A SOCIO-ECONOMIC STUDY ON BROILER FARMING ENTERPRISES AT DAGANBHUIYAN AND SENBAGH UPAZILAS UNDER FENI AND NOAKHALI DISTRICTS

A production report submitted as partial fulfillment of the requirements for the Doctor of Veterinary Medicine degree

A PRODUCTION REPORT SUBMITTED BY

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Production Report submitted in accordance with the contents and style guidelines

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ABSTRACT

The goal of the study was to identify the variations in the socioeconomic circumstances of broiler farmers at Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali District. Twenty industrial broiler farms in all were chosen.

The research was done between 16 April to 8 June 2023 during internship placement time at ULDC level. Using information gathered from a pre-structured questionnaire, the farmers and farming were evaluated and studied. The overall objective of this study is to describe the production, housing, feeding and management system with estimating farm profitability of broiler farming enterprises in the Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali District. The study found that, The flock size (the majority of flocks consisted of 1000–2000 birds), and sources of drinking water (70 percent have their own tube-wells, 5 percent use pond water, and 1 percent use well water). The study revealed that, in Farms 7 and 10, the average weight growth was the highest. Farm-11 had the highest feed consumption, at 3.6kg per bird. Farm-2 has the best Feed conversion ratio (1.47). Farm- 8 had the greatest fatality rate, 3.1%. However, Farm-2 had the greatest livability rating, at 99%.The highest cost per bird of the chosen farms was found to be 354.8 TK in Farm 11, while the largest return per bird was found to be 424.6 TK in Farm 7, the highest benefit per bird was discovered to be 90 TK in Farm 2, and the best benefit-cost ratio was found to be 1.29 in Farm 2. According to a comprehensive economic examination of several factors, Farm 2 is in better shape than the other chosen farms. The average BCR per bird was found 1.12:1 considering the performance data of two locations.

The study's findings indicated that farmers have consistently felt afraid to raise broiler chickens for a number of reasons. Despite the facilities being highly likely, broiler farming was found to be quite unlikely. The study comes to the conclusion that, if fundamental issues are resolved, broiler farming is profitable and offers the potential for economic empowerment, food/nutritional security, and long-term rural development.

Key words: Broiler Chicken, Broiler farming system, Broiler Farmers, Economic Performances analysis

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CHAPTER-I

INTRODUCTION

1.1: Background of the study:

Broiler farming plays an important role in improving livelihood, food security and poverty alleviation in rural and semi-urban communities in developing countries including Bangladesh. Broiler production has become a specialized and speedy business at present time for the people of the country. Short life cycle of the broiler and requirement of relatively less amount of capital attributed to its popularity to the farmers. A large number of energetic men and women are coming forward to undertake broiler farming as a means of self employment. Broiler farming has also been playing an important role in improving livelihoods of the farmers. There are some examples where the broiler raisers have changed their socio-economic conditions to a considerable extent. A study report on the impact on Smallholder Livestock Development Project (SLDP) in rural community at different rural areas of Bangladesh revealed that the overall socio-economic condition of the beneficiaries , their egg and meat consumption capability, empowerment of rural women in decision making issues and employment opportunities were significantly increased after the intervention made by SLDP (Alam, 1997). Approximately now in Bangladesh the livestock population reported to 24.856 million cattle, 1.516 million buffaloes, 26.945 million goats, 3.87 million sheep, 315.704 million birds, and 66.016 million ducks are in existence at the moment (Online source).

According to a study in The Business Standard, Bangladesh has 150,000 registered chicken farms. Many more, though, are unregistered. These are classified as medium farms, small farms, and huge industrial farms. Layer, broiler, sonali, and indigenous poultry birds are the four categories that are widely used in Bangladesh for both meat and egg production. Light-Castle notes that broiler breeds make up more than 58.39 percent of the chickens in Bangladesh. Bangladesh now has around 53,000 broiler farms.

Broiler production has turned into a specific and expedient business at present an ideal opportunity for individuals of the country. Short life pattern of the broiler and prerequisite of generally less measure of capital credited to its prevalence to the ranchers.This industry has massive possibilities according to the perspective of the monetary development of the nation just as satisfaction of essential requirements and to keep the cost at any rate level and guaranteeing food particularly creature protein for the individual. This industry has tremendous extension for the country through changing work and food propensity, decrease of reliance of meat identified with cow and goat and at last decidedly affects GDP development pace of the country (Ahmed et al.,2009).

At Daganbhuiyan and Senbaghupazilas, a sizable number of educated people are currently employed in broiler chicken farming businesses or companies. Broiler meat contains high quality protein and micro-nutrients which has had a tremendous impact on health and nutrition for the poor people in rural areas (Neumann et al., 2002; Barroetoa, 2007).

Again, another study reported that it can be the main source of family earning or can provide sufficient income and gainful employment opportunity to rural farmers throughout the year (Bhende, 2006). For this reason, broiler farming has been playing a key role in providing meat to overcome the malnutrition and serve as a tool for employment generation and poverty alleviation (Raha, 2007). All of this evidence showed that commercial broiler farming should be expanded on a larger scale throughout the country as a poverty-reduction activity. Despite its enormous potential, broiler farming lacks solid foundations. According to studies, the majority of broiler farm owners did not have an acceptable quantity of credit to manage their farms, and financing for poultry farming is not yet a very common and well-established practice among all financial organizations - banks and NGOs in Bangladesh (Jabbar et al., 2005).

Studies revealed that most of the broiler farm owners suffered from adequate amount of credit to run their farms and provision of credit for poultry farming is not yet very regular and well established practice among all the financial institutions - banks and NGOs in Bangladesh (Jabbar et al., 2005) and this credit problem was also noticed for them who have Sonali bird farm.So, broiler and Sonali farm owners face various problems like shortage, high price and poor quality of DOC (Day-old chick); high price, poor quality and unavailability of feeds; high cost and low quality of medicine, vaccine and veterinary services shortage of capital; inadequate marketing facilities; and poor transportation and communication (Raha, 2007).

1.2: Objectives of the study:

The purpose of this study is to examine the socioeconomic situation of broiler farmers in the Daganbhuiyan and Senbaghupazilas of the Feni and Noakhali district as well as their economic analysis. The purpose of this study is to present data on production costs and returns from chicken farming. Once more, it will assist them in allocating their resources more effectively for the formation of sustainable self-employment. This study was conducted to compare the farm profitability of several broiler chicken farming systems in a few chosen regions of the Feni and Noakhali district's Daganbhuiyan and Senbaghupazilas.

The specific objectives of the study are as follows:

(i) To describe production, housing, feeding and management practices of broiler farm enterprises;

(ii) To examine the farm profitability of broiler farming enterprises.

(iii) To identify the farming problems and to make recommendation for overcome the farming problems.

CHAPTER-II

MATERIALS AND METHODS

2.1: Study area

The research was done in the districts of Feni and Noakhali in 2023, specifically in Daganbhuiyan and Senbagh, to compare the profitability of chicken farming in those areas.

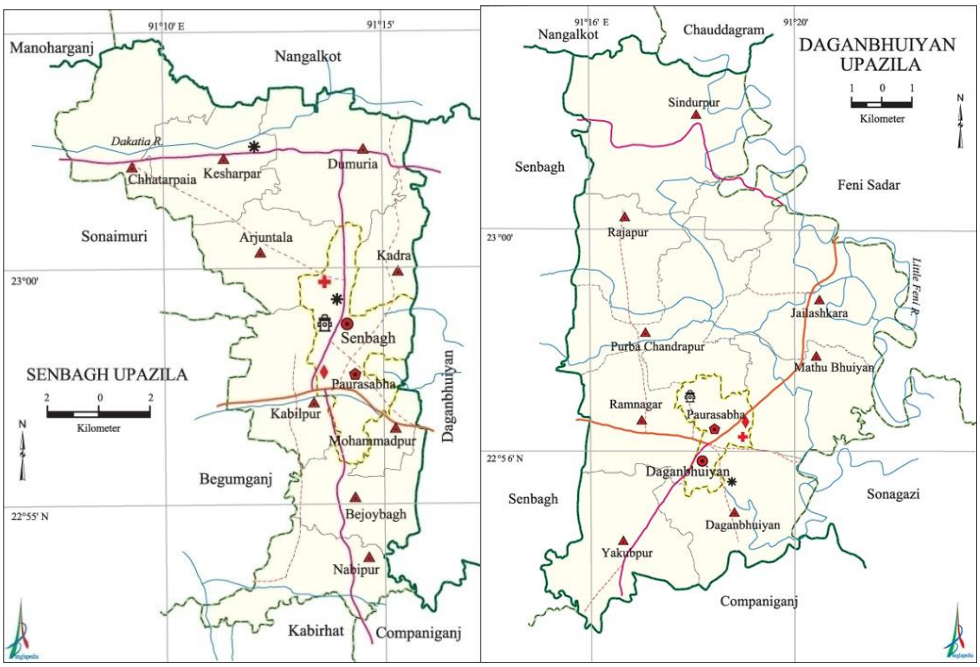

Figure-1: Study area maps

Most of the homesteads in Daganbhuiyan and Senbagh Upazillasare situated adjacent to the house. When choosing a location for farming, transit offices and other offices are taken into account for improved farming framework.

2.2: Study Period

Between April 16 and June 10, 2023, the investigation in Dagonbhuiyan and SenbaghUpazilas was finished. 20 commercial poultry farms were selected for the study at this time, and data were gathered by using a meeting plan that included face-to-face meetings and the gathering of relevant information.

2.3: Sample size and population

All the poultry farms of the locally occupied with poultry were considered as populace and an example size of 30 Broiler farms were choosenin this study.

2.4 Sampling techniques:

From Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali Districts, 20 commercial poultry farms that raise at least 500 birds in a single batch were randomly chosen (stratified arbitrary examining). Prior to sampling, a personal seating program was conducted with the relevant DLS staff, and based on their feedback, the farms were chosen for in-depth analysis.

2.5 methods for gathering data:

Through the use of direct meetings, data were acquired and recorded in a poll. The schedule was constructed taking into consideration the locations of the exams. The survey was pre-tested before being sent out and was accordingly improved. A coordinated survey was created in order to collect more sterile information on various homesteads.

Figure-2: Collecting data from poultry farmers.

2.6: Data analysis methods

The collected data were analyzed and explaining after coding, decoding, summarized. Descriptive statistical study were carried out to measure the cost, return and estimating farm profitability of the farms.

CHAPTER-III

RESULTS AND DISCUSSIONS

In this chapter, the likely results are outlined along with any pertinent comments of the research being studied. In the study areas under Daganbhuiyan and Senbaghupazila, the main topics of discussion focused on socioeconomic characteristics and general information about poultry, production performances of the farm, farm profitability, and farming constraints with a few recommendations.

3.1: Detailed information about farms and a farm management system:

3.1.1: Strains of broiler chicken that farmers use in Farms

The broiler is a typical tool for separating widely disparate aggregates. Hubbard Classic, Starbro, Cobb-500, Arber Acere, Ross, Lohmanh, and the alleged ISa-I 757 are typical.

3.1.2: Size of Farms

From the Daganbhuiyan and Senbaghupazilas, 20 commercial broiler farms were chosen for a thorough investigation. The majority of farm flock sizes range from 700 to 3000 birds, with 1000–3000 birds included in the typical size of 1000–2500 birds of the farms under study.

Figure-3: Photographs of Broiler Farms

The number of birds and individual farm flock sizes for broiler chicken farms are as follows:

Table-1: Farm by Flock's locations and distribution Size of each chicken farm.

Farm Location	Farm ID	Name of the Farm	Individual Farm wise Flock Size	Average Flock Size
Location -1 (Daganbhuiyan)	Farm-1	Gazi poultry farm	1200	**1338**
	Farm-2	Bhuiyan poultry farm	700	
	Farm-3	Islam agro poultry farm	3000	
	Farm-4	Anowar poultry farm	1500	
	Farm-5	Moazzem poultry farm	1000	
	Farm-6	Zahir poultry farm	1200	
	Farm -7	Khokon poultry farm	800	
	Farm-8	Alauddin poultry farm	1400	
	Farm-9	Rony poultry farm	900	
	Farm-10	Monu poultry farm	1100	
	Farm-11	Mosharrof poultry farm	1000	
	Farm-12	Khurshid poultry farm	1500	
	Farm-13	Shahariar poultry farm	2100	
Location -2 (Senbagh)	Farm-14	A.G.S. poultry farm	1200	**1285**
	Farm-15	Mayer doa poultry farm	1500	
	Farm-16	Faruk poultry farm	1700	
	Farm-17	Abdullah poultry farm	900	
	Farm-18	Zahed poultry farm	800	
	Farm-19	Akbor poultry farm	1100	
	Farm-20	Zaman poultry farm	1800	

Source: Field Survey, 2023

According to the data above, small scale poultry farmers have farms with between 700 and 3000 birds. The majority of the broiler farms in the research locations were discovered to have such a

small individual farm population. The studied farm owners who raised 3000 birds per batch was approximately 5.0 percent. The majority of flock sizes are between 1000 and 2000 birds, or about 65.0 percent, which are considered manageable by farmers, and approximately 25.0 percent of farm owners have less than 1000 birds in their flocks.

3.1.3: management and oversight procedures for farms:

Table-2: Practices for Farm Supervision and Management in Broiler Chicken Farms.

Particulars of Variables	Broiler Poultry Farms(N=20)
kinds of people employed in farms:	
Owner him/herself	10 (50.0 %)
Salaried Farm manager	1 (15.0 %)
Casual hired farm staffs	6 (30.0 %)
Responsible other family members	3 (15.0 %)
Flock size of the Farms:	
Less than 1500 birds	13(65.0 %)
1500 to 2000 birds	4(20.0 %)
Above 2000 birds	3(15.0 %)
Making a decision about buying and selling farm inputs and produced live birds:	
Mostly farm owner him/ herself	15(75.0 %)
Mainly decided by farm manager	1(5.0 %)
Decided by adult family members	1(5.0 %)
Decided by other vendors	3 (15.0 %)
Veterinary care and service delivery:	
Owner him/her self	2 (10.0 %)
Manager himself	2(10.0 %)
Contractual Veterinary Doctors	15(75.0 %)
DLS other staffs	1 (5.0 %)

Sources: Field survey, 2023.(Figures in parenthesis show percentages.)

This section outlines the general farm management, production, housing, feeding, and management procedures of the chicken farms under investigation. In Table 2, I first described the management and supervision procedures for both types of farms. According to information provided by farm owners, about 50% of farm owners managed their properties alone. The majority of farmers who raised fewer than 1500 birds in their flocks accounted for 65 percent of the total. About 75% of farm owners made their own decisions about the purchase and sale of their properties. About 75% of the injured birds received treatment from contract veterinarians in terms of medical attention.

3.1.4: Housing policies in farms:

Table-3:Housing practices of Broiler poultry farms.

Particulars of Variables	Broiler Poultry Farms(N=20)
Type of poultry farm house:	
Shawn's House	2 (10.0 %)
Semi Pucca Tin shed	14 (70.0 %)
Part of structured Building	4 (20.0 %)
Location of the Chicken Shed:	
Attached to Farm owner House	12 (60.0 %)
Near to Farm owner resident House	4(20.0 %)
Far fromowner House	4 (20.0 %)
Floor Space given per bird:	
1st week to 2nd week (0.5 to 0.75 Sqft)	19(95.0 %)
3rd week to 4th week (0.76Sqft to1.0 Sqft))	15 (75.0 %)
5th week and above (above1.0 Sqft)	17 (85.0 %)
Average Feeder Size per bird:	
1st week to 2nd week (0.50 inch)	17(85.0 %)
3rd week to 4thweek (0.51 inch to 0.75 inch)	15 (75.0 %)
5th week and above (Above 0.75 inch)	16 (80.0 %)
Drinker allotted for every 50 birds:	
1st week to 2nd week (1-2 number)	17 (85.0 %)
3rd week to 4thweek (3-4 number)	13 (65.0 %)
5th week and above (Above 5)	11 (55.0 %)
Facilities for ventilation in the poultry sheds:	
South Facing and well ventilated	13(65.0 %)
North Facing and moderate ventilation	4(20.0 %)
Other facing and Electric Fan facilities	3(15.0 %)
Animal waste management and liter:	
Dip in a Pit	3(15.0 %)
Drain out	4 (20.0 %)
Sold	5 (25.0 %)
Use at Fertilizer in crop field	8 (40.0 %)

Source: Field survey, 2023 **(Figures in parenthesis show percentages.)**

The majority of farm owners, or over 70%, reported using Semi Pucca Tin sheds to make their poultry houses. All farm owners typically employ stand size and number for equitable distribution to all birds beneath the farms while managing feeders and drinking stations. On the other hand, farm owners made their chicken coops roughly 65 percent of the time facing south. The majority of farm owners used roughly 50% of their farm waste as fertilizer in their agricultural fields while some managed it through different treatment processes, as seen in the above Table 3.

3.1.5: Farm owners' procedures in regard to water, feeds, and feeding:

Table-4: Farming methods for broiler chickens in terms of water, food, and feed.

Particulars of Variables	Broiler Poultry farms(N =20)
Types and Sources of Feed:	
Readymade mixed mesh feed	**2 (10.0 %)**
Own formulated mixed mesh Feed	**3 (15.0 %)**
Readymade Pellet Feed	**15 (75.0 %)**
Feed supplement to birds:	
Not use at all	**5(25.0 %)**
Use in addition as feed additives	**13(65.0 %)**
Use growth promoter	**2 (10.0 %)**
Type of sources of Water :	
Pond water	**5(25.0 %)**
Well water	**1(5.0 %)**
Tube well water	**14(70.0 %)**

Source: Field survey, 2023 **(Figures in parenthesis show percentages.)**

Commercial poultry farming operations must adhere to strict watering and feeding regimens. In this regard, it was shown that 75.0 percent of farmers use ready-made pellet feed for their raised poultry. Farm owners used feed supplements in their feeds in about 65 percent of cases, with broilers being the most common usage. About 70% of farms use deep tube wells as their primary source of water, and almost all farm owners report adding vitamins and minerals to the water to encourage bird drinking.

3.1.6: Time table for temperatures

Table-5: Schedule of temperature for Brooding of Birds.

Age of Birds (in weeks)	Temperature of Brooding Broiler
0-1	**90ºF**
1-2	**85ºF**
2-3	**80ºF**
3-4	**75ºF**
4-5	**75ºF**

Source: Field Survey, 2023.

The majority of farmers were observed using thermometers to gauge the temperature. Farmers have maintained the following temperature schedule according to the birds' individual ages. The

majority of farm owners kept a regular temperature schedule based on the bird age in weeks as shown in Table 5.

3.1.7: System for managing litter:

Table-6: Depth of litter

Litter material	Depth	
	Winter	Summer
Wood powder	1.5-3 inch	0.5-1 inch

Source: Field Survey, 2023

Farming also requires good liter management. Given its fundamental influence on grill performance and, ultimately, the advantages of producers and integrators, the nature of litter in broiler houses is given adequate attention. According to the season, all farmers maintained a bed of wood powder (Table 6).

3.1.8: Birds' Feeding Habits and Nature of Feed:

Table-7:Feeding Methods Used in Broiler Farming

Ages of birds(in Week)	Nature of feed
First	Crumble
Second	Crumble
Third	Pellet
Fourth	Pellet
Fifth	Pellet

Source: Field Survey, 2022

More feed is consumed, more weight is gained. For the first week, the chicks should receive a small bit of nourishment every so often. The broiler chicken farmers in the research areas used the accompanying method to manage their operations. All of the farm owners who participated in the study continued to feed their raised poultry in crumble form at first, and then in pellet form after purchasing from feed business representatives. The feeding procedures are noted in the record sheets of the various farms, and it is discovered that until the second week, Broiler

chicken farm owners provided crumble feed, and once the chickens were ready to be sold, both were provided pellet feeds from the neighborhood market.

3.1.9: Bird's Health Maintenance Program:

Table-8: Adopted a bird vaccination program.

Age of Birds(in days)	Type of Vaccine	Route
1st day	Marek's (at hatchery)	S/C at neck
5th-7th day	BCRDV	Eye drop
10th-12th day	Gumboro (228E)	Eye drop
15th -17th day	Gumboro (228E)	Eye drop
21th day	BCRDV	Eye drop
28th day	ND-Killed	S/C at neck

Source: Field Survey, 2023

Successful poultry farming requires a health program. According to the health program, the individual farmers kept up their vaccinations and utilized foot baths (1% ppm) in front of the shed. The vaccination schedule listed above was used for the broiler chicken farming system, and it was almost exactly followed in the study region in the Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali Districts. Farmers rigorously adhered to the requirements of this vaccination program; otherwise, bird mortality rates would result, costing them money or reducing their margin of profit.

3.1.10: Information about live broiler bird marketing:

For proprietors of commercial poultry farms, marketing or selling is crucial since delaying the sale of birds puts the farmers at danger. In this region, broilers were produced and sold to local poultry traders and individuals when they reached the age of 4-5 weeks at the market nearby or at the rancher's doorstep. They saw that Table-9 had prices for Day Old Chicks (DOC), Feed Cost per kg, and Current Live Bird Sold Price per kg.

Table 9: Information about chicken broilers marketing at the farm level.

Farm Location	Farm ID	Purchase cost per chick	Feed cost per kg	Live bird sold price per Kg	Days of selling Birds
Location-1	Farm-1	62	71	191	35
	Farm-2	62	70	190	34
	Farm-3	61	74	185	35
	Farm-4	62	70	190	36
	Farm-5	62	73	186	32
	Farm-6	62	71	187	34
	Farm-7	62	72	193	30
	Farm-8	62	74	188	32
	Farm-9	61	70	189	36
	Farm-10	62	72	191	35
	Farm-11	62	73	190	34
	Farm-12	62	70	189	35
	Farm-13	62	70	185	36
Location-2	Farm-14	62	71	187	35
	Farm-15	62	70	184	34
	Farm-16	61	74	185	35
	Farm-17	62	70	190	36
	Farm-18	62	73	191	32
	Farm-19	62	71	189	34
	Farm-20	62	72	190	30
	All	61.85	71.55	188.5	34

Source: Field survey, 2023

According to approximated data, the average prices of Day Old Chicks (DOC), per kg broiler feed, and per kg mature live broiler prices were discovered as being Tk. 61.85, Tk. 71.55, and Tk. 188.5 accordingly in the case of broiler farming.

3.2: Production and Economic Performances of Broiler Chicken farming

The recorded data on production and economic parameters were collected and analyzed to assess the farm profitability of both locations and showed as follows in Table-11 and Table-12. Finally summarized the average values of the respective parameters to estimates the per bird farm profitability of the studied farms.

Table-10: Indicators of farm-level production performance for the broiler farming system.

Farm Location	**Farm ID**	Body weight in kg	Feed intake per bird in kg	FCR	Mortality rate %	Livability rate %
Location -1	Farm-1	1.7	3.0	1.76	2.7	97.3
	Farm-2	2.1	3.1	1.47	1.0	99
	Farm-3	1.9	3.1	1.63	1.3	98.7
	Farm-4	2.0	3.4	1.7	1.8	98.2
	Farm-5	2.1	3.5	1.67	2.3	97.7
	Farm-6	2.0	3.4	1.7	1.9	98.1
	Farm-7	2.2	3.5	1.59	1.2	98.8
	Farm-8	2.0	3.1	1.55	3.1	96.9
	Farm-9	2.0	3.2	1.6	3.00	97
	Farm-10	2.2	3.5	1.59	2.5	97.5
	Farm-11	1.8	3.6	2	2.85	97.15
	Farm-12	2.1	3.4	1.61	2.30	97.7
	Farm-13	1.6	3.2	2	1.80	98.2
Location -2	Farm-14	1.9	3.2	1.68	1.7	98.3
	Farm-15	2.0	3.5	1.75	2.3	97.7
	Farm-16	1.7	3.0	1.76	1.6	98.4
	Farm-17	1.8	3.2	1.78	1.9	98.1
	Farm-18	2.1	3.4	1.619	2.1	97.9
	Farm-19	1.7	3.3	1.94	1.82	98.18
	Farm-20	2.1	3.4	1.62	2.12	97.88
All average		1.95	3.3	1.70	2.06	97.94

Source: Field survey, 2023.

Table-11: Indicators of farm-level economic performance for the broiler farming system.

Farm Location	**Farm ID**	Gross Cost per bird (Tk.)	Gross Return per bird (Tk.)	Net profit per bird (Tk.)	BCR
Location -1	Farm-1	305	324.7	19.7	1.06
	Farm-2	309	399	90	1.29
	Farm-3	320.4	351.5	31.1	1.09
	Farm-4	330	380	50	1.15
	Farm-5	347.5	390.6	43.1	1.12
	Farm-6	333.4	374	40.6	1.12
	Farm-7	344	424.6	80.6	1.23
	Farm-8	321.4	376	54.6	1.16
	Farm-9	315	378	63	1.2
	Farm-10	344	420.2	76.2	1.22
	Farm-11	354.8	342	-12.8	0.96
	Farm-12	330	396.9	66.9	1.20
	Farm-13	316	296	-20	0.93
Location -2	Farm-14	319.2	355.3	36.1	1.11
	Farm-15	337	368	31	1.09
	Farm-16	313	314.5	1.5	1.00
	Farm-17	316	342	26	1.08
	Farm-18	340.2	401.1	60.9	1.18
	Farm-19	326.3	321.3	-5	0.98
	Farm-20	336.8	399	62.2	1.18
All average		**327.95**	**368.26**	**39.785**	**1.12**

Source: Field Survey, 2023

3.4: Calculating Costs and Returns:

According to data in the table, the average living weight of each bird was 1.95 kg. It was discovered that each bird consumed an average of 3.3 kg of feed. Both the mortality rate and the livability were determined to be 97.94 and 2.06 percent, respectively. The average marketing age of birds was 34 days, and the feed conversion ratio (FCR) was 1.70. Finally, the broiler's benefit cost ratio is 1.12. The average amount of broiler chicken meat produced per bird, according to Borah and Halim (2017), was 2.18 kilograms. According to Dahake et al. (2016), the benefit-cost ratio was 1.15. According to Singh (2017), at 42.21 days old, the average body weight was 1.80, the FCR was 1.60, and the livability percent was 95.

Table-12: Estimation of Farm profitability per bird.

Particulars of items	Average	Maximum	Minimum
1. Live weight per bird (in Kg)	**1.95**	**2.2**	**1.60**
2. Feed intake per bird (in Kg)	**3.3**	**3.6**	**3.0**
3. Feed Conversion Ratio FCR	**1.70**	**1.47**	**2.0**
4. Mortality rate (in %)	**2.06**	**3.1**	**1.0**
5. Livability rate (in %)	**97.94**	**99.0**	**96.9**
6. Average Flock size (in number)	**1320**	**3000**	**700**
7. Average marketing age (in days)	**34**	**36**	**30**
8. Gross Cost per bird (in Tk.)	**327.95**	**305**	**354.8**
9. Gross Return per bird (in Tk.)	**368.26**	**424.6**	**296**
Net profit per bird (in Tk.)	**39.785**	**80.6**	**-20**
Benefit-Cost Ratio (BCR) Undiscounted)	**1.12**	**1.29**	**0.93**

Source: Field survey, 2023.

The above results indicated that, broiler farming areas marginally profitable and risky livestock agribusiness enterprises in the study.

CHAPTER-IV

PROBLEMOF POULTRY FARMING SYSTEM

In the research locations in Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali Districts, we found a few significant issues as well as potential future revenue streams for raising broiler farming. These areas are described below:

4.1.1: Price fluctuations for live broilers and chicks:

Day-old chick prices fluctuate quite a bit throughout the year. It ranged from 50 taka to 62 taka per DOC in 2023. The same year saw some instability with live broiler as well. At the producer level, it ranged from 140 taka to 230 taka per kg of live broiler. Farmers were angry and extremely frustrated by this variation.

Price instability of both chicks and live broiler was second constraints (Kawsar, 2014). Fluctuation of market price of broilers affected the profitability, consisted with some researchers (Raha 2007; Begum and Alam 2009).

4.1.2: High cost of broiler feed:

Due to high cost of broiler feed the industry of small and medium range broiler farmers are in danger. The farm owner hardly bear the production cost of broiler chicken and maintain stuff salary. The net profit is very low who buy broiler feed from market and hiring manager and stuff for maintenance of poultry farm.

4.1.3: Quality variations in the chick:

Chick quality was the most elevated in scoring among the imperatives of the ranchers (Kawsar et al., 2013 and Chand et al., 2009). Various variables identify with raiser ranch and incubation facility the board influences the quality chick's creation (Chowdhury, 2013). The chicks are conveyed to vendors and specialists after purported reviewing. Chicks of various grades like A, B,C, and so forth unmistakably demonstrate variety in quality (Chowdhury, 2011). As a result, ranchers are receiving a variety of high-quality chicks that affect performance. Ranchers are unhappy because of the executives and advertising. superior feeding.

4.1.4 : Summertime stress has an impact on productivity and survival:

Exotic high yielding strains of broiler chicks are not heat tolerant. The problems are arisen in summer because of temperature raised 35-420C. Therefore, productivity and survivability are decreased. So, some strategies should be applied against heat stress (Lin et al., 2006)

4.1.5: Medications for illnesses:

In spite of the fact that counters action is the way to make accomplishment in battling infections (Chowdhury, 1984). Treatment for sick birds may occasionally be used. Quacks and unqualified workers shouldn't, however, be involved in veterinary procedures that could have a negative impact on the productivity and raising of poultry.

4.1.6: Inadequate vaccination:

Vaccination can avoid several serious diseases. One of the main obstacles to the growth of broiler farms in the Daganbhuiyan and SenbaghUpazilasof Feni and Noakhali Districts was disease outbreak. These infections were avoided in the research area thanks to an effective vaccination campaign, but the cost of the vaccine, its inappropriate storage, and the scarcity of supplies make it difficult to stop the spread of diseases there. The availability of vaccinations against the major diseases was inadequate in terms of both quantity and quality. However, from the district livestock office to the Thana livestock office, the potency fell, and at the user's level, it ultimately drops approx. 40 to 70 percent.

CHAPTER-V

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions:

According to the explanation above, the Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali Districts are a prospective zone that is ideal for raising and producing broilers. But first, the aforementioned issues and other limitations must be resolved urgently. In order to satisfy the public's demand for protein and alleviate poverty, broiler farms might then be established, providing work possibilities for those who are unemployed. The government must take appropriate action and play a significant role in the creation of a poultry zone in this area by resolving issues and providing current farm owners with more options. The government can implement a large-scale plan to create a farm in each Upazila of Bangladesh, which would serve as a model for locals to build their own farms. Finally, it can be concluded that the farming of broilers improved rural livelihood in the research region as well as the socio-economic development of the broiler farmers.

5.2 Recommendations

- The government needs to check the reasonable price of day-old chicks and poultry feed.
- Reasonable Feed Prices: To solve the country's feed shortage, the majority of the sample traders recommended that the government and non-governmental groups play a key role in providing sufficient broiler feed so that the traders could buy feed at a fair price. They also recommended building an adequate feed facility in the research region.
- Facilities for institutional loans should be made available to owners of poultry farms so they can obtain credit on convenient terms.
- The proprietors of poultry farms should receive brief instruction from DLS on adequate housing, feeding, disease control, marketing, and management.
- The government should keep an eye on market price stabilization to ensure that farmers can make a respectable profit.

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APPENDIX

Study on Commercial Broiler farming in Daganbhuiyan and SenbaghUpazilas in the Feni and Noakhali Districts.

Questionnaire

1. A. Name of the farm.....

B. Name of the owner/Farmer/Employee.....

C. Address: Village.....Union.....

P.O.....Thana.....District…..

D. Farmer's education.....

E. Children number.....

F. Farmer's economic condition.....

2.Husbandry practice:

A. Housing: a. Brooder house b. Grower cum finisher house

B. Feeding:

• Collection of feed.....

• Storage of feed ….....

• Types of feed.....

• How many times feed supplied daily.....

C. Watering:

• Source of water

• Frequency of water supply

D. Litter materials.....

E. Ventilation

a. Sufficient. b. Insufficient

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F. Lighting schedule……

G. Biosecurity.....

H. Foot bath: ……...

3. Number of sheds.....

4.Incidence of diseases……..

5.Management of disease condition:

a. Self-management

b. Quack

c. Veterinary doctor

b) .Healthprogramme:

a. Vaccination

b. Anthelmintic

7. Mortality rate: .....

8. Marketing system: …….

9. Cost & return: ……

10. The farm is profitable or not.....

Name of the interviewee..... Name of the interviewer.....

Date..... Date: …….....

Signature..... Signature.....

BIOGRAPHY

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