

Potential of Income Generating Activities on Livelihood Improvement of Rural Women: A Case Study on Two Villages of Hatiya Upazila, Noakhali

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Abstract

Without effective participation of women in development activities, it is impossible to accomplish comprehensive development of the country as both men and women are equally important part of the society. The main purpose of this research is to investigate the improvement of rural women's livelihood through involvement in different Income Generating Activities (IGAs). An attempt has been made in this paper to know the present livelihood situation of rural women to assess their income strategies, and to find out the existing constraints on participation in IGAs. The field survey was conducted in two randomly selected villages of Hatiya Upazila, Noakhali district, namely Char Latiya and Purba Jorkhali. Data collection methods included questionnaire survey and direct observation with 100 women who are associated with income generating activities. Key informant interviews were conducted with strategic stakeholders who were actively involved in the implementation and monitoring of income generating activities. The impact analysis of IGAs on personal income of women shows that overall 43% women have increased their income through participation in IGAs over the past three years. The majority of the rural women (62%) indicated that their livelihoods improved through participation in IGAs. The extent of participation of "NGO women" in various IGAs is higher than "non-NGO women" and they made a significant profit from all IGAs compared to "non-NGO women". This suggests that an increasing participation of rural women in IGAs could potentially benefit the rural economy in Bangladesh.

Introduction

Without effective participation of women in development activities, it is not possible to broaden overall improvement in the livelihood of rural women in Bangladesh. The rural women in Bangladesh have yet a minimum or sometimes, no access to development activities. In this backdrop of the situation, the concept of Income Generating Activities (IGA) plays a key role for sustainable income generation and food security of the rural women (Action against Hunger, 2009). Income generation can help to overcome food insecurity when economic factors are a fundamental cause of food insecurity and when food is available in local market but lack of money is the main difficulty faced by the vulnerable population. Income generating activities can be defined as assisting women to secure income through their own efforts (Alana, 1994). Income generating activities (IGAs) change the livelihood of the poor in terms of living condition, housing, nutrition,

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savings, dress, medical treatment, health, sanitation, education and liberalization (Ullah and Routray, 2007). As a result, non-government organizations (NGOs) and other development agencies have continued to focus their efforts on the delivery of Income Generating (IG) programs on the broad assumption that the benefits for women are self-evident (Basnet and Adhikari, 2006).

In Bangladesh, apart from government initiatives, a large number of non-government organizations are working in rural areas, concentrating on rural women to change their livelihood. Due to the direct and indirect support from these organizations, the capabilities of the involved women are increasing day by day through greater motivation and participation in various income activities, which are expected to eventually contribute to their household income. Currently, rural women in Bangladesh have an anchoring role in the management of their families as well as participation in different income generating activities, like crop production, livestock and poultry rearing, aquaculture and other gainful activities (ADB, 2007; Al-Amin, 2008; Hoque and Itohar, 2009). It is expected that the participation of women in IGAs can contribute to allowing households to cope with income shocks, to ensure food security, to avoid an increase in poverty or to prevent vulnerable households from falling below the poverty line. This research focuses on socio-economic conditions of women and their existing livelihood situation and their income strategies, along with their scopes and constraints of participation in income generating activities.

Literature Review and Conceptual Understanding on Livelihood and IGAs

Concepts of Livelihood

Livelihood concept was introduced for the first time in the World Commission on Environment and Development (WCED) forum in 1987. In the report, the definition of livelihood was set with a core concept of sustainable livelihood security. With a modification to the WCED definition, Chambers and Conway (1992) proposes a definition of livelihood. In their view, 'a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. Also, in their opinion, livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future.

According to Chambers and Conway (1992) livelihood combines the central concept of capabilities, equity and sustainability where all are the means and end of livelihood. In the concept of livelihoods, people centered approach is used and household level is a unit of analysis. They argue that poverty reduction activities should be focused as a base at household level and move to micro and macro level as well. In their argument, 'asset' is divided into tangible (resources and stores) and intangible (where claims and access provide material and social means).

The other definition which is given by Ellis (2000) excludes the concept of capabilities and sustainability. On the other hand, it emphasizes more on social relations and institutions. To Ellis (2000:10), "a livelihood comprise the assets (natural, physical, human, financial and social capital) the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the

individual or household". It is defined as the process by which rural households construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living.

In both definitions given by Chambers and Conway (1992) and Ellis (2000), the central point is they all trying to be pro-poor and to putting asset as a main factor for people's livelihoods or development. The definition adopted by Ellis (2000) from Chambers and Conway (1992) definitions gives a more and strong emphasis on access and also considered the importance of social relations and institutions in defining access.

According to DFID (1999), the term livelihood strategies are defined as the range and combination of activities and choices that people make in order to achieve their livelihood goals, including productive activities, investment strategies, reproductive choices, etc. These choices are reflected in the way that people use their assets and as such are an important part of household behavior, while determining well-being. Livelihood strategies are composed of activities that generate the means of household survival and are the planned activities that men and women undertake to build their livelihoods (Ellis, 2000). Livelihood strategies include: how people combine their income generating activities; the way in which they use their assets; which assets they chose to invest in; and how they manage to preserve existing assets and income (DFID, 2001).

The adoption of different livelihood strategies is meant to result in desirable outcomes, such as food and income security, the security of incomes, strengthened resource base, improved wellbeing (health, self-esteem, respect, sense of control, and maintenance of cultural assets), reduced vulnerability and sustainable use of natural resources. Outcomes are related to security, including the level and stability of income and degree of risk, and to environmental sustainability, including soil quality and biodiversity (Ellis, 2000). Scoones (1998) argues that livelihood outcomes are the achievements of livelihood strategies, such as more income, increased well-being, reduced vulnerability, improved food security (e.g. increase in financial capital in order to buy food) and a more sustainable use of natural resources.

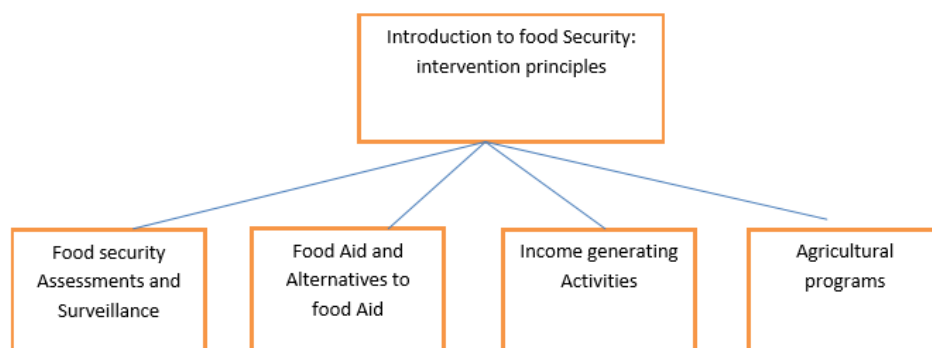
Concepts of Income Generating Activities (IGAs)

An Income Generating Activity (IGA) is any activity that generates income for the family; the activities can include agriculture, livestock rising, fishing, post-harvest processing and services. Income generating programs are directed towards an economic focus, and aim to increase the cash available to the family, improve the local economy, and strengthen the livelihood strategies so that the population is less vulnerable. IGA can be supported through training, improving access to productive assets and increasing sale channels (Action against Hunger, 2009). Income generation can help to overcome food insecurity when economic factors are a fundamental cause of food insecurity and when food is available in local markets but lack of money is the main difficulty faced by the vulnerable population. As shown in Figure 1, Income Generating Activities (IGAs) are a key concept in sustainable food security.

Access to Credit for IGAs

Microcredit may be defined as the extension of small amount of collateral-free institutional loan to jointly liable poor group members for their self-employment and income generation (Rahman, 2003). Getaneh (2006) argues that microfinance can

potentially reduce vulnerability by helping micro entrepreneurs diversify their sources of household income, increase their savings, expand their options for credit, and improve household money management. It also plays a protective role by helping to accumulate physical assets, increase expenditures on housing, and strengthen women's role in collaborative economic decision making. The trend of accessing poor women to microfinance as a means of livelihood earnings is still strongly persisting. This is also further confirmed in details in Tesfay (2003) concerning those accessing poor women to microfinance services in the developing countries as a means of improving their livelihood and alleviating the problem of poverty at large.



Source: Action against Hunger, 2009

Figure 1: Integrating food security and income generating activities

In Bangladesh, most of the NGOs provide microfinance services to their members. Some studies found that the access to credit by the poor has a positive impact both on household outcomes and on individual outcomes as well as permanent effect on living standards. However, other studies have found that the living standards have not improved through micro-credit, but rather that poor households simply become poorer through the additional burden of debt (Sheheli, 2012).

Whether income increase is based on loans for individual micro-enterprises or on group-based income generation projects, its appropriateness as a strategy for poverty reduction in the case of the poorest people is questionable (Susan and Rogaly, 1997). Farm households' access to formal credit has been difficult due to high transaction costs, risks of small-scale lending and lack of collateral (World Bank, 2005). Thus credit for Income Generating Activities (IGAs) in the rural areas, especially for rural women, is not readily available. But availability of credit within their ability to obtain and repay would certainly enable rural women in involving themselves into gainful activities and improve their livelihood.

Women's Empowerment Indicators

The term empowerment has different meanings depending on the socio-economic, political and cultural context in which it is presented. Overall empowerment can be perceived as a process or as outcome/goal and can take place at different levels (individual and community). In discussing the relationship between empowerment and poverty reduction, World Bank (2001) defines empowerment as the expansion of

freedom of choice and actions and increasing one's authority and control over the resources and decisions that affects one's life.

Empowerment is a difficult term to define because there are many trade-offs among many dimensions of empowerment. The major indicators of empowerment may include bargaining power, control over resources, decision making at household level, and self-image and self-confidence (Tesfay, 2003). Generally, it refers to women's direct and indirect control over all activities and choices of their family, and thus refers to the improved status of women at household and community levels. Relentless efforts have been put to empower poor women for decades by governments and non-government development agencies to address women's needs and their exclusion from the benefits of development. Rural women, by no means are free of challenges and drawbacks, but these can inform the strategy of approach that follows (DVV International, 2008). A livelihood comprises the capabilities, assets (both material and social resources) and activities required for a means of living. Livelihoods and skills training in particular need to be tailored to the current socio-economic demand of rural people with special emphasis to poor women (IFAD, 2011).

Malhotra, Schuler and Boender (2002) observes that there are two types of empowerment indicators that are universally used in empirical literature, 1) measuring domestic decision-making, and 2) measuring either access to or control over resources. They argue that these two aspects often merge since indicators on domestic decision-making tend to focus heavily on financial and resource allocation matters. Indicators of women's empowerment can thus be looked through some basic indicators, such as i) access to or control of cash, ii) access to or control of household income, iii) access to or control of asset, iv) domestic decision-making on finances, resource allocation, spending and expenditures, v) domestic decision-making on social and child related issues, vi) mobility or freedom of movement, vii) freedom from violence and viii) appreciation in household and self worth.

Income Generating Programs and Projects in Bangladesh

Bangladesh introduced a number of measures to improve the income status of women. For example, quotas in government administration, public service, local government and special measures to increase girls' enrolment in schools are important initiatives by the government. Non-governmental organizations in Bangladesh introduced small-scale manufacturing and service unit for poor women through soft credit and skills development training (Sheheli, 2012). Like all other patriarchal societies, women in Bangladesh are mostly confined to the homestead due to cultural, religious and social restrictions. Rural women in Bangladesh participate in different income generating activities, like crop production, livestock and poultry rearing, aquaculture etc. (ADB, 2007; Al-Amin, 2008; Hoque and Itohara, 2009). Women from the poorest households, sometimes work outside the home as paid laborers for their family's survival (ADB, 2001). Even though the economic contribution of rural women is substantial, it is largely unacknowledged (ADB, 2004 in Sheheli, 2012).

Decisions on important economic matters such as land acquisition, purchasing agricultural inputs, crop production, marketing (Haider and Akhter, 1999), sale of large animals, such as cows and oxen (Miller, 2001; Ifid, 2004), are often made by men. Women

tend to have control over small animals, such as goats, sheep, poultry and pigs (World Bank, 2008). From these facts, it shows that the participation of women in decision making is low.

Sheheli (2012) maintains that income generating activities of rural women in Bangladesh can be divided into two broad categories: agricultural and non-agricultural activities. The most important agricultural activities includes, homestead vegetables cultivation, crop production, post-harvest activities in agriculture farming, poultry rearing, management of livestock, fisheries, bee keeping, sericulture, etc. Poultry is an integral part of agrobusiness of the village community. About 89% of the rural households rear poultry and the average number of birds per household is 6.8 (Islam, Haque and Paul, 2003). Usually, poultry-related work is carried out by women (Rahman, 2003), which play a vital role for income generation. In rural areas, 94% of the poultry is owned by women (Brac, 2007). Poultry production by poor rural households contributes to income, nutrition, food security, savings and insurance (Nielsen, Roos and Hilsted, 2003; Sonaiya, 2007). Rural women also have some discretion to use money earned from the home-based poultry firm.

The non-agricultural income generating activities by women includes self-employment activities such as handicrafts (dressmaking, wall mats, household accessories, baskets making, jute bags, bamboo work and embroidery) or cigarette making (Al-amin, 2008). They conduct small businesses such as shop keeping, trading CDs or video cassettes etc. Some women operate grocery shops (especially if adjoining their homes), or travel from village to village to selling clothes and other items (Fakir, 2008; Farid et al., 2009). The poorest women are finding work such as gathering firewood, laboring in brick fields, and earthwork on roads, and in rural industries. Women are also engaged in rice/paddy trading, rent of rickshaws, studio business, preparing and supplying fishing nets and other fishing instruments, and so on.

The opposite views also exist, which present that microcredit programs create employment opportunities, increase productivity, increase income and provide economic security, improve nutritional and health status, and improve housing condition of rural women (Hossain and Sen, 1992). Further, microfinance programs have a significant influence on social empowerment, awareness and education, self-esteem, sense of dignity, organizational and management skills, mobilization of collective strengths in many other gainful activities (Pitt and Khandaker, 1996; Khandker, 1998; Nahar, 2007).

Conceptual Framework for the Present Research

The literature review makes an indication that income generating activities help increase earnings of the rural people who get opportunities of participation. The following paragraphs elaborate on three key themes of IGAs.

Sustainable Livelihood: The sustainable livelihood idea was first introduced by the Brundtland Commission on Environment and Development as a way of linking socio-economic and ecological considerations in a cohesive, policy-relevant structure. The United Nations Conference on Environment and Development (UNCED) in 1992 expanded the concept, especially in the context of Agenda 21, and advocated for the achievement of sustainable livelihood as a broad goal for poverty eradication (United

Nations, 2005). It stated that sustainable livelihood could serve as an integrating factor that allows policies to address development, sustainable resource management, and poverty eradication simultaneously (UNDP, 1997). A livelihood is environmentally sustainable when it maintains or enhances the local and global assets on which livelihood depends, and has net beneficial effects on other livelihoods. A livelihood is socially sustainable which can cope with and recover from stress and shocks, and provide for future generations (Chambers and Conway, 1992)

Indicators of Livelihood: There are many indicators used to monitor complex changes in livelihoods and to understand the processes that have produced such change. There are practices in Bangladesh on livelihood indicator-based performance evaluation on economic activities. For example, CARE (2004) identified 26 livelihood indicators usually used to measure around 9 livelihood outcomes. The examples of the broad livelihood outcomes can be seen through aspects, like shelter, economic security, nutritional security, health security, water and sanitation security, education security, community participation, and access to institutions and services. The indicators practiced by different organizations likewise may be wide-ranging when details are taken into consideration.

IGAs as Livelihood Strategy for Rural Women: In rural society, the household is the base upon which the role of rural women is negotiated and enforced. Rural women usually play diversified roles in the household by performing different kinds of activities including household activities, on-farm activities like vegetable cultivation, livestock and poultry rearing and non-farm activities such as small business, handicraft, etc. An access to association with NGOs and credit provides opportunity for women member of NGOs to receive credit to start IGAs. It is hypothesized that both the credit facilities and association with NGOs may change three important dimensions of rural women at household level: building social capital, raising awareness and building capability.

Objectives of the Study

In the context of wide-ranging scope of research on livelihood through diverse income generating activities, this research has been conducted with a limited scope with three objectives. These are: i) to determine the existing livelihood status of rural women through some livelihood indicators; ii) to assess the income generating strategies of rural women and iii) to identify suggestions by rural women to improve their livelihood status.

Methodology

Hatiya is an Upazila (sub-district) of Noakhali District in the Division of Chittagong, Bangladesh. This Upazila was purposely selected because here rural women's involvement with different income generating activities (IGAs) is quite common. Here, main sources of income are agriculture (65.38%) and some non-agricultural activities, such as labor (5.27%) as evident in the published documents (BBS, 2011). For this study, two villages namely Char Latiya and Purba Jorkhali have been selected as case study areas. These two areas are located at Char Iswar and Tamaruddin Union of Hatiya Upazila.

This study employs both quantitative and qualitative techniques to explore underlying facts influencing rural women's livelihood. The quantitative part of the methodology measures the effects of socio-economic, socio-cultural and other household matters on women's livelihood. The qualitative techniques include key informant interviews and direct observations. Key informant interviews are semi-structured interviews and help to guide the interview process about the change in socio-economic issues over the last five years, obstacles faced by rural women regarding their livelihood and IGAs issues and strategies to overcome obstacles. A structured interview schedule was prepared containing open and closed questions.

In order to cover the research topics and better address the validity and reliability of the study, household selection was based on the following criteria: involvement in IGAs, association with NGOs, and participants should not have been interviewed before. At first, two villages were randomly selected from 10 villages within the two unions. To ensure involvement of respondents in IGAs, all women in each village were divided into two categories: (a) women involved in IGAs and (b) women not involved in IGAs. The women who were involved in IGAs within the two villages were the population of the study. Women in the study area who were involved in IGAs were categorized into two groups, i) associated with non-government organizations ("NGO women") and ii) not associated with non-government organizations ("non-NGO women"). One hundred (100) women were purposively selected for interviewing and data collection.

Findings and Discussion

Socio-Economic and Cultural Profile of Rural Women in the Study Area

The survey indicates that 71% of the rural women were within the age bracket of 30 - 50 years, which mostly represents the economically active population and 41% of the surveyed rural women (among them 12% in the illiterate and 28% in the read/write groups) had no formal education, still performed different income activities without recourse to their educational background. A huge portion of the surveyed women (71%) was married and lived with their husbands in the family, 3% were separated, 17% were widowed and the remaining 9% had been divorced. The widowed and separated women were turned into excessive "NGO women" class and the highest proportion of rural women (68%) had medium family, 9% had a small family and the remaining 23% had a large family. In the study area, only three household categories had been found, i.e. landless, marginal and small households. In addition, the highest proportion (57%) of the rural women belonged to the 'marginal farm household' category, 29% to the 'landless household' and only 13% to the 'small farm household' category.

It is interesting to note that most of the male members (51%) had farming as principal occupation and secondarily worked as wage labor (21%). The farming activities included crop production, livestock, aquaculture and integrated farming. Most of the rural women belonged to the low to medium (< Tk. 13 thousand) income group and 11% of them to the high-income group. It is found that ninety-nine percent rural women have rice as their staple food and only 1% prefers wheat as staple food. They ate only few seasonal fruits that have been produced in the homestead. Fifty percent of "non-NGO women" said that they have interest to join with NGOs, but because of family barriers, which includes disagreement of their husbands in their participation of IGAs. Other influential

family members, like father-in-law and mother-in-law also do not necessarily agree in this regard. This shows that patriarchal influence is still dominant in household level decisions on livelihood and other matters.

Livelihood Status of Rural Women in the Study Area

As Chambers and Conway (1992) argue, a livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'. Seven livelihood indicators, namely food availability, housing condition, water facilities, health situation, sanitation, participation in social activities, and freedom in cash expenditure were investigated in the study villages to understand the practical situation of rural women based on these indicators. The following paragraphs present a glimmer of hope in this respect for future actions and improvement.

Food Availability: In the study, most of the rural women said that they suffer from food crises before the yearly harvest nearly each year. The food availability was high for a majority of rural women (59%), while 28% were in the medium and the remaining 13% in the low food availability category.

Housing Condition: The housing conditions of the study area indicated that majority of the rural women lived in poorly framed houses. A large percentage of rural women possessed dwellings with corrugated tin roof (74%), three percent had dwellings manufactured from brick and 23% had a straw roof.

Water Facilities: Fifty-nine percent rural women had access to tube wells as their primary source of water, 17% of rural women collected necessary water from shallow tube wells or deep tube wells and the remaining rural women largely depends on surface water sources, such as ponds (24%). Rural women of the study area suffered from lack of quality drinking water and most effective 60% women used properly quality water. Approximately half of the total population drank unsafe water that contained Fe (iron), as (arsenic) and bad smells.

Health Situation: A high majority of the rural women (82%) had low access to medical facilities and received poor treatment, at the same time 16% had medium health facilities and a few rural women (2%) enjoyed high treatment facilities. The pharmacy was the most popular health treatment provider to the rural women (41%) accompanied by village doctor (11%).

Sanitation: In the study area, 78% of women have own toilet, 7% possess no toilet, and 15% of rural women rely on a neighbor's toilet. There was variation found in the use of toilets between the income groups and the high-income group used more hygienic toilet compared to the lower income group.

Participation in Social Activities: The participation of rural women in social activities lay particularly among low to medium, while a majority had low participation (57%). One-third (38%) had medium participation and only a few (only 5%) had high participation in the study area. A relatively small portion (6%) was engaged in meetings arranged by village community like demonstrations or village *salish*.

Freedom in Cash Expenditure: It is noteworthy that about half of the women (50%) had medium freedom, while 13% had high and the rest 37% had low freedom in cash expenditure. Rural women's freedom was high (34%) on loan repayment, because in most cases, rural women took loans and they had liabilities to repay it. Generally, it is evident in the rural areas that husbands mainly take decisions regarding income-related items, while women's views are suppressed.

Livelihood and IGA Issues in the Survey

Information was gathered about rural women's livelihood and IGA issues to explain the ideas on different aspects:

- i. Changes in socio-economic issues over the last five years
- ii. Obstacles faced by rural women regarding their livelihood and IGA issues
- iii. Strategies to overcome obstacles

The opinion of key informants was, however, gathered on 16 important aspects of socio-economic issues mainly concerning the livelihood of rural women and the contribution of IGAs over the last five years. Of the various aspects, education, food availability, health status, water facilities, sanitation, participation in social activities, credit availability, family planning, cattle and goat rearing, participation in non-farm activities, wage labor, condition of infrastructure facilities were covered in the interview for their opinion. Housing conditions remain unchanged and intensive home gardening, poultry rearing, and condition of electricity facilities have been decreased.

Some obstacles which are faced by rural women regarding their livelihood and IGAs issues are lack of input supply to conduct IGAs, poor attitudes towards rural women, religious (*pardah* system) and social barrier which continuously avoid participation in IGAs, few opportunities for training programs for IGA promotion, less support from government for implementing IGAs, fewer opportunities and difficulties in conducting IGAs, for example less capital, low skillfulness, insufficient infrastructure facilities, lack of improved technologies, and poor marketing channel.

Some important opinions of key informants about the strategy to overcome the obstacles regarding the livelihood and IGA issues of rural women are to: strengthen government programs for rural women, improve the infrastructure (roads, electricity, markets, educational institutes like schools, colleges), increase rural women's income by involving them with suitable IGAs and providing them need-based training, imparting skills, supplying input for both agriculture and non-agriculture at a low cost along with appropriate time for making IGAs successful, extend micro-credit programs of NGO with low interest rates etc.

Income Strategies of Rural Women

Livelihood strategies are composed of activities that generate the means of household survival and are the planned activities that men and women undertake to build their livelihoods (Ellis, 2000).

Extent of Participation of Rural Women in Different IGAs

Nine IGAs commonly practiced by rural women in the study area were identified during the survey. Table 1 presents these IGA activities in the study villages.

Table 1: Extent of participation of rural women in different IGAs

| IGAs | Extent of participation (in frequency) | | | | | | | |
|-----------------------|--|-----------|--------------|------------|--------------------|-----------|--------------|------------|
| | NGO women (46) | | | | Non-NGO women (54) | | | |
| | Never | Sometimes | Occasionally | Frequently | Never | Sometimes | Occasionally | Frequently |
| Cattle and goat | 20 | 5 | 8 | 13 | 38 | 6 | 6 | 4 |
| Poultry | 14 | 10 | 15 | 7 | 31 | 13 | 7 | 3 |
| Vegetable cultivation | 12 | 9 | 14 | 11 | 19 | 6 | 9 | 11 |
| Small business | 25 | 7 | 10 | 4 | 44 | 5 | 5 | 0 |
| Street vendor | 30 | 10 | 6 | 0 | 47 | 3 | 2 | 2 |
| Aquaculture | 37 | 7 | 2 | 0 | 48 | 5 | 1 | 0 |
| Wage labor | 28 | 6 | 7 | 5 | 41 | 4 | 3 | 6 |
| Handicraft | 29 | 4 | 6 | 7 | 38 | 4 | 5 | 7 |
| Tailoring | 33 | 2 | 3 | 8 | 42 | 11 | 0 | 1 |

Source: Field Survey, 2018

The findings of the study showed degree in their participation in IGAs substantially numerous based on their involvement with microfinance programs of NGOs. In general, their participation was relatively high in vegetable cultivation, poultry, cattle and goat rearing. Among the agricultural activities, “NGO women” were ahead in cattle and goat rearing and poultry compared to their counterpart “non-NGO women”.

Estimation of Rural Women’s Personal Income from Different Sources

“NGO women” reported that they received some skill development trainings on different IGAs, such as vegetable cultivation, poultry, cattle and goat rearing, sewing, handicrafts, tailoring, running small business, which improved their capabilities. “NGO women” received loans from microfinance program of NGOs to start an IGA.

Therefore, “NGO women” get maximum organizational support from the beginning of an IGA to marketing that might ensure higher income compare to “non-NGO women” (Table 2). Rural women of the study area earn personally from various IGAs. Major income (33%) came from cattle and goat rearing. The next highest income came from poultry (16%). Accordingly, small business (11%), vegetable cultivation (10%), tailoring (7%), handicraft (10%) and street vending (5%) contributed to the personal income of rural women. The earning of “NGO women” was higher from all these sources than those of “non-NGO women” in the study area.

Table 2: Estimation of rural women's personal income from different sources

| IGAs | Income of women (in '000Taka) | |
|-----------------------|-------------------------------|--------------------|
| | NGO women (46) | Non-NGO women (54) |
| Cattle and goat | 177 | 66 |
| Poultry | 84 | 33 |
| Vegetable cultivation | 52 | 26 |
| Small business | 62 | 18 |
| Aquaculture | 16 | 6 |
| Street vendor | 31 | 9 |
| Wage labor | 21 | 13 |
| Handicraft | 42 | 29 |
| Tailoring | 36 | 20 |

Source: Field Survey, 2018

Selection of the Best IGA

An attempt was made to assess the best IGA in the study area through comparing income of each selected IGA. Table 3 shows the annual income of rural women from various sources of IGAs.

Table 3: Summary of rural women's annual income from various IGAs

| IGAs | NGO women (46) | | | Non-NGO women (54) | | |
|-----------------------|----------------|---------|-----------|--------------------|---------|-----------|
| | Total | Average | Frequency | Total | Average | Frequency |
| Cattle and goat | (177) | 7 | 26 | (66) | 4 | 16 |
| Poultry | (84) | 3 | 32 | (33) | 2 | 23 |
| Vegetable cultivation | (52) | 2 | 34 | (26) | 1 | 26 |
| Small business | (62) | 3 | 21 | (18) | 2 | 10 |
| Aquaculture | (16) | 2 | 9 | (6) | 1 | 6 |
| Street vendor | (31) | 2 | 16 | (9) | 1 | 7 |
| Wage labor | (21) | 1 | 18 | (13) | 1 | 13 |
| Handicraft | (42) | 3 | 17 | (29) | 2 | 16 |
| Tailoring | (36) | 3 | 13 | (20) | 2 | 12 |

Note: Figures in parentheses indicate income (in '000 Taka).

Source: Field Survey, 2018

Vegetable cultivation was the predominant IGA in the study area, as the largest number of rural women (60) was involved in it. However, average returns from vegetable cultivation were very low (Tk. 1,000). High income was obtained from cattle and goat rearing (Tk.6, 000), followed by small business (Tk. 3000).

Impact of IGAs on the Income of Rural Women and their Livelihood

Livelihood outcomes are the achievements of livelihood strategies, such as more income, increased well-being, reduced vulnerability, improved food security (e.g. increase in financial capital in order to buy food) and a more sustainable use of natural resources (Scoones, 1998).

Opinion of Rural Women Regarding Impact of IGAs on Their Own Income

Only 5% of rural women observed a significant increase in their income due to participation in IGAs, while 38% women found that their income increased slightly. Income remained unchanged was reported by 49%, among them 61% were “non-NGO women” and 35% were “NGO women”. It appeared that improved income had been experienced more often by “NGO women” and rarely by “non-NGO women”. Only 08 % of the women had slight or significant declines in their income in the last three years. The reasons might be the improved access of “NGO women” to loans, technology and market facilities provided by NGO. It is also notable that 2% of “NGO women” found that their income decreased significantly.

Reasons for Declining Income of Rural Women during the Last Three Years

Overall 51.5% of respondents identified project failure as the most important reason behind declined income, ranging from 72% in “NGO women” to 31% in “non-NGO women”. 33% of rural women identified market failure as the second important reasons. The other reasons that directed income negatively were high interest rate of loans, exposure to natural disaster, loss of employment and loss of crops/animals.

Reasons for Increased Income of Rural Women during the Last Three Years

In the study area, rural women reported eight items, which contributed to the increase of their income in the last three years. The majority (67% of NGO and 29% of non-NGO) believed that ‘increased production in agriculture and non-agriculture’ played a major role to increase income. The other reasons behind increased income reported by rural women included an increase in cropping intensity, credit facilities from different loan sources, better use of varieties in agriculture farming, opportunity to start new IGAs, enhanced ability to disaster management, less pest attack and getting a new/better job. An overall impact of IGAs on livelihood can be observed in Table 4.

Table 4: Overall impact of IGAs on livelihood of rural women

| Statement | Opinion of rural women (%) | | |
|------------------------|----------------------------|----------------|-----------|
| | Improved | Same as before | Decreased |
| Household income | 49 | 36 | 15 |
| Position in the family | 76 | 21 | 3 |
| Dependency on husband | 39 | 16 | 45 |

| Statement | Opinion of rural women (%) | | |
|------------------------------------|----------------------------|----------------|-----------|
| | Improved | Same as before | Decreased |
| Housing condition | 38 | 58 | 4 |
| Health situation | 35 | 56 | 9 |
| Water facilities | 77 | 23 | 0 |
| Sanitation | 71 | 29 | 0 |
| Food availability | 36 | 49 | 15 |
| Participation in social activities | 60 | 21 | 19 |
| Freedom in cash expenditure | 56 | 9 | 35 |
| Overall livelihoods | 62 | 30 | 8 |

Source: Field Survey, 2018

The majority of the rural women (62%) indicated that their livelihoods improved through participation in IGAs. The position in the family, participation in social activities, water facilities and sanitation also increased remarkably. Many women (30%) reported that involvement with IGAs does not change their livelihood status and 8% mentioned that their livelihood status in fact decreased. Loss of property due to discontinuation of income projects, riverbank erosion, unstable market prices, defaulting and the burden of loans were major reasons for the negative effects reported by women.

Constraints Faced by Rural Women in Participating IGAs

Credit for rural women supplied by different loan sources was very small when compared to the excessive production costs of running an IGA. The most common constraint confronted by rural women is inadequate finance to run IGAs. Besides, the women were usually very poor and spent most of their income on food and household expenses. Rural women in the study area had poor educational backgrounds, and they had difficulties for understanding the concepts behind new technologies and methods of education programs.

Most of the roads in the study area were earthen, and during monsoon, they faced difficulties to travel on the muddy roads. The public transport system was very poor, and it was impossible to use personal vehicles because of their poor economic condition. In addition, they described that social insecurity, insufficient training programs, and natural calamities hindered their participation in IGAs. Every year they faced disaster like heavy rainfall or flood, disease and insect infestation, etc. Thus both production and sale decreased, and sometimes-rural women lost their investment on IGAs.

The unwillingness also resulted from the dependency on men to sell products, the lack of appropriate IGAs, less cooperation from husband and family members, social insecurity and harassment. Environmental hazards such as excess rain, flood and pest attack, as well as social insecurity like theft and destruction of crops increased the risk for agricultural products, which made women reluctant to conduct IGAs.

Probable Measures to Solve the Constraints Perceived by Rural Women

In response to economic, socio-cultural and gender-based obstacles, the rural women suggested some recommendations for the improvement in IGAs. A long list of recommendations can be produced based on their suggestions and literature review, instead a summary is provided, which are as follows:

- Offering enough government assistance to rural women for IGAs through creating provisions for sufficient credit at low interest rate in time of their requirement;
- Supplying enough agricultural inputs (seeds, fertilizer, pesticides, vaccine) and non-agricultural inputs in time through regular governmental programs;
- Providing enough need-based training facilities on IGAs from the government and NGOs in technical and non-technical matters through skilled employees;
- Developing a cooperative society to remedy the advertising issues for marketing the products of IGAs by rural women; and
- Encouraging for increasing participation of the rural women in IGAs through national economic and social policies.

Conclusion

The main purpose of this research has been to investigate the improvement of rural women's livelihood through involvement in different Income Generating Activities (IGAs). An attempt has been made in this research to know the socio-economic conditions of rural women, their existing livelihood situation, and their income strategies, along with their scope and constraints of participation in income generating activities.

The study found that extent of participation of "NGO women" in various IGAs is higher than "non-NGO women", and they made a significant profit from all IGAs compared to "non-NGO women". The impact analysis of IGAs on personal income of women shows that overall rural women have been able to increase income from IGAs over a period of three years. The participants in the program indicated that IGAs help improve their livelihoods.

The study found that in order to improve prevailing livelihood situation of the studied women, an integrated initiative is needed from the government organizations (GOs), non-government organizations (NGOs), women's organizations (WOs), development agencies and as well as various community organizations of rural society. It is expected that this research would encourage future researchers in the field of rural development, especially on income, employment and empowerment of the rural women.

References

- ADB, 2001. Women in Bangladesh: Country Briefing Paper. Program Department West and Office of Environment and Social Development, Asian Development Bank.
- ADB, 2004. Technical Assistance Report. People's Republic of Bangladesh: Preparing the Primary Education Sector Development Program. Asian Development Bank.
- ADB, 2007. Special Evaluation Study: Effect of Microfinance Operations on Poor Rural Households and the Status Action against Hunger, 2009. Untitled.

- Al-Amin, S. 2008. Role of Women in Maintaining Sustainable Livelihoods of Char Landers in Selected Areas of Jamalpur District. PhD Thesis. Department of Agricultural Extension Education Bangladesh Agricultural University, Mymensingh.
- Alana, A. 1994. Support to Women's Productive and Income-Generating Activities, Evaluation and Research Working Paper Series, Number 1.
- Basnet; Sita, R., and Adhikari Krishna, P. 2006. Do Income Generating Programmes Empower women? A Discussion on the Changing Status of Women in Rural Nepal.
- BBS, 2011. Statistical Yearbook of Bangladesh. Bangladesh Bureau of Statistics, Dhaka.
- Brac, 2007. At a Glance. <http://www.brac.net>
- CARE, 2004. Untitled.
- Chambers, R. and Conway, G. 1992. Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. IDS Discussion Paper; 296. Brighton, UK.
- DFID, 1999. Sustainable Livelihoods Guidance Sheets. London, United Kingdom.
- DFID, 2001. Sustainable Rural Livelihoods Guidance Sheet. London, United Kingdom.
- DVV International, 2008. Occasional Paper "Integrated Women's Empowerment Program: No2, Nazareth, Ethiopia
- Ellis, F. 2000. Rural Livelihoods and Diversity in Developing Countries, Oxford University Press.
- Fakir, S. K. 2008. Women Empowerment through Participation in Income Generating Activities of Sabalamby Unnayan Samity. PhD Thesis. Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Farid, K. S. et. al. 2009. Nature and Extent of Rural Women's Participation in Agricultural and Non-agricultural Activities. *Agricultural Science Digest*, 29(4).
- Getaneh G. 2001. Evaluating the Potential of Microfinance as an Anti- Poverty Strategy: A Case study of the Amhara Credit and Saving Institution (ACSI), Ethiopia.
- Haider, R. and Akhter, R. 1999. The Role of NGO and Women's Perception of Empowerment: An Anthropological Study in a Village. *Empowerment: Women for Women*, 6: 58-62. Harare: Ministry of Agriculture.
- Hoque, M. and Itohara, Y. 2009. Women empowerment through participation in micro-credit program: a case study from Bangladesh, *Journal of Social Sciences*, 5(3): 244-250.
- Hossain, M. and Sen, B. 1992. Rural Poverty in Bangladesh: Trends and Determinants. *Asian Development Review*, 10: 2-34.
- IFAD, 2011. Enabling Poor Rural People to Overcome Poverty. Rural Poverty Report.
- IFID, 2004. Livestock Services and the Poor. Rome.
- Islam, M. N., Haque, Q. M. E., and Paul, D. C. 2003. A Strategy for Small Holder Poultry Production in Bangladesh. In: Proceedings of 3rd International Poultry Show and Seminar, Organized by World's Poultry Science Association, Bangladesh Branch. 216-224.
- Khandker, S. R. 1998. Fighting Poverty with Microcredit: Experience in Bangladesh. New York: Oxford University Press.
- Malhotra, A., Schuler, S. R. and Boender, C. 2002. Measuring Women's Empowerment as a Variable in International Development. Background Paper Prepared for the World Bank Workshop on Poverty and Gender: New Perspectives.
- Miller, B. A. 2001. Empowering Women to Achieve Food Security: Rights to Livestock. Washington. DC: International Food Policy Research Institute.
- Nahar, J. 2007. Poverty Reduction in Bangladesh through Microfinance and Poultry.

- Nielsen, H., Roos, N. and Hilsted, S. H. 2003. The Impact of Semi-Scavenging Poultry Production on the Consumption of Animal Source Foods by Women and Girls in Bangladesh. *The Journal of Nutrition*, 133,4027S–4030S.
- Pitt, M. M. and Khandaker, S. R. 1996. Household and Intrahousehold Impact of the Grameen Bank and Similar Targeted Credit Programs in Bangladesh. *World Bank Discussion Papers*, 320. Washington DC.
- Rahman, M. 2003. Growth of Poultry Industry in Bangladesh: Poverty Alleviation and Employment Opportunity. *Research Report No. 45*.
- Sonaiya, E. B. 2007. Family Poultry, Food Security and the Impact of HPAI. *World's Poultry Science Journal*, Vol. 63.
- Scoones, I. 1998. Sustainable Livelihoods, a Framework for Analysis, *IDS Working Paper Number 72*, Brighton, UK.
- Sheheli, S. 2012. Improving Livelihood of Rural Women through Income Generating Activities in Bangladesh. *Dissertation*, Berlin.
- Susan J. and Rogaly, B. 1997. *Micro Finance and Poverty Reduction*, Oxfam UK and Ireland.
- Tesfay, A. 2003. The Impact of Microfinance on Poor Women: A Case Study of Debit-Credit and Saving Institution in the Eastern Zone of Tigray. *Addis Ababa University*.
- Ullah, A. K. M. A. and Routray, J. K. 2007. Rural Poverty Alleviation through NGO Interventions in Bangladesh: How Far is the Achievement? *International Journal of Social Economics*, 34(4), 237 - 248.
- United Nations, 2005. *The Common Country Assessment of Bangladesh: United Nations Country Team in Bangladesh*.
- UNDP, 1997: *Untitled*.
- World Bank, 2005. *The economics and governance of Non Governmental Organizations (NGOs) in Bangladesh, Consultation Draft*.
- World Bank, 2008. *Poverty Assessment for Bangladesh: Creating Opportunities and Bridging the East-West Divide*. Washington, DC.