



Small scale broiler farming at Santhia upazilla of Pabna District of Bangladesh

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Abstract

The experiment was conducted for profiling the existing broiler farming at Santhia upazilla under Pabna District during the period from February to March, 2012. Data were collected using an interview schedule from 50 randomly selected respondents who were involved in broiler farming. In this study out of 50 respondents 60% were engaged in agriculture, 36% businessman and 4% were in services. About 48% respondents had small size farms (100-500 birds), 40% had medium (501-1000 birds) and remaining were large size (1001-2000 birds). Most of the respondents reared Cobb-500 strain, those were purchased from Kazi Farms Ltd. Out of 50 respondents 30% took necessary suggestions from the experienced farmers, 90% farmers regularly vaccinated their broilers and 70% farmers taken short training on broiler farming. About 78% respondents considered market weight as 1.5 kg per bird, whereas the rest 22% sold broiler weighing about 1.8 kg per bird. Most of the respondents (64%) sold broiler at 30-33 d of age and about 80% respondents marketing their broiler at 110-115 taka per kg live bird. About 36% respondents had production cost approximately 90-95 taka per kg bird. In this study, about 36% respondents reported more marketing age of birds, 32% reported higher cost of production and 30% reported lack of training facilities. In conclusion, the result of present study could be considered useful to farmers and researchers to identify the overall problems and their remedies on management and marketing related to broiler production.

Key words: Broiler production, farming system, Pabna district

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Introduction

Small-scale poultry production has developed in a large number of developing countries around the world as an important source of earning for the rural poor. It is growing rapidly and successfully becoming a leading industry in Bangladesh. Islam (2003) stated that there is no doubt that exciting times lie ahead for the Bangladesh poultry industry. Akter and Uddin (2009) reported that poultry industry as a fundamental part of animal production is committed to supply the nation a cheap source of good quality nutritious animal protein in terms of meat and egg. Poultry meat alone contributes 29% of the total meat production in the country (BBS, 2001) and it can efficiently and rapidly fulfill the gap of protein requirement in the shortest possible time. This sector is crucially important in the context of agricultural growth and improvement of diets of people in Bangladesh.

Profitability of broiler production involves proper assessment of demand, planning the size of the activity, possible integration of activities to bring down the cost of production, foresight into market

price situations, and prudent assessment of cost-benefits and finally the rate of returns in the activity. These situations vary from country to country and even between regions of a country. Thus, to explore the insight of the broiler farming of a particular area of the country, it is essential to understand the characteristics of the farmers, farm size and socio-economic status of the farmers to make the business profitable. Therefore, the present study was undertaken to identify the existing management system of broiler farm, problems related with broiler production and their potential solutions.

Materials and Methods

The present study was conducted to investigate the existing broiler farming status at Santhia upazilla under Pabna District during the period from February to March, 2012. Data were collected through an interview schedule involving 50 respondents who were involved in broiler farming. Respondents were randomly selected from different parts of the upazilla for collecting data to address the objectives. In this study 50 respondents were interviewed to find out their

socio-economic condition. The selected characteristics included age, occupation, total annual income, annual income from poultry, farm size, rearing system, sources of day old chick, type of feed used, feed price, marketing age, marketing price, farmer's problem and recommendations.

Data were collected following the direct interviews and making frequent personal visits. Interviews were normally conducted in the market or in respondent's house during their leisure time. Major focal points of the interview were the general information about the farmers, number of farms and birds, management of broiler farm, feed source, fundamental idea on rearing and marketing of broiler. Problems and probable solutions related to broiler production were also focused. The collected data were analyzed statistically by using simple statistical tools like average and percentage through SPSS software.

Results and Discussion

Socio-economic background

Number and percentage distribution of respondents according to their age group, family size and occupation are shown in Table 1. It is revealed that the majority (60%) of the respondents were in the middle age (31-50 years), 34% respondents were young (upto 30 years) and the remaining were old age (above 50 years). Aganga et al. (2000) conducted study in the Southern region of Botswana reported that maximum farmers involved in poultry farming remain within the range of 35-50 years. Educational background of the 50 respondents, as observed in the present study, 20% were within the elementary level, 70% were secondary and remaining 10% were within the intermediate level, suggesting that the maximum farmers handling broiler farms were within the secondary level of education. The results are consistent with the previous report of Rahman et al. (2002).

Out of the 50 respondents 60% were involved in agriculture, 36% in businessman and 4% in services as their main profession. Being a part of agriculture based economy it was not surprising that 60% of poultry farmers choose their main profession as agriculture, which was highest. Previous reports of Jabber and Green (1983), Miah (1990) and Karim (2001) showed that farmer's main occupation was agriculture. In case of annual income of farmers, 46% of the

respondents belong to medium level of income (100001-150000 taka), 34% and 20% of the respondents were in low and high level of incomes, respectively.

Factors involved with broiler farming system by the respondents are shown in Table 2. About 48% respondents had small size farms (100-500 birds), 40% had medium (501-1000 birds) and remaining were large size (1001-2000 birds). About 80% respondents reared Cobb-500 and rest reared Ross, Hubbard and Starbro strain. These results are almost similar to the previous report of Hauque (2005). Singh and Sharma (2003) also estimated that maximum farmers choose Cobb-500 for their better production.

Table 1. Distribution of respondents according to their age group, education level, occupation and annual income of farmers

Parameters	Categories	No. respondent (n=50)	% respondent (n=50)
Age	Young age (≤30 yrs)	17	34
	Middle age (31-50 yrs)	30	60
	Old age (>50 yrs)	3	6
Education level	Low educated (1-5 class)	10	20
	Medium (6-9 class)	35	70
	Higher (10-11 class)	5	10
Occupation	Agriculture	30	60
	Businessman	18	36
	Services	2	4
Annual income of farmers (taka)	Low income (50000-100000)	17	34
	Medium income (100001-150000)	23	46
	High income (151000-240000)	10	20

Factors associated with broiler farming

In this study, most of the farmers (90%) vaccinated their birds regularly against infectious disease. Rahman (2004) reported that 70% broiler farmers vaccinated birds regularly and

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30% did not practice vaccination. About 30% respondents received suggestion from experienced farmers, 10% did not take any suggestion and remaining taken suggestion from veterinary surgeons, technical graduates or dealers. About 70% respondents received short training on broiler management whereas about 30% did not take any training at all. The result is same as Rahman et al. (2003), who reported that among 50 respondents in the study area, 70% had training on broiler farming from local YTC (Youth Training Center), Upazilla Livestock Office, NGO's and different broiler farming related agencies. In the present study out of 50 respondents, 80% purchased broiler chick from Kazi Farm Ltd. and 98% used ready-made feed for broiler rearing.

Table 2. Factors associated with broiler farming system

Parameters	Categories	No. respondents (n=50)	% Respondents (n=50)
Farm size	Small (100-500 birds)	24	48
	Medium (501-1000 birds)	20	40
	Large (1001-2000 birds)	6	12
Name of strain	Cobb-500	40	80
	Ross	5	10
	Hubbard	3	6
	Starbro	2	4
Vaccination	Practiced	45	90
	Not practiced	5	10
Counselor	None	5	10
	Veterinarian	10	20
	Experienced farmer	15	30
	Technical graduates	10	20
Training on broiler rearing	Dealer	10	20
	Received	35	70
	Not received	15	30
Sources of broiler chick	Kazi Farm Ltd.	40	80
	Nourish Poultry	5	10
	CP Company Ltd.	5	10
Feed use	Ready made	49	98
	Hand made	1	2

Production cost and marketing price of live broilers

Factors associated with cost of production and marketing of live broiler are shown in Table 3. About 50% respondents purchased day-old chicks

at 31-33 taka per chick whereas 80% respondents purchased feed 32-35 taka per kg.

About 78% respondents considered market weight as 1.5 kg per bird, whereas the rest 22% sold broiler weighing about 1.8 kg per bird. Almost similar result was observed by Hauque (2005), who found 1.5 kg average market weight per bird. Perry et al. (1999) also found average market weight per bird was 1.10 kg. It ranged from 1.07 kg to 1.70 kg per bird.

Majority of the respondents (64%) sold broiler at 30-33 d of age and about 80% respondents marketing their broiler at 110-115 taka per kg live bird. About 80% respondents marketed broiler with a price of 110-115 taka per kg bird, rest 40% marketed broiler at 120-125 taka per kg bird. Karim (2001) showed that there was a wide range of fluctuation in market price, which might be due to the fact that farmers, while selling the bird, were captivated by the middleman. Out of the 50 respondents 36% respondents had production cost 90-95 taka per kg live bird and 32% respondents had highest production cost at 101-104 taka per kg live bird which is in close agreement with the results previously reported by Hauque (2005).

Table 3. Factors associated with cost of broiler production and marketing

Parameters	Categories	No. respondents (n=50)	% Respondents (n=50)
Price (Taka/chick)	26-30	20	40
	31-33	25	50
	34-35	5	10
Feed price (Taka/kg)	32-35	40	80
	36-40	10	20
Market weight (kg/ bird)	1.50	39	78
	1.80	11	22
Marketing age (d)	30-33	32	64
	34-36	18	36
Marketing price (Taka/kg live bird)	110-115	40	80
	120-125	10	20
Production cost (Taka per kg bird)	90-95	18	36
	96-100	16	32
	101-104	16	32
Annual income from broiler farm (Taka/year)	19200-50000	11	22
	51000-100000	27	54
	100001-144000	12	24

In present study out of 50 respondents 54% respondents earned 51000-100000 taka per year from broiler farm, whereas the rest 22% and 24%

respondents earned 19200-50000 and 100001-144000 taka per year, respectively. Hauque (2005) showed that the annual income from poultry farming ranged between 12988.80 to 276120.00 taka per year, which is very close to the result of the present study.

Problems and suggestions on rearing and marketing of broiler

Depending on demand, price variation of day old chick and lack of quality chicks, availability and quality of vaccines, high price of feed, lack of quality feed and training facilities were the major problems for broiler production faced by farmers in the study area. In this study, about 36% respondents reported more marketing age of birds, 32% reported higher cost of production and 30% reported lack of training facilities. The farmers also suggested that the government should fix and control the price to a limit up to stability so that they can get deserved price. Availability of commercial day old chicks with reasonable market price should be ensured. Sufficient training programs on broiler farming should be arranged, so that the farmers can keep themselves up to date. For indemnity, safety, and security, poultry insurance system should be introduced immediately.

Conclusion

The result of this study area will be useful for farmers and researchers to identify the overall problems and their remedies on feeding, management and marketing related to broiler production. The findings may therefore pass some valuable information for proper management of broiler in rural area of Bangladesh.

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