

Introduction

According to food and agricultural organization and world health organization guideline 60% of our energy comes from grain products, 10-15% energy are said to come from protein. 20% of this protein comes from animal meat. In Bangladesh on an average 1 person eat 8 gram of egg and 14 gram of chicken meat every day. From these 0.33 gram of protein comes respectively. 33 to 66 percent protein should be in the daily diet. And there should be at least 15 gram of animal meat where 4 grams of protein comes from broiler meat. Developing countries like ours broiler meat is cheap and readily available source to fulfill the daily needs of first class middle class, lower middle class and lower class peoples nutrition.

Poultry farming have emerged as a major income generating enterprise in agriculture sector over the last three and a half decades. Today, poultry production has become one of the most rapidly growing enterprises within the reach of the poor, women, marginal farmers and entrepreneurs, considering the trends of population growth, urbanization, road access, transportation linkages, increasing awareness on nutrition and growing demand for consumer products, increasing international level restaurants, it will be safe to assume that poultry sector will constantly grow un a foreseeable future. In addition, since poultry farming are within the reach of all classes of society, including women, marginal farmers and schedule caste and tribes, it could become one of the government's strategic activities for poverty reduction and for reaching the most disadvantaged socio economic groups.

Domestication of poultry is said to be have started in Asia and there is evidence of domesticated chicks in china that goes back to 3000 B. C. It is believed that today's breed originated in India, since the earliest record of poultry dates back to about 3200 B.C. in that country. Green Armytage (2003) reports, however, that archaeological evidence of chickens in India dates back only to 2000 B.C. Ketelaars and saxean (1992) indicate that the first domestication of fowl took place in china and not in south East Asia. Chickens appear in writing and artwork of ancient Greece. They may have been brought to Greece from Persia, and Persian soldiers brought them from India (Green Armytage, 2003)

Chickens have been bred in captivity in Egypt since about 1400 B.C. the red jungle fowl, an Asian breed, is assumed to be the ancestor of our modern poultry breeds (West and Zhou, 1989). The warm regions of world were the areas from which all modern breeds of chickens have evolved. Poultry were kept by farmers in china, India and East Asia long before they were known to Europeans and Americans (Van WulfetenPalthe, 1992). Poultry as a business, however, was not known before the twentieth century. It was not until R.T.Maitland wrote his manual and standards book for the poultry amateur, in which he describes the husbandry, care and breeding of poultry with a short description of poultry strains present at the time.

Poultry production and marketing has been the major source of income of most of the people in Bangladesh. They are obtaining their better livelihood from the outcomes. However there are several problems being encountered during the production process which need to be identified and solved systematically and scientifically and systematically.

Methods and Procedure:

Remove all dirt and old litter from the house. Sweep the floor, walls, and ceiling. Wash the house out thoroughly using a pressure nozzle, a lot of water and “elbow grease.” Repair the windows, doors, screens and ventilators to prevent drafts and keep out predators. Use a disinfectant to disinfect the building and all the equipment. Cover the dry floor with 2 inches of dry litter. Use sawdust dry material as litter. Put a brooder guard around the heat source, feeders, and waterers. Place the feeders and waterers around the heat source so the heat is in the middle of the circle. Adjust the temperature to 95 degrees F. about 2 inches above the litter several hours before the chicks arrive. Fill feeders and waterers at the same time.

Selection of the study area

The research work has been conducted at broiler farm at Hathazari, Chattogram

Sample size, sampling population, and sampling procedure

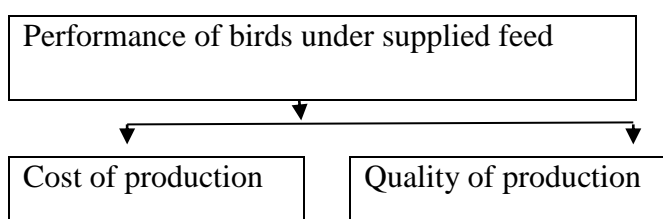
1. 600 broilers cob-100 breed have been reared.

2. There were 10 groups which were formed to rear the broilers.
3. For data recording average of 10 randomly selected birds were taken as a unit from each group.

Materials required:

1. Chicken 600
2. House (33x 19) ft²
3. Feeder 20 and waterier 20
4. Electric bulb of 100 watt , 6 pieces
5. Bucket 2, mug2 and, weighing balances
6. Additives electro care, vimerol, etc. and vaccines.
7. Litter sawdust 20 bags
8. Broiler was taken from the company – Nahar, Mir Sarai, Chattogram
9. Feed was taken from the company – RRP, Hathazari, Chattogram

Research methodology framework



Material and method

Site selection:

Rearing of chicks was done in poultry shade at broiler farm of Hathazari, Chattogram. The house was well ventilated there was facility of storing feed, water, lighting and many other related facility.

Preparation of brooder and brooding house:

Brooder was cleaned on order to make free from the dust and drooping and to prevent spread of disease to the chicks. Brooder was cleaned or washed with the help of surf and water mixing with phenyl. After cleaning the brooder is parts were assembled and heater and lightning was checked.

Cleaning and disinfection of brooder house:

The movable equipments such as feeder and waterier were removed from poultry shed for cleaning and disinfection. Floors, interior walls and roof were scrubbed and precious litter was disinfected Karsoline @0.3%.

Litter management: Sawdust was used as litter by maintaining 2cm thick on floor. The litter was stirred twice in a week to prevent watery. Wet litter was removed and dry was replaced. Before placing the litter in poultry house, dust lime was used as disinfectant.

Brooding and rearing:Chicks should be kept warm and fed on a well balanced diet the care and management of chicks during early part of life continuous brooding successful brooding results in production of healthy chicks in terms of quality and quantity.

After receiving of chicks they were put in well heated brooder which has run 24 hr before the arrival of chicks with proper temperature of 90⁰F -95⁰F with adequate dry litter. The temperature was maintained as below;

Age	Temperature (°F)
1 st week	95
2 nd week	90
3 rd week	85
4 th week	80
5 th week	75

Lighting management: Brooder house was provided with 24 hours light throughout the growing period with one 100 watt bulb for each 115 sq. feet of floor space.

Floor space: Each group has 62.7 sq. feet floor space for 60 birds. Thus total space for 600 birds was 627 sq. feet.

Feeding: Broiler was fed with two type of ration i.e. broiler starter (B1) and finisher (B2). The former ration was fed up to 5 week of age and later till marketing. The starter

ration contains 23-24% cp and finisher containing same level of ME i.e. 3200 ME Kcal/kg feed.

Vaccination:

Broiler was vaccinated as follows:

Age	days of vaccination
5 th day	ND vaccine
12 th day	IBD Gumbaro Vaccine
18 th day	ND Booter
28 th day	IBD Booster Vaccine

Vaccination process:

ND vaccine was given through eye.

Gumbaro (IBD) vaccine was given through orally.

Result

1. Quality product with average live weight of 2 kg to 2.2 kg up to 35 days.
2. The mortality rate was found to be:

$$\begin{aligned}\text{Mortality rate} &= (\text{total death}/\text{total chicks}) * 100 \\ &= (30/600) * 100 \\ &= 5\%\end{aligned}$$

3. Total number of death = 30.
4. Total number of chicken sold = 570
5. Feed intake rate per bird was found to be:

$$\begin{aligned}\text{Feed intake} &= (\text{total feed consumed}/\text{total no. of chicks reared}) \\ &= 1500/600 \\ &= 2.5 \\ &= 2.5 \text{ kg per chick (approx)}\end{aligned}$$

Disease

No any such diseases and parasites were found.

Budget summary

Particulars	Quantity	Cost in Taka
Disinfectants	1	125
Litter	6	1100
Electricity bill	400 unit	3000
Transport Cost	-----	1000
Feed	30	66000
Vaccine	4	1200
Bulbs 100W	6	160
Vitamins (A,D, B1, B2) with relevant medicine	-----	2500
		75085

Income:

Particulars	Rate	Total live weight (Kg)	Total amount (Tk)
Broiler bird live/kg	100	1140	114000
Total income			114000

Profit = 114000– 75085 = 38915

Work schedule

Activities performed:

- Cleaning the shed
- Disinfection
- Management of chicks (feeding, watering)
- Brooding of chicks
- Vaccination
- Management of shed
- Observation

Conclusion

The work on scientific rearing of poultry was completed successfully. This project was found to be beneficial from an academic, economical point of view, and the project was achieved. Also, I became aware of agriculture practice in poultry farming in our location.

Many problems were faced during project work like lack of bio-security and problems in feeding. This made me aware of problem monitoring, rearing of poultry chicks, and good management practices for future or upcoming poultry production programs, so that problems can be solved with maximum profit. This work helps us to gain technical skills and makes us capable of analyzing the cost and benefit of broiler rearing, and confidence was built upon me as a student.

ACKNOWLEDGEMENT

All praises are due to the Almighty creator and supreme authority of the universe, who has blessed me with the strength and opportunity to complete the report successfully.

In my journey towards this achievement I have found a teacher, an inspiration, a role model and a pillar of support in my supervisor, Assistant Professor **Dr. Moksedul Momin**, Department of Genetics and Animal Breeding.

I would like to thank & take pride in acknowledging the insightful guidance of to Vice Chancellor, Professor **Dr. Goutam Buddha Das**, Chittagong Veterinary and Animal Sciences University.

I would like to express my deep sense of gratitude and thanks to Professor **Dr. Abdul Ahad**, Dean, Faculty of Veterinary Medicine, CVASU.

I express my sincere gratitude and thanks to Professor **Dr. A. K. M. Saifuddin**, Director of External Affairs, and for his supervision and kind co-operation during the period of internship.

Very Special thanks to all my friends without whom this work can't be done at all.

Last but not least, I am profoundly grateful to my family members for their endless sympathies, kind co-operation, sacrifices and prayers.

BIOGRAPHY

This is Abdullah Al Ahad. I completed S.S.C in 2011 and H.S.C in 2013. I got admitted into Doctor of Veterinary Medicine (DVM) degree under Chattogram Veterinary and Animal Sciences University in 2014-2015 session. As an upcoming Veterinarian, I would like to dedicate my rest of the life for the welfare of animals. I am keen to be a field veterinarian as well as. a skilled practitioner