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Poverty Alleviation of Rural Women of Bangladesh by Poultry Farming and Poultry Refuse Management

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Abstract:

The study focuses on poultry farming and poultry refuse management as an implement of poverty alleviation of rural women in Jessore district of Bangladesh. With pilot survey, personal interviews and questionnaire survey, this research measured women's involvement in poverty eradication by poultry farming and poultry refuse management. The findings of the study indicate that rural women in Bangladesh are mostly involved with poultry rearing in household level. The study further reveals that poultry farming and poultry refuse management programs empower rural women through economic independence and decision making level. Moreover, the research shows that a rural woman is able to support her family to overcome most of the economic insufficiencies through poultry farming and poultry refuse management. This paper concluded by saying that poultry farming and poultry refuse management can be milestones in poverty alleviation which will bring a great prospect for economic development of Bangladesh.

Keywords: Poverty alleviation, rural women, poultry farming, poultry refuse management

1. Introduction

Historically poultry farming is considered as an indigenous way of living in Bangladesh rural community. It is rare to have a rural family, which does not rear poultry farming, minimum in a small scale (Barua & Yoshimura, 1997). This poultry farming is managed mostly by the female members of the household using indigenous shed of local materials and household wastes as their foods. This is an indigenous culture of Bangladesh rural community and at the same time it is an important source of household economy and employment. In rural Bangladesh, women's participation in poverty alleviation through poultry farming is increasing rapidly. Poultry farming is the most common agricultural practice where women can show their highest responsibilities with all other household activities.

Poultry farming is flexible for rural women as it requires less space, less time and less investment (Kingori, Wachira and Tuitoek, 2010; Ogunlade and Adebayo, 2009). A rural woman serves as an umbrella in her family to balance all economic insufficiencies which motivate them to adapt new technologies for a better earning. So, it is easy for a woman to start a poultry farm within a short time in a small piece of land. In addition, women are industrious to adopt new technologies for a better earning from farming. As a popular sub-sector of livestock production, poultry industry plays a significant role in developing household economy (Shamsuddoha, 2011). Poultry farming is such a practice for the rural women of Bangladesh which contributes significantly to alleviate their poverty and food insecurity without destroying any ecological setting (Gueye, 2009; Nazrul, Ezaz and Chew, 2012).

A number of recent research show that poultry farm is not only a source of ready cash and protein, but also a way of getting waste materials. These waste materials can be recycled, reused and reduced for the economic sustainability of rural women (Shamsuddoha, 2011). Moreover, some secondary research (e.g., K Hossain & Badr, 2007) proposed to use these poultry waste as a renewable resource which may alleviate women poverty and empower them socially. Poultry farming is considered as the best way to measure the capabilities of rural women to be valued and productive to the household. Rural women have the actual direction how to earn money from a farm. More financial independence of rural women increases their bargaining capacity and enables them to earn more influences over family decision making activities (Nazrul, Ezaz and Chew, 2012).

We find a lot of literatures which are related with poultry farming and poultry refuse management activities. But we have focused some specific researches role on poverty alleviation of rural women by poultry farming and poultry refuse management. So, the present research aimed to understand poverty reduce program of rural women by poultry farming and possibility of poverty alleviation by poultry refuse management in Bangladesh.

2. Prior Research

Gueye (2009) used the term 'family poultry' (FP) in explaining poultry farm. According to him, family poultry is such a practice which contributes significantly in alleviating poverty by reducing food scarcity. He further added that it creates gender equality by promoting household incomes for the rural women.

Kingori, Wachira and Tuitock (2010) conducted a research in Kenya. They tried to establish poultry farming as a significant source of women empowerment, especially for female headed households. Poultry farming is an easy source of getting back of invested money as it requires small piece of land and low maintenance cost. Moreover, it enables to have diversified sources of products which may empower some other groups of women, such as primary and secondary traders, poultry farmers, caterers and processors.

Ogunlade and Adebayo (2009) conducted a research in a Nigerian State named Kwara. In this paper they tried to know the socio-economic condition of rural women who are involved with the poultry farming. In addition, they found a positive effect of poultry farm in moving the core poor women to use it as a 'savings accounts'.

Ershad (2005) conducted a research in Jessore district, Bangladesh. In this research he explained about poultry as the better source of ready cash in homestead level employment. He observed that family poultry rearing constitutes sustainable economy of rural women. If chicken production is less, poultry meat and eggs can cover almost a net profit.

According to Menge, Kosgey and Kahi (2005), poultry rearing practice needs low cost of production compared to the output of it. They conducted the research in Kenya and observed three types of chicken production:

Free range system (FRS) or scavenging system, semi-scavenging system (SIS) or semi-intensive system and confined full-ration system (CFRS) or intensive system. These three systems are compared to biological and economic values of the farms in rural area.

Begum (2005) stated that poultry sub-sector is an important agricultural practice which can reduce poverty and malnutrition both in a short time. She mentioned that every farm house has the maximum capacity of rearing chickens or hens by which maximum number of profit comes. But she recommended about commercial poultry rearing more than traditional farming.

Nazrul, Ezaz and Chew (2012) tried to examine women empowerment through poultry farming. In his point of view, about 70% of rural women are directly or indirectly involved with poultry farming. Their poultry rearing practices increase the economic sustainability and enhance their ability to family contribution. Finally, poultry farming program increases the importance of the rural women in their families.

Shahidul, Faysal and Shafiul (2014) showed poverty alleviation as a tool of women empowerment. They mentioned that a significant number of rural women are engaged with livestock, especially poultry farming program. Poultry rearing practice is an important part of small-scale income generation activities. In their view small scale income of rural women can bring strong positive changes on overall women empowerment.

According to Shamsuddoha (2011), poultry farming plays a vital role for women employment. It generates family income of those women and improves family diet with egg and meat. He recommended about the recycle, reuse and reduce of poultry which can bring economic sustainability of rural women. He noticed that this new technology is fully related with poultry refuse management which can help to reduce poverty, lessen unemployment and empower women. Chaudhry and Naseer (2006) conducted a research in Pakistan. In this paper they examined the economic importance of poultry refuse. In their view, poultry refuse has the high economic value because of potential pathogenic bacteria. Proper utilization of it in crop fields, especially in corn field, can bring more profit and reduce poverty in rural area.

According to Al-Amin, Rahman, Howlider and Ahmmed (2009), in Bangladesh poultry population is 200-220 million and the produced waste material of them are 15-20 million ton. Daily a chicken generally can produce 1 kg fresh refuse with variable water components. So, poultry refuse can be used as organic fertilizer in crop fields and vegetable gardens and brings high range of productivity. In the long run, it reduces poverty and makes economic sustainability of rural women.

Mahmuda, Monayem and Hossain (2008) utilized poultry refuse as a technique of Integrated Pest Management (IPM) in vegetable gardening, which is covered mostly by rural women. Decomposed poultry refuse has a high economic return in pest development practices. In their observation after using IPM technology in vegetable gardening, productivity was high more than non-IPM used vegetable garden. High production of vegetables creates a vast area of women employment and makes the economic sustainability.

3. Objectives of the Research

The main objective of this study is to know poverty alleviation by poultry refuse management for the lower income female in village area of Bangladesh. Inter alia objectives of this study are as follows

1. To explore poultry farming as a mechanism of poverty alleviation of the rural women of Bangladesh
2. To demonstrate possibility of poverty alleviation by poultry refuse management

4. Research Approach

In this research data collection was conducted in two ways primary and secondary. Primary data was collected directly from the field. About 200 respondents were involved with primary data collections that were selected after a random sampling in selected villages in 5 Upazilas of Jessore district, Bangladesh. The survey was conducted in 2012. The field survey was performed in two stages pilot survey and final survey.

Data were collected by personal interviews with the women through a semi-structure questionnaire. Secondary data was collected through the web searching and library works. The data were analyzed and presented statistically using quantitative methods.

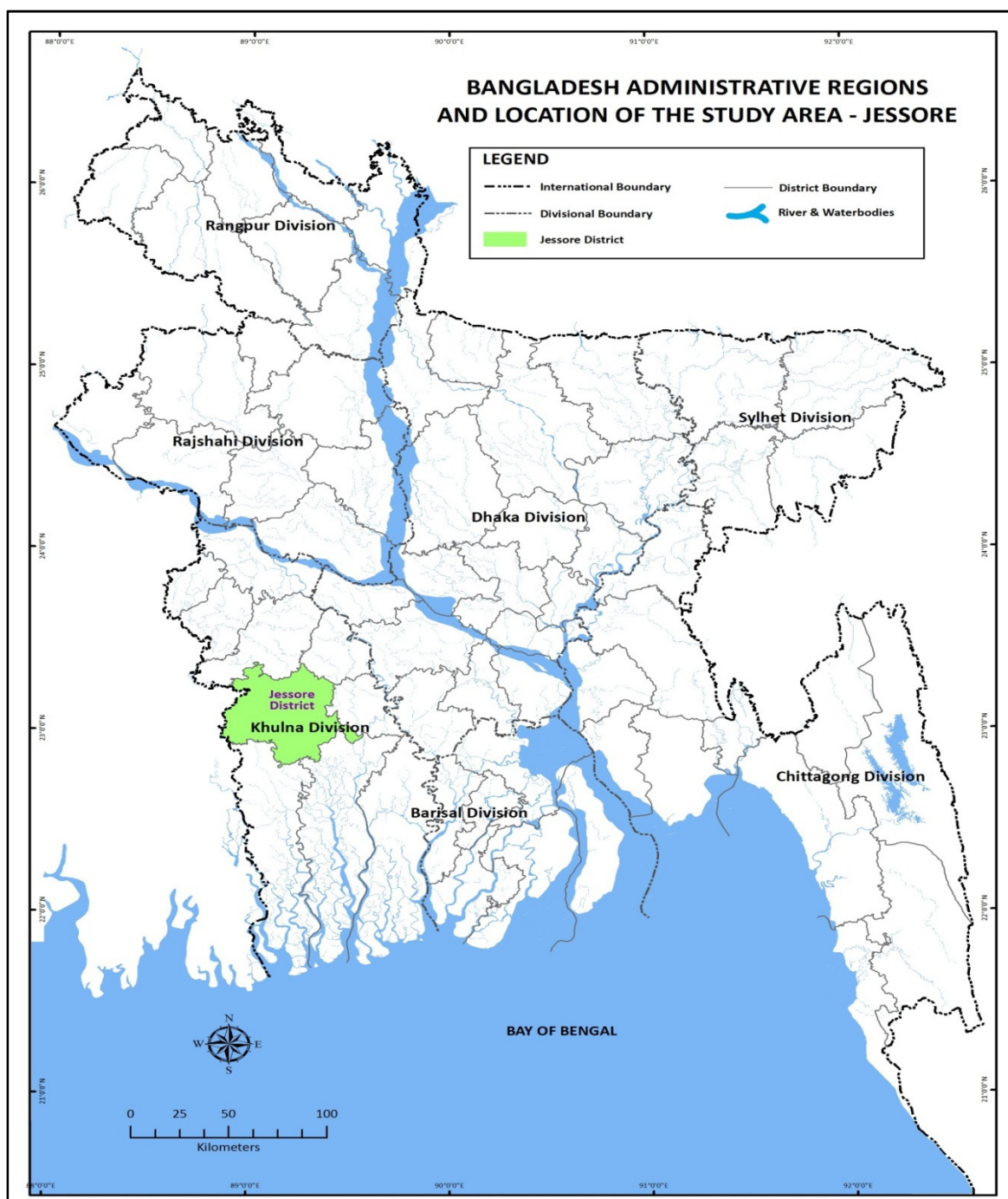


Figure 1: Bangladesh Map and location of Jessore district.

5. Results and Discussions

The objective of this paper is to explore the poultry farming as a mechanism of poverty alleviation and to demonstrate the poultry refuse management as a new mechanism of poverty alleviation. To fulfill these objectives, the research has used the quantitative technique to collect data.

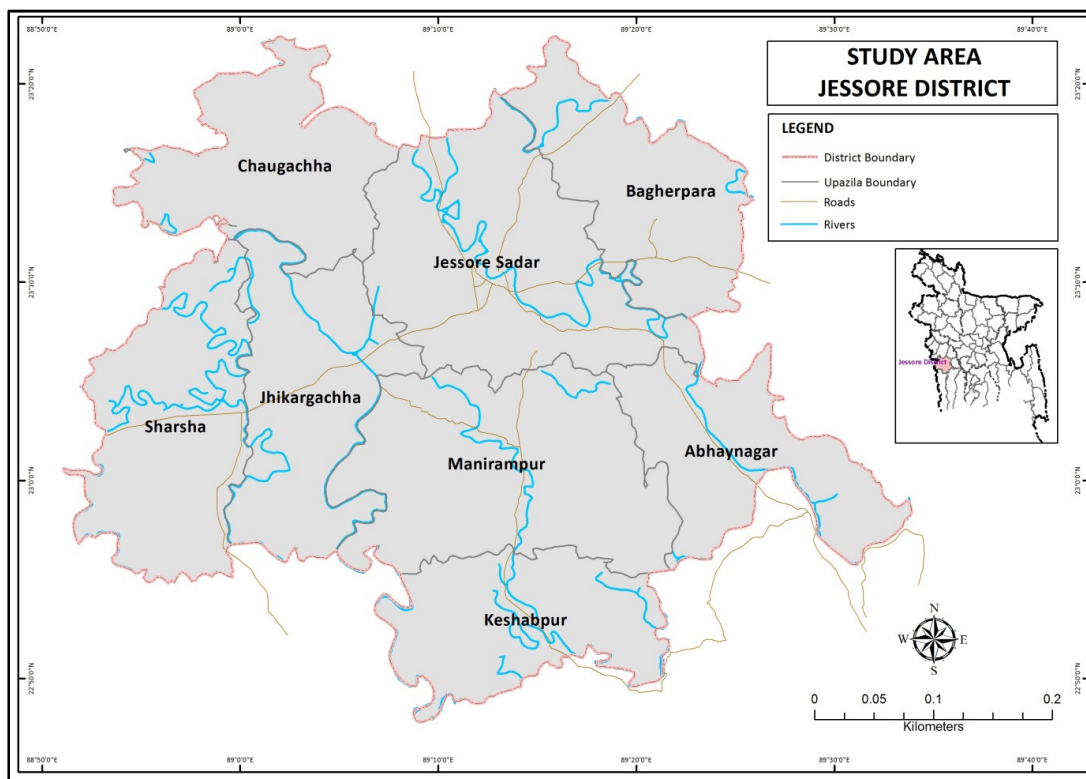


Figure 2: In detail of Jessore district.
Source: Based on field survey, 2012

The collected data in Table 1 shows that among 200 female respondents, 64% of them were married and 64% of these female poultry farmers were lettered only, who have no formal education at all. In addition to these, the highest 27.5% of the respondents were within the age group of 35-39 and next to it 24.5% were within the age group of 25-29.

	Frequency	Percentage (%)
Marital Status		
Married	128	64.0
Widow	32	16.0
Wife with disabled husband	28	14.0
Unmarried	12	6.0
Total	200	100.0
Level of Education		
Non-Lettered	31	15.5
Lettered	128	64.0
School Level (Class I – X)	32	16.0
Higher Studies and Above	9	4.5
Total	200	100.0
Age Group		
<20	16	8.0
20-24	27	13.5
25-29	49	24.5
30-34	30	15.5
35-39	55	27.5
>40	23	11.5
Total	200	100.0

Table 1: Socio-Economic Status of Respondents
Source: Based on field survey, 2012

In table 2, it is revealed that occupation and income of most of the female farmers are considered as supportive incomes for their families. In those cases, these families have other supportive members (usually husbands) to earn for the household. However, it is not unusual that in many cases the female farmers are the main earners for their families and poultry farming and related works are their main occupations.

Occupation	Frequency	Percentage (%)
Poultry	22	11.0
Poultry + Gardening	55	27.5
Poultry + Gardening + Agriculture	32	16.0
Poultry + Gardening. + Business	18	9.0
Poultry + Fishing + Gardening	53	26.5
Poultry + Fishing + Agriculture	9	4.5
Poultry + Gardening + Agriculture + Business	11	5.5
Total	200	100.0

Table 2: Occupation of Respondents
Source: Based on field survey, 2012

Typically, Bangladesh is considered as a patriarchal society where male members of the family take the major decisions for the family. However, in this research it was discovered that poultry farming is considered as a village culture where everything related to poultry farm is maintained and monitored by female farmers. However, if they require any help like finance, sale or taking care, they can get it from their male counterparts. It is found in figure.3 that more than half (56.5%) of the female respondents take their own decisions regarding their farming. They can take their own decisions whether they can run a poultry farm in their house or not. However, 16.5 % of the respondents expressed that their spouse takes all decisions about their farming.

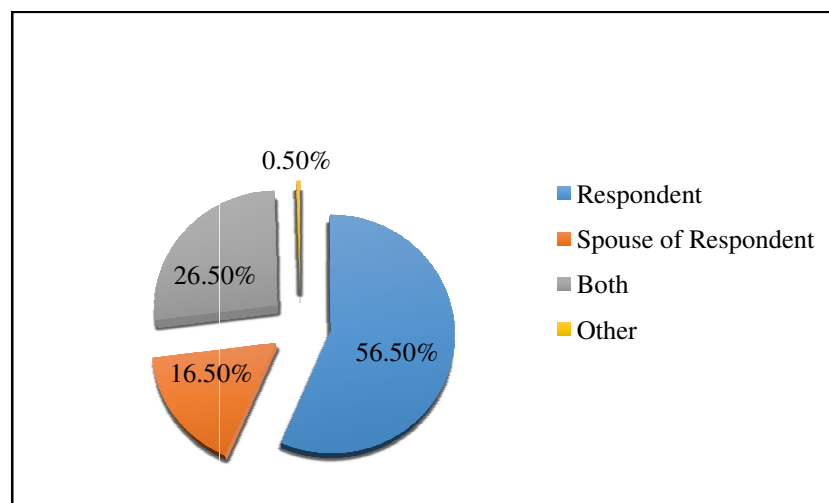


Figure 3: Decision of farming, source: Based on field survey, 2012

Though women of family run the farms along with their household activities, most (52.5%) of the cases these female are not the real owner of those farms. The male members are the main owners. However, 46.5% of the respondents uttered that they have the actual ownership on their farms. For this latter group of respondents, it was found that they are the main earners for their families also as they are widow, single mother or a wife with physically disable husband.

Category	Frequency	Percentage (%)
Respondent	93	46.50
Spouse of respondent	105	52.50
Neighbor	1	0.5
Relative	1	0.5
Total	200	100

Table 3: Ownership of the firm
Source: Based on field survey, 2012

Empowerment of Bangladesh rural women is visible in every steps of it. This empowerment process takes an effective shape when their male partners help them in running their farms. It was found in table 4 that 51.5% of the respondents received helps from their

spouses during their initial investment. Though the money is very small in amount, but the support what these respondents get from their husbands, inspires them to be empowered economically.

Category	Frequency	Percentage (%)
Respondent	53	26.5
Spouse of respondent	103	51.5
Both	34	17.0
Others	10	5.0
Total	200	100.0

Table 4: Sources of Initial Investment
Source: Based on field survey, 2012

In figure 4 indicates that most of the cases female farmers take combined decision (37.5%)with their husbands to sale products of the farms. Only 28.5 % of them can show their opinions about selling products. It proves that husbands are supportive to take any steps about farms in most cases.

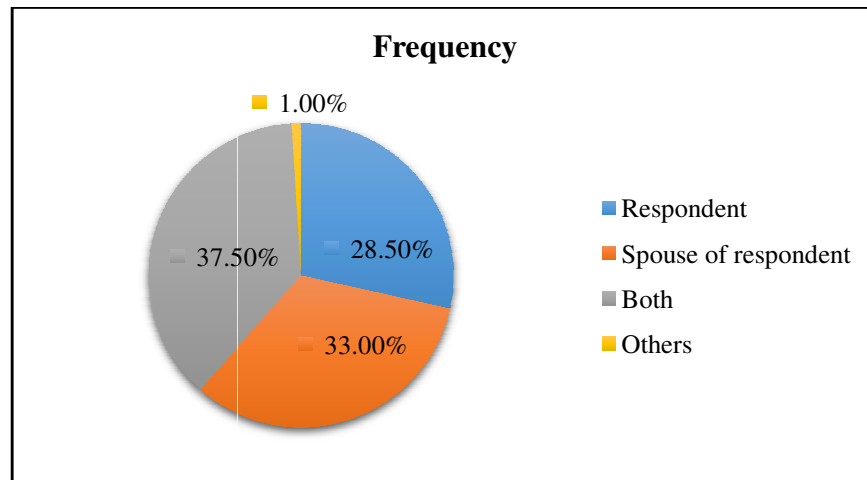


Figure 4: Decision of selling product of firms, source: Based on field survey, 2012
Source: Based on field survey, 2012

Poultry farming covers a significant part of economic insufficiencies of rural women. At the year end, rural farmers can fulfill most of their family expenditures from selling products of farms. The collected data of table 5 shows that most of the female farmers (33.5 %) gain yearly profits between 21000 tk – 25000 tk. Only 12.7 % of them earn money less than 5000 tk. As most of the female farmers have their supportive occupations (Table 2), so it is easy for them to cover all economic imbalances in most cases.

Category	Frequency	Percentage (%)
<5000 Tk	25	12.7
6000-10000 Tk	42	21.3
11000-15000 Tk	22	11.2
16000-20000 Tk	28	14.2
21000-25000 Tk	66	33.5
26000-30000 Tk	11	5.6
>30000 Tk	3	1.5
Total	197	100.0

Table 5: Yearly Profit from Firms
Source: Based on field survey, 2012

There are about 90 million chicken and 12 million ducks in the country. About 89 percent of rural livestock households’ rear poultry and the average number per household is 6.8. It is an important source of cash income for the rural poor families, particularly for women (Saleque& Mustafa, 1996). It was found in this research that many respondents are used to sell the refuse that are produced from their poultry farm. They reuse this refuse for their homestead gardening or for commercial purpose to have economic benefit. In table 6, it is revealed that women can produce refuse from their poultry in daily basis. It is revealed 27% respondents produce 5 to 7 kilograms refuse every day. Even 20.3% respondents produce 14-16 kilograms refuse every day from their poultry farms.

Category	Frequency	Percentage (%)
<5 kg	30	26.3
5-7 Kg	40	27.0
8-10 Kg	29	19.6
11-13 Kg	14	9.5
14- 16 Kg	30	20.3
17- 20 Kg	3	2.0
>20 Kg	2	1.4
Total	148	100.0

Table 6: Daily Refuse Production of Farms
Source: Based on field survey, 2012

In Figure 5, it was found in most of the cases, respondents sell these refuses which bring economic benefit for these women. However, a number of respondents stated that they sell the refuses as they do not need these refuses for their household purposes. On the other hand, 47% respondents shared that they do not sell their daily refuse production. They mentioned that they use these refuse for their household purpose. Moreover, in table 7, many (51%) of them stated that they do not have any knowledge that they can sell. This lack of awareness prohibits them from getting economic benefits.

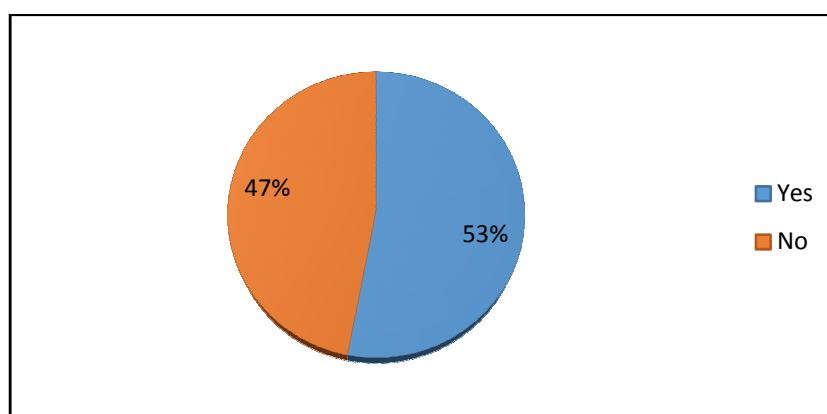


Figure 5: Decision of Selling Refuses
Source: Based on field survey, 2012

Yes		No	
Frequency	Percentage (%)	Frequency	Percentage (%)
94	49.0	106	51.0

Table 7: Knowledge of Poultry Refuses as a Part of Poverty Alleviation
Source: Based on field survey, 2012

Poultry farming and poultry refuse are essential parts of the farming systems in Bangladesh. Based on the above information, it can be stated that most of the respondents of this research are academically not skilled. This inability prohibits them from joining to the formal employment. Moreover, as Bangladesh is an agro based country, it is easier for them to choose agro based poultry farming as their source of income. In addition, if they can run a poultry farm in a proper way, they can get daily benefits from the refuses of these farms. The research proves the economic validity of both of poultry farms and their waste materials.

Secondary resources determine that one of the indicators of women empowerment and poverty alleviation for rural Bangladesh is to make them independent economically. As they do not have formal education and as poultry farming or as poultry refuse management requires small investment with small lands, one of the convenient sources of empowerment is go for it.

6. Conclusion & Recommendations

Poultry farming and refuse management are considered as a growing industry for the empowerment of rural women. For generations, rural women of Bangladesh have practiced poultry farming in this country. Female empowerment is typically defined as the capability of women to make their choices and take decisions within the household with their relative or with their husbands. Working with their male partners, it is found, females can increase their decision making power through poultry farming and refuse management. This household based economic practice is existing co-operations with the household responsibilities as this is working as an important source of reducing household poverty. Though this study field is culturally considered as a conservative society where purdah culture is strongly practiced, but poultry farming is widely practiced here with the support of their family.

Finally, it is recommended here that if these illiterate and less educated women can be provided proper training and can make them skill farmers, a poverty alleviation program through poultry farming will be easier and faster than the present situation.

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