

Determinants of Empowerment of Rural Women in Bangladesh

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Empowerment of rural women in developing countries can reduce gender inequality and improve their social status. This paper sought to identify the determinants of empowerment of rural women in Bangladesh. The data for our study were collected from 75 rural women employed in home-based poultry rearing projects in Bangladesh. We conducted factor analysis to identify the determinants of empowerment of rural women. Multiple regression analysis indicated that independent decision making authority and increased involvement in family affairs were significantly associated with the empowerment of rural women. The implications of the findings of this study for improving the quality of life of rural women in Bangladesh are discussed.

Field of Research Code: 1503

1. Introduction

In many South Asian countries such as Bangladesh, rural women constitute the poorest and most culturally stigmatized sector of the population. Today, more than 600 million girls live in developing countries and approximately one-quarter of the girls in developing economies are not in school (Lloyd, 2005; Population Reference Bureau, Data Finder database, 2007). Women and girls are undervalued, especially in developing countries, and only half a cent of every international development dollar goes towards helping girls (Gopalan, 2001; Levine, Lloyd, Greene & Grown, 2008; Murthy, 2001). In 2009, the World Economic Forum focused on the impact of educating girls in developing countries. International organizations like the World Bank and United Nations have also focused on women's issues especially the empowerment of poor women in rural areas. Consequently, the importance of involving women in economic activities is increasing in developing countries (McNamara, 2003).

Providing alternative sources of employment for poor rural women can result in greater empowerment of women and increase their standard of living. In the late 1980s and early 1990s, non-governmental organizations (NGOs) have taken on an increased role in the area of women's empowerment (Sadik, 1988). Empowering women through self-employment and entrepreneurship in different socio-economic sectors, results in new opportunities for income generation. According to Murdoch (1999), micro credit is a useful tool for the empowerment of women, for poverty alleviation and a relatively new approach for developing economies to solve women's difficulties in obtaining financing.

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Micro finance appears to offer a "win-win" solution, where both financial institutions and poor clients, especially rural women in developing countries, will benefit (Mayoux, 2001; Murdoch, 1999).

While the benefits of empowerment of rural women are significant, variables associated with empowerment have not been clearly identified (Mahmud, Shah & Becker, 2011). We believe that the identification of these variables will enable developing countries to empower women more effectively and increase the standard of living for poor families. Hence, we seek to fill this gap in the literature by identifying the determinants of empowerment of rural women in Bangladesh. Our study focuses on the homestead poultry rearing industry in which a large number of rural women are employed.

2. Literature Review

Our literature review commences with a brief description of rural Bangladesh and the home-based poultry rearing industry. We then discuss the concept of empowerment and theoretical models of empowerment of rural women. Finally, we examine how home-based poultry rearing can be used to empower rural women in Bangladesh.

Rural Bangladesh and Home-based Poultry Rearing

Approximately 84% of the total population of Bangladesh lives in rural areas. Agriculture plays a vital role in the economy of the country accounting for about 32% of total GDP. This sector comprises crops, forests, fisheries and livestock. Of the agricultural GDP, crops contribute 71%, forests 10%, fisheries 10% and livestock 9%. The agricultural sector generates about 63% of the total national employment of the country (Ministry of Agriculture website, 2004). Poultry, which is mostly homestead-based, is one of the most important contributors to the agricultural sector (see Appendix 3).

Since the mid-1900s, public policy sought to develop a modern poultry sector in Bangladesh. In 1954, a company named 'Eggs and Hens' commenced modern poultry farming practices in the private sector in Bangladesh. After independence, medium sized breeder operations were established with the initiative of the government under the Biman Poultry Complex Program. However, till the late 1980s, this industry experienced slow growth. Since 1990, a large number of private companies started their operations with the financial support of Non-Government Organizations (NGOs). Today, the investment in this sector is between US \$1-5 billion and generates employment of 3-5 million. There are about 100,000 small-medium sized commercial poultry farms owned and operated by the people of Bangladesh (Kabir, 2005). To provide a better understanding of the poultry business, intergenerational stages are shown in Appendix 1 and the structure of the poultry industry is presented in Appendix 2.

Along with agricultural work, home-based poultry rearing (e.g., roosters, hens, ducks, swans, geese, birds etc.) is a traditional practice for almost every rural family, as it generates extra income for these families. It is an integral part of agro-rearing practices of the village community of Bangladesh. About 89% of the rural house-holds rear poultry and the average number of birds per household is 6.8 (Fattah, 1999). These poultry rearing practices are predominantly operated and managed by rural women on a small scale. About 70% of rural landless women are directly or indirectly involved in poultry rearing activities. Usually, the investment for starting this business is only the cost of 15

to 20 eggs which is about (Taka)¹ Tk. 50 to Tk. 60 (less than US \$1). These eggs are kept in a neighbor's house and the neighbor's hen is used to hatch baby chicks or baby ducks. Rural women take care of the chicks till they grow up. The chicks are fed mainly on the husk from rice. Baby ducks feed on snails which are collected from the paddy fields by children. Sometimes ready-made poultry feed is bought from the nearby market. After six months, these hens and ducks are able to produce eggs every day for at least six weeks. The male head of the family sells these eggs at the local market. Sometimes, shop-keepers buy eggs directly from the rural women who live nearby. The prices of the eggs are more or less the same across Bangladesh.

Research on Empowerment of Rural Women

Several researchers have empirically examined women's empowerment in rural Bangladesh (Steele, Amin & Naved, 2001; Mahmud, 2003). Rappaport (1987) defined empowerment as "a process by which people, organizations, and communities gain mastery over issues of concern to them" (p. 122). Kabeer (2001) stated that women's empowerment is an expansion in the range of potential choices available to women so that actual outcomes reflect the particular set of choices which women value. Zimmerman (1995) presented three areas in the lives of human beings in which empowerment occurs: 1) Psychological empowerment (PE) refers to empowerment at the individual level of analysis, 2) Organizational empowerment (OE) refers to improved organizational effectiveness by effectively competing for resources, networking with other organizations, or expanding its influence (i.e., empowered organization) and 3) At the community level of analysis empowerment refers to individuals working together in an organized fashion to improve their collective lives and linkages among community organizations and agencies that help maintain that quality of life. (pp. 581-582). He further expounded on his theory by distinguishing between empowering processes and empowered outcomes. He defined empowering processes as those "where people create or are given opportunities to control their own destiny and influence the decisions that affect their lives" (p. 583). Shefner-Rogers, Nagesh, Rogers, & Wayangankar (1998) described empowerment as "a communication process designed to change an individual's behavior through communication relationships with others" (p. 321). They based their arguments on the work of Freire (1973), who emphasized that "empowerment occurs through a communication process in which the relationships between the oppressed and the oppressor undergo a fundamental change". In this study, we focus on the psychological empowerment (PE) of women. Psychological empowerment includes beliefs that goals can be achieved, awareness about resources and factors that hinder or enhance one's efforts to achieve those goals, and efforts to fulfill the goals. (Zimmerman, 1995: 582). Several researchers have identified self-confidence and self-esteem as essential 'first steps' to empowerment (Anderson, 1996; Claridge, 1996). Feelings of greater individual control are another important aspect of psychological empowerment (Anderson, 1996; Kishor & Gupta, 2004).

A review of literature on rural women empowerment revealed several relevant models (Amin, Becker & Bayes, 1998; Basu & Koolwal, 2005, Batliwala, 1994; Friedmann, 1992; Hashemi, Schuler & Riley 1996). Friedmann's (1992) model of empowerment involves local self-reliance, direct participatory democracy and experiential social learning. He suggests that external agents can play a role in providing 'support in ways

¹ US \$1 = 70 Taka (Tk.)

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that encourage the disempowered to free themselves of traditional dependency' (Friedmann, 1992: 77). All three kinds of empowerment are seen as relevant to women's struggles and form an interconnecting triad. Friedmann (1992: 116) suggests that 'when this triad, centered on an individual woman and household, is linked up with others, the result is a social network of empowering relations that, because it is mutually reinforcing, has extraordinary potential for social change'. This view of empowerment is similar to that of Claridge (1996) and Lather (1991).

Several studies have also indicated that women may be empowered in one area of life, while not in others (Malhotra & Mather, 1997; Kishor, 1995, 2000; Hashemi et al., 1996). In this study we take the position that women's empowerment can be measured by factors contributing to personal, economic, familial, and political empowerment. We also include household and interfamilial relations as we believe these variables significantly affect women's empowerment in Bangladesh.

Taking the perspective of people in households, Friedmann (1992) argues that they potentially have access to three kinds of power: *social*, *political* and *psychological*. 'Social power' requires 'access to certain "bases" of household production such as information, knowledge and skills, participation in social organisations, and financial resources' (Friedmann, 1992: 33). This form of empowerment therefore includes key features of social capital, which has been identified as an essential element of sustainable rural community development (Harrison, 1998).

Amin et al (1998) split the concept of women's empowerment into three components, each measured separately: Inter-spouse consultation index, which seeks to represent the extent to which husbands consult their wives in household affairs; individual autonomy index which represents women's self-reported autonomy of physical movement outside the house and in matters of spending money; and the authority index, which reports on actual decision-making power (which is traditionally in the hands of the patriarch of the family). Comparable components of empowerment are included in the eight indicators by Hashemi et al (1996), i.e., mobility, economic security, ability to make small purchases, ability to make larger purchases, involvement in major decisions, relative freedom from domination by the family, political and legal awareness, and involvement in political campaigning and protests.

Mason (2005) refers to the relational nature of empowerment. According to this author, empowerment is about the extent to which some categories of people are able to control their own destinies, even when the people with whom they interact oppose their interests. People are not empowered or disempowered in a vacuum. Rather, they are empowered or disempowered relative to other people or groups whose lives intersect with theirs and whose interests differ from theirs, at least in part.

Batliwala's (1994) conceptualization of empowerment draws on the experiences in the subcontinent, especially in India. This conceptualization is based on experiments that attempted to enact the process of empowerment on the ground with various marginalized communities, but focused most often on poor rural and urban women. She defines empowerment as a process of transforming the relations of power between individuals and social groups by shifting social power in three critical ways. These methods include (1) challenging the ideologies that justify social inequality (such as gender or caste), (2) changing prevailing patterns of access to and control over

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economic, natural and intellectual resources, and (3) transforming the institutions and structures that reinforce and sustain existing power structures (such as the family, state, market, education and media).

Empowering Rural Women through Home-Based Poultry Rearing

In Bangladesh, female members of rural families do not have opportunities to work in value adding economic activities, except homestead poultry rearing. A rural woman spends her time taking care of her husband, children, elders and other members of her family. Rural women are unable to work outside their home or beyond their homestead because of family restrictions, social and traditional barriers. Therefore, their potential often remains unutilized or underutilized. The main problem in rural Bangladesh is that most families have insufficient food, clothing, shelter, medication etc. Usually, a rural man works in the fields to produce food for fulfilling basic needs of his family. Given these difficult circumstances, homestead poultry rearing is considered the best way to utilize the capabilities of women to be productive and add value to the household. Rural women have the opportunity to rear poultry in their homestead because it requires minimum land, small amount of capital and uses traditional technology. The market for poultry products is usually within the vicinity of the homestead. Consequently, home-based poultry is now one of the main sources of income for the rural women of Bangladesh. Poultry also provides meat for the villagers of Bangladesh. Rural women have the discretion to use money earned from the home-based poultry firm. They spend those earnings on the welfare of their children and for special occasions such as, Eid, Durgapuja or Christmas (religious festivals). They buy clothes for their children and for themselves from this income. Profits are often used for educating their children and for buying medicines for family members. This income also helps during family emergencies. The male head of the family works on the agricultural land from dawn to dusk. Hence, home-based poultry rearing provides additional income, which is a very important means for the survival of rural families. Through these traditional poultry rearing practices, rural women are empowered by being involved in the decision making process of their households. The increased involvement in decision results in the improved status of women in relation to the husband and the family. They can spend money for themselves, which gives them independence to take part in making family decisions. Greater financial independence for rural women increases their bargaining capacity, reduces violence against women, and enables them to gain more influence over decision-making in the family (Hadi, 1997).

In addition, poultry projects benefit rural women by increasing their food consumption and nutrient intake (Nielsen, 2000). In Bangladesh, there is now a growing awareness that rural women can play a more productive role and contribute to the socio-economic development of the country. In general, women in rural areas of Bangladesh have little or no control over their resources and have very little decision-making authority in the family. Hence, involvement in home-based income generating activities like poultry rearing will lead to greater socio-economic empowerment as well as increasing their decision making capabilities. Women can use their additional income to provide their families with a higher standard of living (Alam, 1997). Thus, poultry rearing can deliver significant benefits to rural women in Bangladesh and lead to greater empowerment.

3. Methodology

The questionnaire used in this study sought to identify the determinants of empowerment of rural women engaged in home-based poultry rearing practices in Bangladesh. One of the most comprehensive studies on women's empowerment in Bangladesh was conducted by Hashemi, Schuler and Riley (1996). Hence, we developed our questionnaire based on the empowerment indicators identified by these authors. We used other relevant literature to develop the final form of questionnaire (Narayan-Parker, 2005). All responses were measured using a five point Likert scale (1 = strongly disagree through 5 = strongly agree). Along with eighteen questions measuring the determinants of empowerment, we also measured overall empowerment of rural women using a single item scale which stated "I think I am more empowered because of my involvement in the poultry business as it has increased my freedom in many respects" (Anderson, 1996; Claridge, 1996). Since most of the women in rural Bangladesh are illiterate, our research team personally administered the questionnaire and collected the data from the respondents.

4. Results

Respondent Demographics

Our sample included 93 rural women selected at random from the sub-district (upazila) named Batiaghata which is under the district of Khulna. We chose this sub-district as Batiaghata is a relatively poor area with a large number of women directly involved in homestead poultry rearing. In this sub-district there are seven councils (Union Parisads) namely, Batiaghata, Jolma, Amirpur, Gangaram, Surkhali, Vanderkot, and Baliadanga. Under these councils, there are 159 villages where 128,184 people live. The total number of families in the sub-district of Batiaghata is 23,698. Among these households, about 5,000 families are directly involved in homestead poultry rearing (Upazila Statistics Office, Batiaghata, 2010). At least 10 families from the villages of every council (Union Parisad) were included in this survey. Additional information about the research area is shown in the Table 1. Our sample consists of a random selection of families who are involved in the poultry rearing business. Several of the respondents were not able to provide all the information we requested in our questionnaire. 75 completed questionnaires were obtained and these questionnaires were used in our analysis.

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Table 1: Statistics of Sample population

District	Sub-District (Upazila)	Council (Union Parishad)	Number of Villages
Khulna	Batiaghata	Batiaghata	25
		Jolma	19
		Amirpur	22
		Gangaram	19
		Surkhali	27
		Vanderkot	24
		Baliadanga	23
Total		Seven Union Parisads	159

Age Distributions of the Respondents

Of the total respondents, 68% were aged between 20 to 30 years (see Table 2). A further 16% are between 30 to 40 years. Only 8% were less than 20 years old while a further 8% were between 40 to 50 years. In Bangladesh, people usually get married at the age of twenty to thirty years. As they start a new family, rural women look for sources of additional income. Poultry rearing is considered one of the most important methods of generating additional income for rural women.

Table 2: Age Distributions of the Respondents

Age	Number of Respondents	Percentage (%)
Less Than 20 Years	6	8.0%
20 – 30 Years	51	68.0%
30 – 40 Years	12	16.0%
40 – 50 Years	6	8.0%

Monthly Income of the Respondents

Among the 75 respondents, 36 respondents (48%) have a monthly income of (Taka) Tk. 1000 to 2000 (about US \$14 to \$28). In addition, 24% of the respondents earn between Tk. 2000 to 3000 (US \$28 to \$43) per month. A further 20% of the respondents earn between Tk. 3000 to 4000 (US \$43 to \$57) a month. 4% of the respondents earn below Tk. 1000 (less than US \$14) and only 4% earn over Tk. 4000 (more than US \$57) per month (see Table 3). This income distribution indicates that a large number of rural women in Bangladesh earn less than US \$1 every day.

Table 3: Monthly Income of the Respondents

Income in Taka (Tk.)	Number of Respondents	Percentage of Respondents
Less Than Tk. 1000	3	4.0%
Tk. 1000 – 2000	36	48.0%
Tk. 2000 – 3000	18	24.0%
Tk. 3000 – 4000	15	20.0%
More Than 4000	3	4.0%

Family Property of the Women Respondents

Rural women in Bangladesh do not usually own land and the title deeds are in the name of their husband. The amount of family property of our respondents is as follows: 68% of the respondents have less than 0.165 acres of land while 24% have more than 0.660 acres of land. Approximately 5% of the respondents have 0.330 acres to 0.495 acres of lands. 2% of respondents have 0.165 to 0.330 acres and a further 2% have 0.495 to 0.660 acres (see Table 4).

Table 4: Family Property of the Respondents

Size of Land in Acres	Number of Respondents	Percentage of Respondents
Less Than 0.165	51	68.0%
0.165 – 0.330	1	1.3%
0.330 – 0.495	4	5.4%
0.495 – 0.660	1	1.3%
More Than 0.66 Acre	18	24.0%

Number of Years of Poultry Rearing Practice

Among the respondents, 14.7% have less than two years experience in home-based poultry rearing. 30.7% have been involved with poultry rearing as a business for 2 to 4 years while 22.6% have been involved with poultry rearing for 4 to 6 years. 12% of the respondents have between 6 to 8 years experience. Only 20% of the respondents have been involved with poultry rearing for more than 8 years (see Table 5).

Table 5: Number of Years Involved in Poultry Rearing Practices

Number of years	Number of Respondents	Percentage of Respondents
Less Than 2 Years	11	14.7%
2 – 4 Years	23	30.7%
4 – 6 Years	17	22.6%
6 – 8 Years	9	12.0%
More Than 8 Years	15	20.0%

Factors Associated with Empowerment of Rural Women

We conducted factor analysis to identify the factors associated with the empowerment of rural women. Our factor analysis indicated that there are six factors related to the empowerment of rural women of Bangladesh. These factors are: husband’s influence, independence in spending money, independent decision making authority, involvement in family affairs, control over poultry rearing practices and position in the family (see Table 6).

Table 6: Factors Associated with Empowerment of Rural Women

Factor	Eigen values	Variance %	Cumulative %
Husband’s behavior	4.1	22.8	22.8
Independence in spending money	2.4	13.4	36.2
Independent decision making authority	1.9	10.8	47.0
Involvement in family affairs	1.6	8.8	55.8
Control over poultry rearing practices	1.3	7.0	62.8
Position in the family	1.2	6.6	69.4

Extraction Method: Principal Component Extraction with varimax rotation

Husband’s Behavior

One of the determinants for the empowerment of rural women involved in homestead poultry rearing practices is the husband’s behavior, which changes when their wives are engaged in poultry rearing practices and are able to generate income for the family. Five questions constituted this factor (see Table 7). These questions include husband’s treatment of his wife (-0.823), wife’s knowledge of treatment of chicks and ducks (0.781), contribution to the day-to-day expenses of the family (-0.774), acceptance of poultry rearing by the husband (0.610), and freedom to sell eggs and chicks (0.550). The negative factor loading for the husband’s treatment of his wife (-0.823) and for the financial contribution of rural women (-0.774) stems from cultural norms. In a patriarchal society like Bangladesh, the husband wants to provide for his family and does not like the wife to earn money. In fact, in Bangladesh, the husband initially takes the money the wife earns as he wants complete control of the family. Later, he changes his behavior

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and allows his wife greater freedom, when he sees that his wife's poultry business is actually earning money and contributing to the welfare of the family.

Table 7: Husband's Behavior

Variable Name	Factor Loadings
I feel that my husband treats me as an equal in the family	-0.823
My husband knows that I can treat sick chicks and ducks	0.781
I contribute to the day-to-day expenses of my family	-0.774
My husband accepts my expertise in rearing practices	0.610
I have the freedom to go to market or sell the eggs/chicks from my house	0.550

Independence in Spending Money

The second factor which determines the empowerment of rural women involved in poultry rearing practices is independence in spending money for the betterment of their families. Poultry rearing at home helps rural women to be independent in spending money earned from their business. The lack of husband's influence on the use of money earned from the poultry rearing practices (0.850) and the capability to operate the rearing practices (0.774) constitute the second factor (see Table 8). Rural women are empowered when the husband finds that his wife is quite competent in managing a small-scale home-based poultry rearing project that is earning money for the family and allows the wife to manage her own finances.

Table 8: Independence in Spending Money

Variable Name	Factor Loading
My husband does not have influence over the use of money earned from my poultry rearing practices	0.850
I believe that I am quite capable of operating these rearing practices	0.774

Independent Decision Making Authority

Independent decision making authority is another factor which empowers rural women in Bangladesh. Home-based poultry rearing practices help women to be more self sufficient in making decisions for the family. This factor comprised three questions: i.e., decisions to expand the rearing practices (0.813), freedom to initiate and run the poultry (0.614), and control over the income of the poultry business (0.580). The decision-making authority of rural women is increased when they can exercise their own opinion/ideas to initiate, run, and expand poultry rearing and have control over the income of the poultry (see Table 9).

Table 9: Independent Decision Making Authority

Variable Name	Factor Loadings
I make decisions to expand my poultry rearing business	0.813
I have the freedom to initiate and run this business	0.614
I have control over the income of poultry rearing practices	0.580

Involvement in Family Affairs

Rural women are often not consulted at the time of making family decisions. However, when women are involved in poultry rearing, their importance in the family increases. Involvement in poultry rearing helps them to take part in the family decisions. This factor includes participation of women when productive assets are bought for the family (0.891) and use of profits to satisfy their own needs and the needs of their children (0.559) (see Table 10).

Table 10: Involvement in Family Affairs

Variable Name	Factor Loadings
I extend financial help to my husband when we buy productive assets for the family	0.891
I use the profits to satisfy my own and my children's needs	0.559

Control over the Poultry Rearing Practices

Control over the management of poultry rearing practices is another empowerment factor for rural women in Bangladesh. This factor consists of three practices which include control for running and maintaining the poultry (0.745), meaningful job for the family (0.738), and contributing to the children's education (0.636). When rural women have the control over the poultry, they can help the family in many respects, especially with the education of their children (see Table 11).

Table 11: Control over the Poultry Rearing Practices

Variable Name	Factor Loading
I have full control over running and maintaining the poultry rearing business	0.745
I believe that what I am doing is meaningful for my family	0.738
I contribute to the educational expenses of my children	0.636

Position in the Family

In rural areas of Bangladesh, the husband usually does not consider his wife in making family decisions. Male members believe that women are incapable of contributing to the

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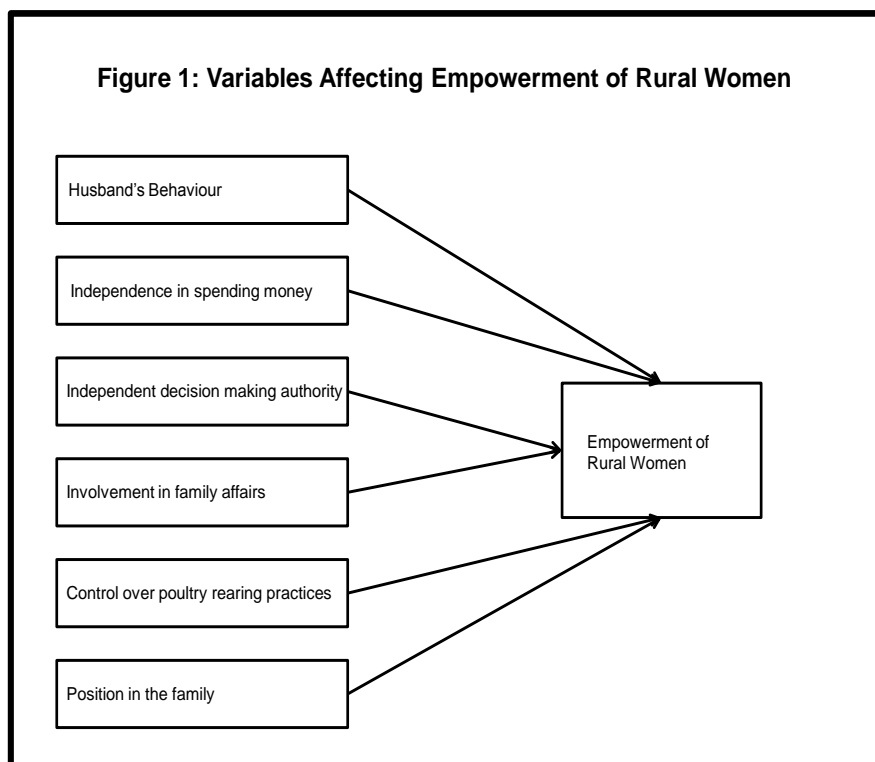
family affairs. However, homestead poultry rearing can empower these rural women by creating an important position in the family. This factor consists of three questions which include better position in the family (0.713), husband's permission to run the poultry (0.622), and the power to include other members of the family in the poultry functions (-0.446) (see Table 12). Homestead poultry rearing improves the women's position in the family. However, inclusion of other family members in the business has a negative relationship as the money earned will have to be shared with other people.

Table 12: Women's Position in the Family

Variable Name	Factor Loadings
I think that my position in the family is better now	0.713
My husband allows me to do the rearing practices easily	0.622
I include my husband and other family members in running this rearing practice	-0.446

Significant determinants of the Empowerment of Rural Women

Based on the factor analysis we developed the following model of empowerment and tested our model using multiple regression (see Figure 1).



We used multiple regression to identify which were the most significant factors in the empowerment of rural women in Bangladesh. The correlation matrix is presented in Table 13.

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Table 13: Means, Standard Deviations and Intercorrelation Matrix

Variables	Mean	SD	1.	2.	3.	4.	5.	6.
1. Empowerment of rural women	4.69	.46						
2. Husband's behavior	3.85	.42	.15					
3. Independence in spending money	4.27	.85	-.04	.11				
4. Independent decision making authority	4.63	.50	.38**	.22	.41**			
5. Involvement in family affairs	4.44	.57	.90	.25*	.77**	.29*		
6. Control over poultry rearing practices	4.29	.50	.03	.05	.23*	.17	.15	
7. Position in the family	4.29	.53	.15	-.16	-.33**	.19	-.08	-.11

N = 75

*p<.05, **p < .01

The results of the regression analysis indicated that the overall model was supported (R Square = .207, p<.05). Analysis of the significance levels indicated that independent decision making authority ($b = 0.372$, p<.01) and involvement in family affairs ($b = 0.209$, p<.10) are significantly associated with the empowerment of rural women in Bangladesh (see Table 14).

Table 14: Results of Regression Analysis for Empowerment of Rural Women

Variables	<i>b</i>	<i>s.e.</i>
(Constant)		0.051
Husband's behavior	-0.086	0.052
Independence in spending money	-0.110	0.052
Independent decision making authority	0.372***	0.051
Involvement in family affairs	0.209*	0.051
Control over poultry rearing practices	0.059	0.051
Position in the family	-0.015	0.052
R^2	0.207**	
F	2.603	
N	75	

* p < .10, ** p < .05, *** p < .01

5. Discussion

This study sought to identify the key determinants of empowerment of rural women in Bangladesh. The sample for our study included women engaged in poultry rearing practices. The findings of our study indicate that rural women in Bangladesh are empowered by homestead poultry rearing practices. Our interviews with rural women indicated that involvement with poultry rearing projects increased their business acumen. This led to the improvement in the productivity of poultry, reduced chick mortality and increased net profits. In addition, health and living conditions also improved.

Traditionally, rural women of Bangladesh are only involved in household activities. They look after their husband, children, elders and other members of the family. They are usually not involved in making decisions on family matters. Their role is to provide support to the family and to their husband. Women are usually suppressed in rural households. The results of this study indicate that simple poultry rearing practices can change the cultural fabric of rural Bangladesh and improve the status of women. We found that poultry rearing programs empower women by improving their economic condition and enhancing their ability to contribute to their family.

The first significant factor associated with the empowerment of rural women in Bangladesh was independent decision making authority. When women are given the freedom to initiate and run their poultry rearing business, their status in the family improves considerably. Involvement of rural women in poultry production increases their disposable income. These rural women can contribute more to the day-to-day expenses of the family. It also increases their freedom to sell eggs and chicks in the nearby market. The husband's behavior towards his wife changes when he sees that his wife can earn money and contribute to improving the living standards of the family.

Involvement in family affairs was the second significant factor associated with the empowerment of rural women in Bangladesh. Greater involvement results in women being able to provide financial assistance when buying household assets. Usually, rural women are ignored when decisions are made in rural households. Women are perceived as inferior to their husbands. However, they become more important in the family by earning money and they are asked by their husbands to take part in making family decisions (Mahmud & Sultan, 2010). They can also make decisions on their own for the welfare of their husband, children and extended family. They are able to establish control over the income of the poultry business. The overall decision-making authority of rural women is increased when they employ their own methods to initiate, run, and expand their poultry business. Hence, to empower rural women, homestead poultry rearing projects should be encouraged by government and non-government development agencies as it increases independent decision making authority and leads to greater involvement in family affairs, which improves the socio-economic development of rural Bangladesh.

This study has some limitations. First, we investigated only home-based poultry rearing practices. Other home-based industries were not included in our sample. Second, we looked at empowerment of rural women only. We did not include women living in urban areas. Third, we focused our study only on Bangladesh. We did not include other developing countries in the region.

6. Conclusion

The findings of our study indicate that rural women feel empowered when they are engaged in a very simple business which generates some revenue. Since the scope of our study was limited to an important sub-district in rural Bangladesh, the findings of our study can be generalized only to women in rural Bangladesh. However, we believe that the concept of empowerment through self employment would apply to women in countries across the world. It is possible that the exact determinants of empowerment may vary across industry and across different cultures. Hence, future research should include other home-based industries such as sericulture, to examine whether the determinants of empowerment are the same. Future research can include both rural and urban women to see if there is a difference in the variables which empower women living in urban areas. Researchers can also expand our study to other developing countries in south-east Asia to identify whether women in these countries can also benefit from simple home-based industries. This study only dealt with the empowerment of the rural women of Bangladesh through homestead poultry rearing practices. However, the empowerment of rural women might be related to other socio-economic factors such as social position, education, maturity and intellectual capability. Future researchers can examine the impact of these variables on the empowerment of women.

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Appendix 1: Intergenerational Production Stages of Poultry Rearing

Types of Farm	Output
Pure Lines	Day old great parent chicks
Great Grand Parents	Day old grandparent chicks
Grand Parents	Day old parent chicks
Parents	Day old commercial chicks
Commercial Birds	Meat or eggs

Source: Kabir, K.S.S. (2005), Poultry in Bangladesh: Awaiting the Awakening, Souvenir, published in "4th International Poultry Show and Seminar", Dhaka, Organized by Poultry Science Association, Bangladesh Branch, 10-12 March, pp. 13-20.

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Appendix 2: Structure of Poultry Industry in Bangladesh (Figures in 000's)

Broilers	2004	2003	2002	2001	2000	CAGR*
No. of Grand Parents (Yearly)	25	5				400%
No. of Parent DOC Produced (Yearly)	350					
No. of Parent Stock Imported (Yearly)	2500	1800	1300	1050	750	29%
No. of Commercial DOC (Weekly)	5000	4000	3000	2423	2000	23%
Broiler Meat Prod. In Kg (Weekly)	6175	4940	3705	2992	2470	23%
Layers	2004	2003	2002	2001	2000	CAGR*
No. of Parent Stock Imported (Yearly)	280	320	300	220	145	17%
No. of Commercial DOC (Weekly)	476	560	510	381	226	19%
No. of Commercial Eggs (Weekly)	99000	110800	91800	65968	62807	14%

* Compound Annual Growth Rate: Estimates a compound growth equation of the form $P_t = P_0(1+g)^t$

Source: "The Structure of Poultry Industry in Bangladesh." A report compiled by Renata Agro Industries Limited, February 16, 2005 (Mimeo).

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Appendix 3: Some Indicators of Bangladesh Economy

Sr. #	Particulars	Data
1.	Area of Bangladesh	147,570 sq.km
2.	Total population (January 1999)	128.1 million
3.	GDP (1998-99)	755.73 billion Tk.
4.	GDP Growth rate (1998-99)	5.2%
5.	Agricultural Growth rate (1998-99)	5.0%
6.	Number of Rural Households	17.83 million
7.	Number of non-Farm Households	6.03 million
8.	Number of Farm Households	11.80 million
9.	Number of Agricultural Labor Households	6.40 million
10.	Small Households	80% (9.42 million)
11.	Medium Households	17.50% (2.08 million)
12.	Large Households	2.50% (0.3 million)
13.	Cultivated Area	17.77 million acres
14.	Cultivated Area per Household	1.5 acres
15.	Cropping Intensity (1996-97)	174%
16.	Irrigation Area	8.59 million acres

Source: Statistical Year Book of Bangladesh, 1998, BBS