

## Participation in Diversified Income Generating Activities by World Vision Beneficiaries

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### Abstract

The objectives of this study were to determine the extent of participation in diversified income sources by World Vision beneficiaries and to explore the relationship of their selected characteristics with their extent of participation. Besides, attempts were made to ascertain the problem faced by the beneficiaries to participate in diversified income sources. Data were collected by using structured interview schedule during 22 March to 22 April 2007 from 110 randomly selected World Vision beneficiaries from a total of 433. Data revealed that the highest proportion (83.6%) of the World Vision beneficiaries had medium participation in diversified income sources and only 16.4% had low participation for the same. Among nine characteristics of the respondents, education, farm size, annual family income, input availability, training received, cosmopolitaness showed significant positive relationship, but NGO affiliation showed significant negative relationship with their extent of participation in diversified income sources, while age and family size were not significantly correlated. 'Inadequate homestead land, lack of vaccine, lack of education, participation in training for money and food, lack of poultry feed and social and religious restriction were the most important problems faced for participation in diversified income sources.

**Keywords:** *Participation, World Vision, diversified income generating activities*

### Introduction

Bangladesh is densely populated country and her land resources are limited which is the main obstacle of economic development of Bangladesh. Though, land cannot be increased, it should be used in maximum possible way for getting maximum output from limited resources. In Bangladesh, most of the people are involved in a single income source, such as crop production or livestock or fishery etc. But if people participate in

diversified income sources like crop production, livestock, fishery, poultry rearing, vegetable cultivation, forestry etc simultaneously it is possible to get maximum output from our limited resources.

Economic development is impossible unless the people become integrated with the diversified income sources. Empirical evidences show that the poor people have

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little access to employment and income generating opportunities and they have low wages, shortage of capital, lower level of working skill and very low level of literacy, low level of participation in social and political activities, contribute to low productivity of the farm families (Islam, 2002). In order to improve this vulnerable position of landless people a large number of NGOs and recently different government organizations are working in the country through different projects in collaboration with NGOs which initiated different activities such as education, agriculture, livestock, fisheries, credit program, savings, cottage industry etc. World Vision is a foreign funded NGO which plays an important role in employing and empowering the poor people by their diversified income sources program.

Very few research works have been carried out in home and abroad to determine the extent of participation in diversified income generating activities (IGAs) by the landless people that may be useful to government and non-government organizations those have been working with the landless rural people of Bangladesh. Keeping these facts in mind the present research has been undertaken to fulfill the following objectives:

- To determine the extent of participation in diversified income sources by World Vision beneficiaries;
- To explore the relationship of the selected characteristics of the World Vision beneficiaries with their extent of participation in diversified income sources; and
- To ascertain the problem faced by the World Vision beneficiaries to participate in diversified income sources.

## **Methodology**

The study area was located in Dhakua union of Phulpur upazila under Mymensingh district which was purposively selected for collecting data because the activities of World Vision were intensive and the highest number of the participants was in this union compared to other union. The selected area had a total number of 433 beneficiaries from which only 110 beneficiaries were randomly selected as the respondents. Thus, from the study area, sample comprised 25.4% of the total beneficiaries.

Selected nine characteristics namely beneficiaries' age, education, family size, farm size, annual family income, input availability, training received, NGO affiliation and cosmopolitaness were considered as independent variables. These

were measured employing prevailing standard methods. 'Extent of participation in diversified income sources' by World Vision beneficiaries was selected as dependent variable of the present study. To measure the extent of participation three dimensions of participation namely (i) frequency of performance, (ii) part of work done, and (iii) control over decision were used. The first dimension included involvement, the second ensured action, and the last dimension covered the psychological aspect of participation. Each of the dimensions was quantified separately with four-point rating scale against 13 items of diversified income sources. Finally, Participation Index (PI) has been used to determine the extent of participation, where Participation Index (PI) was defined as the ratio of 'actual

participation' to 'possible participation' in diversified income sources expressed as percentage. The Participation Index (PI) can mathematically be expressed as follows (Hasan, 2006):

$$PI = \frac{1}{3} \times \left( \frac{f_a}{f_p} + \frac{w_a}{w_p} + \frac{d_a}{d_p} \right) \times 100$$

Where, PI = Participation Index

$f_a$  = Actual frequency of performance

$f_p$  = Possible frequency of performance

$w_a$  = Actual part of work done

$w_p$  = Possible part of work done

$d_a$  = Actual control over decision

$d_p$  = Possible control over decision

Thus, Participation Index (PI) could vary from 0 to 100 where 0 indicated no participation and 100 indicated full participation in diversified income sources by

the World Vision beneficiaries. This Participation Index (PI) has been used for further statistical analysis with the values of independent variables.

To measure problem confrontation in participation in diversified income sources by the subjects, Scored Causal Diagrams (SCDs) of Participatory Farm Management (PFM) methods were used (Galpin, Dorward and Shepherd, 2000). SCDs were used to examine in detail the causes and effects of problems and to identify the 'root' cause which need to be addressed, and to analyze the relative importance of the problems and prioritize them. Finally possible solutions of the 'root' causes were traced back on the diagram. A structured interview schedule was used for collection of relevant data for the study. Data were collected during March to April 2007.

## Findings and Discussion

### Participation in diversified income sources by World Vision beneficiaries

The Participation Index (PI) of World Vision beneficiaries has been presented in Table 1,

which showed that the highest proportion of the World Vision beneficiaries had medium participation in diversified income sources and the rest had low participation.

Table 1. Distribution of World Vision beneficiaries according to PI

Range		Respondents		Mean	Std. Dev.
Possible	Observed	Categories	No.		
0-100	15.38-64.10	Low ( $\leq 33$ )	22	16.4	43.37 10.25
		Medium (34-67)	88	83.6	
		High ( $> 67$ )	00	0.0	

During collecting data, it was found that World Vision beneficiaries were small farmer and they had limited resources which were not sufficient for participating in diversified income sources. On the other hand, the training received by the

beneficiaries was low and they got low input availability from World Vision for participating in diversified income sources. Moreover, every respondent did not participate in all of the income sources. The respondents could not participate in all of the

income earning activities due to their small farm holdings. So the extent of participation of World Vision beneficiaries in diversified income sources was low to medium, not high.

### **Comparative participation in diversified income generation sources**

As stated earlier thirteen diversified income sources were considered to determine the extent of participation in diversified income sources. The computed extent of participation and concerned rank order has been presented in Table 2. In order to rank the income sources, descending order of PI was used. Table 2 shows that the average participation in homestead vegetable cultivation by World Vision beneficiaries was the highest (72.63)

and it was placed in the first position comparing the second and third ranked participation in marketing of product (72.32) and field crop production (70.40%) respectively. Participation in nursery management by World Vision beneficiaries placed in the last position and it had only 8.48% participation.

Homestead vegetable gardening placed first in the rank because, more or less all the respondents had homestead and they grew vegetables in their homestead land. On the other hand, large land, technical support and more labor are required for nursery management. So, the nursery management placed last position in the rank.

Table 2. Ranking of diversified income sources in respect to participation index

Rank order	Income sources	Average
1	Homestead vegetable cultivation	73
2	Marketing of product	72
3	Field crop production	70
4	Poultry rearing	66
5	Beef cattle fattening	61
6	Spice cultivation	55
7	Goat rearing	39
8	Pond fish culture	37
9	Mini-mixed orchard	33
10	Bio-intensive gardening	26
11	Road side tree plantation	14
12	Rice-cum fish culture	9
13	Nursery management	8

It might be worthy to mention that though the respondents could not participate in field crop production due to lack of farm land but they could participate in marketing of product as small business. So, participation in marketing of product was placed before the field crop production.

Participation in nursery management, road side plantation, rice-cum fish culture etc. by the rural people was quite low. Rice-cum fish culture was affected by the water shortage in the rice field due to the high geographical location of the study area. Moreover, more than half of the respondents were female and

they had social and religious restriction. They could not participate in aforementioned activities because their husbands did not allow them to go out side of their houses. They had the possibility to be subject to criticism by the neighbors. This reason was identified in SCDs. Therefore, the extent of

participation in the above activities by the respondents was not in satisfactory level.

### Relationships between the dependent and independent variables

The relationship between the dependent and independent variables has been shown in Table 3.

Table 3 Relationship between dependent and independent variables

Characteristics	Extent of participation
Age	0.093
Education	0.234*
Family size	0.095
Farm size	0.429**
Annual family income	0.335**
Input availability	0.368**
Training received	0.379**
NGO affiliation	-0.198*
Cosmopoliteness	0.368**

\*\* Significant at 0.01 level, \* Significant at 0.05 level

Among nine characteristics of World Vision beneficiaries, age was not significantly correlated with their extent of participation in diversified income sources and followed a positive trend. Khatun (2004) found similar relationship in her respective studies. It was so because of almost all of the respondents were young and middle-aged. Therefore, changing in age of the respondents could not influence their extent of participation in diversified income sources. The relationship between education and extent of participation in diversified income sources was significant and followed a positive trend. Khan (2004) observed similar relationships in her respective studies. To participate in diversified income sources the participants require some background knowledge about how to perform these income generating activities in economic way. The relationship between family size and extent of

participation in farming activities was not significant correlated but followed a positive trend. The findings were supported by Aktaruzzaman (2006). There was positive significant relationship between farm size and extent of participation in diversified income sources. The result was quite logical because more farm size facilitated the respondents to participate in more income generating activities. Farhana (2002) supported these findings. Annual family income was significantly correlated with the extent of participation in diversified income sources. Hasan (2006) found similar relationships in his respective studies. It was so because, families having high annual income took part in diversified income sources for earning more money as they could take the risk of loss from initiating new and diversified income sources. The relationship between input availability for the

World Vision beneficiaries and their extent of participation in diversified income sources was positively significant. Akter (2003) also found the similar findings. This was logical, because high amount of input availability leads to high amount of investment and subsequently to high extent of participation in diversified income sources. The correlation the relationship between training received of World Vision beneficiaries and extent of participation in diversified income sources was significant and followed a positive trend. This was so, because training develops new skill and practical knowledge as how to do a job in a better way and it is one of the most important components of successful participation in diversified income sources. The relationship between NGO affiliation and extent of participation in diversified income sources was negatively significant. Many NGOs in the study area were found to conduct mainly credit based programs but World Vision conducted programs concerning diversified income sources and awareness development. In this program they have no credit function, moreover they conducted training program and supplied input to the beneficiaries for performing diversified income activities which were not conducted by other NGOs. Hence, the beneficiaries affiliated with other NGOs, usually did not get training and input and other support services and ultimately their participation in diversified income sources was low. The relationship between cosmopolitanism of the World Vision beneficiaries and their extent of participation in diversified income was positively significant. Without going outside of the locality the rural poor people do not get proper information, training and input for

conducting diversified income earning activities and ultimately their extent of participation in diversified income sources remains low. Therefore, the finding seems to be rational with the real situation.

### **Problem confrontation in participating diversified income generating sources**

Constraints faced by the World Vision beneficiaries in participating diversified income sources were measured with Scored Causal Diagrams (SCDs). The SCDs was prepared by a group of respondents. The SCDs have been presented in Figure 1. In Figure 1, bold faced ellipse with no exiting arrow was used for end problem, normal ellipses with no entering arrow for root causes, rectangles for intermediary problems, arrows for causal relationships between problems and numbers in the parentheses for scores of the concerned problems.

On exploration of the root causes to the end problem 'low participation in diversified income sources', it was found that 'inadequate homestead land' was the most crucial root cause because homestead land is essential to perform income generating activities carried out in homestead area. Some opined that lack of need based training, lack of education were root causes of low participation in diversified income sources because they were not aware of participation in diversified income sources due to this. However, ranking of root causes to the end problems 'low participation in diversified income sources' has been presented in Table 4. Ranking was done based on the total score assigned by the group of respondent independently to each of the 'root' causes.

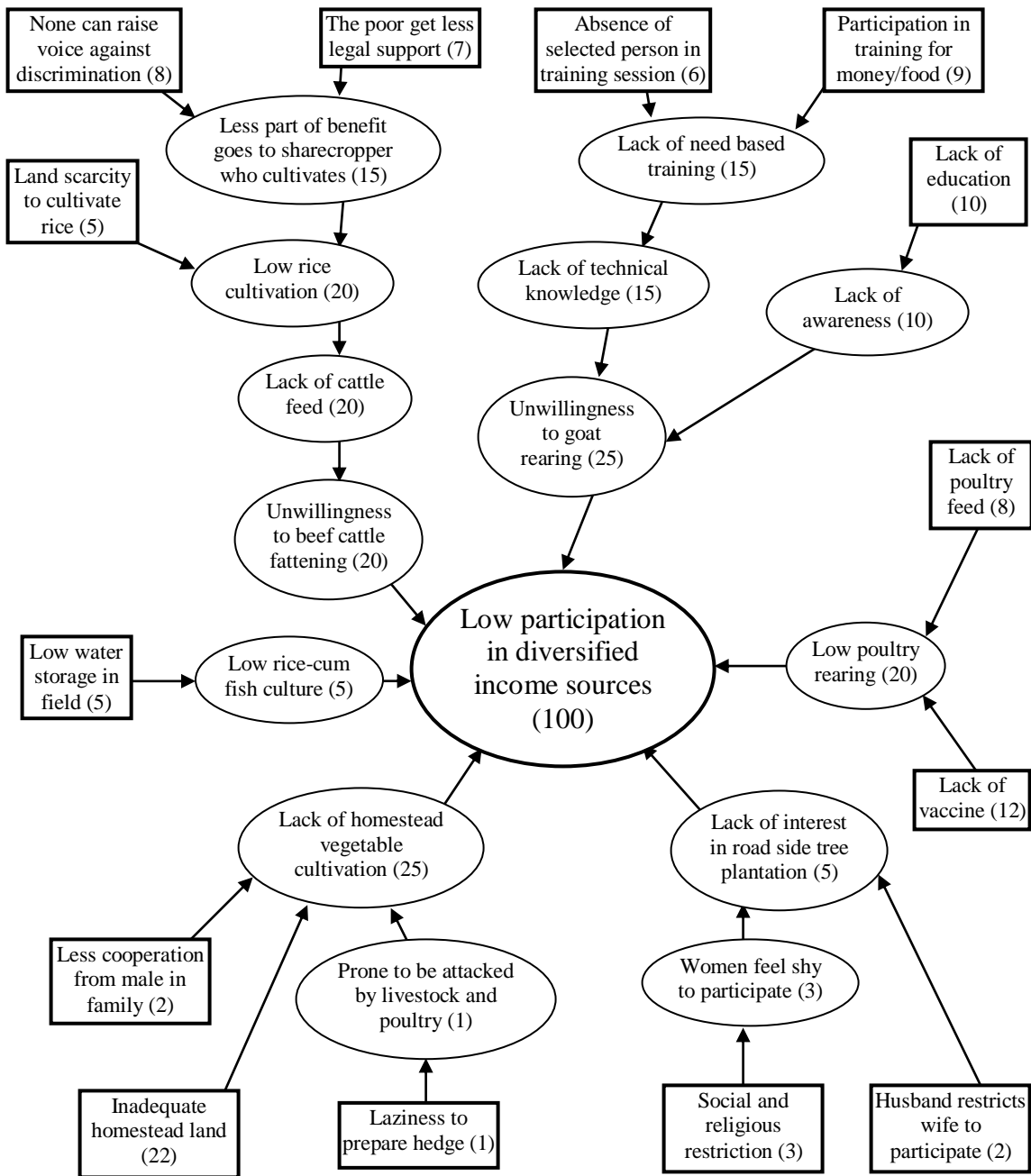


Figure 1: Scored Causal Diagrams (SCDs) for determining the problems in participating in diversified income sources under World Vision

Table 4. Ranking of problems according to their obtained scores

Rank order	Problem	Obtained score
1	Inadequate homestead land	22
2	Lack of vaccine	12
3	Lack of education	10
4	Participation in training for money/food	9
5	Lack of poultry feed	8
6	None can raise voice against discrimination	8
7	The poor get less legal support	7
8	Absence of selected person in training session	6
9	Land scarcity to cultivate rice	5
10	Low water storage in field	5
11	Social and religious restriction	3
12	Less cooperation from male in family	2
13	Husband restricts wife to participate	2
14	Laziness to prepare hedge	1

### Possible solutions to the 'root' causes

Participants engaged in the preparation of SCDs were requested to mention possible solutions to the 'root' causes of low participation in diversified income sources. They made the following suggestions through discussing with one another:

- Homestead vegetable cultivation using the land adjacent to the houses and allowing the climbing type vegetables on to the roofs.
- Arranging need based training for the rural poor and improving training management strategy by the GO and NGO.
- Arranging adult education program through government and non-government initiatives.
- Making the vaccine available to the poor people with low cost.
- Launching micro-credit program for the rural poor.
- Redefining government policy concerning land tenure so that sharecroppers who actually cultivate can get equal part of benefits from the crops.
- Ensuring legal support for the rural poor.
- Arranging motivational campaign using group and mass media to motivate male partners of the family to cooperate females as well as to minimize social and religious restriction.

### Conclusion

Findings of the study and the logical interpretations of their meanings in the light of other relevant facts prompted the researcher to draw the following conclusions:

There is further scope to increase participation of World Vision beneficiaries in

diversified income sources. Among thirteen diversified income sources, World Vision beneficiaries participated mostly in homestead vegetable cultivation, followed by marketing of product and field crop production. Finally, they had the lowest participation in nursery management. Thus,



there is ample scope for increasing participation in the later ranked activities. There is further scope to improve the level of education of the respondents to increase the extent of participation in diversified income sources. Farm size was an important characteristic influencing the participation in

diversified income sources for World Vision beneficiaries. There was further scope to increase input availability for the World Vision beneficiaries in order to increase participation in diversified income sources. Training had a great influence on the participation in diversified income sources.

### **Recommendations**

Based on the findings and conclusions of the study, the following recommendations could be made:

- Need based training support should be increased by the GOs and NGOs.
- Educational facilities should be provided to the rural people through adult learning program.
- Various inputs such as improved seeds, fertilizers, pesticides, vaccines and feeds for poultry and livestock etc. should be made available and accessible to the poor people with low cost and micro-credit program for them could be lunched by GOs and NGOs.
- Homestead vegetable cultivation could be encouraged using the land adjacent to the houses.
- Government policy concerning land tenure should be redefined so that sharecroppers who actually cultivate can get equal part of benefits from the crops.
- Legal support for the rural poor should be strengthened and motivational campaign may be arranged using group and mass media to motivate male partners of the family to cooperate females as well as to minimize social and religious restriction.

### **References**

- Aktaruzzaman, M. 2006. Functional Participation of Landless Women in Income Generating Activities (IGAs) under SAIP of DAE. *M.S. (Ag. Ext. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh.
- Akter, T. 2003. Participation of Women in Income Generating Activities (IGA) of SUS. *M.S. (Ag. Ext. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh.
- Farhana, Y. 2002. Participation of Women in Rice Production Activities and Their Training Needs in Some Selected Villages of BAUEC under Sadar Upazila of Mymensingh District. *M.S. (Ag. Ex. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh.
- Galpin, M., P. Dorward and D. Shepherd. 2000. *Participatory Farm Management Methods for Agricultural Research and Extension: A Training Manual*. The University of Reading, Reading, UK. <<http://www.agric.rdg.ac.uk>>
- Hasan, M.K. 2006. Participation in Farming Activities by Conventional and Organic

- Farmers. *M.S. (Ag. Ex. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh.
- Islam, M.R. 2002. Involvement of BRAC Trained Women Beneficiaries in Income Generating Activities and Decision Making Role. *M.S. (Ag. Ext. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh.
- Khatun, F. 2004. Participation of Rural Women in Homestead Management Activities. *M.S. (Ag. Ext. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh. *(Ag. Ext. Ed.) Thesis*, Dept. of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh, Bangladesh.