

List of table

| Table | Title | Page No |
|--------------|---|----------------|
| 3(I) | Farmer's socio economic information..... | 06 |
| 3(II) | Balanced ration for pigeon..... | 09 |
| 3(III) | offered diet by farmers..... | 09 |
| 3(IV) | Breeding details of pigeon..... | 09 |
| 3(V) | Management & marketing of pigeon & squab..... | 11 |
| 3(VI) | Annual gross cost for single pair..... | 12 |
| 3(VII) | Annual gross return for single pair..... | 12 |

List of figures

| No | Title | Page No |
|-----------|--------------------------------------|----------------|
| 3(a) | different pigeon breed..... | 07 |
| 3(b) | Housing materials used..... | 08 |
| 3(c) | vaccination & medication status..... | 10 |
| 3(d) | cost benefit relation..... | 13 |

ABSTRACT

Consumers prefer variation in their daily food item. Pigeon meat has become one of those food items for superb test, high nutritional value. Considering this significance a study was conveyed using a pre-tested interview schedule in the senbag upazila of Noakhali district to study the socio-economic status, management practice of pigeon, production performance and profitability of pigeon farming. Data were collected from 200 pigeon farmers in different village of senbag upazila. Besides housing of pigeon, common breed, quantity of feed supplied, breeding & hatching, vaccination medication status, price and profitability of pigeon farming also available. This study reveals lots of facilities, limitation of pigeon farming. Facilities are doing pigeon farm don't need great amount of money. Unlike many other domestic animals and birds, pigeon farming requires less labor and low investment. That's why most of the fresher are students (34%), house wife (64%) utilize their free time, free space on rooftop, balcony. This docile monogamous bird does not need too much care and attention without for New castle (ND), pigeon pox, cold during starting of winter. 80% pigeon of total population affected by ND, pigeon pox due lack of vaccination. In the study area 46% people know there are two vaccine for pigeon but don't vaccinate due to lack of facilities. Even 10% have no idea about pigeon vaccine. Pigeon hatchability which remains 99% in summer season, fall down in winter (28%) as a result of faulty management during this time. Existing all these limitation people never lose hope of pigeon farming having facilities. Each pair gives one pair squab per month. The price of per pair squab is 250 taka – deshi breed, 300 taka in case of cross breed. The price of mature pigeon pair is in 500-1000 taka. Some aristocratic breed price is 50 thousand to more than lakh. There is a lot demand of squab meat in market due to its delicacy and taste. Being the symbol of peace and beauty there are enormous demand for different pigeon breed in the market. The pigeon farming may be increased with government initiative providing training to farmers and extending loans. Introduction meat breeds, good flock size and balanced feed need to be ensured for improving income and employment opportunity.

Key words: pigeon, pigeon farming, Newcastle .

CHAPTER-I

INTRODUCTION

Pigeon is one species from 12 species of poultry which is loved, fascinated, attracted, preferred, cared by people from different religion, culture, color, region. For their charming morphology, aristocratic life cycle, docile behavior makes more affection. The rock pigeon is the world's oldest domesticated bird. Mesopotamian cuneiform tables mention the domestication of pigeons more than 5,000 years ago, as do Egyptian hieroglyphics. Research suggests that domestication of pigeons occurred as early as 10,000 years ago. Pigeon have made contributions of considerable importance to humanity, especially in times of war. The geographic condition and vast areas of crop field along with housing premises of Bangladesh are suitable for pigeon farming. The contribution of pigeon has not yet been considered in relation to the contribution of livestock sub-sector & whole poultry production though the pigeon provide alternative source of animal protein.

Low investment, minimum worker, less feed & housing cost involved, easy and economic husbandry practices, short reproduction cycle & less disease occurrence are observe for pigeon farming. All these facilities are appropriate for any kind of entrepreneur. In our country lots of graduate passed every year and remain unemployment, depressed due to shortage of jobs. Besides many house wife who want to contribute their family. Many students want to utilize their free time. All of them can improve their condition by starting pigeon farm. side by side can contribute family, society, nation.

Pigeons are used in natural beautification & ornamental birds as source of recreation, source of palatable, delicious & easily digestible animal protein. Pigeon feces can be used as source of bio-fertilizer. This bird also used as the laboratory animal in case of genetic & hormonal studies. Hence profitable pigeon farming may be an easy & reliable source of employment opportunity. Way of family action utilization & cash income sustainable & increasing rate of pigeon farming may enhance the rate of reducing gap of animal protein, increase the rate of poverty reduction & it may improve the socio-economic status of the rural poor community. The ability of pigeon to carry messages has been reliably exploited in the welfare, trade, friendship maintenance and political administration.

The objectives of the study are as follows:

1. To know the socio- economic status of the farmers.
2. To identify the common management practice of pigeon rearing.
3. To evaluate the production performance & profitability of pigeon farming.

CHAPTER-II

MATERIALS AND METHODS

2.1 Study area:

Several villages (Nolua, Moidipur, Lalpur, Sebarhaat, Babupur) under senbag upazila of Noakhali district and 200 farmers were selected from these villages purposefully and randomly. The selected farmers were considered on the basis of their traditional crop production combined with pigeon production system.

2.2 Duration of study:

This questionnaire survey was conducted from 13th October to 12th December, 2019.

2.3 Selection of sample:

A total of 200 farmers were randomly selected for data collection in which around 20 were from every selected village.

2.4 Questionnaire design and data collection:

On the farm visit, working in the hospital, a pre-structured questionnaire survey was used to collect applicable information of pigeon. A close ended (categorical) and open ended questionnaire were designed. Data were collected through direct randomly interviewing method questionnaire.

2.5 Statistical analysis:

Data obtained were entered into Microsoft excel 2010. Results were expressed in percentage each category of variable.

Chapter-III

RESULT AND DISCUSSION

3.1 Age of pigeon farmers:

Age of the pigeon farmers ranged from 12 to 90 years. The farmers were stratified into 3 age categories; young < 25, middle age < 50, and old > 50.

3.2 Literacy level of the pigeon farmers

Level of education is an important indicator of pigeon farming. The literacy level of the studied pigeon reared is categorized as four groups such as illiterate, primary, secondary, higher secondary and above. In the study area, it was shown that 2% farmers were illiterate followed by 7% had primary education and 25% had secondary, 58% had higher secondary education where 8% were above.

3.3 Occupation of the pigeon farmer

Occupation helps to express which type of people have time and affection for rearing of pigeons. It is categorized as three groups such as student, housewife, job holder. Study revealed that 34% students have huge time and affection, 63% were housewife and 3% were job holder.

3.4 Pigeon rearing experience of farmer

Rearing experience indicates the poor management knowledge of pigeon farmers. The pigeon farmers were classified into 3 categories; namely shorter < 3 years, moderate < 6 years, longer > 6 years.

3.5 Land holding size of the farm owners

Land holding sizes are classified into four groups such as Landless farmer (0-0.49 acre), small and marginal farmers (0.5 -1.49 acre), medium farmers (1.5-2.49 acre), large farmers (>2.5 acre).

Table 3(I): Farmer's socio- economic information

| Characteristics | Category | Farmers no N=200 | Percentage (%) |
|--------------------------|---------------------|-----------------------------|-----------------------|
| Age (year) | Young <25 | 106 | 53 |
| | Middle<50 | 90 | 45 |
| | Old > 50 | 4 | 2 |
| Education | Illiterate | 14 | 7 |
| | Primary | 50 | 25 |
| | Secondary | 116 | 58 |
| | Higher | 16 | 8 |
| Occupation | Student | 68 | 34 |
| | House wife | 126 | 63 |
| | Job holder | 6 | 3 |
| Experience | Shorter <3 | 12 | 6 |
| | Moderate <6 | 54 | 27 |
| | Longer >6 | 138 | 67 |
| Land holding size (acre) | Landless (0-0.49) | 26 | 13 |
| | Marginal (0.5-1.49) | 84 | 42 |
| | Medium (1.5-2.49) | 70 | 35 |
| | Large >2.5 | 20 | 10 |

3.6. Rearing of pigeon

Pigeons are generally raised in pairs. Male female pigeon both tend to spend their whole life together. Most people start pigeon farming by buying 1-2 pair squab, 2/3 month or paired birds. After providing house, feed for several days pigeon become habituated. When they try to fly, travel different place, collect food and come back home at evening. This semi-intensive type rearing is followed by 99% farmer. The great advantages of this system are can express their natural behaviour, exposure of physical exercise, gather some necessary nutrient which may be absent in offered feed. Male and female both collect straws together and build a small nest for raising their family. Female pigeons start laying eggs around the age of 5-6 months. Each time the couple lays two eggs and they can keep breeding with consistency for about 6 to 8 years.

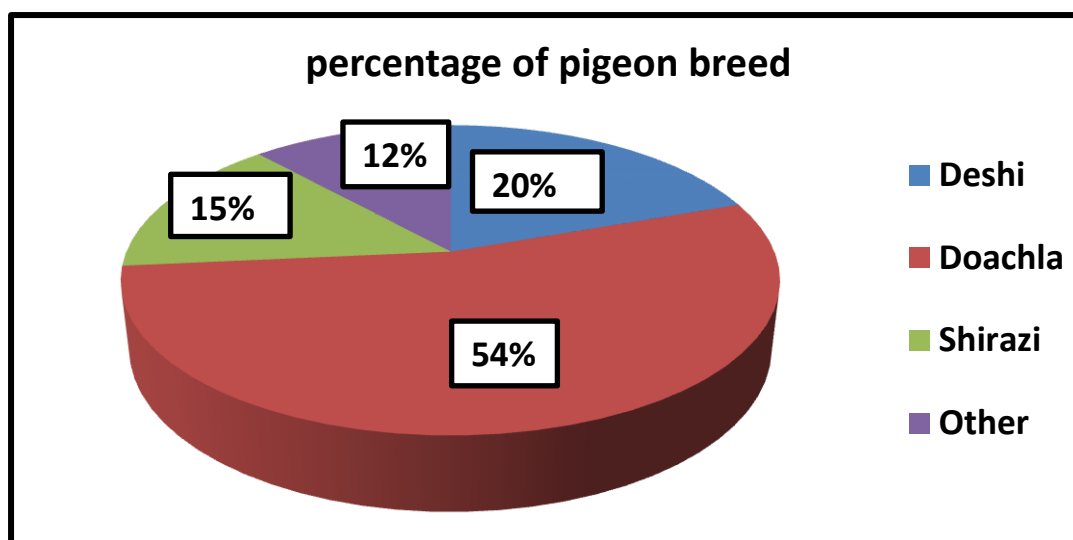
Both male and female pigeons take turns to hatch their eggs. Usually, it takes about 18 to 20 days to hatch the eggs. The stomach of the parent pigeons produces crop milk 2 days before the hatch, which they feed to their babies for 4 days. Female pigeons feed their babies ground semi-solid for

ten days with their mouth. After that, the babies start taking supplementary food on their own. At the age of 26 days, they become fully adult.

3.7. Popular pigeon breeds

- **Breeds for meat production:** white king, silver king, Texona , Gola, Lokkha, etc.
- **Breeds for beauty and recreational:** Moyurponkhi, Shirazi, Lahori, Fantail, Jacobin, Frillback, Modina, Trumpeter, Trubit, Mukhi, Giribaz ,Templer, Lotan etc.

Figure 3(a): different pigeon breed in senbag upazilla.



DESHI



DOACHLA



SHIRAZI

3.8. Management practices followed by the owners of pigeon

Housing:

Farmer used a variety of materials for pigeon housing. Wooden box, bamboo box, plastic cage, iron case have been observed in the study area. Wooden box is mostly preferred. Pigeon like to remain separate completely from others view which can be maintained by wooden wall. Besides cost of this type box is least, some farmer made box by spare wood.

One pair requires a separate box during laying and hatching. When the squab become 25-30 days parents pigeon transfer another room or box for the next laying. For that reason additional boxes are included. The size of pigeon nest is around 24 inches length, the height 18 inches and the depth about 17 inches. This size gives enough space for the parent pigeon & their future offspring.

Figure show that about 85% farmers used wood followed by 12% farmers used bamboo, and 3% farmers used others (iron cage , cardboard, tin). Some farmer use to offer several soft materials like straw, hey, rice husk etc during laying period as precaution of egg broken.

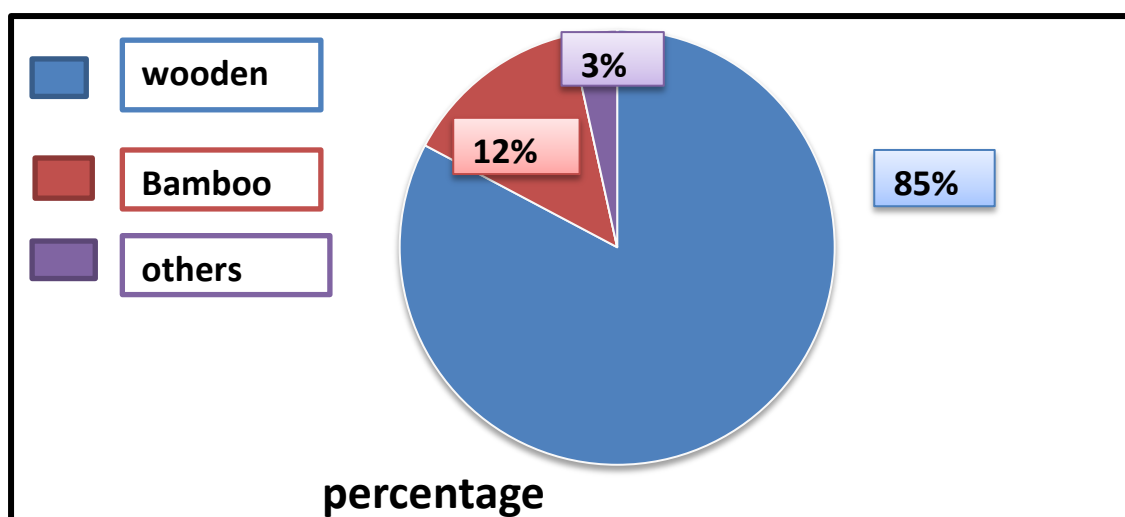


Figure 3(b): Housing materials used by farmers

Feeding:

Pigeon usually eat wheat, maize, paddy, rice, enamel, legume , gram and mustard seeds etc. keeping foods in front of their house or scatter them on rooftop on a regular basis and they will collect and feed by themselves.

In senbag upazila, 42% pigeon farmer offer broken gram. This was due to the cost of the gram (40tk/kg, during study period). 19% farmers also offer wheat with gram. During harvesting of paddy, it is available everywhere and most of the farmer in the studied area cultivated paddy different time of the year. So 39% farmer offered gram mix with paddy.

Table 3(II): Balanced ration for pigeon

| Feed Amount (kg) | |
|-------------------------|-----------|
| Broken wheat | 2.8 |
| Broken maize | 2.2 |
| Mustard | 1.0 |
| Broken gram | 1.0 |
| Soybean cake | 0.8 |
| Rice bran | 1.8 |
| Salt | 0.4 |
| Total | 10 |

Table 3(III): provided diet by farmers

| Feed ingredient | Farmer (%) |
|----------------------------|-------------------|
| Broken gram | 42 |
| Broken gram, wheat | 19 |
| Broken gram, rice or paddy | 39 |

Each pigeon can consume 35-50 grams of feed grains daily. Up to 15-16% protein need for pigeon feed. For growing baby pigeons faster and for nutrition of the adult farmer provided oyster shells, limestone, bone powder, salt, greet mixture etc.

Baby pigeon's feed

Baby pigeons (squab) don't need any kind of special feed for up to 5-7 days. They can get all the nutrients they need from crop milk that their parents produce. This secretion called pigeon milk. Male and female pigeon feed their babies processed ingredients from their stomach for up to 10 days.

Breeding and hatching

Generally male and female pigeon stay in pairs. During laying period they collect straw and make a small nest. Female pigeon start laying eggs when they reach 5 to 6 months of age. They lay a pair of egg after every one month. Both male and female pigeon hatch the eggs one after another. It takes about 17 to 18 days to hatch the eggs.

Table 3(IV): breeding details of pigeon

| | |
|---------------------------|-------------------|
| Type of pair | Monogamous |
| Laying age of female | 5 to 6 month |
| Number of egg per nesting | 2 eggs |
| Incubation period | 17 to 19 days |
| Peak period | Spring and summer |
| Constantly lay egg | 6 to 8 years |
| Average lifespan | 12 to 15 years |

3.9. Vaccination and medication



NEWCASTLE ,ND



VACCINATION



PIGEON POX

Most of the owner said that pigeons are affected mostly first few days of starting of winter by new castle , salmonella, pigeon pox , common cold etc. some owner hardly treated the sick pigeon, they used to slaughter or sell. About 80% owner said that new castle is the main reasons for mortality.

According to data analysis, 46% owner didn't use vaccine and medicine for controlling disease due to lack of facilities. It is a major obstacle.

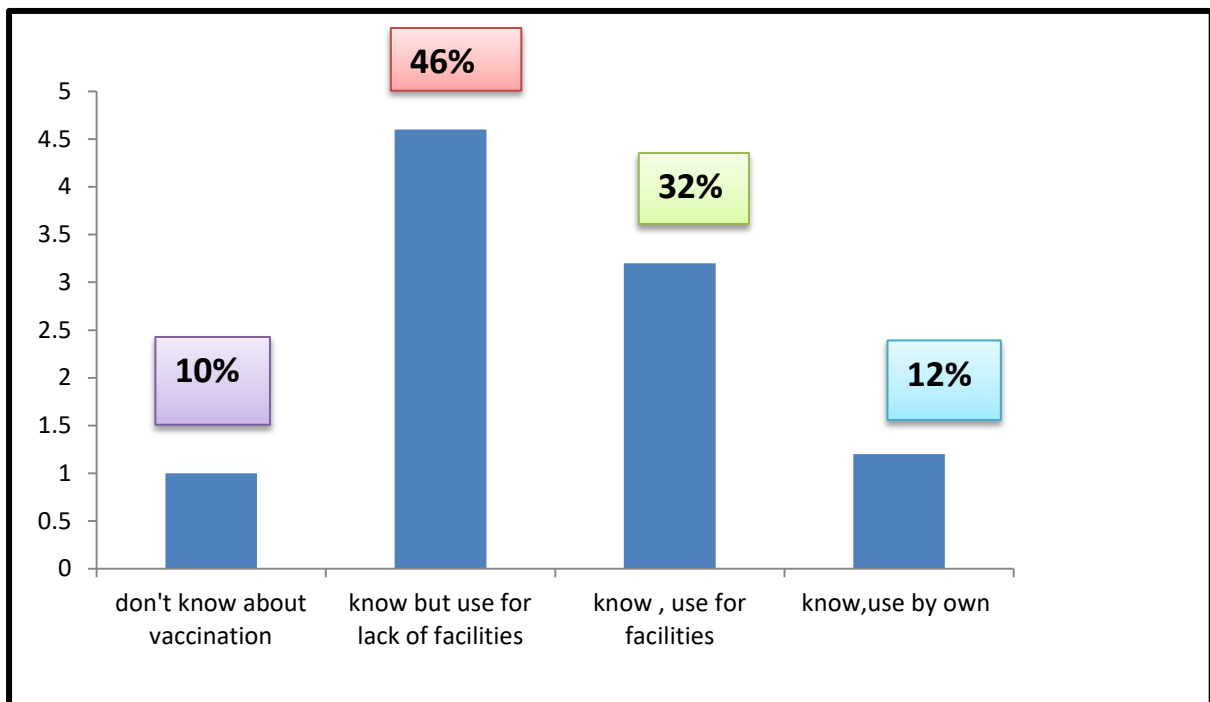


Figure 3(c): vaccination and medication status of owner

Table 3(V): Management and marketing of pigeon and squab

| parameter | Pigeon farmers | | Range | | Mean |
|--------------------------------------|----------------|-----|---------|---------|------|
| | no | % | minimum | maximum | |
| Marketing age of squab | | | | | |
| 20-24 days | 24 | 12 | | | |
| 25-29days | 116 | 58 | 20 | 30 | 27.4 |
| 30-35days | 60 | 30 | | | |
| total | 200 | 100 | | | |
| Weight of squab (g/squab) | | | | | |
| 200-300 | 32 | 16 | 200 | 300 | 257 |
| 240-250 | 102 | 51 | | | |
| 260-300 | 66 | 33 | | | |
| Total | 200 | 100 | | | |
| Price of squab | | | | | |
| Low (200-250) | 74 | 37 | | | |
| Medium(260-300) | 116 | 58 | | | |
| high (>310) | 10 | 5 | 200 | >300 | 296 |
| total | 200 | 100 | | | |
| Production of squab/year/pair | | | | | |
| Low(18-20) | 70 | 35 | | | |
| Medium(20-22) | 92 | 46 | | | |
| High(22-24) | 38 | 19 | 18 | 24 | 20 |
| total | 200 | 100 | | | |

3.10. Cost, return and profitability of pigeon rearing

Per pair annual gross cost:

Cost, return calculation helps to compare benefit of different poultry farming. Table 3(VI) & 3(vii) shows cost, return of pigeon farming of study area, where time bound was among 13th October – 12th December, 2019. The owners with 40-50 pigeons usually don't hire labour and work by themselves. It was found from data that the average cost for squab, feed, medicine & vaccination housing was 250, 410, 50, 200 respectively.

Table 3(VI): per pair annual gross cost (average)

| Item | Per pair annual cost (tk) | |
|-------------------------|---------------------------|-------------------------|
| | Gross cost | Depreciation cost (10%) |
| Squab cost | 250 | |
| Feed cost | 410 | |
| Medicine & vaccination | 50 | |
| Housing cost | 200 | 20 |
| Total depreciation cost | - | 20 |
| Total gross cost | 910 | |
| Total cost | (910+20)=930 | |

Per pair gross return:

Table 3(Vii): per pair gross return (GR)

| Item | Per pair annual GR |
|----------------------------|--------------------|
| Return from selling squab | 3000 |
| Return from selling pigeon | 550 |
| Total income | 3550 |
| Total cost | 930 |
| Net annual return | 2620 |

The price of pigeon depends on the species and its colour. Fancy pigeons have high demand now and their prices can go up to TK 10,000 to 15,000. Some pigeon lovers would pay even more (lakh taka) if they find something they have been looking for.

But in this cost benefit relation, the cost of pigeon is minimum average 550tk.

Net annual return = Total income – Total cost. Here the profit of first year is minimum cause squab become sexually mature at the age of 5/6 months. So income start after initiation of laying which is 2100 tk. After excluding the cost, the net annual return become 1170tk (1st year). Expressing the benefit in percentage, it show 25% benefit.

In the 2nd year of farming pigeon gives 10 pairs squab in 12 months of year, after considering the mortality. As a result total income increase rapidly which is 3000tk. After excluding the 2nd year cost net annual return become 2270tk. Expressing the benefit in percentage, it show 310% benefit.

For more benefit some rear squab up to 7/8 month & sell them minimum at 550tk maximum 50 thousand to lakh taka (Fancy breed). If we count this profit, then the curve line will increase amazingly.

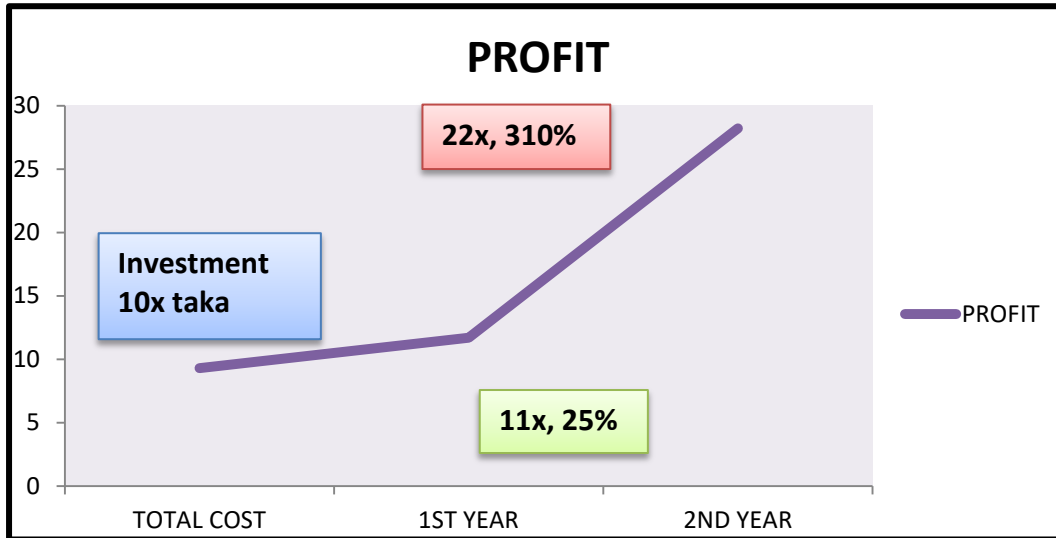


Figure 3(d): cost benefit relation only for common breed (cross breed)

Image gallery



Several wooden houses



Iron cage



Bamboo house



Plastic cage



Selling of pigeon in market



Selling of squab in market

CONCLUSION

Pigeon farming in rural areas of Bangladesh is not well organized. Most of the villagers rear pigeon in small scale and provide supplementary feeding only. The farmer rear deshi (indigenous) pigeon and have no idea about standard variety of pigeon. It is a profitable business and the price of pigeon meat is high. The pigeon rearing knowledge such as breeding, feeding, housing, prevention of diseases are not satisfactory of the farmers. Therefore, a need-based extension program should be introduced among the farmers giving more focus on building awareness and ability about pigeon rearing providing quality products for human consumption and reducing nutritional deficiencies and poverty of the country.

Recommendation to improve pigeon farming:

1. For increasing pigeon meat and squab production it is needed to introduce improve pigeon varieties in the rural areas with informing the farmers about the advantage of rearing improved varieties.
2. Several training, workshop is necessary to all pigeon farmers for better feeding and management. For example, starting of winter is the risk time for both pigeon and squab for diseases (ND, POX).
3. To increase the hatchability during winter, spreading the knowledge of using straw, rice husk, soft grass, cotton, jute sack to prevent cold wind or cold. At time of excess cold artificial supplementary temperature can be provided for successful incubation.
4. Pigeon birds mostly susceptible for new castle disease, pigeon pox and there are vaccination for prevention of these two. By doing different programme on vaccination and deworming people will be aware about pigeon vaccine.
5. I found a prejudice about vaccination that is vaccination increase laying period which is about 2-3 month. Such type prejudice, problems can be identified by taking feedback programme every 3 or 5 month later.
6. By increasing the facilities for vaccination. Due to long distance and one hospital covers many villages most of the time it is difficult having the facilities.

REFERENCE

- Banerjee,G.C. 1992,india. Poultry 3rd edition. Oxford & Ibh publishing company pvt Limited
1986-poultry-148pages.
- Singh K.S., & Panda B,1992,india. Poultry Nutrition 1ST edition. Published by kalyani
Publishers, 1996.
- Ahmed Ali, 1998, Bangladesh Agriculture University, Mymensingh, Bangladesh. Principles of
Poultry Breeding.
- Earnest Marvin Funk, & M. Richard Irwin. Hatchery operation and Management.
Management during extreme cold , Wiley Publisher, New York, 1955.
- Samad,.M.A;Bangladesh Agriculture University Mymensingh,2005. Poultry science &
Medicine. Most common disease of pigeon , treatment and prevention.
- David Hawks Worth. British poultry standards. Butterworths publishers, uk, 1982.
- Kabir Ashraful, june 2019. First time pigeon farm. Journal of Dairy, Vetetrinary Animal
Research. Published: November 21,2018.
- Hazard FA. Profitable pigeon breeding. American pigeon journal company.1992.
- Asaduzzaman, M.Mahiuddin, M.A.R.Howlider,M.M.Hossain and T.Yeasmin. pigeon farming
In Gouripur Upazilla of Mymensingh district. Bang.j.anim.sci.2009,38(1&2):142-150
- Kabir,.A.M.,November 5, 2017. Productivity, management and marketing of pigeons.
Journal of Agricultural Economics and Development vol.2(4),pp 147-153
- Romanoff,.AL. and AJ Romanoff,1949. Avian incubation. J.wily, New York, 1949.
- Anderson.A.F Brown and G.E.S Robbins. The new incubation book. Hancock house pub Ltd.
- Blechman. Andrew.D. Pigeons. The fascinating saga of the world's most revered and reviled
bird. Grove press publisher, October 10, 2007
- Wikipedia.w.w.w, Domestication of pigeon & the reproductive behaviour of pigeon
- Levi, Wendell,1977. The pigeon. Sumter,s.c. levi publishing co, inc.

Damian scarf; Karoline boy; anelisie uber reinert ; jack devine; onur; Michael Colombo
2016, 'organographic processing in pigeons (*Columba livia*) proceeding of the
National academy of science. 113(40) 11272-11276

Wallraff,H.G. 1999. ' The roles of the sun and the landscape in pigeon homing'. Journal of
Experimental biology.202(16).

'pigeon search and rescue project . united states coast guard.28 may 2009.

Gorman, kate. Bird lady of haslet helps to evaluate occasions. Star telegram june15, 2008
Archived from the original on 2 april 2019. Retrieved 25 june 2008

Moore j. 1735. Columbarium: or, the pigeon-house, being an introduction to a natural
History of tame pigeons. London:printed for j. wildford. (A printing of this book is
Given by j.m. Eaton.

Mcneillie A. 1993. Pigeons of the world. A magna illustrated guide, Leicester.

Bretton, p. (1914). Pigeon for profit.london:c. Arthur pearson Ltd.

Damian scarf; harlene hayne; Michael Colombo (2016). 'pigeons on par with primates in
Numerical competence'.science .334(6063):1664.

Platt,C.S and Dare,R.S. 1937. Squab production. New jersey agric, exper.634.

Smith,lewis(30 may 2008). Pigeon fanciers blamed for trap campaign to kill peregrine
London:times online. 20 june 2008.

Wilson.Alan.D. 'Columbidae' behaviour of pigeon. Written by, the editors of encyclopaedia
Britannica. January 30,2019

Johnston,R.F , A.Poole, P. Stettenheim, and F.Gill . Rock Dove (*Columba livia*). The
Academy of natural sciences, Philadelphia, PA, and the American ornithologists
Union, Washington, D.C.

www. Pigeon control resource centre. Online resource. Unit4, sabre close, devon, tq126tw

www. Animals network team. Pigeon, interesting fact about the pigeon.

ACKNOWLEDGEMENT

All praises are due to Allah and Supreme Authority of the universe, who enable the author to complete this assignment. I am grateful to my teacher and supervisor professor S M Mokaddes Ahmed Dipu, Department of Agricultural Economic and Social Sciences, Chattogram Veterinary and Animal Sciences University, for his valuable suggestions and guidance.

I am also grateful to professor Dr. Gautam Buddha Das, vice chancellor, and professor Dr. Abdul Ahad, Dean, Faculty of veterinary Medicine , professor Dr. A.K.M. Saifuddin , External Affairs, Chattogram veterinary and Animal Sciences University for their continuous inspiration to accomplish the study.

I wish to express my gratitude to my placement provider Dr. Mahabubur Rahman, upazila livestock officer, senbag, Noakhali, to help me by giving the opportunity to work and collect important information.

Finally, by no means least, I am really very much grateful to all of my teachers, friends, my parents, and all who have inspired me in various ways for successful ending of the study.

The Author,

February, 2020

Biography

My self Fatema tuz Zohura, the author of this production report would like to introduce as intern DR. of chattogram veterinary and animal Sciences University (CVASU) have passed four years academic career in faculty of veterinary medicine. As a student of veterinary science, the main mission and vision of my life is to do something better and creative job by dint of my academic knowledge and experience, for the development of livestock as well as development of livestock as well as development of economic condition of our country. This production report on pigeon farming is the fast step to fulfil my dream.

APPENDIX

QUESTIONNAIRE

Study on pigeon rearing systems & their comparative performance analysis.

1. Date Case No.
2. Farmers details..
 - a. Name of the farmers..
 - b. Name of the village.. . . . union.. .. upazilla...
 - c. Mobile number of owners..
 - d. Occupation.....

3. Family details:

| SL NO | NO of family members | Type of housing | Source of income | Land (acre) |
|-------|----------------------|-----------------|------------------|-------------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

4. Total income of family... ..TK
5. Education of the owner..
6. Purpose of rearing
7. Number of pigeon and other details

| Criteria | 1 | 2 | 3 | 4 |
|----------------------|---|---|---|---|
| No of pair | | | | |
| No of squab | | | | |
| Age of pair | | | | |
| Age of squab | | | | |
| Body weight of pair | | | | |
| Body weight of squab | | | | |

8. Type of pair ,...Deshi (3pair), Sirazi (4pair),Doachla(8pair) etc..
9. Breeding and hatching details
 - 1) Age of sexual maturity..

- 2) First age of laying egg
- 3) Number of days for per pair egg.. . . .
- 4) Hatchability of pigeon... . . .
- 5) If decrease then time of season and reason

10.Housing details

1. Elements of housing : wooden/bamboo/metal/plastic
2. Types of rearing : extensive / intensive/semi-intensive
3. Cleaning of house : yes/no

11.Feeding information:

- I. Offered feed type: wheat/paddy/rice/broken gram
- II. Mixed feed ratio...
- III. Amount of feed type..
- IV. Frequency of feeding..
- V. Supplementary feeding..

12.Have any special choice of feed type : yes /no

If yes what is the reason.. . . .

13.Experience details

- i. Training experience : yes/ no
- ii. Duration of rearing :...
- iii. Number of programme attended :...
- iv. If yes then title of the programme :... . .

14.Vaccination details

| Criteria | 1 | 2 | 3 | 4 |
|----------------------------------|--------|---|---|---|
| Have knowledge about vaccination | Yes/no | | | |
| History of previous vaccination | | | | |
| Frequency of vaccination | | | | |

15.Facing of problems after vaccination : yes/no

If yes ...then problems details...

16. Any complain about vaccination whole process.. : yes/ no

If yes ... then the complains are.. ...

17.Disease details

- A. History of previous diseases..
- B. Details about present diseases
- C. Timing of previous disease.. . . .
- D. Number of death bird per diseases.. . . .
- E. Season of previous disease .. .
- F. Number of disease bird present time .. .
- G. Number of death birds for present diseases.. . . .
- H. Treatment of present disease.. ...

18.Investment details

- a. Cost for housing
- b. Feeding cost daily.. . . .
- c. Cost for buying of pigeon.. . . .
- d. Medication cost
- e. Vaccination cost
- f. Others

19.History of deworming..yes/no

If yes then frequency & complain if have

20.Selling number squab per month

21.Selling amount of per pair pigeon.. . . .

22.Selling amount of per pair squab.. ..

23. Profitable yes/no

If no then what are the reasons..

24.Limitation of pigeon farming

25.Suggestion for improvement of pigeon farming

Signature of interview.. . . .