

Household Consumption Pattern and Nutritional Security among Poor Rural Households: Impact of MGNREGA[§]

Praduman Kumar^{a*} and P.K. Joshi^b

^aDivision of Agricultural Economics, Indian Agricultural Research Institute,
New Delhi-110 012

^bInternational Food Policy Research Institute, NASC Complex, New Delhi-110 012

Abstract

The paper has examined the changes in household food consumption and nutritional security of poor rural households and has assessed the impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on the dietary pattern and nutritional status of these households using the data from 66th round of National Sample Survey (NSS) pertaining to the year 2009. Since getting a job card is the first step for linkage with the MGNREG scheme, only job card holder households were considered in the study. These were further grouped into job seekers and non-job seekers. The non-job seekers were those who were not serious on getting an employment under MGNREGA but had got the job card issued to be used under emergency or as a trump card for getting higher wages from the present employer. The job seekers were also classified as 'beneficiaries' (who got employment) and 'non-beneficiaries' (who did not get employment but got unemployment allowance). The study has revealed that MGNREGA has benefitted 22.5 per cent of the rural households by providing, on an average, wage employment for about 43 days. It has increased the income of rural households and has been successful in reducing the poverty level by 4 per cent. The MGNREGA has provided almost equal employment benefits to all the categories of farm-sizes, household-types and income-groups. The state-wise study has revealed that though all the states have been benefitted, wide variations do exist. It is observed that the economically weaker states of the country have been benefitted maximum and have implemented the MGNREGA more vigorously. The study has shown that the raise in income could lead to increase in food consumption — both of cereals and non-cereals by all the categories of households. A diversification in the dietary pattern of households has also been observed, which is again a strong indicator of better food consumption. These developments have resulted into a substantial increase in calorie-intake as well as protein-intake by different categories of households, leading to a decrease in the undernourished and nutrition-deficit households by 8-9 per cent. In nutshell, the impact of MGNAREGA has been positive and effective in increasing household food consumption, changing dietary pattern and providing nutritional food security to the poor rural households of India.

Key words: MGNREGA, nutritional security, food consumption, poverty reduction, employment generation, women empowerment

JEL Classification: J43, J48, I30

* Author for correspondence

Email: pkumariari@gmail.com

§ The paper is drawn from the TAPSIM project undertaken by the International Food Policy Research Institute. The project was co-funded by the European Commission within the Seventh Framework Programme (2007-13).

Introduction

To alleviate poverty in the rural areas, Government of India has been launching various programs from time to time. These include: Integrated Rural Development Program (IRDP), Employment

Assurance Scheme (EAS), *Pradhan Mantri Rojgar Yojna* (Prime Minister Job Scheme), *Swaranjayanti Gram Swarajgar Yojna* (Golden Jubilee Rural Self-Employment Scheme) and *Pradhan Mantri Gramodaya Yojna* (Prime Minister Rural Development Scheme). The latest program, covering all the earlier poverty alleviation schemes was implemented by the Government of India through the legislation entitled 'National Rural Employment Guarantee Act (NREGA). It is a massive employment providing program ever started by a country in the world for the development of its rural areas. The Act was later renamed as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). This cross-cutting scheme stipulates a legal guarantee of providing one hundred days of wage employment in a financial year to adult members of any rural household willing to do unskilled manual work at the statutory minimum wages. In 2009, these wages were ₹ 120 (US \$ 2.39) per day (Wikipedia, 2012).

For the operation of a scheme under MGNREGA, the Government of India meets the cost towards payment of statutory wages, three-fourths of the material cost and some percentage of administrative cost. The Act has a provision of payment of unemployment allowance also to a job-seeker who is not provided employment within 15 days of his/her request date. However, this unemployment allowance is to be met by the state governments along with one-fourth of material cost and the remaining administrative cost. The implementation of MGNREGA was started with an initial outlay of ₹ 125 billion in the year 2006-07. It was enhanced to ₹ 440 billion in 2010-11.

A scheme under MGNREGA adopts a direct and most-effective way of reducing poverty by providing (extra) wage employment to the rural poor, whether they are below the poverty line or not. Contrary to the traditional practice, a scheme under MGNREGA provides equal wages to both men and women. It is open to all the rural households including those of scheduled castes (SCs), scheduled tribes (STs) and other backward classes (OBCs).

The MGNREGA aims to achieve the twin objectives of providing rural employment and undertaking rural development simultaneously. The works under MGNREGA must be targeted towards a

set of stipulated rural development activities like water and soil conservation, afforestation, flood control, watershed development, road connectivity, construction and repair of embankments, digging of new tanks/ ponds, construction of percolation tanks, check dams, etc. Up to the end of 2010-11, various schemes under MGNREGA have provided employment to 54.7 million rural households with around 2564 million person-days work.

The landless and small farm (< 1 ha land) households constitute more than 50 per cent of India's population and account for more than half of the poor people in the country. This scenario of prevalence of wide poverty on one side and implementation of massive livelihood-security providing Act, MGNAREGA on the other side, raises some fundamental questions like (i) Is small farm-size of majority of rural households the main course of perpetuating poverty and undernourishment in the country?, (ii) Is there any prospect of liberating these farm households from poverty and undernourishment?, (iii) How can the scope of MGNREGA be enhanced in empowering the poor to combat poverty and raise nutritional status? and (iv) Will MGNREGA help in uplifting the socio-economic status of poor households? Some of these questions have been addressed in this study by examining the dynamics of rural households through geographic and socio-economic dimensions across states and regions of India, and by finding the dietary pattern, nutritional status and expenditure on food and non-food commodities by these households. The study has been conducted with the following specifics objectives:

- To examine the changes in household food consumption and nutritional security of rural poor households, and
- To assess the impact of MGNREGA on food consumption and nutritional food security.

The MGNAREGA has some significant components like :

- It is a cross-cutting program of reducing poverty by providing employment and income to the poorest in the rural areas.
- It provides legal rights to employment.

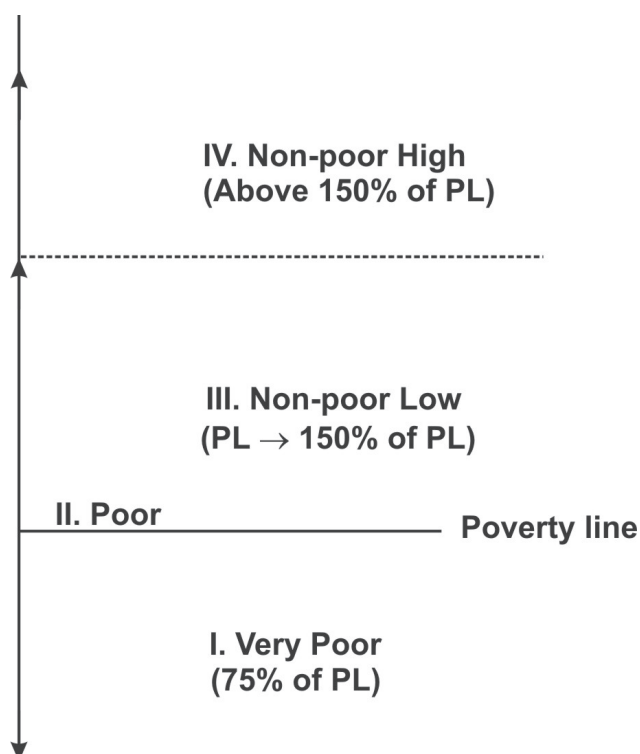
- It provides equal wages to men and women and thus empowers women socially and economically.
- It is open to all rural households, irrespective of their farm-size, household-type, caste and religion.
- It has enhanced the bargaining power of poor men and women in the labour market by providing statutory minimum wages.

Data Used for the Study

The study has used Indian household unit data on dietary patterns and employment collected at the national level by survey method based on 66th round of the National Sample Survey (NSS) Organization and pertained to the year 2009 (GoI, 2009a;b). For analysis, the sample rural households were grouped into six regions, viz. Eastern states, Western states, Northern states, Southern states, Hill states, and North-East states; six land classes, viz. landless, sub-marginal (<0.5 ha), marginal (0.5-1.0 ha), small (1.0-2.0 ha), medium (2.0-4.0 ha), and large (> 4.0 ha); five household types, viz. Self-employed in non-agricultural sector, Agricultural labour, Non-agricultural labour, Self-employed in agricultural sector and others; and four income groups based on the poverty line (PL), viz. Very poor (75% of poverty line (PL)), Poor, Non-poor low

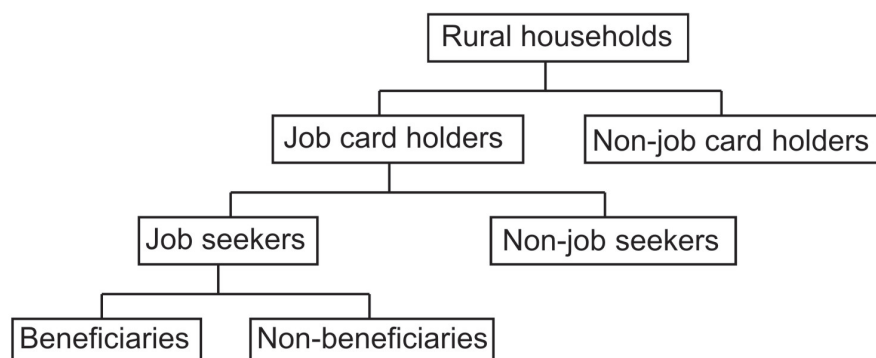
(PL→150% above PL) and Non-poor high (>150% PL). The PL (poverty line) depicts a specific income level of a household; the households having income less than this level are termed as BPL (below poverty line) households and more than this level are called APL (above poverty line) households. The PL is adopted by the Planning Commission of the Government of India for rural households by provinces (states of India). The PL values for the year 2009 were used to classify the households into different income groups.

The calories and protein intakes in the study refer to their respective consumption through different food commodities, calculated using the conversion factors provided by the NSSO (Report No. 405, 1996). The minimum (threshold) food-energy requirements were taken as 1800 kcal/person/day, which are 75 per cent of the recommended energy requirement of 2400 kcal/person/day for rural households. An intake below this threshold is considered as not sufficient to maintain health and body mass, or to support physical activity. The threshold level of food-protein intake was used as 48 gram/person/day (which is also 75% of the recommended level of protein for an average rural Indian). The households whose average intake of calories and protein was below these recommended threshold levels were categorized as 'undernourished' and 'malnourished', respectively.



Results and Discussion

In the rural areas, there are some households which are in need of job while some others are either comfortable with their income or are not interested to do the type of work offered under a MGNREGA scheme. For seeking employment under a MGNREGA scheme, adult members of a rural households, willing to do unskilled manual work, are required to get a 'job card' from the local Gram Panchayat after making registration with it. These persons were classified as job card holders while the non-applicants were termed as non-job card holders and were not of relevance for the present study. The job card holders were classified into job seekers and non-job seekers. The non-job seekers were those who were not serious on getting an employment under a MGNREGA scheme but had got the job card issued to be used under emergency or as a trump card for getting higher wages from the present employer.



A schematic depiction of rural households' linkage with MGNREGA

The job seekers had two types of members. One, who asked for the employment and were able to get it; these were termed as 'beneficiaries' and second, who asked for the employment but were not provided because of work-shortage or for some other reasons, were termed as 'non-beneficiaries'. Of course, these non-beneficiaries were entitled for daily unemployment allowance, the liability of payment of unemployment allowance being of the states.

In this study, the dynamics of MGNREGA job card holders has been studied across geographic regions of the country, landclass, household type and income group. The dynamics of MGNREGA job card holders by socio-economic dimensions has been studied by the states of India also.

The impact of MGNREGA in providing nutritional-security and energy-security to the rural households has been studied by comparing the consumption pattern of beneficiary and non-beneficiary households.

Dynamics of MGNREGA Job Card Holders

Job Card Holding

Of the total all-India sample of rural households, only about one-third (32.1%) had registered for seeking employment under MGNREGA, i.e. were job card holders. Across different regions of the country (viz. eastern, western, northern, southern, hills and north-eastern), the number of MGNREGA job card holders in total sample households was maximum (55.2%) in the north-eastern region, followed by western region (38.6%), hill region (30.6%), eastern region (29.7%) and was lowest in the northern region (17.6%). The

trend in seeking job cards across regions clearly depicts that registration for employment was maximum in the economically weaker regions.

Across income groups, as expected, the maximum percentage of job card holders was of very poor (45.2%) and poor (41.9%) households and the least percentage was of non-poor (high income) (21.3%) households. It shows that MGNREGA has been successful in the first step of its aim of providing employment to the poor. Landclass-wise also, the percentage of job card holders was high across landless (29.2%), sub-marginal (37.5%) and marginal (30.8%) households and was least but still substantial, for large households (19.7%). In household types, agricultural labour and non-agricultural labour households were far ahead in getting job cards than self-employed and other types of households.

Employment Seeking

It depicts the number (and percentage) of job card holders who sought employment in the total job card holders (Columns 5 and 6, respectively in Table 1). Overall, 84.0 per cent of the total job card holders sought employment in the states of India. Region-wise, the number of job seekers was maximum (95.7%) in the north-eastern region, followed by northern (90.2%) and eastern (85.1%) regions. Thus, in the north-eastern region, not only the number of job card holder households was highest in total sample households, but the number of job seekers was also highest, showing the incidence of extreme poverty in the region.

Across income groups, it was surprising to see that not all the job card holders in the poor and very poor household categories sought employment. As far as

Table 1. Dynamics of MGNREGA households by geographic and socio-economic dimension in India, 2009

Category	No. of sample rural house-holds	MGNREGA job card holders		MGNREGA job seekers		MGNREGA beneficiaries			
		No. of house-holds	% of house-holds	No. of house-holds	% of house-holds	No. of house-holds	% of job seekers	Employment (No. of days in a year)	% of sample rural house-holds
Region									
Eastern region	14227	4219	29.7	3591	85.1	2491	69.4	22.5	17.5
Western region	12870	4966	38.6	3689	74.3	2950	80.0	49.6	22.9
Northern region	10042	1770	17.6	1596	90.2	1342	84.1	30.0	13.4
Southern region	12344	3490	28.3	2894	82.9	2567	88.7	42.9	20.8
Hills region	3108	952	30.6	748	78.6	609	81.4	45.4	19.6
North-eastern region	6538	3612	55.2	3456	95.7	3367	97.4	57.6	51.5
India (All states)	59129	19009	32.1	15974	84.0	13326	83.4	43.1	22.5
Income group									
Very poor	5289	2393	45.2	2106	88.0	1659	78.8	37.1	31.4
Poor	9965	4173	41.9	3621	86.8	3032	83.7	41.3	30.4
Non-poor low	20447	7453	36.5	6381	85.6	5395	84.5	45.1	26.4
Non-poor high	23428	4990	21.3	3866	77.5	3240	83.8	44.6	13.8
Land class									
Landless	25087	7314	29.2	6243	85.4	5156	82.6	41.3	20.6
Sub-marginal (< 0.5 ha)	21266	7974	37.5	6905	86.6	5797	84.0	42.9	27.3
Marginal (0.5-1.0 ha)	8158	2514	30.8	2040	81.1	1734	85.0	45.7	21.3
Small (1.0-2.0 ha)	2816	735	26.1	516	70.2	415	80.4	51.3	14.7
Medium (2.0-4.0 ha)	1330	379	28.5	225	59.4	185	82.2	52.4	13.9
Large (> 4.0 ha)	472	93	19.7	45	48.4	39	86.7	67.2	8.3
Household type									
Self-employed in non-agricultural sector	14330	4094	28.6	3278	80.1	2665	81.3	40.6	18.6
Agricultural labour	6453	3209	49.7	2891	90.1	2395	82.8	35.4	37.1
Non-agricultural labour	10215	4515	44.2	4029	89.2	3394	84.2	44.5	33.2
Self-employed in agricultural sector	16837	5497	32.6	4487	81.6	3775	84.1	47.4	22.4
Others	11294	1694	15.0	1289	76.1	1097	85.1	46.9	9.7

trend is concerned, it was the same as observed in job card holding, viz. very poor (88.0%), followed by poor (86.8%), non-poor low (85.6%) and non-poor high (77.5%). Landclass-wise, the job was sought maximum by sub-marginal (86.6%), landless (85.4%) and marginal (81.1%) households. The job seeking was though least among large households at 48.4 per cent, it was still substantial. Across household types, agricultural labour and non-agricultural labour were far ahead in seeking jobs under a MGNREGA scheme.

MGNREGA Beneficiaries

These were those job card holders who sought employment under a MGNREGA scheme and were successful in getting employment. It is significant because some job card holders who sought employment, were not given employment because of shortage of works, more seekers than the quantum of works available, faulty planning, etc. The analysis is based on the number (and percentage) of beneficiaries in the total number of job seekers; these values are given in Columns 7 and 8 of Table 1.

Region-wise, it was the north-eastern region which provided maximum employment (97.4%) to its MGNREGA job seekers, followed by the southern (88.7%) and northern (84.1%) regions. Overall, 83.4 per cent MGNREGA job seekers were successful in getting jobs for the average duration of 43.1 mandays in a year. The success rate in getting employment across income group-wise, landclass-wise as well as household type-wise was quite high and varied between 80 and 85 per cent of total MGNREGA job seekers.

Duration of Employment

This is an important aspect of MGNREGA and is the basis of rural poverty reduction. The Act has a provision of providing 100 days of wage employment in a year, but it was found that no rural household could get employment for 100 days in a year. The details about days of work are given in Column 9 of Table 1. On an average, employment for 43.1 mandays was provided in 2009, it being maximum (57.6 mandays) in the north-eastern region and minimum in the eastern region (22.5 mandays). Across income groups, APL households received employment for more number of days (45 mandays) than BPL households (34-41 mandays). Similarly, landclass-wise also large households could manage to get more work (67

mandays) than landless and small households, who could get employment for 41-46 mandays only. Household type-wise, the agricultural labour got the employment for minimum duration, only for 35.4 days. It was surprising to note that resource-poor households could get employment for a smaller number of days than resource-rich households.

The benefits of MGNREGA have reached 22.5 per cent of the rural households at the national level. About 30 per cent PBL households, 37 per cent agricultural labour, 27 per cent sub-marginal farmers, and 21 per cent landless households have been benefitted from the launching of MGNREGA schemes. However, during the study year 2009, none of the socio-economic groups got employment for 100 days, as stipulated in the Act.

State-wise Economic Dynamics of Rural Households

The state-wise socio-economic dynamics of sample rural households is depicted in Table 2. It is seen that more than two-third households have received job cards under MGNREGA in the states of Rajasthan, Manipur, Mizoram and Tripura, while in the states of Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa & Daman, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Lakshadweep, Maharashtra, Punjab, and Uttar Pradesh not even one-third rural households had obtained job cards. In some states like Punjab, Haryana and Goa & Daman, this percentage had not even touched a two-digit figure. But the percentage of job seekers among the registered job card holders was very high in almost all the states, with states like Andhra Pradesh, Jharkhand, Manipur, Meghalaya, Nagaland, Sikkim, Tripura, Pondicherry, Arunachal Pradesh, Rajasthan, Tamil Nadu and Uttarakhand experiencing demand of jobs from about ninety per cent MGNREGA-registered households. In terms of provision of work, some states like Andhra Pradesh, Rajasthan and north-eastern states of Manipur, Meghalaya, Sikkim, Tripura and Mizoram, could provide work for 50 days or more in different schemes under MGNREGA in 2009.

In terms of benefits of MGNREGA schemes, it was found that the percentage of beneficiary households in the total sample households remained less than 10 per cent in Bihar, Goa & Daman, Haryana,

Table 2. Dynamics of MGNREGA households by socio-economic dimension in India, 2009

Category	No. of sample rural house-holds	MGNREGA job card holders		MGNREGA job seekers		MGNREGA beneficiaries			
		No. of house-holds	% of house-holds	No. of house-holds	% of house-holds	No. of house-holds	% of job seekers	Employment (No. of days in a year)	% of sample rural house-holds
A&N Islands	271	96	35.4	64	66.7	33	51.6	34.1	12.2
Andhra Pradesh	3926	1557	39.7	1331	85.5	1203	90.4	50.1	30.6
Arunachal Pradesh	1042	228	21.9	214	93.9	188	87.9	48.4	18.0
Assam	2616	591	22.6	520	88.0	354	68.1	30.5	13.5
Bihar	3300	457	13.8	376	82.3	229	60.9	26.0	6.9
Chhattisgarh	1759	464	26.4	395	85.1	243	61.5	24.1	13.8
Goa & Daman	224	22	9.8	13	59.1	7	53.8	13.6	3.1
Gujarat	1721	426	24.8	300	70.4	212	70.7	30.3	12.3
Haryana	1440	79	5.5	74	93.7	60	81.1	30.8	4.2
Himachal Pradesh	1660	719	43.3	581	80.8	506	87.1	48.2	30.5
Jammu & Kashmir	1448	233	16.1	167	71.7	103	61.7	31.3	7.1
Jharkhand	1495	655	43.8	575	87.8	514	89.4	34.2	34.4
Karnataka	2038	233	11.4	148	63.5	103	69.6	31.8	5.1
Kerala	2606	433	16.6	310	71.6	246	79.4	25.8	9.4
Lakshadweep	56	15	26.8	15	100.0	12	80.0	46.0	21.4
Madhya Pradesh	2735	1690	61.8	983	58.2	697	70.9	29.1	25.5
Maharashtra	4017	452	11.3	297	65.7	126	42.4	34.0	3.1
Manipur	1376	923	67.1	922	99.9	922	100.0	56.1	67.0
Meghalaya	864	375	43.4	326	86.9	315	96.6	51.1	36.5
Mizoram	632	508	80.4	497	97.8	496	99.8	76.3	78.5
Nagaland	704	384	54.5	367	95.6	327	89.1	38.8	46.4
Odisha	2976	1033	34.7	813	78.7	520	64.0	27.4	17.5
Pondicherry	128	47	36.7	46	97.9	40	87.0	14.5	31.3
Punjab	1560	107	6.9	92	86.0	63	68.5	27.6	4.0
Rajasthan	2582	1714	66.4	1514	88.3	1387	91.6	70.3	53.7
Sikkim	608	229	37.7	224	97.8	220	98.2	58.5	36.2
Tamil Nadu	3319	1109	33.4	980	88.4	930	94.9	40.7	28.0
Tripura	1312	965	73.6	906	93.9	899	99.2	59.7	68.5
Uttar Pradesh	5903	1080	18.3	960	88.9	832	86.7	32.8	14.1
Uttarakhand	1048	504	48.1	470	93.3	387	82.3	24.3	36.9
West Bengal	3576	1674	46.8	1487	88.8	1145	77.0	16.8	32.0

Jammu & Kashmir, Karnataka, Kerala, Maharashtra and Punjab, while it crossed 50 per cent mark in Rajasthan, Manipur, Mizoram and Tripura. The overall performance of Rajasthan and north-eastern states has been commendable in terms of high number of job card holders, job seekers, and the number of days work provided in various schemes under MGNREGA.

Dietary Pattern and Nutritional Status

The MGNREGA was introduced with the aim of improving the purchasing power of the rural people in India. Table 3 provides a comparison of the dietary pattern and nutritional status of MGNREGA job card holders versus non-job card holders; job-seekers versus non-job seekers; beneficiaries versus non-beneficiaries

Table 3. Dietary pattern and nutritional status of rural households in India, 2009

Socio-economic dimension	MGNREGA job card holders	MGNREGA non-job card holders	MGNREGA job card holders		
			Job-seekers		Non-job seekers
			Beneficiaries	Non-beneficiaries	
Share of food expenditure in total expenditure, %					
Food commodities	57	51	58	58	54
Non-food commodities	43	49	42	42	46
Expenditure (₹/capita/day)	28.80	37.20	28.60	26.60	31.60
Dietary pattern (annual per capita consumption in kg)					
Cereals	146.7	143.5	148.4	141.9	143.2
Pulses	7.0	8.7	6.8	7.4	7.8
Milk	43.9	66.2	41.6	39.3	58.0
Edible oils	6.1	7.4	5.9	6.3	7.1
Vegetables	57.7	63.1	58.1	57.0	56.2
Fruits	7.3	10.8	6.9	7.0	9.1
Meat, eggs & fish	5.8	5.9	6.1	5.4	5.0
Sugar	7.7	9.5	7.5	7.6	9.0
Food budget shares, % of total food expenditure					
Cereals	31.9	27.8	32.6	32.4	28.5
Non-cereals	68.1	72.2	67.4	67.7	71.6
Food expenditure (₹/capita/year)	6025	6925	6050	5591	6277
Sources of calories, % of total calories intake					
Cereals	59.9	55.5	60.1	60.9	58.3
Non-cereals	40.1	44.6	39.9	39.1	41.7
Calorie intake (kcal/cap/day)	2311	2440	2332	2199	2317
Sources of protein, % of total protein intake					
Cereals	46.0	46.8	44.1	52.2	50.2
Non-cereals	54.0	53.2	55.9	47.8	49.9
Protein intake (g/cap/day)	78.4	77.5	81.4	67.6	74.5
Per cent of households					
Below poverty line	39.9	26.4	40.6	44.9	32.4
Nutritional deficit	37.6	33.8	36.3	44.2	37.1
Undernourished	19.6	18.0	17.7	26.9	21.3
Employment under MGNREGA schemes (mandays/year)	30.2	0.0	43.1	0	0

Table 4. Expenditure on major non-food items by MGNREGA beneficiaries and non-beneficiaries in India, 2009

Non-food items	Expenditure (₹/capita/year)		% share in total non-food expenditure	
	MGNREGA-beneficiaries	MGNREGA-non-beneficiaries	MGNREGA-beneficiaries	MGNREGA-non-beneficiaries
Fuel & light	965	915	22.0	22.2
Education	383	402	8.7	9.8
Transport	419	347	12.3	15.0
Medicine & health care	540	617	9.6	8.4
Clothings	583	558	13.3	13.6
Others non-food items	1493	1276	34.1	31.0
Total non-food expenditure	4384	4115	100	100

among rural households in India. It was found that job card holders under MGNREGA spent a higher percentage (57%) of their income on food commodities compared to non-job card holders (51%). The expenditure share on food decreased with increase in the income level. Among food commodities, the share of cereals dominated the food expenditure accounting for about 28-32 per cent. With improvement in the purchasing power, the dietary pattern diversified towards non-cereal high-value commodities, accounting for 68-72 per cent of the total food expenditure.

The MGNREGA job card holders are relatively poor than non-job card holders. The non-job card holders spent ₹ 37/capita/day on food and non-food commodities while job card holders spent only ₹ 29/person/day on these items. Non-job seekers among the job card holders were richer than the job-seekers. The MGNREGA targeting the weaker sections of the rural households contributed towards providing additional income through employment for 43.1 days (average) in a year. It facilitated buying of more food and consumption of more calories and protein by beneficiaries vis-à-vis non-beneficiaries of MGNREGA.

Cereals accounted for 55-61 per cent of the total calories intake and 44-52 per cent of total protein intake by the households across various MGNREGA groups formed for the analysis of data. The households who desired to seek job but could not get the same (non-

beneficiaries) had a lower energy intake (2199 kcal/capita/day) as well as lower protein intake (67.6 g/capita/day) compared to the households who received the employment (beneficiaries) (2332 kcal/capita/day and 81.4 g/capita/day, respectively).

This comparison of beneficiaries and non-beneficiaries has clearly revealed that MGNREGA is attaining its aim of providing nutritional security to the weaker sections of rural households. The calorie intake has increased from 2199 kcal/capita/day to 2332 kcal/capita/day, and protein intake has increased from 67.6 g/capita/day to 81.4 g/capita/day. About 4.3 per cent households will be lifted above the poverty line. The number of nutrition-deficit households has reduced nearly by 8 per cent, from 44.2 per cent to 36.3 per cent and the number of undernourished (deficit in protein) households has come down by 9 per cent, from 26.9 per cent to 17.7 per cent.

Non-food Expenditure Pattern

Among non-food commodities, the expenditure on fuel & light takes the major share, followed by clothings, transport, healthcare and education (Table 4). The MGNREGA beneficiary households spent more on non-food items as compared to non-beneficiary households. The beneficiary households spent more on fuel & light, transport, clothings and other non-food items but less on education and healthcare & medicines than by the non-beneficiary households.

Conclusions

The study has revealed that implementation of MGNREGA is a direct way of increasing income of the rural poor. It has benefitted 22.5 per cent of the rural households by providing, on an average, wage employment for 43 days. MGNREGA has been successful in reducing the poverty level by 4 per cent. It has provided almost equal employment benefits to all the categories of farm-sizes, household-types and income-groups. The state-wise study has revealed that though all the states have been benefitted by MGNREGA, but with wide variations. It is observed that the economically weaker states of the country have been benefitted more and have implemented MGNREGA more vigorously.

The study has shown that the raise in income has led to an increase in food consumption level — of both cereals and non-cereals — by all the categories of rural households. A diversification in the dietary pattern of different households has also been observed, which is again a strong indicator of better food consumption. These have resulted into a substantial increase in calorie-intake as well as protein-intake by different categories of households, leading to a decrease in undernourished and nutrition-deficit households by 8-9 per cent.

In nutshell, the impact of MGNAREGA has been positive and effective in increasing household food consumption, changing dietary pattern and providing nutritional food security to the poor rural households of India.

References

- Wikipedia. *Mahatma Gandhi National Rural Employment Guarantee Act*. http://en.wikipedia.org/wiki/Mahatma_Gandhi_National_Rural_Employment_Guarant.. 6/18/2012
- Dutta, Puja, Murgal Ravallion, Rinku and De Walle, Dominique Van (2012) Does India's employment guarantee scheme guarantee employment? *Economic & Political Weekly*, **XLVII**(16): 55-64.
- GoI (Government of India) (2009a) *Socio-Economic Survey: Employment and Unemployment*, Sixty-sixth Round: July 2009-June 2010, National Sample Survey Organization, New Delhi.
- GoI (Government of India) (2009b) *Socio-Economic Survey: Consumer Expenditure*, Sixty-sixth Round: July 2009-June 2010, National Sample Survey Organization, New Delhi.
- GoI (Government of India) (2012) *Poverty Estimates for 2009-10*, Press Information Bureau, Planning Commission, 19 March.

Received: January, 2013; Accepted: March, 2013