# Livelihood Improvement of the Participants of the Service Emergency for Rural People Program

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#### **Abstract**

The study aimed at exploring the livelihood improvement of the Service Emergency for Rural People (SERP) program (a program of HELVETAS Swiss Intercooperation) participants and finding out the relationships between the selected characteristics of the SERP program participants and their extent of livelihood improvement. Data were collected from the SERP program participants of four unions under Atwari upazila of Panchagarh district by using a pre-tested interview schedule from 17 May to 25 June, 2014. There were 1,030 SERP program participants in the study area and they constituted the population of the study. A sample of 103 participants was selected by using stratified random sampling method. The selected nine characteristics of the participants were considered for exploring their relationship with livelihood improvement of the SERP program participants. Livelihood improvement of the participants was measured by a 5-point Likert scale. The observed scores of livelihood improvement of the participants ranged from 51 to 101 while the possible range was 45 to 225. The mean of livelihood improvement scores was 81.84 with a standard deviation of 9.44. All of the participants had low livelihood improvement and the variation among the mean scores of the livelihood capitals was low. The highest livelihood improvement was observed in case of natural capital and the lowest was social capital. Four out of nine selected characteristics of the participants, namely education, annual income, agricultural knowledge and extension media contact had significant positive relationships with their livelihood improvement; while age, family size, farm size, training experience and organizational participation did not show any significant relationships with their livelihood improvement.

Key words: Livelihood improvement, livelihood capitals, SERP program

#### Introduction

The fundamental requirement for the improvement of livelihoods of the rural people is to enhance peoples strength and activities essential for the means of living. The livelihood improvement is founded on a belief that people require a range of assets to achieve a positive livelihood outcome. The major livelihood components are human, social, financial, physical and natural capitals (DFID, 2000). The nongovernment organizations (NGO) are considered as a part of alternate institutional

mechanisms for the transfer of resources that attracts the interest on their roles among the different stakeholders such as academicians, practitioners, planners, policy implementers and also the beneficiaries at large. One of the major issues considered by the stakeholders is how to improve the livelihood of the poor people. This study intends to have an understanding of livelihood improvement due to partcipation in NGOs specifically in a development program.

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Service Emergency for Rural People (SERP) is an emergency program that operated under a specialised non-profit oriented development organization named Inter-cooperation. HELVETAS **Swiss** SERP program was designed to actively contribute to the improvement of the living conditions of economically, socially and politically disadvantaged people within the frame of the human rights. SERP program offers technical supports and particular innovative rural advisory services and to make people learn how they could do best use of their existing assets and to ensured their livelihood improved and sustainable. The NGO has been working in Bangladesh since year 2000. The present study was undertaken to examine the livelihood improvement achieved by the SERP program participants with the following specific objectives: (i) to ascertain the selected personal and socio-demographic characteristics **SERP** program of participants; (ii) to determine the livelihood improvement status of SERP program participants; and (iii) to explore the relationships between livelihood improvement of the SERP participants with their selected characteristics.

# Methodology

Locale of the study: The study was conducted in Atwari upazila under Panchagarh district where SERP program is implemented. Four unions of this upazila, namely Radhanagar, Balarampur, Mirzapur and Alowakhowa were selected purposively for this study.

**Population and sample of the study:** A total of 1,030 participants under the SERP program in the study areas were the population of the study. Ten percent of the SERP program participants accounting 103 were selected using stratified random sampling method.

Instrument and data collection: A structured interview schedule was prepared for collection of data. The interview schedule was pre-tested with 10 SERP program participants. Necessary correction and alterations were done to finalize the interview schedule for data collection. Data were collected during the period of 17 May to 25 June, 2014.

**Measurement and analysis:** Livelihood improvement status of the members of SERP program was the main focus of the study. This variable was measured by

composite computing livelihood improvement score based on each of the five following components of 'livelihood asset pentagon' (DFID, 2000): (i) human capital, (ii) social capital, (iii) financial capital, (iv) physical capital and (v) natural capital. Each of the capitals was measured against nine statements. Each of the statements was put against 5 point Likert scale (Likert, 1932): strongly agree, agree, no opinion, disagree and strongly disagree and score given as 5, 4, 3, 2 and 1, respectively for positive statements and the scoring technique was reverse for the negative statements. The total scores for each of the livelihood capital could range from 9 to 45, where 9 indicated no improvement and 45 indicated high improvement regarding the concerned livelihood capital. The overall scores for livelihood improvement were computed by adding the scores obtained by the all capitals of livelihood asset pentagon. Thus, scores for overall livelihood total improvement could vary from 45 to 225, where 45 indicated no improvement and 225 indicated very high improvement of overall livelihood status.

The selected characteristics of the program participants, namely age, education, family size, farm size, annual income, training experience, agricultural knowledge, extension media contact and organizational participation were measured by numerical

scores or through scales. Various descriptive statistical measures were used for categorization and describing the variables. Pearson's Product Moment Correlation Coefficient was used for testing the relationships between the concerned variables. SPPS computer package was used for analysis of data.

## **Results and Discussion**

**Selected characteristics of the SERP participants:** A summary of nine selected characteristics profile of the respondents has been presented in Table 1.

Results presented in Table 1 indicates that an overwhelming majority of the SERP beneficiaries were medium aged. The greatest proportion of the respondents possessed education of secondary level. Most of the farmers have medium sized family. The highest percentage of the sample SERP program participants belongs to small farm sized category. Again, the highest proportion of the respondent farmers had low income. Findings also reveal that the greatest percentage of the respondents had less than weeklong training experience and majority of the respondents had high agricultural knowledge. Majority of the SERP program participants had medium contact with different extension media and had low organizational participation.

Table 1 Main features and categorization of the SERP participants (n=103)

Selected	Measurement unit	Possible		Respond	_	Std.	
characteristics		range (observed)	2		%	Mean	dev.
Age	No. of year	(30-55)	Young(up to35)	30	29.2		
			Medium (36-50)	71	68.9	40.05	5.69
			Old(above 50)	2	1.9		
Education			Can sign only (0.5)	13	12.6		
	Year of schooling	(0.5-12.0)	Primary(1-5)	16	15.5		
			Secondary(6-10)	67	65.1	7.32	3.22
			Higher secondary (above 10)	7	6.8		
Family size	No. of members	(2-6)	Small (up to 3)	15	14.6		
			Medium(4-5)	85	82.5	4.12	0.70
			Large (above 5)	3	2.9		
Farm size	Hectare	0.121- 1.736	Marginal (up to 0.2)	5	4.9	•	
			Small (0.21-1.0)	92	89.3	0.54	0.28
			Medium(1.01-3.0)	6	5.8		

Selected	Measurement unit	Possible range (observed)	Categories	Respondents			Std.
characteristics				frequency	%	Mean	dev.
Annual			Low (up to 120)	54	52.5		
Annual income	'000' Taka	(46-290)	Medium (121-240)	47	45.6	124.5	45.92
			High (above 240)	2	1.9		
Training experience	Day	(2-11)	Less than weeklong	70	68.0		
			Weeklong	23	22.3	5.49	2.12
			Above weeklong	10	9.7		
Agricultural knowledge	Score	0-29 (11-29)	Low (up to 10)	0	0.0		
			Medium (11-20)	37	35.9	22.0	3.36
			High (21-29)	66	64.1		
Extension media contact	Score	0-30 (7-21)	Low ( up to 10 )	48	46.6		
			Medium (11-20)	54	52.4	11.82	3.53
			High (21-30)	1	1.0		
Organizationa l participation	Score (5	- (5.0.22.0)	Low(up to 13)	76	73.8		
			Medium (14-23)	24	23.3	12.73	5.54
		(5.0-33.0)	High (above 23)	3	2.9		

# Livelihood improvement status of the SERP participants

Results related to livelihood improvement of SERP program participants according to

the five capitals have been presented in Table 2.

Table 2 Livelihood improvement status of the participants (n=103)

Livelihood	Range		Respondents			Mean	Std. dev.
capitals	Possible	Observed	Category	Freq.	Percent	_	
Human capital	9-45	11-25	Low (up to 21)	95	92.2	18.14	2.89
•			Medium (22-33)	8	7.8		
Social capital	9-45	7-21	Low (up to 21)	103	100.0	13.38	2.77
Financial capital	9-45	4-20	Low (up to 21)	103	100.0	13.83	2.49
Physical capital	9-45	11-24	Low (up to 21)	98	95.1	17.43	2.89
			Medium (22-33)	5	4.9		
Natural capital	9-45	13-25	Low (up to 21)	97	94.2	19.07	1.86
			Medium (22-33)	6	5.8		
Overall livelihood							
improvement	45-225	5-101	Low (up to 105)	103	100.0	81.84	9.44

A comparative findings of five types of livelihood capitals of table 2 indicates that the highest variation exists regarding human and physical capital having a standard deviation of 2.89. On the contrary, the lowest variation of standard deviation 1.86

was observed for natural capital. Considering the mean values of different livelihood capitals, the highest mean value is observed for natural capital followed by financial capital, human capital and physical capital. The lowest mean value is

observed for social capital. Thus, the highest improvement is observed in the natural capital of the SERP program participants. For all of the livelihood capitals the participants were classified into three categories based on their possible range equally distributed for the categories. It was found that most of the participants belongs to low improvement category for all of the livelihood capitals. Very few frequency of the participants were found under medium improvement categories for human, physical and natural capital. There were none of the respondents under high categories for all of the capitals. Table 2 also shows that the overall livelihood improvement of the participants was low. The major objective of the SERP is to improve livelihood status through income generation. To address this issue, the smallholder's i.e. landless, marginal farmers are being given technical support through SERP. They are also expected to utilize their knowledge and skills in order to increase their income and thereby improve their livelihoods. But due to lack of their physical resources they cannot implement the knowledge and technical knowledge acquired from SERP. Thus there is ample opportunity to improve their livelihood situation through distribution of physical resources with easy terms like leasing *khash* lands, marginal lands, credit without collateral etc.

Relationships between selected characteristics of the respondents and their livelihood improvement: Pearson's Product Moment Correlation of Co-efficient (r) was used to determine the relationships between the nine selected nine characteristics of the respondents and their

livelihood improvement score. A summary of the correlation analysis is presented in Table 3.

Table 3 Relationships between the variables

Selected characteristics of the	'r' value with livelihood			
respondents	improvement			
-	(d.f. = 101)			
Age	-0.118			
Education	.298**			
Family size	167			
Farm size	.097			
Annual income	.211**			
Training experience	.138			
Agricultural knowledge	.480**			
Extension media contact	.195*			
Organizational participation	.144			

<sup>\*</sup>Significant at 0.05 level of probability,

The correlation coefficient presented in table 3 indicates that the respondents' education, annual income, agricultural knowledge and extension media contact had significant positive relationship with their livelihood improvement, while age, family size, farm size, training experience and organizational participation had no significant relationships with their improvement. livelihood Thus. comprehensive approach for improvement of the educational level and agricultural knowledge of the **SERP** program participants (like adult education, group discussion with the participants etc.) will be helpful for their livelihood improvement. In addition, more agricultural extension services and strategies for more income generation will also improve the livelihood condition of the SERP program participants.

<sup>\*\*</sup> Significant at 0.01 level of probability.

## Conclusion

The variation among different capitals of livelihood was minimum but the highest status of livelihood improvement was observed in case of natural capital and the was observed in case of social capital. The overall livelihood improvement of the SERP program participants was low. So, it can be concluded that the farmers' knowledge technical and skill agricultural practices, their working ability in adverse condition and top down agricultural technology dissemination had been improved to some extent through **SERP** program. That brings improvement in different livelihood capitals and in the overall livelihood of rural people to some extent. But for achieving more

livelihood improvement from this program the distribution of physical resources with easy terms like leasing Khash lands, marginal lands, credit without collateral etc. need to be ensured for the participants so that they can incorporate their knowledge and skill with these resources. In addition, different group approaches like group discussion with the program participants, meeting. problem monthly solving discussion etc. need to be incorporated in the SERP program activities. More income generating activities and vigorous agricultural extension services need also to be incorporated in SERP programs for boosting-up the livelihoods of the rural people.

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