

## Government Initiatives: Means To Achieve Sustainable Goals in Rural Areas

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### Abstract

Rural infrastructure is the fundamental for the socio-economic development of a country. Well-developed roads provide several socio-economic welfares to the people. Roads are the mainstay for the agro based economy, increase the agricultural productivity. Roads provide access to the people in terms of reach. About 40% of village people of this nation are not linked by all season -weather roads. India is having road linkage of 56.03 lakh kms, which is the second biggest in the world. While the road transport is a vigorous vein to India's economy, the pulse of fabrication has not kept up with the exponential rise in motorized vehicles. As roads contribute 4.7% towards India's GDP, compared to railways that contribute around 1%. Agreeing to one of the study, it is projected that India will require to invest 41.7 trillion for road developments to upkeep the rising GDP growth. The present research intends to know whether the government Initiative through Pradhan Mantri Gram Sadak Yojna (PMGSY) has strengthened rural economy and to what extent the people have derived benefits from such Scheme. The primary data was collected consists of 400 samples for which different statistical tools were used like Factor Analysis, Regression Analysis, Correlation and ANOVA. During the analysis it was observed that the scheme has benefitted people and contributed towards the economic development in number of ways. Better road connectivity have made the life of people ease in terms of market connectivity, education access to towns and access to jobs in urban areas. Further, the respondents have been facing a challenge of transport facility which is not available with ease and least impact has been found on agriculture. Further, suggestions have been put forward to make the scheme fruitful for the people and to eradicate the problems related to the scheme by committing to responsibility and accountability.

**Keywords:** Government; Initiatives; Development; Standard of Living, Implementation, Awareness

### Introduction

In India 68.84 % population lives in 649481 villages (census, 2011), these rural areas have greater incidence of poverty. The people who live in rural areas are suffering more than the urban ones and live a life of hardship. In reality India lives in the in which people are land less, homeless, and agricultural labourers. The development of the nation cannot be achieved unless we develop the rural areas i.e. villages. The real fruits of democracy cannot be enjoyed by the people until they are evacuated from the various sufferings. So far only small junk of people have been benefited by the policies and programmes formulated by the centre and state governments.

To overcome the problems of road development PMGSY was launched in year 2000 on 25<sup>th</sup> December. It is a 100% CSS which wishes to provide all weather road connectivity to over 1.60 lakh eligible unconnected habitations; is executed by states and monitored by MoRD through National Rural Roads Development Agency (NRRDA). India with a network of high roads in which national highways constitute 79.116km (only 1.7%) of total road network, but carries 40% of the road traffic, which reflects that local roads are underutilised. Since 1980 only 47,795 km national highways have been added and during 9<sup>th</sup>5 year plan 23184 more were added (Swanti)<sup>[1]</sup>. Whereas, India is the second largest in the road network, the quality of the roads is found pathetic when compared to other countries. Four lane roads in

India are hardly found. PMGSY aims to link more rural link roads to ensure full market connectivity. Its wish is to offer all season weather connectivity to all habitations having a population of:

- 500 persons or more in plain areas
- 250 or more in hill , tribal and desert areas
- 60LWE affected/ Integrated action plan IAP districts

PMGSY is nothing but simply new connectivity. The allocation takes place state wise; district wise like the 80% of the state's allocation will be distributed among the districts on the source of road length for unconnected habitations. Similarly the district wise allocation of funds would also be conveyed to the Ministry.

In the State of Madhya Pradesh, due to the peculiar complications and different languages, cultures the tribal are mainly cut off from the main development. When we present picture as perHDI index it is at 0.375 which is under the nationwide average. In case of hunger Index reported by Indian State Hunger Index 2008, prepared by International Food Policy Research institute, the malnutrition situation is alarming. Madhya Pradesh is one of the populous state in the country with vast network of rural roads. It has been a big challenge for maintaining these roads as many problems are associated with it like delays and inefficiencies in the maintenance process. About 70% population in the state depend on agriculture for which better roads are prerequisite to derive benefits from the agricultural activities. Keeping in view the above facts this study has been carried out in the state of Madhya Pradesh.

### **Objectives of the study**

The foremost objective of the study is to analyse the PMGSY and suggests the recommendations for the further improvement of the schemes. The specific objectives of the study are as under.

- i. To assess the extent of benefit derived from PMGSY in the State.
- ii. To examine the impact of PMGSY on upliftment of rural people in rural areas.
- iii. To explore the impediments in the implementation of PMGSY.
- iv. To determine regional imbalances if any created by PMGSY.
- v. To make suggestions for strengthening implementation strategies of PMGSY.

### **Hypothesis of the Study**

- i. It is hypothesized that PMGSY have a great impact on socio-economic life of rural people in terms of Rural connectivity, Agricultural production and Standard of living.
- ii. It is being supposed that some people have least awareness about rural development scheme.

### **Literature Review**

NRDA (2004) study revealed that impact of PMGSY on various dimensions. This study observed that the scheme had an abundant bearing on the education as students have now easy access to educational institutions and has open the doors for many. Enrolment of children has increased and more schools are being built in the state. The study also revealed that in many states like Assam, MP, TN and West Bengal more girls have been enrolled in the schools. The noteworthy impact is that teachers are regular to schools and students are now getting even higher education with the support of their parents. Officials are now keener towards the implementation of the scheme which may produce even good results in the future also. More and more participation on part of villagers, and other functionaries have been reported. Among the states more impact has been felt in Mizoram and Rajasthan where people have benefitted a lot from the scheme.<sup>[2]</sup>Yoginder (2005) "Panchayat Raj and planning in India". He examined the rural roads and their

implementation in three areas namely in Ahmedabad, Sugar factory area in western India and Aurangabad district. This article is divided into 3 parts. The first part mainly emphasized on decentralised development efforts and reorganisations of the system. The second part stresses on the road networks development in watershed development projects. The third part deals with the conclusions of the institute development. This work was done by resorting to secondary information. He concluded the study by emphasising on proper commitment from political members, bureaucracy and people themselves and good leadership is the prerequisite in developing rural areas. He also suggested that self-government should be made an effective instrument.<sup>[3]</sup> **PEO (2005)** this study has revealed that the PMGSY has paved way for many habitations in terms of connectivity. The scheme is being justified in terms of work done under it and benefits drawn. The states have appointed nodal agencies for the implementation and execution of the scheme which is good. Almost all the states are adhered to the guidelines framed for the scheme. It has increased the income for the villagers and has created many employment opportunities. In some states like Himachal Pradesh there has not been great impact as due to hilly area.<sup>[4]</sup> **CAG (2006)** has recommended that it is very important to have whole coverage of the country and easily availability of the funds before implementing the schemes like PMGSY. The ministers should be cooperatively involved in the scheme. The entire govt. officials should be firm in executing the scheme in order to get the anticipated outcomes. The Ministry in coordination with the state governments must ensure that scheme is being executed properly and funds are being issued and utilised properly. They should also ensure proper monitoring mechanism. The states should be permitted to take appropriate actions in case work is not being executed in accordance with. Independent quality assurance should be ensured and framed. If possible laboratory testing materials should be adopted.<sup>[5]</sup> **Vaidya (2006)** attempted to know whether the PMGSY Scheme is being implemented properly or not and found that the quality parameters are the main issue in its implementation. There is no proper mechanism before and after its implementation. There is a lack of attention from contractors and PIUs. She suggested that it is a tremendous scheme which can do great but quality management is an issue, so should develop quality management. She further provided that all the individuals mainly officials must be held accountable in its proper implementation and quality inspection team should be constituted.<sup>[6]</sup> **Government of Sikkim (2007)** In Sikkim Govt. had identified the areas which are prone to landslides, flooding areas, bridges which have caused a greater problem in the areas and these things are responsible for land degradation, but unfortunately no comprehensive policy has been constituted in the border areas. The state government has never taken any initiative and has never followed the guidelines being imposed on the government. Implementation on part of centre and state both have shown the laziness approach in implementation. There is also a problem in fund issuance as no balanced funds are being approved for the betterment. Monitoring is also a concern and no one bothers about this land degradation. It was suggested that government should monitor the issue and took an proactive approach and unauthorised constructions should be demolished. It was further suggested that that proper mechanism should be adopted and awareness should be circulated.<sup>[7]</sup> **Vanka (2008)** in his study found that there has been a circulation of funds among the ministers which are meant for the development purpose. Ministers are transferring the funds in to their own accounts rather than for development purpose. Fund allocation works by carrying the left over funds from MP Lok Sabha to new lok Sabha MP. Similarly unspent funds are carried forward from outgoing MPs to new nominated MPs. Since 1993 government has allocated around 16375 crore funds for the scheme. Out of these funds 605 has been spent on roads, bridges and other public utilities.<sup>[8]</sup>

**Althaf (2010)** attempted to find out the benefits PMGSY has given to villagers in which he concluded that it has saved a much amount of time in case of travel like 152 minutes per habitation to travel to district headquarter, 116 minutes from home to blocks, 110 minutes to market access, 92 minutes to fertilizer shops, 91 minutes to hospitals and 60 minutes to bus stops. All this reflects that it has minimised the distance for the villagers to have access to basic facilities. Not only this, people's income had also increased about 93% by access to various districts. New shops have been installed due to the construction of roads. Due to the construction of roads people have now easy access to other cities where they can exploit the employment opportunities. Employment days have increased for both employees and

labourers. Further in 14 villages number of workers has increased.<sup>[9]</sup> **Pandey (2011)** conducted a survey in which he observed that funds approved by the govt. for various central schemes don't reach to the targeted beneficiaries. It is same as Rajiv Gandhi has said that it is true that only 15 paise reaches the poor out of every one rupee being spent by the govt. the reason behind is that people are not much aware about the scheme and so don't participate which leads to mutualisation of the resources. When people are the participants, they don't expect any good results from the others. All these things lead un- implementation of the schemes. He has stressed on the communication for the development i.e. for social welfare, public facilities and economic development. He suggested that proper and comprehensive strategy should be adopted to make it the effective one.<sup>[10]</sup> **Walsh (1988)** studied on Road to Effective Project Management in which he explained that the skills required for good project managers. This study was made across the country in engineering organisations. To make project managers effective developmental programmes can be installed and programmes like job enrichment can be used.<sup>[11]</sup> **Kumar (2012)** emphasised the Rural Road Protective Maintenance with Micro-surfacing, in this paper he described that the construction process of wearing course of pavement through Micro-surfacing has minimised the cost direct and indirect as well, experience of Micro-surfacing at IIT-Guwahati approaching road.<sup>[12]</sup> **Jain(2013)** "PMGSY- A path to Inclusive Growth of MP", carried out the study in the state of Madhya Pradesh in which she observed that PMGSY has a significant impact on the various dimensions like agriculture, education, health services and inspection by the officials. She said that employment opportunities have increased, more self-employment have emerged, education facilities have been improved, improvement in inspection by the govt. officials to examine the status and implementation of the schemes. It has also made an impact on the marriages where parents are marrying their daughters even in the areas which are far distant. Newer roads created under the PMGSY have made the life of people easy in terms of bank visits, hospital visits and to the market. Apart from this there are some problems in the scheme which government should try to eradicate as far as possible.<sup>[13]</sup> **Vargas (2014)** explained about Resources Management Practices in the Construction Industry. In his study he made to know material management techniques in capital projects industry. He revealed that there has been enhancement in systemic approach to materials management.<sup>[14]</sup> **Samanta (2015)** concluded with his study that the rural roads are the means of development and are the key instruments for the nation's wealth. It is the road which connects the communities to the markets, agricultural fields. It is due the development of the rural roads that have reduced the transport costs and increased marketing. This has resulted in the increase in the production of crops, crop diversification and profitability. But the main problem with the rural roads is the poor quality that needs to be addressed. These roads should also be linked to hilly areas where people can be benefitted to a great extent.<sup>[15]</sup> **CAG (2016)** "CAG tells rural development ministry to review systemic faults in PMGSY", suggested the rural development ministry to assess the defects in the scheme PMGSY. CAG in its report revealed that the implementation procedure is not being adhered with conformity that requires the social audit. In such a study it was observed that eligible habitations were left out and ineligible were covered under the scheme. It has also disclosed that there is much inefficiency in contract management, non- recovery of liquidated damages.<sup>[16]</sup> **CAG (2016)** "11 states abandon rural road projects under PMGSY for want of land", in its report said in the parliament that there has been a loss of 280 crores due to the non-availability of land. Eleven states have abandoned to construct 372 roads in the rural areas under the scheme. Apart from this, it was also observed that there is a problem with programme implementation and proper management of the funds. The most important thing to mention down here is that 538 works were dropped due to unavailability of land and 1550 works were dropped because of deficient planning, remote location, Maoist problem and no response to tenders. In response to the report nothing was done to implement it properly.<sup>[17]</sup>

**Research Gap:** The studies conducted so far depicts both haves and haven't about the scheme and the results varied according to different regions. These studies have taken into consideration various dimensions like employment generation, implementation mechanism, flaws in schemes, participation rate, beneficiaries registered, awareness level, funds offered, monitoring mechanism etc. Least work has been carried out in Madhya Pradesh as far as the evaluation of PMGSY is considered. Previous studies were

done on the individual schemes. In this paper I have taken PMGSY scheme for the study purpose along with various parameters on which impact will be justified.

### **Research Methodology**

Being an important element in the entire research, it acts as a road map in carrying out the research from the initials to its end and how to start with the hypothesis till its final analysis. This research is mainly descriptive and exploratory in nature.

### **Sampling Design**

In carrying out the research smoothly; time and energy was kept in view, for that reason Multi Stage Sampling was adopted based on random sampling in collecting primary data. Firstly, the whole state was divided in to 10 divisions namely: Bhopal Division, Chambal Division, Gwalior Division, Indore Division, Jabalpur Division, Narmapuram Division, Rewa division, Sagar Division, Shahdol Division and Ujjain Division based on geographical locations. From each division one district was selected. These districts were chosen keeping in view their backwardness. Following districts were chosen; Bhopal, Bhind, Gwalior, Barwani, Mandla, Hoshnagabad, Rewa, Sagar, Shahdol and Ujjain. Further, a particular block was selected from each selected district on the basis of backwardness respectively Phanda, Bhind, Gwalior, Barwani, Niwas, Seoni Malwa, Sirmour, Sagar, Beohari and Badnagar. Finally 4 villages from each block were selected. The sample was distributed in each village proportionately i.e.10.

A sample of 450 respondents has been taken for the research purpose. Primary Information was obtained from sampled respondents of rural households located in different blocks. Self-administrated questionnaires were filled with the willingness of participants in the study, in the respective villages and respondents were assured of the confidentiality of their personal information.

### **Data Collection**

The study is descriptive in nature and the data is collected from primary data with the help of questionnaire. The data is collected keeping in view the impact PMGSY. The primary data has been obtained with the help of questionnaire which has been subjected to Factor Analysis, Chi Square and Regression Analysis to examine impact of PMGSY on life of people. The software SPSS has been utilised for analysis purpose.

### **PMGSY:**

Primary data is obtained to see impact on the several dimensions like: **Agriculture, Education and Infrastructure**. Scheme Implementation has been taken as an independent factor.

### **Scope of the study**

For the descriptive analysis the primary data has been collected from the 10 blocks through questionnaire to analyse the impact. 400 samples were collected for the study from the 40 villages.

### **Sampling Technique**

Sampling technique used in the present research work is Multi Stage simple Random Sampling based on the accessibility and proximity of the samples.

### **Tools and Techniques**

The data collected from the different sources has been classified and tabulated for the convenience purpose in compliance with analysis requirement. For primary data, questionnaire was prepared to collect information from the respondents.

**Descriptive Statistics:** It is an important tool in the research as it ensures that data has been presented in objective and meaningful manner. It allows simple interpretation of the data. It reflects whole information about the variables which we use in analysis.

1. **Averages:** We also call them statistical averages. The mostly used and unique average is the arithmetic mean which is defined as the value which we get by dividing the total of values of items in a given series by the total number of items.
2. **Chi Square Test:** Chi Square test is an important tool and mostly used in the research as it doesn't look for rigid assumptions about the population. This is mainly applied as a non-parametric test where we require only degrees of freedom. This is also understood as test of goodness of fit and test of independence. As a test of goodness it helps us to know how the observed suits the assumed data. As a test of significance it ensures whether 2 attributes are linked or not. In chi square test we group the expected and actual in the same manner.
3. **Factor Analysis:** This analysis is used to reduce the large variables in fewer factors and helps in extracting maximum common variance from among all variables. After that they are put into a common score. It depicts that linear relationship should prevail and no multicollinearity issue should be there. It takes relevant variables into analysis. It describes the variability among the variables
4. **Correlation Analysis:** This analysis is being used to determine level of linkage between the variables and the value may range from -1 to +1 which represents negative and positive correlation between the variables and 0 represents no relation.
5. **Regression Analysis:** It is an important statistical tool for finding the relationship among the variables. It includes many techniques for modelling and analysing several variables, when the focus is on the relationship between a dependent variable and the independent variables (predictors). It helps to understand how the dependent variable (criterion) changes when the change occurs in independent variable

### **Analysis of PMGSY**

This part comprise the analysis part of the study. This study is descriptive in nature in which primary data was collected from the respondents in the form of questionnaire. 400 samples were taken for the study purpose and data collected through the questionnaire was exposed to various statistical tools like factor Analysis, Regression, Chi-square, and ANOVA etc. in order to verify or contradict the hypothesis. Software Package for Social Science(SPSS) tool has been utilised to carry out the analysis. The various tests were applied to check the reliability and adequacy of the data and impact significance like Cronbach Alpha, KMO test, Bartlett test etc. The data has been presented in a comprehensive and easy way.

The foremost step in the survey was to collect the general information about the respondents i.e. Demographic Profile. The various parameters used are elaborated as under:

#### **Demographic Profile of the respondents:**

Demographic profile of the people was taken for conducting the survey smoothly. . The various characteristics which were followed are age, occupation, gender, family members, education and villages. The information about the said parameters is presented in each separate table concisely.

Table 1

*Age Profile of respondents*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than 20 years	73	18.2	18.2	18.2
20-40	157	39.2	39.2	57.5
40-60	113	28.2	28.2	85.8
above 60 years	57	14.2	14.2	100.0
Total	400	100.0	100.0	

The age profile of the respondents was distributed into different age groups i.e. below 20 years, 20-40, 40-60 and above 60. It was found that 73 respondents were falling below the age group of 20, 157 in the age group of 20-40, 113 respondents in the age group of 40-60 and remaining 57 above 60 years. The respective percentage is also reflected in the table 2.

Table 2

*Education profile of the respondents*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid uneducated	243	60.8	60.8	60.8
higher secondary	125	31.2	31.2	92.0
Graduate	20	5.0	5.0	97.0
post Graduate	12	3.0	3.0	100.0
Total	400	100.0	100.0	

The table 2 gives bio data about the education profile of respondents. The education criteria were distributed into 4 groups namely uneducated, higher secondary pass outs, graduate and post graduate. It was found that 60.8% i.e. 243 respondents were illiterate, 31.2% were those who had gone to higher secondary's, 20 respondents i.e. 5% were graduates and remaining 12 i.e. 3% were post graduates.

Table 3

*No. of members in a family*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	9	2.2	2.2	2.2
2	54	13.5	13.5	15.8
3	87	21.8	21.8	37.5
4	149	37.2	37.2	74.8
above 4	101	25.2	25.2	100.0
Total	400	100.0	100.0	

The table 3 reveals information about family membership. An attempt was made to know number of members in each family. It was found that 9 respondents were those who were living alone, 54 respondents with 2 family members, 87 with 3 family members, 149 with 4 members and 101 respondents with above 4 family members. Most of families were of 4 members.

**Table 4**

*Gender profile of the respondents*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	268	67.0	67.0	67.0
Female	132	33.0	33.0	100.0
Total	400	100.0	100.0	

Gender profile was taken in to account which is reflected in the table 1. In case of gender profile 268 were males which constitute 67% of total respondents and remaining 33% i.e. 132 were females.

**Table 5**

*Occupation profile of the respondents*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Farmer	218	54.5	54.5	54.5
Student	131	32.8	32.8	87.2
government Employee	51	12.8	12.8	100.0
Total	400	100.0	100.0	

The table 5 offers information about the occupation summary of the respondents. An effort was made to know occupation profile of the respondents, it was established that most of the respondents were farmers i.e. 218 (54.5%), followed by the students 131 (32.8) and finally government employees were of 12.8%.

**PMGSY: Description of Analysis:** This part deals with the examination of PMGSY scheme to know whether there is a significant impact of PMGSY. In this scheme 4 factors were extracted namely **Scheme Implementation, Infrastructure, Agriculture and life Standard**. Then relationship was established among the said factors. It was found that PMGSY has a substantial influence on the on the life standard but showed no impact on the infrastructure and the agriculture. To observe its sway on the rural life it was also subjected to the tests mentioned above. Some problems which were referred by the respondents were as: less transport facility being available and infrastructure facilities have not improved to a great extent.

**Descriptive Analysis:** It describes the data in terms of its features. This forms the base for every quantitative analysis. It helps in measuring the differences. This information is presented in the table 6



**Table 6**  
*Descriptive Statistics of PMGSY*

Questions	N	Minimum	Maximum	Mean	Std. Deviation
Q1. PMGSY is a scheme to construct roads to connect villages with cities/towns	400	1	5	3.64	1.311
Q2. Your village is also connected to city/towns by Pakka road constructed under PMGSY Scheme	400	1	5	3.83	1.294
Q3. Roads are being constructed and inspected with in stipulated time.	400	1	5	3.92	1.189
Q4. The scheme make it easy for villagers to reach cities/towns	400	1	5	3.98	1.226
Q5. The roads are constructed to connect schools, hospitals, etc. with villages	400	1	5	3.88	1.262
Q6. PMGSY make it possible for the people to have access in new job opportunities	400	1	5	3.89	1.260
Q7. PMGSY has brought markets close to the villagers through connectivity.	400	1	5	3.92	1.235
Q8. Road connectivity brought industrial units to the village vicinities	400	1	5	3.99	1.192
Q9. Better road connectivity has positively helped others constructions of the villages (houses, toilets, bridges, schools, hospitals etc.)	400	1	5	3.54	1.348
Q10. PMGSY increases earnings of farmers by quick supply of agricultural products to desirable markets.	400	1	5	3.73	1.279
Q11. Better road connectivity increases the interest of agricultural research and government in agricultural productivity of villages	400	1	5	3.85	1.246
Q12. PMGYS reduces Transport cost and overhead costs of agricultural produce at village level.	400	1	5	3.84	1.250
Valid N (listwise)	400				

**Regression:** It is a tool in the statistics that helps in establishing relationship between the variables. It tries to explain the influence of independent variable on the dependent variable. It measures the association between the variables. It explains to what extent dependent variable vary with the independent. It shows cause and effect relation.

**Table 7**  
*Descriptive Statistics*

	Mean	Std. Deviation	N
Scheme Implementation	3.2825	1.05273	400
Life Standard	3.8900	1.07378	400
Infrastructure	3.9467	1.11467	400
Agriculture	3.8583	.93685	400

This statistics is used to summarise the numeric variables or to compare several numeric variables side by side. Here in the table the infrastructure element has the highest standard deviation. And highest average score of the 4 sections. The lowest average score element is scheme implementation i.e. 3.2825 and the minimum standard deviation is related to agriculture.

**Table 8**  
*Correlations*

		Scheme Implementation	LifeStandard	Infrastructure	Agriculture
Pearson Correlation	Scheme Implementation	1.000	.144	.018	-.026
	LifeStandard	.144	1.000	.018	.231
	Infrastructure	.018	.193	1.000	.334
	Agriculture	-.026	.231	.334	1.000
Sig. (1-tailed)	Scheme Implementation	--	.002	.357	.304
	LifeStandard	.002	--	.000	.000
	Infrastructure	.357	.000	---	.000
	Agriculture	.304	.000	.000	--
N	Scheme Implementation	400	400	400	400
	LifeStandard	400	400	400	400
	Infrastructure	400	400	400	400
	Agriculture	400	400	400	400

The above table reveals the correlation among the variables. If we look at the table we could see the positive correlation among all variables except the agriculture. It means that there is negative relationship between the scheme and the agriculture. 1 tailed test shows the significance of the data positively.

**Table 9**  
*Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.157 <sup>a</sup>	.025	.017	1.04364	.025	3.327	3	396	.020	1.720

a. Dependable Agriculture, LifeStandard, Infrastructure

**Table 9**  
*Model Summary<sup>b</sup>*

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b. Independent Variable: Scheme Implementation

Regression typically comprises the 4 tables, but here we will display the summary of tables used for the analysis. The above summary table gives the information about the regression lines capability to explain for the total variation in the dependent variable. It explains the limited proportion of the dependent variables total variation. The dependent variables total variation is measured by its variance. If the line is not horizontal (i.e. b coefficient is different from 0), then total variance is accounted for by the regression line. Variance here is measured as the sum of the squared differences between the respondents predicted dependent variable values and overall mean divided by the number of respondents. On dividing variance can beand we arrive at the proportion of the total variance that is accounted for by the regression equation. This share varies between 0&1 and is represented by R<sup>2</sup>. Here in this table it means that 25 % of the total variance has been explained. The R value in the table represents the correlation which is 0.157, which indicates the high degree of association. Information is also plotted on the graph.

**Regression Coefficient:** Coefficient shows the rate of change in the dependent variable as a result of changes in the independent variable. This is a slope of a linear regression line. It gives important information to foresee benefits from the Scheme i.e. awareness and determines whethe

**Table 10**  
*Coefficients<sup>a</sup>*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Dependent)	2.929	.283		10.342	.000		
LifeStandard	.154	.050	.157	3.063	.002	.932	1.073
Infrastructure	.009	.050	.010	.182	.855	.874	1.144
Agriculture	-.073	.060	-.065	-1.219	.224	.860	1.163

a. Independent Variable: Scheme Implementation

Coefficient shows the rate of change in the dependent variable as a result of changes in the independent variable. This is a slope of a linear regression line. It gives important information to foresee benefits from the Scheme i.e. awareness and determines whether awareness adds statistically or not. The above table reveals that there is a significant relationship between Scheme Implementation and Life Standard but it provides that there is a negative impact of PMGSY on Infrastructure and Agriculture. The t value is more than 1.96 and the Beta value is also positive. People could derive the positive benefits from the scheme if implemented properly and effectively. We have also standard error which is standard deviation of the sampling distribution of the estimate of the coefficient and t value is the value of the t- statistic for checking whether the equivalent regression coefficient is different from 0. The Beta is coefficient that can be obtained when we normalize all of the variables in the regression. After than we run the regression and before that we put variables on the scale to check which one has more effect. It can be noted that higher betas are linked with the larger t- values and lower p- values. T and sig. are the statistics which are used in

examining whether a given coefficient is significantly different from zero using an alpha of 0.05. Tolerance and VIF (Variance Inflation factor) assess multicollinearity issues. Small tolerance value indicates variables are in perfect linear combination of independent variables. Its value should not be < 0.1. VIF measures issue among the variables. Its value is 1/Tolerance. It is always 1 or > 1. If its value exceeds 10 means collinearity. So we can say value lies in b/w 1 – 10.

**ANOVA:** Presents how well the regression equation fits the data (i.e. predicts the dependent variable). It specifies the regression model statistically and significantly predicts the outcome variable (i.e. it is a good fit for the data). Information is presented in the table 11.

**Table 11**  
*ANOVA<sup>b</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.870	3	3.623	3.327	.020 <sup>a</sup>
	Residual	431.318	396	1.089		
	Total	442.189	399			

a. (Dependent), Agriculture, LifeStandard, Infrastructure

b. Independent Variable: Awareness

ANOVA presents how well the regression equation fits the data (i.e. predicts the dependent variable). Here the sig. value is 0.000 which is less than 0.05 and specifies the regression model statistically and significantly predicts the outcome variable (i.e. it is a good fit for the data). In regression, Residual and Total Variance is segregated into the variance that could be explained by the independent variables (Model) and the variance that is not described by the independent variables (Error). In case of total variance which is segregated into the variance is clarified by the independent variables (Regression) and variance which is not clarified by the independent variables (Residual). Total variance has N-1 degrees of freedom. F value is the statistic Mean square (Regression) divided by Mean square (Residual). P value is matched with some alpha level in testing the null hypothesis means model coefficients are 0.

**Collinearity:** The term collinearity means that the two variables are linear blends to each other. The multicollinearity refers that when we have more than two variables. The multicollinearity should not increase as it leads to fluctuation in the standard error. It means there no variance between the variables. The data is presented in table 12.

**Table 12**  
*Collinearity Diagnostics<sup>a</sup>*

Mode	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Dependent)	LifeStandard	Infrastructure	Agriculture
1		3.874	1.000	.00	.00	.00	.00
2		.059	8.112	.00	.63	.45	.02
3		.042	9.595	.03	.18	.49	.60
4		.025	12.461	.97	.18	.06	.38

a. Independent Variable: Scheme Implementation

A collinearity issue occurs when a component associated with a high condition index contributes strongly to the variance of two or more variables. The uppermost condition number in this table is 12.461 (condition index 30 to 100 indicates moderate to strong collinearity).

**Validation of Results: Findings and Suggestions**

This section endeavours to assess the results drawn from the proposed hypothesis analysed with the help of statistical tools; especially regression analysis. It was to found the socio- economic impact of PMGSY on rural development. For that purpose development indicators were used like employment, infrastructure, standard of living etc. to know its impact. Relation was established between the indicators and PMGSY. The results have been presented below for accepting or rejecting proposing hypothesis.

**H1: It is hypothesized that PMGSY has a great impact on socio-economic life of rural people ( rural connectivity, agriculture, education and standard of living.**

H1a: PMGSY has positive and significant impact on rural connectivity.

H1b: PMGSY has positive and significant impact on standard of living.

**Table 13**  
*Association between PMGSY and Infrastructure*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-.034	.308		-.112	.911		
cssdevelopment	1.377	.110	.533	12.555	.000	1.000	1.000

a. Dependent Variable: pmgsy infrastructure

**Table 14**  
*Association between PMGSY and Life Standard*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1.380	.415		-3.328	.001		
cssdevelopment	1.892	.147	.541	12.836	.000	1.000	1.000

a. Dependent Variable: pmgsy lifestandard

**Table 15**  
*Results to validate the proposed hypothesis (H1)*

Relation	B-value	t-value	p-value	Decision
PMGSY->Infrastructure	1.377	12.55	.000	Accepted
PMGSY->Life Standard	1.892	12.836	.000	Accepted
<b>Hence H1 accepted</b>				

Table 15 portrays the results of various indicators and their association with CSS and was found that CSSs have positive and significant impact on poverty (B = .278, t-value 3.38, p-value .000), housing facilities (B

= 1.22, t-value 7.41, p-value .000), Infrastructure ((B = 1.377, t-value 12.55, p-value .000) and Life Standard (B = 1.892, t-value 12.836, p-value .000). Therefore, the results support the proposed hypothesis and the hypothesis H1 is accepted i.e.CSS have a great impact on socio-economic life of rural people (Poverty reduction, better housing, rural connectivity and standard of living is accepted at 0.05 level of significance i.e. p value should be less than 0.05.

**H3: It is being supposed that some people have least awareness about PMGSY**

**Table 16**  
*Association between PMGSY and Total Awareness*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-.790	.224		-3.533	.000		
cssdevelopment	1.222	.080	.610	15.369	.000	1.000	1.000

a. Dependent Variable: totalawareness

**Table 17**  
*Results to validate the proposed hypothesis (H3)*

Relation	B-value	t-value	p-value	Decision
PMGSYand Total Awareness	1.222	15.369	.000	Contradictory
<b>H3 refuted hence alternative hypothesis accepted</b>				

In table 17 relationships was established between PMGSY and total awareness which was found to be significant (B-value 1.222, t value 15.369 and p value .000). Hence we reject the hypothesis H3 i.e. it is being supposed that some people have least awareness about rural development schemes, is contradictory to the actual hypothesis.

- In case of PMGSY, the impact was also found significant. The people have benefitted in terms of connectivity to hospitals, schools, markets etc., it has increased their living standard to a great extent. Individual relationship was established between awareness with other parameters like life standard, rural connectivity and the agriculture. It was perceived that the awareness has a progressive bearing on the rural connectivity; life standard but there was a no impact on other parameters like agriculture. Almost all the villages are having the *pucca* roads. It should be attempted to cover the remaining parameters so that life of people will become worthy one. More and more awareness should be disseminated among the people so that they can get more benefits and should be implemented in a better way. Additionally all villages should be connected with better roads.

**Conclusion**

It is hard to think the development of a nation without the development of rural economy, neglecting of rural means neglecting of overall development. The actual progress and prosperity of country lie in the economic betterment of rural people for which government must formulate strong economic policies and better strategies. Every nation wants to boost its resources and initiate growth through developmental programmes and inclusive strategies. India is the nation, which needs these development programmes more than any other nation, as it has the world’s highest poor population. The government has always attempted to satisfy the unmet needs of underprivileged through these schemes and desired better results.

India at a very challenging stage has introduced CSS, which are well-recognised schemes of the nation. These schemes are famous throughout the world and have shown pervasive influence. The introduction of CSS was the commencement of the golden period in the lives of poor with an aim to achieve progress and prosperity. It is a prodigious footstep towards the fulfilment of economic objectives. These schemes have enhanced people's livelihood by developing infrastructure and local jobs for the rural development. It is believed that CSS have a capability to renovate the lives of rural people. These schemes were established keeping in view the objectives of inclusive growth and to make these reachable to every village so that people could derive economic and social benefits.

The present study focussed on Centrally Sponsored Scheme PMGSY. It was witnessed that PMGSY has a positive influence on the Life Standard of the people and Rural Connectivity but not on Agriculture

Simultaneously, there are some bottlenecks related to execution of the scheme which need to be addressed and resolved. For that purpose proper authority, liability and answerability should be made compulsory. The officials associated with this initiative should be made realised significance of the advancement and prosperity which could be realized through such schemes. Most important people should be involved whole heartedly and their cooperation should be winning to make them the core elements in the developmental process. Resources should be utilised judiciously and government should be vigilant in these things, so that specific objectives could be achieved for which these schemes have been introduced. When these schemes will uplift the people's life standards, then we could claim that we are moving towards the track of progress and prosperity. Eventually, we can conclude with that this initiative has brought a sigh a relief and had raised the hope amongst the people to live a prosperous, progressive and a healthy life. Most important officials should not get indulge in dishonesty and nepotism. All the agencies associated with the system should get adhere to the quality parameters. Total Quality Management (TQM) and new use of technology should be introduced that may improve its monitoring and supervision. The coming years for India are the days of happiness, progress and prosperous.

#### **Future Prospectus**

This study was carried out keeping in mind the time and location, as it was conducted in a particular area and within a limited time. Whereas, India is big in size and has a large population, studies can be conducted throughout the country. Many schemes may be taken together to examine their impact on rural development, as only one scheme was taken into consideration in this study and many more indicators of development can be taken for the studies. Moreover, PMGSY have the potential to renovate the lives of rural people and most important people have the dire need of these schemes to overcome their sufferings. The population of India is growing enormously as it is often said "Overpopulation is the Mother of all Problems".

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