OBTAINING ECONOMIC SOLVENCY THROUGH BEEF FATTENING IN PIROJPUR DISTRICT



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Abstract

Beef fattening program have become an important business of the small farmer in Bangladesh.In few areas of Bangladesh a small scale beef fattening program has already been started. The experiment was carried out at Nazirpur upazila of Pirojpur district to determine socio-economic conditions of the farmers. The data were collected through direct interviews with farmers by going door to door. The interview involved 130 farmers who rear cattle for fattening. Collected data were analyzed in Excel sheet. It was found that most of the farmers were in middle aged categories (50.77%). More than one-third (77.77%) of the respondents were farmers by profession followed by businessman(13%). About 59.23% respondents were from medium sized family. About 51.53% respondents started the program with their own capital followed by 23.07% taking bank loan and about 47% of the respondents got government office support whereas 63% did not get any government office support during the whole fattening period. About 58.46% farmers got training on cattle fattening. For fattening most of the farmers choose both cross breed and indigenous breed (41.53%). At 80% case cattle were reared for less than 6 months. Cattle were bought seasonally most of the time(84.62%) for beef fattening. In beef fattening farms, technological and economic performance optimization is imperative for reaching profitabilitythe small scale beef fattening represents an important component of the agribusiness sector of the economy with great economic, income, poverty reduction and social enlightenment. The results of this study will be fruitful for farmers and researchers to identify the overall problems and their remedies on management and marketing related to cattle fattening program in Bangladesh.

Key words: Beef fattening, Beef, Bangladesh, socio-economic:

1. INTRODUCTION

Livestock agribusiness plays an important role in our economy by helping to mitigate poverty by producing rural jobs and accelerating the accomplishment of higher economic growth. Livestock may be considered as "Cash income" to rural farmers that is instantly available for sale or barter (Hossen et al., 2008). Bangladesh's agricultural economy heavily depends on livestock. Now it is necessary to find out the limitations of existing beef production system to make it more sustainable at root level farmer's. In rural regions most of the families keep cattle with the majority of them being landless, marginal, divorced women and small farmers. Fattening of cattle is an efficient strategy for the rural poor to alleviate poverty. Small farmers in Bangladesh have turned to cattle fattening for meat production as a lucrative industry. One of the advantages of rural farmers raising cattle is that they may use locally available feed during the Eid festival. Beef fattening is a 4 steps rearing program of male or sterile female malnourished cattle with the goal of gaining satisfactory growth in at least 60 to 120 days. The four primary criteria the make the fattening program viable are animal selection based on body traits, deworming, cost effective feeding upto lucrative weight gain and easy marketing system. Beef fattening could be the most suitable way to increase the socioeconomic status of the poor farmers in terms of net income. The major objectives of the study were:

- 1.To identify the key factors to get economic solvency of rural people of Pirojpur district by adopting beef fattening as a tool of poverty eradication.
- 2. To determine the socioeconomic characteristics of beef fattening farmers at study region.
- 3. To assess the economic efficiency of small scale beef fattening farmers in study region.

2. REVIEW OF LITERATURE

The livestock subsector is an important subsector of Bangladesh agriculture. Its contribution to country's GDP is about 1.47% in 2018-19 according to DLS. The growth rate of GDP of livestock is 3.47%. Beef fattening is an important subsidiary to agriculture and playing a significant role in rural economy in Bangladesh (Hashem *et. al.*, 1999).

"The information that are found in the literature on beef fattening by small scale farmers in rural areas are few and sporadic" (Hossain *et al.*, 1986)

About 80 to 85% of the family keep livestock in the rural areas and most of them are landless, marginal and small farmers (Hossain *et al.*, 2004)

"The majority (45.3%) of the farmers are in middle aged, 16% are young and remaining were old age category (38.7%)" (Rahman *et. al.*, 2012).

The majority (50.2%) of the respondents were in the middle aged category, 22.3% and 24.4% of the respondents were in the young and old aged respectively (T. Ahmed *et al.*, 2010)

"The findings show that the highest proportion (47%) of the farmers in the studied area was in the middle aged category compared to 20% belonging to young aged category and 33% to old aged category".(A.K Sarker*et al.*, 2012)

"The majority (63.8%) of the respondents had main occupation as

agriculture, 27.5% were related in the livestock business. About 51.3% of the farmers run their cattle fattening business by own money, 20% from NGO loan, 23.8% bank loan, 5% taken loan from mohajon. In case of training, only 23.8% respondents had cattle fattening training"(M.T Kamal *et al.*, 2019)

86.7% farmers used own capital. (Begumet al., 2007)

Only 23.8% respondents had cattle fattening training and 76.3% farmers had not get any training. (M.T Kamal *et al.*, 2012)

Out of 30 respondents 50% are involved in agriculture, 23% in business, and 23% other job and 4% in government job, respectively. (A.K Sarker*et al.*, 2012)

26.3% selected indigenous and 32.5% farmer's selected crossbreeds and 41.3% select both crossbreeds and local for their farm.(M.T Kamal *et al.*,2012)

(Hossain *et al.*,2016) stated that about 12% cattle were indigenous and 88% crossbred in origin.

(Hossain et al., 1996) reported cattle fattening periods of 4-5 months and 5.7 months.

30% farmers practiced fattening only before Eid-ul-Azha, 63.8% farmer practiced fattening round the year and the rest of the farmers performed seasonal fattening (M.T Kamal *et al.*, 2012)

Islam *et al.*, 2012 showed that majority (53.3%) of the respondents start fattening before Eidul-Azha and the rest practiced round the year.

Among the farmers 16.3% farmers practiced fattening for 3 months or less and maximum number farmers (35%) farmers fattening period was 3 to 6 months and 31.3% farmers fattened their cattle for 6 months to 1 year and the rest above 1 year.(M.T Kamal *et al.*,2012). (Ahmed *et al.*, 2010) stated that 79.1% respondents found that the fattening period of cattle was 3-6 months.

(Rahman *et al.*, 2012) stated that most of the respondents fattened cattle for 3 months (44.7%) and rest fattened for 6 months or one year.

3. METHODOLOGY

The present study was undertaken in the district called Pirojpur which is under Barisal division of Bangladesh. It is bounded by Gopalganj and Barisal district on the north, Barguna district on the south, Jhalokati district on the east, Bagerhat district on the west. The respondents were selected who rear or bought cattle for rearing or fattening. Respondents were randomly chosen in Nazirpur upazilla among farmers who rear cattle for beef fattening.

Data were collected through direct interviews with farmers. The interview schedule contained general information (occupations, education, family member, source of earnings etc.) of the cattle owners and other information like fattening period, training on cattle fattening, government office support, period of program and breed of cattle used in beef fattening.

4. RESULTS AND DISCUSSION

- **4.1. Socio-economic condition of the goat farmers:** In this study some major characteristics of the respondents were selected to find out the socio-economic conditions of the farmers like age of the farmers, family size, occupation, source of capital and training. Number and percentage distribution of respondents according to their age of the farmers, family size, education, occupation, source of capital, training on beef fattening, period of fattening and purchase time are shown in Table 1 and 2.
- **4.1.1. Age of the farmers:** The findings indicated that the highest proportion (50.77%) farmers of the study region were middle aged category in contrast of old aged category (26.15%) and young aged (23.07%) category. The results of this study are similar as Rahman *et al.* (2012) where they reported 45.3% farmers were in middle aged category 38.7% were old and 16.0% were middle aged category.
- **4.1.2. Household size:** In this study we found about 59.23% of the farmers held medium sized family whereas 39.23% respondents held large sized family and 1.5% held small family.
- **4.1.3. Occupation:** About 77.77% of the respondents were farmers by profession among 130 respondents.13.07 % respondents were businessman by profession 2.3% were shopkeeper and 6.9% were service holder. This result collaborates with the result of the result of Sarker *et al.*, 2014 who reported that 50% respondents involved in farming, 23% in business and 23% in other jobs.
- **4.1.4. Source of capital:** The source of capital for beef fattening varies from farmer to farmers. About 51.53% of the respondents used their own capital for the program and 23.07% received bank loan for beef fattening. 20% used NGO loan and rest 5.38 % used other sources for beef fattening. This result is pretty close to the result that was found by Sarkar., 2014 where he got 57% respondents used own money as capital, 10% got bank loan and rest 33% managed capitals by other means like NGO loan and lending money.
- **4.1.5. Government office support:** 63.84% of the respondents did not get any support from government office such as vaccination, deworming and treatment facilities.

4.1.6. Training: Training is an important factor for proper management and marketing of cattle during and after beef fattening. The study shows that 41.16% of the respondents got training on beef fattening by different government and non-government organizations. Other 58.84% did not have any experience of any kind of training.

4.2. Factors associated with beef fattening:

- **4.2.1 Type of breed:** About 41.53% of the farmers used both cross breed and indigenous breed for beef fattening whereas 32.53% and 26.15% were the percentage of cross breed and indigenous breed respectively. Rahman *et al.*, (2012) found 60% used both type of breed, 28% used indigenous breed and 12% used cross breed. This result is quite similar to ours.
- **4.2.2 Duration of program:** In the study it is shown that at 80% respondents run the beef fattening program for less than 6 months. 14.61% respondents prolonged the program for more than 12 months. Rest 5.38% run the program for 6-12 months. Rahman*et al.*, (2012) found 86% of the respondents run the fattening program for less than 6 months which is quite similar to our study.
- **4.2.3 Purchase time of cattle:** The study showed that about 60% of the respondents bought cattle round the year, 31.53% farmers purchased cattle just before Eid-ul-Azha and rest 8.4% bought cattle seasonally.

Table 1: Distribution of respondents according to age, household size, occupation, source of capital, government support and training.

Parameter	Categories	Number of respondents	Total respondents (%)
	Young(<35 years)	30	23.07
Age	Middle(36-50years)	66	50.77
	Old age(>50years)	34	26.154
	Small family(<3)	2	1.5
Household size	Medium family(4-6)	77	59.23
	Large family(>6)	51	39.23
	Farmer	101	77.70
Occupation	Business	17	13.07
	Shopkeeper	3	2.30
	Service	9	6.9
	Own	67	51.53
Source of capital	Bank loan	30	23.07
	NGO loan	26	20
	Others	7	5.38
Government	Yes	47	36.15
office support	No	83	63.84
Training	Have	54	41.54
	Have not	76	58.46

Table 2: Distribution of respondents according to breed of cattle, duration of programme and purchase time.

Parameters	Categories	Number of respondents	Total respondents (%)
Type of Breed	Indigenous Cross Both	34 42 54	26.15 32.30 41.53
Duration of program	<6 month 6-12 month >12 month	104 7 19	80 5.38 14.61
Purchase time	Just Before Eid-ulAzha Round the year Seasonal	41 78 11	31.53 60 8.46

5. CONCLUSION

The study reveal that most of the respondents were middle aged belong to marginal class, from medium sized family, involved in agriculture, used own capital, had no training experience on beef fattening. It clearly indicates that beef fattening is the most profitable and socially acceptable income generating activity. The results of this study will be useful to farmers and policy makers before starting beef fattening and taking decision regarding the issue.

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Appendix

Questionnaire prepared for data collection

Farmers information:

- Date:
- Farmers name:
- Mobile number:
- Address:
- Years of farming:
- Age:
- Occupation:
- Household size: (Number of family members)

Farming information:

- Source of capital: own/bank loan/NGO loan/others
- Training: Yes/No
- Government office support: Yes/No
- Type of breed used for fattening: Indigenous/Cross/Both
- Duration of program: <6 month/6-12 month/>12 month
- Purchase time:Just before Eid-ul-Azha/Round the year/Seasonal

Biography

Sagar Banik, son of Sushil Banik and Pranati Banik passed his Secondary School Certificate examination from Bangladesh Railway Government High School, Chattogram in 2014 and Higher Secondary School Certificate examination from North Kattali Alhaz Mostafa Hakim Degree College, Chattogram in 2016. Thereafter he enrolled for Doctor of Veterinary Medicine (DVM) degree in Chattogram Veterinary and Animal Sciences University (CVASU), Bangladesh and now he is an intern student in this university.