity there is also the facility of ambulance in the habitations under study. Same is the case with block Chenani where total numbers of institutional deliveries before the construction of road were 31 which have increased to 47 after the construction of road. Thus, it becomes clear from the table that construction of road has improved the health conditions of the rural dwellers.

(c) Impact of PMGSY on improved Educational Access

Beneficiaries mentioned that education of the children without road connectivity was confined to village. After PMGSY numbers of students going to school outside the habitation have increased. Construction of road has multi-dimensional impact on the literacy level. Moreover, attendance of both teaching staff as well as students has been increase. Households mentioned that increased safety and easy transport has encouraged the parents to send their girl child to school. The road connectivity has led to gain in the awareness among the rural students regarding various higher education courses available throughout the state as well as the country. The number of students going to school with in habitation as well as outside the habitation has substantially increased due to the construction of roads under PMGSY. Thus, the construction of road has increased the attendance of the students on the one hand and on the other hand the well qualified and efficient teachers are attracted to the schools of the habitation due to the easier access and improved transport facilities. All this has positively influenced the attendance of teachers as well as the students in the far flung areas. Therefore, the attendance of students and teachers is remarkably increased throughout the year even during monsoon season.74% of the total households mentioned that education level has been improved after road. It has been observed that road connectivity led to decrease in average time taken to reach the school or colleges. Now the student can concentrate more on their studies without any tiredness.

Table.2 Number of students (among respondent households) going for higher education before and after PMGSY:

Villages	Before PMGSY	After PMGSY	Percentage change
Tandar	14	17	(21)
Nagulta	12	19	(58)
Madha	11	16	(45)
Sangot	9	13	(44)
Nallan Ghouran	7	8	(14)
Nelli Nallan	10	16	(60)

Surnni	12	14	(17)
Mahni	06	13	(116)
Total	81	116	(43)

Source: field survey, June 2018 [figures in bracket represents percentage]

From the above table it becomes clear that after the construction of road in the study area, number of students going for higher education outside the village have increased. As shown in the above, table total number of students going for higher education among the respondent households was 81 which has increased to 116 after road. Many parents mentioned that after the construction of road they feel very confident to send their children for education outside the villages especially girl child. Thus, construction of road has its positive impact on the education.

(d) Impact of PMGSY on Women Empowerment

Beneficiaries reported that the road connectivity under PMGSY had led to an increase in the number of girls going to schools in the various villages (like, Nallan Ghouran, Nelli Nallan, Tandar, and Nagulta & Madha etc.) in the study area. Most parents mentioned that they are now more confident about sending their daughters to schools/colleges. Women of the rural areas have to manage all the activities related with the cooking and they have to collect the firewood from the nearby forest. But without road women have to cover whole distance by feet and to carry fire wood physically which was very difficult for them to manage. Out of the total 8 selected villages, 5 villages namely Tandar, Sangot, Nallan Ghouran, Surnni & Mahni were found roadwhere constructed under PMGSY also covered the root that women used to travel before the construction of the road. Households opined that numbers of visits to collect the firewood from the nearby forests have been decreased after the construction of road. Majority of the respondents mentioned that they have bought LPG connection after road at their own basis and some households were also covered under the UJJWALA scheme. Use of LPG improved the health of women. Women of the study area have engaged in number of employment opportunities which resulted into increase in their income or generation of new income. Women of the study area earn their livelihood as they have opened beauty parlor and other kinds of small business. Thus, construction of road has increased employment opportunities for the women on the one hand and on the other hand it increased income which makes them self-independent. Women of the study area mentioned that number of visits outside the villages have increased after PMGSY road.

(e) Impact on Socio-Economic facilities

Table 5: Impact of the PMGSY road on different attributes of socio-economic development in Udhampur district.

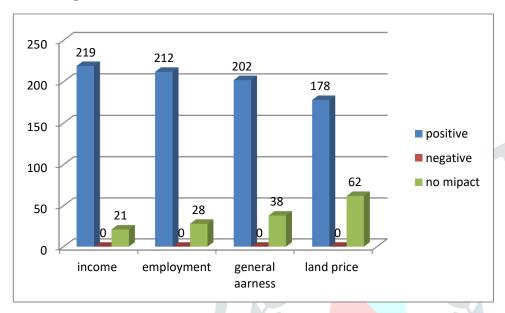
Impact on sectors	Positive		Negative		No Impact	
	No. Of % of respondent		No. Of % of respondent		No. Of respondent	% of respondent
Change in Income	219	91%	0	0	21	9%

Employment	212	88%	0	0	28	12%
Generation						
General	202	84	0	0	38	16%
Awareness						
Land Price	178	74	0	0	62	26%

Source: field survey, June 2018

Figure 3:.

Figure 3. Impact of PMGSY on different attributes of socio-economic development.



Source: field survey, June 2018

From the above table and diagram it can be observed that construction of road has its positive impact on the income and employment opportunities. Also construction of road has increased the land prices. General awareness after road connectivity has increased. General awareness here means awareness regarding various kinds of government initiatives and updated information about market trends.

(f) Impact on Basic Facilities Including Housing

Houses which are made with high quality material including the floor, roof, and exterior walls are called pucca houses. Houses made from mud, and other low quality materials are called Kaccha house (data.gov.in). Construction of roads had made significant impact on the housing condition of the habitants of the study area. After the construction road number of Pacca and semi-Pacca houses has increased considerably. Although housing condition not depends only on the road connectivity but easy access to housing material provide incentives to the several households to change their housing conditions from Kaccha to semi-Pacca or Pacca and from semi-Pacca to Pacca. Before the construction of road in the study area, habitants had to live in Kaccha houses without any option even the households who were having higher level of income. After the construction of road people are striving for semi-Pacca and Pacca house rather than to live in Kaccha house. Construction of road has significant impact on the housing conditions of the habitants of the study area.

Table. 3. Type of house before and after PMGSY

Blocks	Kaccha		Semi-Pacca		Pacca	
	Number of households		Number	of	Number	of
			households		households	
	Before road After		Before	After	Before	After
		road	road	road	road	road
Chenani	70	43	42	61	8	16
Ghordi	86	54	31	57	3	9
Grand	156	97	73	118	11	25
total						

Source: field survey, June 2018

Construction of road under PMGSY has also its impact on the housing condition of the rural habitant. As it can be seen from the above table that majority of the households were having Kacha house before the construction of road. But after the construction of road majority of the households have changed their housing condition from Kaccha to either semi-Pacca or Pacca. Beneficiaries responded that this could become possible just because of the road connectivity. Without road connectivity it was not possible to carry housing material. Thus, construction of road has improved the housing condition among the respondent in the study area.

(g) Conclusion and Suggestions

Rural road constructed under PMGSY played an important role in the upliftment of socio-economic condition of the rural habitant. Agricultural output per kanal after PMGSY have been increased. Modernization of agriculture becomes possible after road connectivity in the study area. Housing condition has also improved after PMGSY. Majority of the houses after road changed to semi-pucca after road. Also numbers of Pucca houses have increased. More employment opportunities have been generated as a result income level of the rural dwellers has increased and poverty level have decreased up to some extent. Health conditions have also been improved after PMGSY. Many households have bought LPG connections which contribute in improving the health of the rural women. Rural road connectivity is the basic infrastructure requirement and plays a major role in the upliftment of socio-economic condition of the rural community. After the construction of the roads women have started small business like beauty parlour etc. Another role that PMGSY roads have played is that the women are now travelling outside the habitation for employment and for other purpose also.

Suggestions: During the field survey it has been found that among all the selected villages there was no connectivity between the villages have been found. Construction of road under PMGSY did not provide connectivity to the nearby villages even if, it requires less than two or four kilometre distance to provide linkage to the nearby villages. This is one of the major shortcomings in the implementation of the PMGSY Projects. Therefore it can be suggested that in the next phase of PMGSY government should take this matter into consideration and bridge the gap between villages by providing connectivity between the villages.

References:

- 1. Ahmed, R. and Hossain, M. (1990), "Developmental Impact of Rural Infrastructure in Bangladesh", International Food Policy Research Institute, Research Report No.83: Washington, D.C, U.S.A.
- 2. Ahmed, R. (1996), "A Critique of the World Development Report, 1994: Infrastructure for Development" in UNCTAD, International Monetary and Financial Issues for the 1990s, 7: New York and Geneva.
- 3. Barwell (1996), "Transport and the Village," World Bank Discussion Paper No.344, Africa Region Series, 23-33: World Bank, Washington, D.C.
- 4. Corral, L., and Reardon, T, "Rural nonfarm incomes in Nicaragua", World Development, 29 (3), 427-442, 2001
- 5. Gahlot, V. (2011), "Impact of PMGSY on Social Inclusion and Service Delivery", [Online: Web] Accessed 8Aug.2017.
- 6. Jain, P. (2014), "Pradhan Mantri Gram Sadak Yojana: A path to Inclusive Growth of MP", *International Journal of Commerce, 3 (2)*
- 7. Kumar, S. (2011), "Development of Rural Road Infrastructure in India", Pacific Business Review *International*, 7(11).
- 8. Sahadev, B. (2011), "Overview of Rural Transport Infrastructure in Nepal", Eurasia Journal of Earth Science & Civil Engineering, 1(I).
- 9. www.pmgsy.nic.in
- 10. www.omms.nic.in
- 11. www.data.gov.in