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Asian Journal of Agricultural Extension, Economics & Sociology
11(4): 1-10, 2016; Article no.AJAEES.26687
ISSN: 2320-7027

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Impact of MGNREGA on Quality of Life of MGNREGA Beneficiaries in Punjab

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Authors' contributions

This work was carried out in collaboration between both authors. Author VR designed the study, wrote the protocol and supervised the work. Author BK carried out all field work and performed the statistical analysis. Author BK managed the analyses of the study. Author BK wrote the first draft of the manuscript. Author VR managed the literature searches and edited the manuscript. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2016/26687
Editor(s):
(1) Kwong Fai Andrew Lo, Agronomy and Soil Science, Chinese Culture University, Taipei, Taiwan.
(2) Zhao Chen, Department of Biological Sciences, College of Agriculture, Forestry and Life Sciences, Clemson University, USA.
Reviewers:
(1) Arif A. Waqif, University of Hyderabad, Hyderabad, India.
(2) Samuel Ochuodho, University of Eastern Africa, Baraton, Kenya.
(3) Tsepiso A. Rantso, National University of Lesotho, Lesotho.
Complete Peer review History: http://sciencedomain.org/review-history/15318

Original Research Article

Received 28th April 2016
Accepted 24th June 2016
Published 9th July 2016

ABSTRACT

The present study was conducted to assess the impact of MGNREGA on quality of life of rural poor in Punjab. The 11 districts of Punjab were selected from 3 socio-cultural by using probability proportionate to sampling size procedure. A total of 396 respondents were selected randomly who worked under MGNREGA from last five years. Before-after assessment based on recall method by assessment of quality of life of beneficiaries was used to assess the impact on quality of life. It was observed that in *Malwa* region, maximum change was observed in household possession aspect ($\bar{X}$=2.74, Rank 1st). Improvement in sanitary conditions obtained $\bar{X}$=1.13 and Rank 2nd as significant change in conditions of kitchen, toilets, cleanliness was reported. As far as housing conditions were concerned the beneficiaries reported same improvement ($\bar{X}$=1.09, Rank 3rd) by way of moving from mud house to cemented house with cemented floors and walls or adding rooms etc. As far as impact of *MGNREGA* in the *Majha* region was concerned maximum impact

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was observed with respect to material possession having obtained ($\overline{X}$=2.66, Rank 1st). As far as food conditions were concerned, beneficiaries reportedly improvement in food consumption pattern ($\overline{X}$=0.88, Rank 2nd). Least impact was observed in the area of education with ($\overline{X}$=-0.49, Rank 8th). In *Doaba* region of Punjab, maximum improvement was found in acquiring material possessions ($\overline{X}$=2.79, Rank1st) followed by housing condition ($\overline{X}$=1.08, Rank 2nd) and consuming quality food ($\overline{X}$=0.90, Rank 3rd). *MGNREGA* had significant impact on housing conditions, household possessions, food consumption and sanitary conditions of beneficiaries (p=0.05). Though the socio-economic conditions of households have improved gradually, but to hasten the pace of improvement some developmental initiatives can be integrated with the scheme mainly targeting those households who are working regularly under the scheme.

Keywords: *MGNREGA impact; quality of life indicators (education, housing, sanitary conditions, food consumption, clothing, health conditions, household possession and social life); Punjab.*

1. INTRODUCTION

India is one of the fastest growing economies in the world yet poverty in the country is all pervasive. According to a recent Indian government committee constituted to estimate poverty, nearly 38% of India's population (380 million) is poor [1]. Even after more than 67 years of Independence, India still has the world's largest number of poor people in a single country. Of its nearly 1 billion inhabitants, an estimated 260.3 million are below the poverty line, of which 193.2 million are in the rural areas and 67.1 million are in urban areas [2]. More than 67.5% of poor people reside in villages [3]. Poverty level is also not uniform across India. The incidence of poverty in India is much more severe in the villages than in towns. The major reason of course is the mammoth population which is far in excess of what may be supported by available resources. This abnormal rise in population has intensified the problem of unemployment in the country. The states have been unable to provide adequate work leading to ever increasing number of unemployed every year.

Most of the poor are employed in unorganized sector and live lives of uncertainty misery and disadvantage. Over 94 per cent of India's working population is part of the unorganised sector which has grown tremendously in the last few decades. Un-organised sector is basically characterized by relatively irregular salary pattern, no clear cut terms and conditions of employment, lack of rights and obligations, and seldom any social security protection measures. The workers in unorganised sector include agricultural labourers, small and marginal farmers, forest workers, fisher folk, *beedi* rollers, garment stitchers, construction workers, rag pickers- people involved in an innumerable variety of tasks and employments, having no fixed employer. These workers are basically causal, contractual, migrant, home based, own-account workers who attempt to earn a living from whatever meagre assets and skills they possessed. Unorganised sector unlike organised sector has low productivity and offers lower wages [4].

This labour class comprising of lakhs of people earn their livelihood on daily basis. They gather themselves on some specific place just to find daily employment somewhere. Sometimes, they find employment and sometimes they return back homes without finding employment and thus habituated to adjust themselves with the circumstances. Though, this is irritating, annoying and disappointing at-time when basic necessities problems of even food and clothing etc. pose problems in front of them. So, major problems confronting this population includes low levels of literacy and income, unemployment and under-employment, poor nutrition and health status, lack of access to potable water, inadequate physical safety and social inequity causing misery and making their lives difficult. Further, children of these families travel to nearby towns for health care facilities and higher education and even for primary and secondary school education. They have limited choices of food and poor consumption pattern. Sanitation is a big problem in rural India with open sewage lines/ drains running along the side of the streets everywhere. Some people still defecate in the open. They are singularly deprived of civic amenities and infrastructural facilities. As a result, the millions of unemployed and underemployed are migrating in large numbers to the cities in search of better life and prospects.

In order to tackle above problems, a number of rural development programmes have been

implemented by the government to create employment opportunities, alleviate poverty and improve quality of life of these rural poor. Since India's independence, a number of policies and programmes have been designed with the aim to alleviate rural poverty as an approach towards planned development of the country. The employment oriented programmes as effective instruments of poverty alleviation started receiving attention around 1980's. Consequently, the sixth plan included National Rural Employment Programme (NREP) and the Rural Landless Employment Guarantee Programme (RLEGP). Some other employment generation programmes launched by central government included Jawahar Rozgar Yojana (JRY), Employment Assurance Scheme (EAS), Sampoorna Grameen Yojana (SGRY) and National Food for Work Programme (NFFWP) etc. However, all these programmes were treated as schemes which did not involve any legal entitlements. They were aimed to reduce the gap between rural and urban people which would help reduce imbalances and speed up the development process. Government of India made huge investment (Rs. 79,526 crores) for up-liftment of rural areas in 2015-16 [5]. The focus of national rural development programmes is therefore on raising the economic level of the people, reduce poverty and unemployment, improve health and educational status and fulfil the basic needs such as food, shelter and clothing of the rural masses. The poverty alleviation programmes focus on generating employment through creation of basic social and economic infrastructure, provision of training to rural unemployed youth and providing employment to marginal farmers/labourers to discourage their seasonal and permanent migration to urban areas.

A new rural development initiative of central government (passed by the parliament) came into existence in the form of an Act, on 25th August 2005 called the 'National Rural Employment Guarantee Act (*NREGA*)'. This is considered the most accessible approach to rural India for poverty alleviation through employment generation so far. This act, now called Mahatma Gandhi National Rural Employment Guarantee Act (*MGNREGA*) aims at enhancing livelihood security in rural areas which came into force on February 2, 2006 and planned to be implemented in phased manner. In the first phase, it was introduced in 200 most backward districts of the country and was then extended to additional 130 districts in the financial year 2007-2008. Subsequently, the Act was extended to cover all the districts, with the exception of districts that have a hundred per cent urban population. This act is an Indian Labour law and social security measure that aims to guarantee the 'right to work' and enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.

Starting from 200 districts on 2 February 2006, the *MGNREGA* brought all the districts of India under its ambit since April, 2008. The statute is hailed by the government as "the largest and most ambitious social security and public works programme in the world". In its World Development Report (2014) the World Bank termed it a "stellar example of rural development" [6]. The act envisages creating durable assets (such as roads, canals, ponds, wells), providing employment within 5 km of an applicant's residence, and paying them the minimum wages. If work is not provided within 15 days of applying, the applicants become entitled to an unemployment allowance. Thus, employment under *MGNREGA* is a legal entitlement.

It is the first ever law internationally, that guarantees wage employment at an unprecedented scale. The works are mostly taken up under this act to rejuvenate the natural resource base and address the causes of chronic poverty such as drought, deforestation, soil erosion, floods, poor rural connectivity etc. In the year 2012-13 the scheme generated over 4.48 crore person days. Women constituted the major work force followed by those from scheduled tribes and scheduled castes. Over 23.28 crore worth works were under taken in the year 2008-09 of which 45% were water conservation, 20% were micro irrigation and 15% were land development and 18% rural roads based projects as reported by Ministry of Rural Development [7]. In order to increase transparency in the programme and bring the rural poor under the organized banking sector and credit system, agencies for wage payment are being separated from implementing agencies through accounts-based wage payment [8].

The potential of *MGNREGA* for strengthening the livelihood resource base is thus making itself manifest and its linkages with other development initiatives are being established so that their coordinated energies can be leveraged for sustainable development. Long term benefits and

sustainable development are however, possible only through multiple inputs converge that impact human life and its environment holistically. The ministry of rural development recognizes the need of convergence of various schemes for optimal utilization of resources for enhancing the productivity of natural resources and improving the quality of life. *MGNREGA* with its inter-sectoral approach opens up opportunities for such a convergence. A total of 79,526 crore rupees were allocated for rural development activities in 2015-16 financial year. Out of which around 34,699 crore rupees have been allocated for *MGNREGA* [7].

Since eight years *MGNREGA* has been in operation in all districts of the state, but it has not shown the intended results *MGNREGA* objectives. Most of the evaluation studies show that the scheme is not working properly at ground level because of it's poor implementation. There are many issues and challenges that have come up during its implementation such as demand of work, identification of work site and planning, complicated administrative structure with less competent staff, delay in payment, lack of human resources. It is observed that in very few states like Andhra Pardesh, Rajasthan, etc. where programme is being implemented successfully as pointed out by evaluative nature of studies. So, it is time now to assess the impact of the programme from holistic point of view as huge investments are being made on it.

Impact assessment refers to outcome of the results of programme, net effect of progarmme on economic and social status. The word bank started carrying out annual impact studies as far back as 1979, most of which involved attempts through the use of socio-economic surveys, to assess the impact on the targeted beneficiaries. They suggested that there were two approaches to impact assessment- the exploratory approach and the explanatory approach. The latter attempts a systematic explanation and quantification of the changes being analysed and this would involve using experimental methods, like control samples. The exploratory approach, on the other hand attempt that the full experimental approach is likely to prove very demanding in time and resources and opts for simpler techniques which involve documentation the changes that have occured without trying to establish a control. The exploratory approach is more practical and realistic one. The choice of appropriate indicators is a crucial part of every impact evaluation. For the most part the indicators chosen will be specific to the project being evaluated and are just as likely to be qualitative as quantitative. In addition, these are likely to be some general indicators (eg. change in household income, changes in level of expenditure, level of food consumption, quality of hosing, access to electricity, access to potable water) reflecting improvements in the overall living standards of rural people [9]. In Punjab, many studies were conducted to evaluate the *MGNREGA* progarmme such as implementation of the program. But the multidimensional effect of *MGNREGA* was under studied so an attempt was made to see the overall performance of the scheme and its impact on quality of life with exploratory approach of impact assessment.

2. MATERIALS AND METHODS

The study was conducted in all three socio-cultural regions of Punjab i.e. *Malwa, Majha* and *Doaba*. Probability proportionate to size sampling procedure was used for selection of districts from each zone. Therefore, a total of eleven districts i.e. 7 from *Malwa* region, 2 from Majha and 2 from Doaba region were covered under the study. From each district, two blocks were selected in consultation with concerned district officials. From each block two villages were selected for canvassing the schedules and collecting information from the beneficiaries. So, two blocks and four villages (two villages per block) were selected from each district taking the total to 44 villages. From each village, nine beneficiaries who have been working under *MGNREGA* were selected randomly. A total of 396 beneficiaries were selected randomly form the study who have been working under MGNREGA from last 5 years. Impact of *MGNREGA* on quality of life was measured through recall method in which the before and after version of change in quality of life indicators of beneficiaries was captured. The list of general indicators reflecting improvements in the overall living standards of beneficiaries based on increase in expenditure on education or health care, levels of food consumption, quality of housing, access to potable water, access to electricity, access to sanitary facilities, household possessions and access to health facilities were concerned. An index based on these indicators of quality of life was constructed to analyse the impact of *MGNREGA*. Index scores were obtained by assigning numbers to response categories i.e. 'yes and no' signifying presence or absence of the variable. The impact was assessed by computing mean difference values

using the following formula:

QI_b= (EP+ HP+HHP+CP+HEP+FP+SP+SOP)/ n_i
QI_a= (EP+ HP+MP+CP+HEP+FP+SP+SOP)/ n_i
Mean difference in quality of life = QI_a-QI_b

Where:

QI_b= pre assessment mean of quality of life index before joining the scheme
QI_a = post assessment mean of quality of life index after 5 years of joining the scheme
EP= total obtained educational parameters scores of beneficiaries
HP= total obtained housing parameters scores of beneficiaries
HHP= total obtained household possession parameters scores of beneficiaries
CP= total obtained clothing parameters scores of beneficiaries
HEP= total obtained health parameters scores of beneficiaries
FP= total obtained food consumption parameters scores of beneficiaries
SP= total obtained sanitation parameters scores of beneficiaries
SOP= total obtained social life parameters scores of beneficiaries
n_i= number of beneficiaries

Further rank was assigned from highest to lowest values in descending order. Wilcoxon signed-rank test is used to compare two sets of scores that come from the same participants. This can be employed to investigate any change in scores from one time point to another, or when individuals are subjected to more than one condition. For the present study, this test was used to see the improvement in quality of life parameters based on recall method i.e. situation before and after joining the scheme. The Z-scores of Wilcoxon signed rank test signifying the significant or non-significant change in conditions

3. RESULTS AND DISCUSSION

MGNREGA is the most significant current development scheme focused to uplift the overall quality of life of rural households. One of the major objectives of the scheme is to improve the income levels and enhance the quality of life of village folks who have thus far eked out a living with meager income, low wages, frequent interruptions in wage earnings etc. *MGNREGA* focuses on the following works: conservation and water harvesting (digging new ponds, percolation tanks, dams etc.), drought proofing (afforestation/ tree plantation), micro irrigation works (minor irrigation canals etc.), provision of irrigation facility to land owned by SC/ST, renovation of traditional water bodies (de-silting of tanks/ponds, canals, wells etc.), land development (plantation, land levelling etc.), flood control and protection (drainage in water logged areas, construction and repair of embankment) and rural connectivity (specific work to be indicated separately). It gives 100 days of assured wage employment at prescribed minimum wages applicable in the region at a particular time. This section deals with the impact of this scheme on various important attributes that contributed to enhancing their quality of life in terms of education, housing, social life, food, clothing, sanitary conditions material possession and health aspects.

3.1 Impact in *Malwa* Region

Table 1 shows impact based on mean differences scores reflecting improvement in quality of life of *Malwa* region of Punjab. The mean difference was worked out based on recall method (before and after version). It is evident from the data that mean scores were higher in the after situation in so far as education, health, food, housing were concerned. It was observed that in *Malwa* region, maximum change was observed in household possession aspect ($\bar{X}$=2.74, Rank 1st). Before joining the scheme they owned electrical ceiling fan, bicycle, stove etc. But post joining the scheme the material possessions increased with the purchase of mobile, household articles like utensils, pressure cookers, crockery, refrigerator, a television set etc. with increased in income. They moved from low level to average status. Improvement in sanitary conditions obtained $\bar{X}$=1.13 and Rank 2nd as significant change in conditions of kitchen, toilets, cleanliness and garbage disposal pattern and provision of water was reported. Before joining the scheme they had open kitchen, they defecated in open and there was no provision of tap water. But after wards their income level increased and they constructed closed type kitchen and flush toilets etc. As far as housing conditions were concerned the beneficiaries reported same improvement ($\bar{X}$=1.09, Rank 3rd) by way of moving from *kuccha* house (mud house) to cemented house with cemented floors and walls or adding rooms, proper ventilation, lighting, windows and doors. Least impact was however reported as far as improvement in health conditions was concerned ($\bar{X}$=0.06, Rank 8$^{th)}$. Earlier, they never consulted any doctor incase of minor ailments/ infections and the

situation remained the same even post joining the scheme. While making district wise comparisons with respect to quality of life indicators, it became obvious that maximum impact was observed in Ludhiana district with mean difference of 0.93 in before-after followed by Sangrur (mean score difference=0.86) and Bathinda (mean score difference =0.81). Least mean difference ($\overline{X}$=0.59) was observed in Ferozepur district. It can be inferred that if *MGNREGA* is implemented properly, it has the potential to transform the demography and poverty of the change quality of life of people in the region.

The differentiation between per-post assessment scores was further analyzed by using 'Wilcoxon sign rank test' to see district wise significant differences with respect to different quality of life dimensions. Table 2 also highlighted that in Ludhiana district, *MGNREGA* had significant impact on education, housing, material possessions, food and sanitation level of beneficiaries (p=0.05). It may be due to the reason that majority of the *MGNREGA* workers in Ludhiana district started valuing the education, sent their children to tuitions and provided facilities such as books, stationary which was lacking before joining the scheme. Whereas, in health, clothing and social life aspects, there was non-significant difference between before-after assessment scores. It may be attributed to the reason that majority of *MGNREGA* workers gets their clothing requirements met through their landlord families (get old clothes to wear) and do not spend money on purchasing new garments/ outfits. In Moga district, there was non-significant difference between assessment scores (before-after) in so far as education, health, clothing and social life parameters were concerned owing perhaps to the reason that the people in this district are relatively backward and do not believe in spending on health, clothing and social and recreational activity. In Ferozepur and Mansa districts, non-significant difference was observed in housing aspect. This can be attributed to the reason that people in these districts are comparatively traditional and prefer old living styles. Further Table 2 revealed that there was significant change in material possessions, food and sanitary conditions of beneficiary families in every district of *Malwa* region. As far as housing aspect of quality of life is concerned, the pre-post difference was non-significant in case of Mansa and Ferozepur districts. It may be inferred that socio-economically poor families first try to fulfil their basic necessities of life and then consider spending money on other aspects of life. Engler and Ravi (2012), who studied the impact of *MGNREGA* in Medak district of Andhra Pradesh, reported improvement in food security condition of the beneficiaries however, health outcomes did not show any significant improvement in the physical health of the workers [10].

3.2 Impact in *Majha* Region

Table 3 depicts the impact of *MGNREGA* in the *Majha* region. It was observed that in this region, maximum impact was observed with respect to material possession having obtained ($\overline{X}$=2.66, Rank 1st). As far as food conditions were concerned, beneficiaries reportedly improvement in food ($\overline{X}$=0.88, Rank 2nd) as they earlier consumed seasonal vegetables and rarely consumed fruits but their fruits consumption improved after joining the scheme with increase in income. Least impact was observed in the area of education with ($\overline{X}$=-0.49, Rank 8th). Further, the data also showed that in Gurdaspur district, *MGNREGA* had a negative impact (mean score difference=-0.65) perhaps owing to the fact that some of the college going students reportedly left studies as they got employment under *MGNREGA*. Contrary results were observed by Dev (2011), who observed that NREGA can have a significant positive impact in reducing child labour due to increased income of families [11]. Based on the mean scores differences in before-after conditions, the impact was more in Tarn Taran district ($\overline{X}$=0.67) as compared to Gurdaspur district ($\overline{X}$= = 0.63) the results proved that *MGNREGA* resulted in multi-dimensional impact in improving overall quality of life.

The perusal of Table 4 indicated that in Tarn Taran district, there was a significant (p=0.01) impact of *MGNREGA* on housing, material possession, and sanitary conditions of households. In Gurdaspur district, significant difference was found in case of housing, material possession, clothing, food and sanitation at 0.01 level of significance. Whereas, in education, health, clothing and social life aspects difference in per-post conditions were not found significant as they still go to tantric/ quacks on falling sick, expenditure was not increased in education and clothing and social life was same as before. The results of the study were in conformity with Holmes et al. [12], who reported that the scheme resulted in raising their economic status and enhanced their decision-making power as far as food consumption pattern was concerned.

Table 1. Mean differences in scores of quality of life parameters of *MGNREGA* beneficiaries in *Malwa* region of Punjab (n=252)

Quality of life indicators	Ludhiana	Moga	Ferozepur	Sangrur	Mansa	Bathinda	Ropar	Total	Rank
	Mean score difference (pre-post)	Mean score difference (pre-post)	Mean score difference (pre-post)	Mean score difference (pre-post)	Mean score difference (pre-post)	Mean score difference (pre-post)	Mean score difference (pre-post)	Mean score difference (pre-post)	
Education	0.34	0.21	0.13	0.19	0.11	0.05	0.13	0.16	5
Housing conditions	2.11	0.56	0.39	1.56	0.33	1.53	1.15	1.09	3
Household possession	3.11	2.61	2.67	2.91	2.72	2.493	2.67	2.74	1
Health care	0	0.027	0.27	0	-0.02	0.14	0.05	0.06	8
Clothing	0	0.14	0.19	-0.05	0	0.44	0.08	0.11	6.5
Food consumption	0.28	0.86	1	0.86	0.81	0.81	0.75	0.76	4
Sanitary conditions	1.5	1.1	0.5	1.34	1.3	1.11	1.1	1.13	2
Social life	0.1	0.42	0.08	0.08	0	-0.08	0.18	0.11	6.5
Overall mean score difference	0.93	0.74	0.59	0.86	0.65	0.81	0.76		

Table 2. Impact of *MGNREGA* on the quality of life in *Malwa* region of Punjab (n=252)

Quality of life indicators	Districts						
	Ludhiana	Moga	Ferozepur	Sangrur	Mansa	Bathinda	Ropar
	Z-score	Z-score	Z-score	Z-score	Z-score	Z-score	Z-score
Education	2.80**	1.69 NS	0.73 NS	1.78*	1.01 NS	0.56 NS	0.94 NS
Housing	4.78**	2.75**	1.57 NS	4.24**	1.59 NS	4.38**	4.03**
Material possession	5.02**	5.08**	4.63**	5.23**	5.46**	5.43**	5.15**
Health	-	0.34 NS	1.16 NS	-	0.40 NS	0.82 NS	0.71 NS
Clothing	-	0.87 NS	1.41 NS	-	-	2.13*	1.40 NS
Food	5.08**	4.18**	4.52**	4.247**	3.79**	3.98**	3.74**
Sanitation	5.23**	4.37**	1.79*	-5.01**	4.93**	4.02**	4.56**
Social life	-	1.75 NS	-	0.80 NS	-0.26 NS	0.40 NS	0.70 NS

**significant at 0.05% , ** significant at 0.01%, NS=Non-significant, No difference (-)*

Table 3. Mean differences in scores of quality of life parameters of *MGNREGA* beneficiaries in *Majha* region of Punjab (n=72)

Quality of life indicators	Gurdaspur n_1=36	Tarn Taran n_2 =36	Total mean score difference (pre-post)	Rank
	Mean score difference (pre-post)	Mean score difference (pre-post)		
Education	-0.65	0.33	-0.49	8
Housing	0.62	1.08	0.85	3
Material possession	2.7	2.62	2.66	1
Health	0.03	0.28	0.16	6
Clothing	0.08	0.22	0.15	7
Food	0.86	0.9	0.88	2
Sanitation	1.08	0.5	0.79	4
Social life	0.37	0.1	0.23	5
Overall mean score difference	0.63	0.67		

Table 4. Impact of *MGNREGA* on the quality of life in *Majha* region of Punjab (n=72)

Quality of life indicators	Districts	
	Gurdaspur n_1=36	Tarn Taran n_2 =36
	Z-score	Z-score
Education	1.20 NS	-0.73 NS
Housing	2.61**	2.88**
Material possession	5.15**	5.08**
Health	0.34 NS	1.16 NS
Clothing	0.58 NS	1.92*
Food	4.26**	4.52**
Sanitation	4.46 **	1.72*
Social life	1.75 NS	-

**significant at 0.05%, ** significant at 0.01%, NS=Non-significant, No difference (-)*

3.3 Impact in *Doaba* Region

Table 5 reflects the impact of *MGNREGA* in *Doaba* region of Punjab. In *Doaba* region, maximum improvement was found in acquiring material possessions ($\bar{X}$=2.79, Rank1st) followed by housing condition ($\bar{X}$=1.08, Rank 2nd) and consuming quality food ($\bar{X}$=0.90, Rank 3rd). District wise comparison revealed that in Nawanshahar district impact was more over Hoshiarpur district. The workers spent maximum on purchase of new utensils, storage bin etc., and their food and fruits consumption increased, they were able to construct *pucca* house with *MGNREGA* earnings. The study findings were in line with the study done on MGNREGA Sameeksha (2006-2012), who reported that *MGNREGA* has proved to be much more credible than a mere pro-poor survival scheme only enhanced income security, intensified food intake, plummeted incidence of poverty, and lessened mental depressions and proliferated positive health outcomes [11]. It was evident from the data that their quality of life parameters such as change in expenditure on education ($\bar{X}$=0.19), health ($\bar{X}$=0.03), housing ($\bar{X}$=1.16), and consumption of food levels ($\bar{X}$=0.89) change significantly five years after joining the scheme then was the situation before in Gurdaspur district. As far as parameters of social life were concerned, negative impact was reported ($\bar{X}$=-0.03) in Hoshiarpur district. As no change was observed their hard earning, as far freedom to spend, decision making power and socializing of women were concerned. Contrary results were however observed by Pankaj and Tankha [13], who examined the impact of NREGA on women empowerment in four North Indian states and observed that there is direct impact of NREGA in increasing the social status of women.

Perusal of data in Table 6 also revealed that in *Majha* region, there was significant improvement in housing conditions, material possessions and sanitary conditions in both the districts i.e. Nawanshahar and Hoshiarpur. There was non-significant difference found in case of education and health in Nawanshahar district, where as in Hoshiarpur district non-significant difference was found in case of clothing owing perhaps to less importance attached to grooming.

Table 5. Mean differences in scores of quality of life parameters of *MGNREGA* beneficiaries in *Doaba* region of Punjab (n=72)

Quality of life indicators	Nawanshahar n_1=36	Hoshiarpur n_2 =36	Total mean score difference (per-post)	Rank
	Mean score difference (pre-post)	Mean score difference (pre-post)		
Education	0.19	0.13	0.16	5
Housing	1.62	0.54	1.08	2
Material possession	2.84	2.75	2.79	1
Health	0.03	0.03	0.03	7.5
Clothing	0.02	0	0.02	6
Food	0.89	0.92	0.905	3
Sanitation	1.38	1.4	1.39	4
Social life	0	-0.06	-0.03	8
Overall mean score difference	0.87	0.71		

Table 6. Impact of *MGNREGA* on the quality of life in *Doaba* region of Punjab (n=72)

Quality of life indicators	Districts	
	Nawanshahar n_1=36	Hoshiarpur n_2 =36
	Z-score	Z-score
Education	1.78 NS	1.33 NS
Housing	4.48 **	1.91 *
Material possession	5.30 **	5.30 **
Health	0.40 NS	-
Clothing	-	0.52 NS
Food	4.35**	4.28**
Sanitation	5.08 **	4.08**
Social life	0.10 NS	-

**significant at 0.05%, ** significant at 0.01%, NS=Non-significant, No difference (-)*

Overall, it was observed that in *Malwa* region, the districts of Ludhiana and Sangrur had maximum impact of the scheme in terms of quality of life parameters over other districts. It may be attributed to the fact that in both of the districts majority of the respondents were working under *MGNREGA* since last 7 years, whereas in other districts majority of the respondents were working since last 5 years. In the *Majha* region, Tarn Taran district reportedly had more impact than the Gurdaspur district. In *Doaba* region it was noticed that Nawanshahar district showed more improvement in quality of life parameters over Hoshiarpur district. This may be attributed to semi- arid conditions and remote location of the district in the foot-hill of Shivaliks which perhaps is responsible for less exposure and slow change. Region wise comparison revealed that the impact of the scheme was maximum in Sangrur and Ludhiana district over other districts of Punjab.

4. CONCLUSION

As the consequence of income generation, *MGNREGA* has made significant impact in improving expenditure on food consumption, household possession, housing conditions and sanitary conditions of beneficiaries. Non-significant impact was however found in education, clothing and social life. Though the socio-economic conditions of households has improved gradually, but to hasten the pace of improvement some developmental initiatives can be integrated with the scheme mainly targeting those households who are working regularly under the scheme. There is an urgent need to address/ rectify implementation flaws as observed during the survey to make *MGNREGA* more effective and responsive to the needs of the underprivileged people.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/15318