



## **Impact of MGNREGS on the Improved Livelihoods of Rural Communities in Ananthapurmu District of Andhra Pradesh**

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### **ABSTRACT**

*The study was conducted to know the impact of MGNREGS in Ananthapuramu district of Andhra Pradesh state in India. An ex-post facto research design was followed to present investigation. Multistage sampling procedure was followed for this study. Sample size of 120 respondents were selected by using purposive and simple random sampling techniques. Out of the sixty three mandals, three mandals were selected based on the criteria of maximum employment generation. From the list of villages in each mandal, four villages were selected based on the criteria of maximum employment generation. From each selected village 10 respondents were selected from the list of beneficiaries by following the simple random sampling. The data was collected through personal interview with the help of structured interview schedule. The data was obtained and coded, classified and tabulated. Finally statistical tools such as descriptive statistics and Paired 't' test were used for the analysis of the data. The study revealed that direct changes such as employment generation, number of employed persons in the family, daily wage rates, income generation and community and individual assets creation were increased and reduction in daily working hours, migration of rural people to urban areas for employment was observed. Indirect changes occurred due implementation of MGNREGS were increased empowerment, increased personal and family security, increased food security, increased conservation of natural resources and strengthened democracy. It was recommended that extension in the limited types of works undertaken in MGNREGS, introduction of a 'Wage subsidy' to the farming community and imparting the training to MGNREGS beneficiaries will help in improving the livelihood security of beneficiaries under MGNREGS.*

**KEY WORDS:** MGNREGS, Impact, Direct changes, Indirect changes

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### **INTRODUCTION**

National Rural Employment Guarantee Act was notified on 7<sup>th</sup> September, 2005. The Act came into force on February 2006. The aim of the scheme is to enhance the livelihood security of households in rural areas of the country by providing 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. Further, its primary objective is to augment wage employment and strengthen natural resource management. It is the biggest poverty alleviation programme in the world which is started with an initial outlay of Rs. 11,300 crore in year 2006-07 and it is Rs.38,500 crore rupees allocated for MGNREGA (2016-17) (<http://india.gov.in/spotlight/union-budget-2016-17>). In Andhra Pradesh the scheme is running in all the 13 districts and has completed 10 years. Many studies have assessed the impact of MGNREGS in terms of poverty alleviation and generation of income opportunities in the future. However, further research and analysis is required both for evaluating the current efforts in terms of their impact on livelihood and poverty as well as informing future implementation of the Scheme. Under the above stated circumstances it became necessary to assess how far the programme achieved its desired goals in terms of empowering the rural people.

### **MATERIALS AND METHODS**

#### **Study Area**

Ananthapuramu district of Andhra Pradesh is located at 14.68°N and 77.6°E. It has an average elevation of 335 m (1,099 ft.). Ananthapuramu district is one of most backward region of India, located in the Southwestern part of Andhra Pradesh. The district receives the least rainfall in the state of Andhra

Pradesh and the rainfall is second lowest in India, after Jaisalmer in Rajasthan with average annually rainfall of 522 mm. The district has a population of about 41 lakhs (2011 census) under the total population 30 lakhs population lives in rural areas. About 20 per cent of the population comprises schedule caste and schedule tribes and 60 per cent comprises of backward communities. It is one of the poorest districts in the India.

### Research Design

“Ex-post facto” research design was used in the present investigation.

### Sampling Procedure

A multistage sampling technique was used to select the respondents for this study. In the first stage Ananthapuramu district of Andhra Pradesh was purposively selected based on the criteria of maximum employment generation in Rayalaseema region of Andhra Pradesh. Out of 63 mandals of Ananthapuramu district, three mandals were selected purposively based on the criteria of maximum employment generation. From the list of villages in each mandal, four villages were selected making a total of 12 villages, based on the criteria of maximum employment generation. From each selected village from the list of the beneficiaries 10 respondents were selected by following simple random sampling, thus making a total of 120 respondents.

### Data Collection and Analysis.

The primary data was collected from the selected MGNREGS beneficiaries through personal interview with help of a well structured interview schedule. The data was obtained from the selected respondents, then coded, classified and tabulated. Finally statistical tools such as Frequency (F), Percentage (%), Arithmetic Mean ( $\bar{X}$ ), Standard Deviation ( $\sigma$ ) and Paired ‘t’ test were used for the analysis of the data, so that the findings could be meaningfully interpreted and conclusions were drawn.

## RESULTS AND DISCUSSION

### A. Direct Changes

The direct changes were studied in terms of the employment generation, number of employed persons in the family, daily working hours daily wage rate, migration, income generation, community assets creation and developmental works on individual land holding.

**Table 1: Direct changes occurred due to the implementation of MGNREGS**

(n= 120)

S.No	Direct changes	Before MGNREGS		After MGNREGS		‘t’ value
		Mean	SD	Mean	SD	
1.	Employment generation (Days/ Year)	169.41	41.45	278.83	40.89	52.46**
2.	Mean value of employed persons in the family	1.73	0.57	2.44	0.78	11.43*
3.	Daily working hours (Hours/Day)	8.79	0.81	7.24	2.45	6.49*
4.	Daily wage rates (Rs./Day)	66.53	21.32	144.95	8.36	36.97**
5.	Income generation (Rs./Year)	29188.33	9716.87	45950	14344.56	21.82**
6.	Migration (Days / Year)	99.16	62.03	22.25	22.23	18.82*

\*\* = At 1% level of significance, \* = At 5% level of significance

### Employment generation

It was evident from Table 1 calculated ‘t’ value (52.46\*\*) was found significant at 1 per cent level of significance indicating that there existed a significant difference in the total number of man days in a year before and after MGNREGS. The mean employment *i.e.* the total number of man days in a year available for the MGNREGS beneficiaries before introduction of MGNREGS was 169.41 days and after introduction it was 278.83 days. This increase in employment might be due to policy initiatives and enhanced fund allocation by the Government of India. This finding was in agreement with the findings of Sitarambabu *et al.* (2013).

### Number of employed persons in the family

It was evident from table 1 Calculated ‘t’ value (11.43\*) was found significant at 5 per cent level of significance indicating that there existed a significant difference in the employed persons in MGNREGS beneficiary families before and after MGNREGS implementation. This might be due to the saturation concept for employment of rural poor as well as the 33.00 per cent reservation for women under MGNREGS. This finding was in agreement with Argade (2010).

**Daily working hours**

Calculated 't' value (6.49\*) of Table 1 was found significant at 5 per cent level of significance indicated that there existed a significant difference in daily working hours of MGNREGS beneficiaries before and after MGNREGS. It was clearly exhibited from the results that mean daily working hours before implementation was 8.79 hours and after the implementation the mean daily working hours were 7.24 hours with a mean difference of 1.55 hours. From the results it could be inferred that there was a mean reduction in daily working hours without affecting their earnings. This might be due to the reason that most of the beneficiaries were agriculture labourers, small and marginal rain fed farmers who were working in MGNREGS in the lean season so that during that period there was no chance of working extra hours. This finding was in agreement with the finding of Argade (2010).

**Daily wage rate**

Calculated 't' value (36.97\*\*) of Table 1 was found significant at 1 per cent level of significance indicated that there existed a significant difference in wage rates of MGNREGS beneficiaries before and after MGNREGS. It was clearly exhibited from the results that the mean daily wage rate before the implementation was Rs. 66.53 and after the implementation it was Rs. 144.95 with a mean difference of Rs.78.42. This might be due to that scheme followed the rules and regulations of minimum wage act. These findings were in agreement with the findings of Gladson (2008) and Argade (2010).

**Migration**

Calculated 't' value (18.82\*) of Table 1 was found significant at 5 per cent level of significance indicated that there existed a significant difference in the migration of MGNREGS beneficiaries before and after MGNREGS. The mean migration before the introduction of MGNREGS was 99.16 days/year and it was 22.25 days /year after the introduction of MGNREGS. The observed significant mean difference before and after was 76.91 days/year.

This might be due to the opportunity of extra employment days provided to the MGNREGS beneficiaries which helped in increasing their man-days of employment. Most of the beneficiaries who were having occupation as farming and agriculture labourers generally after *kharif* season used to migrate to urban areas for getting employment. This is due to the reason that majority were rainfed farmers and they lack permanent water sources for agriculture hence they felt it was very difficult to cultivate land except during *kharif* season. But after the introduction of MGNREGS, their migration was reduced due to availability of employment in their own villages. This finding was in agreement with the Sitarambabu *et al.* (2013).

**Income generation**

Calculated 't' value (21.82\*\*) of Table 1 was found significant at 1 per cent level of significance indicated that there existed a significant difference in the income generation of beneficiaries before and after MGNREGS. The mean income of MGNREGS beneficiaries before the introduction of MGNREGS was Rs.29188.33 and after the introduction of MGNREGS the mean income was Rs.45950. It meant that MGNREGS helped the beneficiaries to increase their income. This might be due to the increase in number of days of employment, wage rates and also due to the number of persons employed in a family. Similar trend was reported by Argade (2010).

**Community assets creation****Table 2: Percentage increase in the community assets created before and after MGNREGS (n=120)**

S. No	Types of Assets	Before MGNREGS	After MGNREGS	Difference	Percentage Increase
1.	Formation of approach roads	36	48	12	33.33
3.	Number of watershed works	167	354	187	111.97
4.	Number of afforestation works, plantation works	70	128	58	82.85
5.	Number of drainage structures formation	10	14	04	40.00
6.	Number of Cattle drinking water troughs and drinking water tanks constructed	11	19	08	72.72
7.	De-silting of tanks	08	15	07	87.50
<b>Total assets created</b>		<b>297</b>	<b>578</b>	<b>276</b>	<b>92.39</b>

It was evident from Table 2 there was an increase to the extent of 92.39 per cent in community assets created as a result of MGNREGS. An orderly arrangement had shown that percentage increase in the 'number of watershed works' completed was more (111.97%) followed by 'de-silting of tanks' (87.50%), 'afforestation works' and 'plantation works' (82.85%), 'cattle drinking water troughs and drinking water tanks' constructed (72.72%), 'drainage structures formation' (40.00%) and 'formation of approach roads' (33.33%).

From the above findings it was evident that the MGNREGS has provided multiple community and environmental services and reduced vulnerability, apart from providing employment and income to rural

communities. This might be due to the policy initiatives of MGNREGS to take up labour intensive activities. This finding was in concurrent with findings of Kantharaju (2011).

#### Development works on individual land holding

The data presented in Table 3 clearly indicated that the overall there was an increase to the extent of 75.62 per cent in the individual assets created as a result of MGNREGS. An orderly arrangement of had shown that 133.33 percentage increase in the 'number of farm ponds' constructed followed by 'earthen field bunds and staggered trenches' (83.04%), 'plantation works' (70.00%), 'land leveling and waste land development works' (65.85%) and 'silt application to crop lands' (46.96%).

This might be due to the policy initiatives of MGNREGS to take up labour intensive activities which may provide steady employment in agricultural slack season, facilitate in engaging more labour as well as in creation of individual assets. These findings were in agreement with the findings of Deepak and Mohanty (2009).

**Table 3: Percentage increase in the individual assets created before and after MGNREGS (n=120)**

S. No	Types of assets	Before MGNREGS	After MGNREGS	difference	Percentage Increase
1.	Earthen field bunds and staggered trenches	230	421	191	83.04
2.	Plantation works	50	85	35	70.00
3.	Farm ponds constructed	15	35	20	133.33
4.	Land leveling, waste land development works	41	68	27	65.85
5.	Silt application to crop lands	66	97	31	46.96
<b>Total assets created</b>		<b>402</b>	<b>706</b>	<b>304</b>	<b>75.62</b>

#### B. Indirect Changes

The major indirect changes experienced by the selected MGNREGS beneficiaries in the study area were the food security, personal and family security, empowerment, natural resources development and strengthen the democracy.

##### Food security

Calculated 't' value (21.42\*\*) of Table 4 was found significant at 1 per cent level of probability indicating that there existed a significant difference in food consumption of MGNREGS beneficiaries before and after MGNREGS. The mean food consumption before MGNREGS was 21.22 Kg/week and it was 28.97 Kg/week after the introduction of MGNREGS. The observed significant mean difference before and after was 7.75 Kg/week. This might be due to the increase in the consumption levels of vegetables, fruits, pulses and meat /eggs because of increased awareness on the nutritional security and benefits of balanced diet by attending health campaigns.

**Table 4: Food security level changes due to the implementation of MGNREGS (n= 120)**

S.No	Direct changes	Before MGNREGS		After MGNREGS		't' value
		Mean	SD	Mean	SD	
1.	Food security ( Kg/ Week)	21.22	7.42	28.97	9.40	21.42**

\*\* = At 1% level of significance, \* = At 5% level of significance

##### Personal and family security

It was evident from table 5 that the majority (75.84%) of MGNREGS beneficiaries had medium level of personal and family security followed by low (13.33%) and high (10.83%) levels of personal and family security. From the above findings majority of the respondents had medium level of personal and family security. This might be due to the increase in the income levels of the beneficiaries with the introduction of MGNREGS. The scheme also provided the opportunity to improve the personal and family security *i.e.* increase in purchasing power, better education for children, better medical facilities and reduced indebtedness of the beneficiaries.

**Table 5: Distribution of selected MGNREGS beneficiaries according to the changes in personal and family security (n= 120)**

S. No.	Personal and family security	MGNREGS Beneficiaries	
		Frequency	Percentage
1.	Low	16	13.33
2.	Medium	91	75.84
3.	High	13	10.83
	Total	120	100.00
<b>Mean: 14.80    SD: 1.45</b>			

**Empowerment**

Table 6 it was clearly indicated that majority (73.33%) of MGNREGS beneficiaries belonged to medium level of empowerment followed by high (22.50%) and low (4.17%) level of empowerment. From the above findings majority of the beneficiaries had medium level of empowerment. This might be due to the increase in the family income, ability to operate postal/bank accounts, social participation and decreased dependency on money lenders. These findings were in disagreement with the Shubhadeeproy and Baldeosingh (2010).

**Table 6: Distribution of selected MGNREGS beneficiaries according to changes in empowerment (n= 120)**

S. No.	Empowerment	MGNREGS Beneficiaries	
		Frequency	Percentage
1.	Low	05	4.17
2.	Medium	88	73.33
3.	High	27	22.50
	Total	120	100.00
<b>Mean: 10.60    SD: 2.14</b>			

**Natural resources****Table 7: Distribution of selected MGNREGS beneficiaries according to changes in natural resources (n=120)**

S. No	Statements	Decreased		Remained Same		Increased	
		F	%	F	%	F	%
1.	Opportunity for soil and water conservation	0	0.00	15	12.50	105	87.50
2.	Availability of drinking water in the village	60	50.00	36	30.00	24	20.00
3.	Water table of the area in the village	63	52.50	22	18.33	35	29.17
4.	Agriculture productivity in the village	9	7.500	91	75.83	20	16.67
5.	Overall development of the village	0	0.00	5	4.17	115	95.83
<b>F= Frequency      %= Percentage</b>							

Table 7 it was clearly exhibited that about the overall development of the village 95.83 per cent of beneficiaries felt that it was increased and 4.17 per cent felt it was remained same. This might be due to the diversified works taken up under MGNREGS. Majority (87.50%) of beneficiaries felt that 'opportunity for soil and water conservation' increased and 12.50 per cent opined it was remained same. The possible reason for this might be due to the high preference given to water and soil conservation activities under the MGNREGS.

With regard to the agricultural productivity in the village, 75.83 per cent of the beneficiaries expressed it remained same followed by increased (16.67%) and decreased (7.50%). This might be due to the reason that the study area having low rainfall zone hence, the production of crops mainly depends on rain. This was the notable reason for the agricultural productivity remained same in the area. With regard to water table of the area and availability of drinking water in the village, above half of the percentage of the beneficiaries expressed it was decreased. This might be due to the reason that indiscriminate use of water

than the groundwater recharge. This finding was in accordance with the finding of Dadabahu and Gopikrishna (2013).

### Strengthening democracy

**Table 8: Distribution of selected MGNREGS beneficiaries according to the changes in strengthening democracy (n=120)**

S. No	Statements	Decreased		Remained Same		Increased	
		F	%	F	%	F	%
1.	Priority to the Gram Sabha in selection of works	0	0.00	13	10.83	107	89.17
2.	People's participation in the preparation of projects	0	0.00	41	34.17	79	65.83
3.	Allotment of works through Gram Panchayat	0	0.00	83	69.17	37	30.83
4.	Involvement of local MP/MLAs and PRI members	67	55.83	08	6.67	45	37.50
		<b>F= Frequency</b>		<b>%= Percentage</b>			

Table 8 it was clearly indicated that majority (89.17%) of the beneficiaries experienced that 'priority to the Gram Sabha in selection of works' was increased. This might be due to the policy guidelines for implementation of MGNREGS. With regard to the 'allotment of works through Grama panchayat', majority (69.17%) of beneficiaries expressed it was remained the same and rest (30.83%) expressed it was increased. This might be due to the reason that the situations created by the earlier employment generation programmes such as NREP, RLEGP, JRY, SGSY. With regard to the 'involvement of MP/MLAs and PRI members', majority (55.83%) of beneficiaries expressed it was decreased followed by increased (37.50%) and 6.67 per cent remained same. This might be due to the lack of interest of the people's representatives in the various activities, but it was not the same in case of MGNREGS as the implementation of the scheme was highly transparent in Andhra Pradesh state; hence there was no chance of intervention in the scheme activities. This finding was in accordance with the Dadabahu and Gopikrishna (2013).

### CONCLUSION

The result of the study revealed that positive changes had occurred among the respondents in terms of direct and indirect changes after commencement of MGNREGS in the study area. It was felt that the MGNREGS facilitated the provision of a strong social safety net for the vulnerable groups by providing a fall-back employment source when other employment alternatives are scarce or inadequate. From the findings of the study the following implications were drawn. Extension in the limited types of works undertaken in MGNREGS helps to increase the availability of works at Gram Panchayat level. The introduction of a 'Wage subsidy' to the farming community by applying MGNREGS workforce may be a better strategy. There is need to imparting training to the MGNREGS beneficiaries to ensure their claiming of their rights under the provisions of the act.

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