



Impact of MGNREGA on income, expenditure and assets in Ri-Bhoi district of Meghalaya

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ABSTRACT

This study was undertaken to assess the impact of the MGNREGA on change in the income, expenditure and asset of the scheme in Ri-Bhoi district of Meghalaya state. District was selected for the study with the objective of analysing the impact of MGNREGA on the participant households. For evaluating the specific objectives designed for the study, required primary data were collected from the participants for the year 2017. It was found that there was 20.79 per cent increase in income, after getting wage employment from MGNREGA. Agriculture was found to be the major source of income of beneficiary group. Due to volatility either in production, prices or both, their monthly income from agriculture was not stable. To stabilise the monthly sources of the income of the beneficiary groups, special attention is required through MGNREGA like scheme. Which not only ensure their 100 days' work but also helps in stabilising the income. It showed that how MGNREGS helps to stabilise monthly income level of beneficiary household. But this stabilisation mainly depends on how many days and when they are setting the MGNREGS activities. Generally during the lean season of agricultural activities MGNREGA will help to make them stabilise food security or livelihood. Significant increase in expenditure of almost all the food and non-food items was observed. This may be due to increase in income after participation in MGNREGS. The purchasing power of the beneficiaries for assets like farm implement, television, mobile phone, bike, livestock had also increased after MGNREGA.

1. Introduction

The National Rural Employment Guarantee scheme (NREGS) came into existence after the enactment of parliament Act "National Rural Employment Guarantee Act" in September 2005. It aims at enhancing the livelihood security of the people in rural areas by guaranteeing hundred days of wage employment in a financial year, to a rural household whose members volunteer to do unskilled manual work. MGNREGA became operational from February 2008 in Ri-Bhoi.

The Act covered 200 districts in its first phase, implemented on February 2, 2006, and was extended to 130 additional districts in 2007-2008. All the remaining rural areas have been notified with effect from April 1, 2008. NREG (amendment) Act, 2009 renamed it to Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on October 2, 2009 (GoI, 2009). This act is also referred to as Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) and it covers entire country with the exception of districts that have 100 per cent urban population.

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2. Methodology

Multistage random sampling technique was applied for the present study. Meghalaya state and Ri-Bhoi district were chosen purposively. From the district, two blocks *viz.* Umsning and Umling was also chosen purposively based on population. Two villages from each blocks was selected randomly using simple random sampling technique and around 90 respondents (60 beneficiaries and 30 non-beneficiaries) was selected randomly from the four villages. Both primary and secondary data were used in the study. Primary data were collected through personal interview using pre-tested interview schedule. Secondary data were collected through journals, research papers, thesis, publications of Ministry of Rural Development, Government of Meghalaya and different related websites. In accordance with the specific requirements to draw logical conclusion, analysis and interpretation of collected primary data were done by utilizing standard statistical techniques like – Frequency, Arithmetic mean, Percentage, Paired t-test, t-test for equality of means, Index Numbers.

3. Results and Discussion

Table 1 showed the income of the beneficiaries before and after participation in MGNREGS across the sources. To compare the income and its differences, income

for the year 2012 had been adjusted to 2017 prices. It can be seen from the above Table 1 that after participating in MGNREGA, the annual income had increased and major contributing factor is MGNREGA. Its contribution to total increase in annual income is found to be about 60 percent. It clearly depicts how MGNREGA helps for sustaining rural household livelihood. Income from livestock which includes mainly piggery, poultry, cattle, and goat had also increased at a share of 12.19 percent. This may be due to the fact that, as the beneficiaries had additional income from working under the scheme they were able to afford to invest more in livestock, and hence the increased in income from livestock source. Earning from wage which includes income from agricultural labour, construction labour, and daily wage earned from stone crushing had also increased (9.09 percent). Income from business which includes selling of fruits, vegetables and pickles, bakery, tea shop and small hotel on the road side of national highway, *etc.* had also increased (8.37 percent). Income from agriculture which includes cultivation of paddy, maize, potato, ginger and vegetables like cabbage, cauliflower and some leafy vegetables had also increased (5.13 percent). Income from salary which includes private and government job had also increased (4.05 percent). Income from horticulture which includes pine apple, banana, and guava cultivation had also increased (0.8 percent). But there was no change in the income from others sources like fish rearing, selling firewood, forest products after MGNREGA.

Table 1. Income of beneficiaries before and after participation in MGNREGS across the sources (N=60)

Sources	Before MGNREGA (₹year)	After MGNREGA (₹year)	Increase in income (₹year)	% share to total increase in income
Agriculture	28883.33	29766.67	883.33	5.13
Horticulture	1083.33	1233.33	150.00	0.87
Livestock	3733.33	5833.33	2100.00	12.19
Wage	27583.33	29150.00	1566.67	9.09
Business	10300.00	11741.38	1441.38	8.37
MGNREGA	0.00	10391.67	10391.67	60.31
Salary	8166.67	8864.41	697.74	4.05
@Others	500.00	500.00	0.00	0.00
Total (Annual)	80250.00	96941.67	17230.79	100.00
Monthly (₹month)	6687.50	8078.47	1390.97 (20.79%)	Paired t-test
				t value
				p value
				-21.58***
				<0.001

Note: *** represents significance at 1 per cent level

Note: @others= Fish rearing, selling fire wood and forest products

The monthly income of the beneficiaries had increased from ₹6687.50 to ₹8078.47 after working in MGNREGA, it was found that there was 20.79 per cent increase in the income, which was statistically significant (Table 1). This increase in income was due to additional employment generated from MGNREGA (Harish *et al.*, 2011). MGNREGA had given beneficiaries additional income (Panda *et al.*, 2009) and implementation of MGNREGA was a direct way of increasing income of rural poor (Kumar and Joshi, 2014). Table 2 showed the average monthly household expenditure on food items of beneficiaries before (2012) and after (2017) participation in MGNREGS. There was significant increase in expenditure of food items like cereals, pulses, vegetables, oil, meat, milk and its products, sugar and salt and spices after working under MGNREGS (Table 2). Increase in expenditure on other food items such as fruits, betel nut, beverages was also observed, though not significant. This may be due to increase in income after participation in MGNREGS. It can be seen that the expenditure on cereals and meat had increased substantially for the beneficiaries due to income enhancement effect through MGNREGA. Dkhar (2012) also found that MGNREGA had positive impact on the beneficiaries thus uplifting their socio-economic conditions. Due to increased income, expenditure on certain food items like meat, fruits, vegetables and betel nut have increased. Average monthly household expenditure

on non-food items of beneficiaries before (2012) and after (2017) participation in MGNREGS is presented in Table 3. The expenditure on all the non-food items like cooking, electricity, transportation, children education, medicine, cloths, and ceremony or function has increased significantly after working under MGNREGA (Table 3). There was not much variation on percentage share of total expenditure on food items (43.85 percent and 43.68 percent) and non-food items (56.15 percent and 56.32 percent) before and after MGNREGA (Table 2 and 3). The increase in expenditure on non-food items is highest for ceremony or function, followed by cooking and transportation due to income enhancement effect through MGNREGA. Increase in cooking expenditure may be due to increase in the number of LPG connections. They also used charcoal and firewood in winter to keep warm. As they have more income, they begin to spend more on ceremonial and religious functions. Increase in transportation rate may be due to going to the other places of work. Out of the increase in total expenditure, beneficiaries spend more on non-food (57.84 percent) than food items (42.16 percent). Thus, MGNREGA would prove to be an extremely cost-effective way of increasing employment directly and indirectly, reviving the rural economy, providing basic consumption stability to poor households and improving the bargaining power of rural workers (Ghosh, 2008).

Table 2. Average monthly household expenditure on food items by beneficiaries before and after participation in MGNREGA (N=60)

Food items	Monthly expenditure (₹)		Index no.	Increase in monthly expenditure (₹)	Paired t-test	
	Before MGNREGA	After MGNREGA			t value	p value
Cereals	277.5	315.83	113.81	38.33	-7.53***	<0.01
Pulses	188.67	198.67	105.30	10.00	-3.84***	<0.01
Vegetables	156.67	171.50	109.47	14.83	-2.93***	<0.01
Fruits	59.75	67.17	112.41	7.42	-1.42	0.16
Oil	122.50	128.00	104.49	5.50	-3.25***	<0.01
Meat	217.50	249.17	114.56	31.67	-7.70***	<0.01
Milk and its products	50.66	66.92	132.07	16.25	-6.77***	<0.01
Betel nut	145.50	157.50	108.25	12.00	-1.72	0.09
Sugar & salt	96.16	108.59	112.91	12.42	5.60***	<0.01
Spices	48.00	61.41	127.95	13.42	-6.06***	<0.01
Beverages	60.58	65.83	108.67	5.25	-1.67	0.10
^s Others	213.33	220.83	103.52	7.50	-1.67	0.09
Total (Food)	1636.83 (43.85)	1811.42 (43.68)		174.58 (42.19)		
Total (F+NF)	3732.5 (100)	4146.59 (100)		414.08 (100)		

Note: Figures in the parenthesis indicates percentage to total

Note: *** Represents significance at 1 per cent level

Note: ^sothers = Grocery, fermented pickles, egg, dry fish and sea food

Note: (F+NF) = Food + Non Food

(44.44 percent), LPG connection (33.33 percent) after participation in MGNREGA. The number of households having bike (14.28 percent), television (11.6 percent), farm implements (6.12 percent) and mobile phone (5.45 percent) had also increased after working under MGNREGS, which may be due to increase in income. The purchasing power of the beneficiaries for assets like farm implement, television, mobile phone, bike, livestock have also increased after MGNREGA (Dkhar, 2012).

Conclusion

After participating in MGNREGA, the annual income of the beneficiaries had increased and major contributing factor to the increase in income was found to be MGNREGA. This increase in income was due to additional employment generated under the scheme. Agriculture was found to be the major source of income of beneficiary group. Due to volatility either in production, prices or both,

their monthly income from agriculture was not stable. To stabilise the monthly sources of the income of the beneficiary groups, special attention is required through MGNREGA like scheme, which not only ensure their 100 days' work but also helps in stabilising the income. It showed that how MGNREGS helps to stabilise monthly income level of beneficiary household. But this stabilisation mainly depends on how many days and when they are setting the MGNREGS activities. Generally during the lean season of agricultural activities MGNREGA will help to make them stabilise food security or livelihood. Due to increase in income after working under MGNREGA, beneficiaries' expenditures and assets have also increased. Thus, MGNREGA would prove to be an extremely cost-effective way of increasing employment directly and indirectly, reviving the rural economy, providing basic consumption stability to poor households and improving the bargaining power of rural workers. The purchasing power of the beneficiaries for assets had also increased after MGNREGA.

Table 3. Average monthly household expenditure on non-food items of beneficiaries before and after participation in MGNREGS (N=60)

Non-food items	Monthly expenditure (₹)		Index number	Increase in monthly expenditure (₹)	Paired t test	
	Before MGNREGA	After MGNREGA			t value	p value
Cooking (gas/firewood)	260.00	303.33	116.67	43.33	-8.06***	<0.01
Electricity	247.50	260.00	105.05	12.50	-2.85***	<0.01
Transportation	291.67	331.67	113.71	40.00	-4.72***	<0.01
Children Education	259.17	290.83	112.22	31.67	-5.56***	<0.01
Medicine	89.00	100.17	112.55	11.17	-4.67***	<0.01
Cloths	248.33	273.33	110.07	25.00	-4.16***	<0.01
Ceremony/ Function	280.83	325.83	116.02	45.00	-7.47***	<0.01
^e Others	419.17	450.00	107.36	30.83	-2027**	0.03
Total	2095.67 (56.15)	2335.17 (56.32)		239.50 (57.81)		
Total (F+NF)	3732.5 (100)	4146.59 (100)		414.08 (100)		

Note: Figures in the parenthesis indicates percentage to total, Note: ** & *** represents significance at 5 per cent and 1 per cent level, respectively, Note: ^eothers=cosmetics, alcohol, recharge of mobile and television set, Note: (F+NF) =Food + Non Food

Table 4. Comparison of assets of beneficiaries (before and after MGNREGS) (N=60)

Assets	Frequency of households possessing different assets		Increase in number of households	
	Before MGNREGA	After MGNREGA		
^x Farm implements	49	52	3	(6.12)
Television	43	48	5	(11.6)
Radio	5	5	0	(0.00)
Mobile phone	55	58	3	(5.45)
Bike	21	24	3	(14.28)
LPG connection	24	32	8	(33.33)
Livestock	18	26	8	(44.44)

Note: Figures in the parenthesis indicates percentage to total

Note: ^xFarm implements = Axe (*sdié* in khasi), hoe (*Mohkhiew*), spade (*belsha*), Machate, Traditional plough (*lyngkor*).

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