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Livelihood Security of Small Farmers in Jabalpur District of Madhya Pradesh

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ABSTRACT

The research study was conducted in the Shahpura block of district Jabalpur in Madhya Pradesh with 120 small farmers to analyze their livelihood security. It was found from the study that more than sixty percent of the small farmer had a medium level of food security and more than fifty percent of the small farmer were having a medium level of occupational security. It was also observed that 53.33 per cent of the small farmer had a medium level of habitat security, 62.50 per cent of the small farmer were having a medium level of educational security, more than sixty percent of the small farmer had a low level of social security, more than fifty percent of the small farmer in the study area were having a medium level of health security. The majority of the small farmer had a medium level of environmental security. More than sixty percent of the small farmers came in the category of having medium Livelihood security. Habitat security was observed with the highest index value of 0.731 while social security had the lowest index value of 0.256.

Keywords: Index value, Livelihood security, Small farmers

INTRODUCTION

India is primarily an agriculture-based economic country. The majority of the people in India make out their existence directly or indirectly from farm-related economic activities (Bairwa *et al.*, 2014). Rural livelihood has great significance for a country like India where the majority of the population live in rural areas. The present strategy of rural development in India mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programs, and wage and self-employment (Netar, 2018). Household livelihood security is defined as adequate and sustainable access to income and resources to meet basic needs including adequate access to food, potable water, health facilities, educational opportunities, housing, time for community participation, and social integration (Frankenberger, 1996). The risk of livelihood failure determines the level of vulnerability of a household to income, food, health, and nutritional insecurity. Therefore, livelihoods are secure when households have secure ownership of, or access to, resources and income-earning activities, including reserves and assets, to offset risks, ease shocks and meet contingencies (Chambers, 1989). A livelihood is sustainable, according to Chambers and Conway (1992) when it "can cope with and recover from the stress and shocks, maintain its capability and assets, and provide sustainable livelihood opportunities for the next generation". Unfortunately, not all households are equal in their ability to cope with stress and repeated shocks. Poor people balance competing

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needs for asset preservation, income generation, and present and future food supplies in complex ways (Maxwell and Smith, 1992). The anecdotal evidence needs to be put to rigorous empirical scrutiny to understand the different dimensions of livelihood security and suggest appropriate policy measures to ensure a secure livelihood to the small farmers. Thus the study intended to use both qualitative and quantitative approaches together to analyse the livelihood security status of small farmers.

METHODOLOGY

The investigation was conducted in the Jabalpur district (23.10' N 79.59' E) of Madhya Pradesh. The district comprises seven blocks namely Jabalpur, Panagar, Kundam, Patan, Shahpura, Majholi, and Sihora. Out of which, the Shahpura block was selected purposively because of the maximum number of small farmers as compared to other blocks. The selected block, Shahpura comprises 220 villages; out of which 8 villages were selected randomly by using a simple random sampling method. Then 15 small farmers were selected randomly from each selected village. Thus, altogether 120 farmers were selected for the investigation. Data were collected through personal interviews using the pretested structured schedule. Data were analysed with suitable statistical tools. To measure the livelihood security of the respondent's household, a livelihood security index (LSI) developed by Baby (2005) was used. She identified seven different dimensions of livelihood security and weighted those based on their perceived significance in determining the livelihood security of the rural household. Household food security emerged as the most important dimensions, followed by occupational security, habitat security, health security, environmental security, social security, and educational security in their descending order of significance.

RESULT AND DISCUSSION

It is evident from Table 1 that out of the total small farmers, more than 60 per cent of the respondents (61.67%) had a medium level of food security. 25.00 per cent and 13.33 per cent of them had high and low food security respectively. Results indicate that 86.67 per cent of the respondents had a medium to a high

Table 1: Status of different dimensions of livelihood security of respondents (N=120)

Category	Components of Livelihood Security													
	Food Security		Occupational Security		Habitat Security		Educational Security		Social Security		Health Security		Environmental Security	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Low	16	13.33	17	14.17	27	22.50	19	15.83	73	60.83	26	21.66	12	10.00
Medium	74	61.67	63	52.50	64	53.33	75	62.50	29	24.17	63	52.50	92	76.67
High	30	25.00	40	33.33	29	24.17	26	21.67	18	15.00	31	25.84	16	13.33
Mean Score	0.697		0.425		0.731		0.510		0.256		0.686		0.361	

level of food security in the study area, which highlights that food security had a relatively better position among the respondent in the present research. This might be because the villages in the study area were agricultural-based and had a well-functioning food distribution system for the small farmers. This result was in accord with the results of Sathwika *et al.* (2019) who found that majority of the respondent (65.00%) had a medium level of food security. Further, more than fifty percent of the respondents (52.50%) were having a medium level of occupational security followed by 33.33 per cent and 14.17 per cent of them had a high and low level of occupational security respectively. Results indicate that 85.33 per cent of the respondents had medium to a high level of occupational security in the study area, which implies the majority of the small farmers were satisfied with their present occupation. This might be due to the small farmers who can follow agriculture as their major occupation and having access to regular and satisfying employment opportunities in the non-farm sector. This result was in line with the results of Sathwika *et al.* (2019) who found that majority of the respondent (88.30%) had a medium level of occupational security. More than fifty percent of the respondent (53.33%) had a medium level of habitat security followed by a high level of habitat security (24.17) and a low level of habitat security (22.50). Results show that 77.50 per cent of the respondents had a medium to a high level of habitat security in the study area, which implies less vulnerability to the habitat security of the small farmers in the study area, however, a small percentage of respondents need housing facilities for their better living. This might be due to the political commitment to providing rural electricity and pipe water supply even in remote rural areas could add to their habitat security. The majority of the respondents have sanitation facilities in their house and also they have better transport facilities at their house. This result was similar to the results of Shyamalie and Sani (2010), who found that 36.00 per cent of the women in Kangra district enjoyed medium level of habitat security.

Data further shows that more than sixty percent of the respondents (62.50) were having a medium level of educational security followed by a high level of educational security (21.67) and low level of educational security (15.83). The result indicates that 84.17 per cent of the respondent had medium to a high level of educational security, which implies that access to school and availability of educational facilities including higher education are stood at a better level. This might be due to the educational status of the respondent are quite high, there are a few numbers of respondents who were not having a formal education. The basic schooling facilities for their children are provided by the Govt. as every village has a primary school in the study area. The majority of the respondent has access to information regarding educational opportunities for their children. The finding is in line with the work of Barela *et al.* (2018) who found that the maximum number of the respondent (55.42) had a medium level of educational security. More than sixty percent of the respondent (60.83) had a low level of social security followed by 24.17 per cent had a medium level of social security and 15.00 per cent had a high level of social security. Results interpreted that only a small portion of the respondent in the study area feel socially secured while 85.00 per cent of them feel socially insecure. This might be due to a large majority of the respondent are not actively participating in the social organizations leaving them limited chances, developing community networks, also have little scope for community participation and they seldom enjoy any occupational status in society. The present finding is similar to the work of Shyamalie and Sani (2010), who found that 42.00 per cent of the women in Kangra district had low level of social security. It can be seen that more than fifty percent of the respondents (52.50%) in the study area were having a medium level of health security, followed by 25.84 per cent of the respondents in the high category, and 21.66 per cent of the respondents in the low level of health security. More than seventy percent of respondents (78.34%) were found in the medium to a high level of health security, which indicates the higher health status of small farmers and their better access to health care facilities available in the Study area. This might be due to the respondents in the study area are quite aware of their health conditions and implement the necessary measures for the improvement of their health conditions.

It was noted that there existed considerable access to primary health care centers and basic hospitals were found to be nearer to the study area. The findings supported by the work of Mahadik and Sawant (2012) who found that majority of the respondent (95.00%) had a medium level of health and sanitation status. Majority of the respondent (76.67%) had a medium level of environmental security whereas 13.33 and 10.00 per cent of the respondents reported that they were having high and low levels of environmental Security respectively. A very large number of the respondent (90.00%) had medium to high-level environmental security which indicates environmental security had a better position among the respondent in the present research. This might be due to the majority of the respondent were having the awareness and capacity to manage their scarce resources like irrigation water, land quality, and follow eco-friendly farm management practices. There is a little extent of flood or drought-prone Condition in their farm or household as per the view presented by respondents and the availability of groundwater storage is quite high in the study area.

A cursory glance of the values shown in Table 2 reveals the distribution of respondents into three categories i.e. low, medium, and high respectively, based on their overall 'Livelihood Security'. The overall score for 'Livelihood Security' of an individual farmer was found out by taking into account the scores for different domains of Livelihood Security. It was found that out of 120 respondents, more than sixty percent of respondents (61.66) came in the category of having medium Livelihood Security, 20.00 per cent come in the category of low Livelihood Security, and 18.34 percent come in the category of having high Livelihood Security. From the results, we can conclude that majority of the respondents (80.00) of the selected area were having a medium to a high level of livelihood security, which implies a quite good sign for their standard of living. However, Shyamalie and Sani (2010); Lal *et al.* (2015); Roy *et al.* (2012); Saha (2018); Mahadik and Sawant (2012); Sathwika *et al.* (2019) also found in their research study that the maximum number of the respondent had a medium level of livelihood security.

Table 2: Overall livelihood security of respondents

	Frequency	Percentage	Mean
Low (<40)	24	20.00	55.32
Medium (40 -70)	74	61.66	
High (>70)	22	18.34	
Total	**120**	**100.00**	

Figure 1 has been depicted through a diagram in the form of radar which is indicating the contribution of different components to the overall Livelihood Security of the respondents in the study area. It was found from the security score of each indicator that out of the 7 sub-indicators, habitat security had the highest index value of 0.731 while social security had the lowest

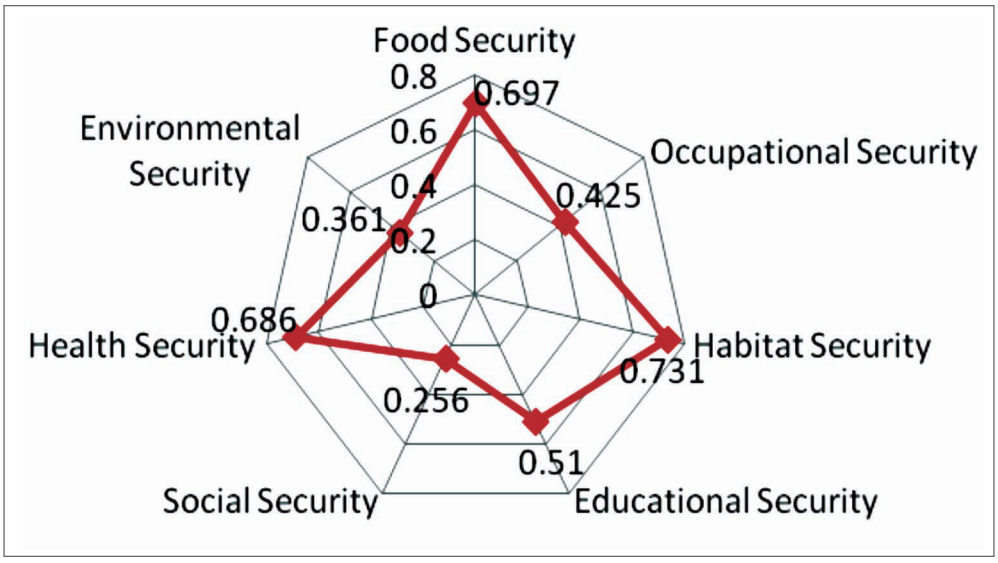

Figure 1: Mean Score of different components of Livelihood Security

index value of 0.256. This result was in agreement with Jeyarajah (2016) who found that habitat security had the highest index value of 0.718 but this result was contrary to the finding of Lal *et al.* (2015) who found that Educational security had the highest index value of 0.560.

CONCLUSION

The study was set out to explore the livelihood security of small farmers in the Shahpura block of district Jabalpur. It was very much evident that the overall extent of livelihood security was found to be 55.23 per cent, suggesting that small farmers in the study area were a relatively better way of living. As food and shelter are necessary for an individual, food security and habitat security of small farmers in the study area were found 0.697 and 0.731 respectively, suggesting that a low vulnerability of small farmers to these two aspects. Particularly, social security status is in highly vulnerable situations compare to other components of livelihood security which is a matter of great concern. The government policies and programmes should be focused on small farmers for this parameter.

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