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Assessment of Asset Creation and Awareness Level among Beneficiaries under MGNREGA in Himachal Pradesh

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Abstract

Enhancing the livelihood security of the rural poor through the creation of durable productive assets is one of the prime objectives of MGNREGA for revival of rural economy. The study is an attempt to analyze the nature of assets created and level of awareness among beneficiaries about provisions of the scheme. Results of the study reveals that MGNREGA helps in creating durable productive assets which are useful in uplifting the socio-economic conditions. The nature of relationship between the variables chosen and assets created was computed using correlation coefficient, which is found significant with size of land holding, family income employment under MGNREGA, and economic status of respondents. On average, 68 percent of respondents were moderately aware of the provisions of scheme. Under constraints faced, worksite facility was a major constraint. In case of personal constraints, being unable to take extra work due to fatigue and children left uncared were major constraints.

Keywords: Assets creation, Awareness level, Correlation, Garrett ranking, Perception

JEL Classification: H50**,** I38, O10, O20

Introduction

To evolve the design of the wage employment programs by creating assets and empowering communities, the central government launched the National Rural Employment Guarantee Act in 2005. The act was enacted to enhance livelihood security in rural areas by providing 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work (MGNREGA Sameeksha, 2012). Public work programs prior to NREGA were plagued by major implementation problems, one among them was poor quality of assets created, because asset creation was a very distant objective of the employment generation (World Bank, 2011). NREGA later named as Mahatma Gandhi National Rural Employment Guarantee Scheme in 2009, not only provide employment but also focuses on inclusive growth, rejuvenation of natural resources, generating productive assets with the objective of sustaining growth (Harish *et al,* 2011). Enhancing livelihood security of the rural poor through the creation of durable productive assets is one of the prime objectives of MGNREGA for revival of rural economy to labour intensive growth path (Mishra, 2011). The employment generation can be sustained if more focus is given on generating community as well as individual assets (Katoch *et al*, 2020).

Himachal Pradesh being a hilly state has a number of geographical impediments. Creation of productive assets under programs in such areas is inherently difficult and these hurdles in implementation engenders to poor quality of assets in the rural hilly areas. Therefore, MGNREGA was realized as key in ensuring broader rural development through creating productive rural assets (Aggarwal *et al,* 2012). MGNREGA was executed in India's 200 most backward districts in its first phase and later its coverage extended to 130 more districts in its second phase and remaining districts were covered in the third phase. In Himachal Pradesh, Sirmaur and Chamba districts were covered in the first phase of program, Kangra and Mandi districts in the second

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phase and remaining districts were brought under the cover in 2008. By keeping this in view, the present study was conducted in Sirmaur district of state with objectives to assess the nature of assets created and level of awareness among beneficiaries about provisions of the scheme.

Data Sources and Methodology

Multi-stage random sampling was used to draw the sample of respondents. Primary data was collected from two blocks *viz.,* Rajgarh and Sangrah selected in sampling's first stage. A list of gram panchayats from each block was prepared and five panchayats were selected at random in sampling's second stage. Thereafter, list of the households from selected panchayats was prepared and 10 households were selected in sampling's third stage. Thus, in all total 100 respondents were selected randomly in sampling process. Quality of assets created and level of awareness among beneficiaries was drawn on the basis of perception of respondents. Correlation coefficient was used to find out the extent of the relationship between variables. Garrett's ranking technique was used to analyse the problems encountered by respondents.

Perception on assets created/work done

To assess whether the assets created were useful to the beneficiaries and were being used as per purpose, the respondent's perception was operationalized through survey. Five point continuum scale *viz.*, very poor, poor, good, very good and excellent with respective scoring of 1, 2, 3, 4 and 5 for the positive statements was operationalized to measure perception. The scoring was reversed for negative statements and respondent's frequency under each column of five point continuum scale was multiplied with their respective score to determine the total score of each respondent. On the basis of the total score and standard deviation, the respondents were divided into the following three perception categories;

Particulars	Perception
Good	>Mean + SD
Fair	Mean ± SD
Poor	<Mean – SD

Correlation Coefficient

Correlation is used to find out the extent of the relationship between the scores of the X and Y variables. The computed 'r' values were then compared with the tabulated values at 1 and 5 per cent levels of significance (Mummulla, 2015).

$$r = \frac{\Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{n}}{\sqrt{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{n}\right)\left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{n}\right)}}$$

Where,

r = coefficient of correlation between X and Y

ΣX = sum of X variables

ΣY = sum of Y variables

ΣX^2 = sum of squares of X variables

ΣY^2 = sum of squares of Y variables

N = size of the sample

Variables for Correlation

Variables were selected on the basis of primary data available during survey and review of literature under scheme.

X Variables : Age, Education, Economic status, Type of house, Type of family, Size of family, Land holding, Family income, Total working days and Employment under MGNREGA.

Y Variables : Individual and Community assets

Under 'Y' variables, Individual assets has been operationalized as creation of assets that the respondents secured after participating in MGNREGA works such as: income, land development, addition in livestock, material procurement etc. While income has been an earning, remaining were the indicative of purchasing capacity of the respondents. Community assets were operationalized as the activities undertaken to develop the resource base of the village to enhance the livelihood of the community like creation of water bodies, fish ponds, renovation of play grounds, sanitary facilities in work place, anganwadi, village common places, schools, dispensary etc. Nature of relationship between 'X' and 'Y' variables was tested by hypothesis.

H_0: No significant relationship between 'X' variables and assets created under MGNREGA

H_1: Significant relationship between 'X' variables and assets created under MGNREGA

Perception on Awareness level

To assess the level of awareness among beneficiaries,

their perception on the scheme was operationalized through numerous questions during survey. On the basis of the total score and standard deviation, the respondents were divided into the following three perception categories;

Particulars	Perception
Significantly aware	>Mean + SD
Moderately aware	Mean ± SD
Unaware	<Mean – SD

Garrett's ranking technique

The problems encountered by respondents were analyzed using Garrett's ranking technique. The ranks given by respondents were then converted into per cent position by using following formula;

$$\text{Per cent position} = \frac{100 \times (R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij} = Rank given to i^{th} problem by the j^{th} individual and

N_j = Number of problems ranked by j^{th} individual.

The estimated per cent positions were converted into scores using table given by Garrett and Woodworth (1969). Then for each factor, the scores of individual respondents were summed up and divided by the total number of respondents for whom scores were gathered. The mean score values estimated for each factor were arranged in the descending order. The constraint with the highest mean value was considered as the most important one and the other followed that order (Karthick *et al*, 2013).

Chi-Square test

The chi-square test has been used to find out the significance in constraints. It has been one of the most widely used non-parametric tests in the statistical work (Guleria, 2018)

$$\chi 2 = \sum \frac{(O - E)^2}{E}$$

Where,

O = Observed frequencies

E = Expected frequencies

Results and Discussion

Assets created under MGNREGA

Asset created under scheme were divided into two categories that is individual and community assets. Individual assets were those that the respondents secured after participating in MGNREGA works, while community assets were considered as the activities undertaken to develop the resource base of the village to enhance the livelihood of the community. Further, extent of relationship between these assets and X variables was computed by correlation coefficient and quality of asset creation was assessed on basis of perception.

Relationship between 'X' variables and assets (individual and community) created

To study the nature of relationship between the 'X' variables and assets created, correlation coefficient 'r' has been computed and values presented in table 1. The relationship between the scores of 'X' variables and assets (individual and community) of the respondents has been tested by null and alternate hypothesis. Perusal of table 1 revealed that the overall coefficient of correlation 'r' computed between individual assets and 'X' variables was significant with size of land holding, family income and employment under MGNREGA. Whereas, for community assets, economic status, size of land holding and employment under MGNREGA were found to be significant. Hence, the null hypothesis was rejected and alternate hypothesis was accepted.

The significance with size of land holding, family income and days under MGNREGA could be justified with as with creation of agriculture oriented assets by the scheme, land under cultivation has increased; or with wage earnings under MGNREGA, the increased family income might have been invested on land or other individual assets; more days of employment under scheme means more earnings and creation of number of assets. Whereas, the significance of economic status could be due to social upliftment and earnings of those employed in the scheme after implementation of program and creation of community assets.

Quality of assets created/work done under MGNREGA

Quality of asset created/work done was identified by categorizing data into five point continuum scale. The perusal of table 2 revealed that quality of renovation of traditional water bodies was near to very good. Whereas, in case of other assets quality was not more than good. Given the low level of support infrastructure provided for MGNREGA works, it was not surprising that quality of works undertaken was more or less reported to be poor (Ambasta *et al*, 2008).

Table 1. Correlation coefficient analysis between profile characteristics and assets created

X Variables	Y Variables (n=100)	
	Individual Assets	Community Assets
Age	0.0177	-0.0314
Education	0.0226	0.1856
Economic Status	0.1728	0.2840**
Type of House	-0.1498	-0.0939
Type of Family	-0.0641	0.0162
Size of Family	-0.0844	0.0183
Size of Land Holding	0.8019**	0.1973*
Family Income	0.5468**	0.0732
Total working days	0.0866	0.0643
Employment under MGNREGA	0.2187*	0.2726**

*Note: *, ** significance at 5 and 1 per cent level respectively*

Table 2. Quality of assets created under MGNREGA

Assets/work done	Average
Renovation of traditional water bodies	3.66
Drought proofing	1.50
Land development	1.87
Fisheries	1.96
Rural sanitation	2.40
Irrigation facilities to SC/ST	2.47
Play Ground	1.73
Other works	2.32

Note: Figures represent average quality of study area

Expectations from the scheme were not completely realized during its initial years due to non-uniform returns from the assets. The gains were positive in favorable pockets, but they were marginal in disadvantageous situations. The works taken up under the MGNREGA, opened up greater livelihood opportunities through the increased availability of wage income but the issues related to physical assets and their performance levels were not sufficiently addressed. Probably because MGNREGA neither adopted any measure of pre-work feasibility studies of land conditions to prescribe suitable construction specification nor it proposed any post-construction evaluation to estimate the realization of adequacy level of the assets created. Constructions were non-durable mainly due to inadequate time frames and a lack of fund utilization for basic maintenance of the facilities, due to which the lifespan of the assets becomes uncertain.

Perception of respondents regarding assets quality under MGNREGA

Perception of the beneficiaries regarding quality of work done under scheme was grouped into three categories *viz.* good, fair and poor. According to 68 per cent of respondents, work done under scheme was fair. Whereas, according to 17 per cent it was good enough but for remaining 15 per cent it was poor. In conclusion, with respect to perceptions, overall the scheme has done its part fairly good but still there is a long way to go (Fig. 1).

Level of awareness among beneficiaries about MGNREGA

To assess the level of awareness among beneficiaries, a set of questions were asked as yes or no in answer during survey which were converted into average percentage from both blocks. 86 per cent of respondents were aware about provisions of MGNREGA scheme implying good sign. But, the contribution of gram sabha functionaries (58%) was not commendable, which showed the ineffectiveness of gram sabha in information dissemination. The job cards were generally made hassle free except for 7 per cent of the sample for whom the convenience charges were paid later. No fee was charged for issuing of job card and 92 per cent of respondents got work within 15 days. 87 per cent respondents received dated receipt of their application and rest were given verbal assurance. Around 84 per cent, got 100 days employment for a year, rest were either not aware about work time and place or were

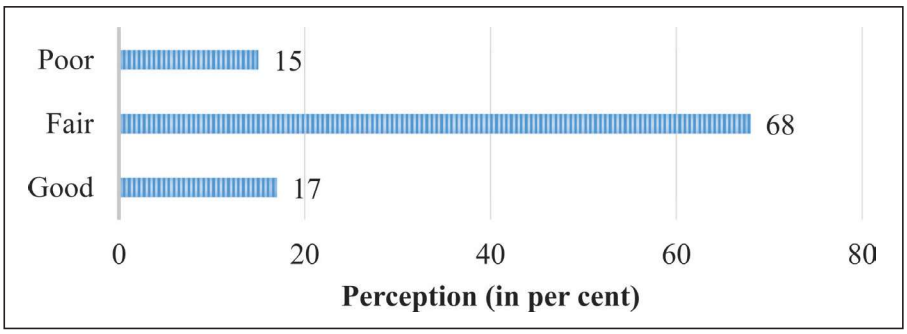

Figure 1. Perception of respondents regarding quality of assets

busy in some other important work during sanctioning of proposed work or were caught with some personal issues.

Within 7-15 days, 69 per cent of respondents got their wages whereas few of the remaining beneficiaries' blamed gram sabha functionaries for delay in wages. Only 35 per cent of respondents were carrying job cards to work place, that too on irregular basis because as mostly work places were within 5 km of residence and gram sabha functionaries were familiar with the workers. All the respondents had their bank/post office accounts, as the payments under scheme are paid through digital transaction. 7 per cent respondents said that they receive unemployment allowance when panchayat failed to provide employment within 15 days from the receipt of application. Only, 61 per cent workers were satisfied with wages and majority of these constituted of rural women. Wages were provided irrespective of gender basis that is, there was no discrimination with male/female workers in distribution of wages. 60 per cent of employed workers were unskilled and rest were skilled, which shows the level of unemployment in region. Only 79 per cent respondents said that there attendance was marked daily in the rolls.

According to 44 per cent respondents, 100 days employment was less and it should be increased to more days with main emphasis on agriculture sector. Work done under scheme was good and fair according to 84 per cent of respondents. No work under the scheme was completed through contractors and no heavy machinery was utilized in the work site, other than some basic tools like spade, axe, etc. Work completed under scheme was beneficial to village/society according to 89 per cent, whereas rest claimed that it was beneficial only up to few days due to low maintenance. 70 per cent respondents admit that their socio-economic conditions have improved due to implementation of MGNREGA. Around, 73 per cent agreed that panchayat has implemented MGNREGA properly and according to rest there is room for improvement.

Majority of the times (95%) panchayat fixed/erected work site notice board at work site after completion of work. 89 per cent of respondents said that MGNREGA was good for providing employment and scheme has positively impacted the rural unemployed poor families as they were able to reduce their family debts and had sufficient food to sustain. 92 per cent feel that MGNREGA has brought an end to labour-landlord relationship, as they were able to get work on demand basis. 41 per cent believed that scheme has succeeded in checking migration of workers from the villages as these households were getting employment opportunities in or around their villages at satisfactory wage rates.

Perception of respondents regarding level of awareness

Awareness perception was calculated by grouping data collected from respondents in three categories i.e. significantly aware, moderately aware and unaware. Overall, maximum number of respondents 68 per cent were moderately aware about provisions of scheme followed by 18 per cent significantly aware and 14 per cent unaware. In conclusion, with respect to perceptions, overall the respondents were aware about the provisions of scheme (Fig. 2).

Constraints encountered by respondents

The constraints were ranked using Garrett's ranking technique, based on the responses by beneficiaries. Perusal of table 3 revealed that, absence of work site facilities was main constraint according to the response from 79 per cent of respondents. Major constraints

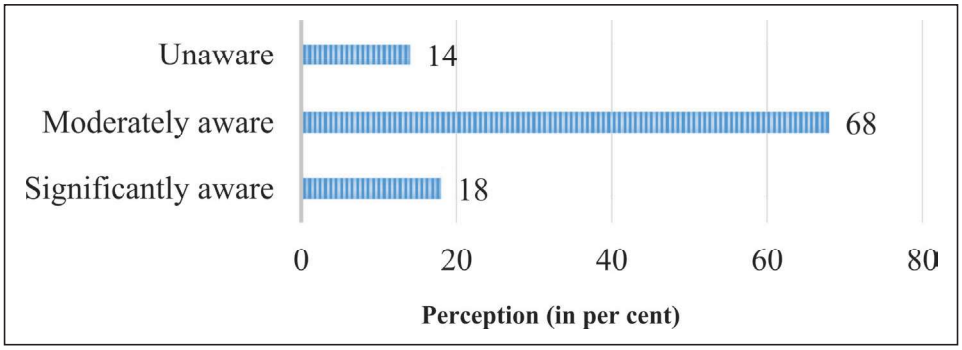

Figure 2. Perception of respondents regarding level of awareness

Table 3. Constraints encountered by respondents

Constraints	Per cent	Rank
Right to work	26.42	IX
Right to information	21.35	X
Maximum no. of days of employment guaranteed in a year	53.08	V
Unemployment allowance in absence of work	47.58	VI
Distance between house and worksite	39.71	VII
Time limit for issue of job card	69.39	II
Minimum wages	56.32	IV
Mode of payment of wages	66.43	III
Time limit for payment of wages	38.54	VIII
Worksite facilities	79.18	I
Personal Constraints		
Load of work	55.3	V
Non-cooperation from the family members	59.27	III
Unable to take extra work due to fatigue	75.91	I
Children left uncared	75.52	II
No access or control over the income earned through MGNREGA	59	IV
Chi-Square value	63.33*	

*Note: Figures represent average of study area in per cent*p<0.05*

reported by the respondents were time limit for issue of job card, mode of payment of wages, low wages and employment days in a year. In case of personal constraints, inability to take extra work due to fatigue and children left uncared were two major ones.

The significance of chi-square value at 5 per cent level showed that the cited problems did not effected the respondents equally.

Conclusion and Policy Implications

MGNREGA helps in creating the durable productive assets which were useful to the individual, family, and community as a whole in uplifting the socio-economic conditions. The correlation coefficient computed to study the nature of relationship between the variables and assets created was found significant with size of land holding, family income, employment under MGNREGA and economic status. According to 68 per cent of respondents, work done under scheme was fair enough. On average, 68 per cent of respondents were moderately aware about provisions of scheme followed by 18 per cent who were significantly aware. Absence

of worksite facility was major constraint which could be overcome if panchayat officials ensure the availability of facilities to workers and if s/he is not competent enough to ensure, things should be brought in knowledge of administrators. In case of personal constraints, being unable to take extra work due to fatigue and children left uncared were two major constraints. To overcome these personal constraints, gram panchayat should take the help of anganwadis or assign one individual who can look after children, provide drinking water, and first-aid in emergencies. It is also recommended that, assets should be maintained on the basis of previous experiences of the local workers engaged in scheme and panchayat officials should carry out some surprise visits to find out the progress of work done. This uneven level of awareness, can be improved by active participation of government and non-government organizations and a portion of funds can be used by administration to drive the awareness path for the scheme.

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