

Review Article





# Necessary steps to establish a first-time pigeon farm

#### **Abstract**

Most readers in Bangladesh are providing very poor feed in their farm. They don't know the exact feed ratio for racing or rearing stock. Some readers give broiler feed but they don't know that if this feed is mixed with normal feed for a long time it's possible to growing pathogenic fungus. They are not well known or not try to know about pigeons. Pigeons in Bangladesh now rear just for hobby. It makes a good source of income. Lack of cleanliness of the farm is very common which allows for spreading a lot of diseases. Peoples rear their fancy pigeons in confined area and not getting flying or exercise. When a reader starts a farm just buy some breeds but they don't know which are good at the first stage or good for breeding. Moreover, they don't know the ideal markings of such pigeons. Ultimately they get mixed breed which is not good their profit.

**Keywords:** pigeon farm, loft, pigeon

Volume 7 Issue 6 - 2018

#### M Ashraful Kabir

Lecturer in Zoology, Cantonment Public School and College, Bangladesh

Correspondence: M Ashraful Kabir, Lecturer in Zoology, Cantonment Public School and College, Saidpur Cantonment 5311, District- Nilphamari, Bangladesh, Email ashvaful\_wb@yahoo.com

Received: November 23, 2016 | Published: November 21, 2018

#### Introduction

From the history we know that Asian subcontinent was the pioneer of fancy pigeons rearing. Emperor Akbar had 20,000 pigeons where 500 were selected. Pigeon keeping is the prehistoric hobby of human. That time only bamboo and wooden cages were the rearing appliances. Millions of thousand selective breeding was happened in pigeons then produced a lot of fancy pigeons. From the modern thinking for overcome unemployment status of the country it's very essential to establish a pigeon farm. Squab meat could a protein demand for peoples. That's why in US there Palmetto Pigeon Plant is now well established. Davis and Dyer and Carpenter Squab Rancing are also another renowned pigeon farm of the world. In Los Angeles there a great pigeon farm and its droppings are selling with huge currency. In mughal dynasty emperor Akbar reared a lot of fancy pigeons in his court in Delhi.<sup>1,2</sup> In Bangladesh at present there huge pigeon farms or pet shops available.<sup>3</sup> But one problem is that most farms are private. If there is a source of loan by our government or bank most peoples will get benefit. Our poultry sector is enriched due to loan for rural and urban peoples. In this case we need to submit an application to Youth and Development Department, Bangladesh for getting loan for establishing a pigeon farm. Our university authority rears pigeon for research. Visited out of ten farms 50% were commercial, 40% were hobby and only 10% were research. Observed all farms either hobby or commercial farm all were very dirty except Pabna, Natore and Naogaon farm. In Saidpur and Dinajpur of Bangladesh farms are semi-good. Due to mismanagement or not consciousness or only for hobby they don't think on its profit. Huge amount of money they are investing but fall loss. Again they get new expensive breed and then same losses. It will take time that pigeons are the major source of protein and could be a farm-based bird. There are competitions that who buy rare and expensive breed among all. Though in Dhaka they establish lot of nice farms but only vitamin added food leads to its productivity. Kushtia, Bheramara, Rangpur and Dinajpur they establish a farm but not well documented or scientific. There is no farms I have seen where pigeons get chance to free for small amount of flying.

#### **Materials**

#### First rearing breeds with real characteristics

Tumbler (10 Pair): Its real characteristics are- Medium size; Finch

like beak; mainly pearl or black eyed; Variable in colour; Tumbling behaviour (Plate 1).

Satinette (2 Pair): Tumbler size body; Breast frill; Peak crest; Grouse muffs; Medium-short thick beak; Legs are short (Plate 2).





Plate | Flying tumbler

Plate 2 Satinette

Fantail (2 Pair): Finely expanded tail feathers (above 20) and erect; Head-tail touched; Tremules of the neck; Breast well rounded; Walk on its toes (Plate 3).

Bombay (1 Pair): Medium size; Compact body; Broad crest; Self colour (Plate 4).





Plate 3 Indian fantail

Plate 4 Bombay

*Lahore (Martin) (2 Pair):* Laterally bi-lateral colour where base is always white; Neck heavily feathered; Broad chest; Beak broad; Stockings leg; Tight feather; Beak and edge of mouth is wattled; Upper mandible is coloured (Plate 5).

King (1 Pair): Medium sized body; Graceful line of the eye; Stout Beak; Wattle and eye nicely proportional; Round skull; Eye cere is beet red; Shorter wing and well folded; Wing and tail tips are three quarter of an inch; Tail is parallel to the ground; Legs straight and bright red (Plate 6).









Plate 5 Lahore (Martin)

Plate 6 King

Pigeons need to collect from a renowned loft but not in open market. After collecting any pigeons not mix with others until it will be passed its life in another cage for 40 days; this is called quarantine. Research says that if there any germs of diseases it will be focused within 40 days. For purchasing all breeds Dhaka, Bangladesh is the best and during purchasing from houses is the best way for avoiding diseased birds. For fostering parent's local pigeons (gola), tumbler, crossbreds and homer shows good performance for rearing squab. In the hot season once in a week bathe is essential but remember in nesting time it not allowed. If there some ectoparasites infestation very little amount of potash can be added in that water.4 Very low cost and effective disinfectants are bleaching powder, potash and lime. Clean your farm once in a week and once in a year with strong disinfectants. For identifying the purity of pigeons you should know the salient characteristics through learning. Common criterion such as bright feather, normal breathing, clear eye, movement and faces are the point for identifying good health. Always buy pigeons at their new adult stage and remember pigeons are sexually active up to 4-5 years and within this time try to make another pair by sexing male and female and mate them with same breeds by another pair male and female. Such type of out breeding is important for its viability. For the profit the broiler breeds such as king, mondaine, Hungarian, runt, polish lynx are good.5

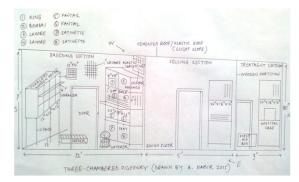
# Ideal and balanced diet

Which food is good for health is ideal and carries the various components with exact ratio is balanced diet. By Dr Collin Walker's research indicates that the racing pigeons are of course avian athletes. Racing pigeons need 12-14% protein for its excess muscle tiredness and from fat and carbohydrate it could get energy. In maize, wheat, pea and rice contains 10, 9.5, 25 and 6% protein respectively. For the measurement of food 100 gram scoop can be use. 4 scoops of peas contain 100g protein, 2 scoops corn 20 g, 1 scoop wheat 9.5 and 0.5 scoops of rice contains 3 g protein. This 12-14% is slightly high so reducing peas and increasing corn and safflower is the best way to minimize. Moreover, protein is important for pigeons growing, molting and breeding also. Legumes or pea sometime contains various anti-digestion substances like phytic acid and tannin. Fat between 5-11% are best for pigeon but over 30% it causes obesity, fatty liver and type II diabetes. Racing pigeons need 10-15% fat to become fit. Pigeons do not have the enzymes to digest all protein so nutrients are simply passed in the droppings. It's possible to ensure best pellets except the traditional diet it makes good for pigeon but in Bangladesh this is not available. Calcium should be approximately 1% in diet and calcium-phosphorus ratio needs 2:1. Nutrition is a complex area in pigeon so be very careful for better performance in the farm. As food maize 6 kg in winter (summer 4kg), wheat 4 kg in winter (summer 6 kg), black pea 2.5 kg, Japanese millet 0.5 kg mix well and 1 pinch of mustard needs per pigeon daily at evening. Oyster shell which shows above 6 mm is good source for calcium carbonate need to provide always.<sup>6</sup> For egg laying use mud pot with soft cloth but not uses newspaper because its smoothness causes splay legs of the squab. For semi-intensive rearing system daily tow times feeding required. Morning 8 and evening 6 and after hatching of seven days need mid 2 pm extra feeding. This time all grains should be small in size and 14 days of squab could allow usual food. After feeding all pots should remove from its chamber each pigeon takes food maximum 60g a day.<sup>3</sup> Regular two times group feeding is important for its physical and mental health. Water of pigeons should always clean because this is the source of infection in most cases.

## **Methods**

#### Three-chambered pigeonry

Roof of your residence could a best place for your pigeon farm but need to ensure which of course not disturb to your neighbors. It will have four corners; all sides will be open by plastic-coated wire. Air passing in and out will be must. In your farm you need to buy some accessories- feeding pot, waterier, plastic bowl, feeder, first aid box, jute bags, polythene, washing tools, some common medicines etc. Remember, you always maintain disease-free and good quality pigeon. Your farm could three-chambered- one is breeding section, one selling section and another treatment section. 20 pair of pigeons should have 12x12x7 feet pigeonry. Tumblers are needed wooden nest boxes with 12x12x12 inches. Other fancy pigeons<sup>7</sup> need 2 inches gap wire cages is enough. The base of the cages should provide 1 inch gap. Measurements of wire cages maintained 22x18x16 and same as cages for storing squabs and hospital cage also. The door of all cages wills 8x8 inches which of course allowed entering mud pot for laying. At the first stage tumbler, king, Bombay, fantail, Lahore and Satinette could rear. At the time of entering your pigeonry should wear apron, googles, musk, glove and slipper. Visitors not allowed without any precautions. The best lofts are positioned is between northwest to north east, because the sun moves northward during the winter month. Waterproofing loft is a priority, because wet floors endanger the health of the birds. Concrete floors are not recommended in the race loft because they are cold and retain moisture, but this is good for the breeding and used they are centrally heated. February and November are the worst months to youngsters for the additional stress. Ventilation of the houses, concrete floor, thermometer, good drainage system needs to be ensured an ideal pigeon farm. The roof of the house if wooden is good. Air passing need to ensure for preventing diseases especially eye problem and pox. The body temperature of pigeon is 107º Fahrenheit. Dumpy floor is the main causal agent of pigeons' disease. Sunlight provides birds with the vitamin D, necessary for bone, feather, reproductive health, metabolism and immune system whereas greater than 65% humidity produces green watery droppings in pigeons.



#### Judging in pigeons

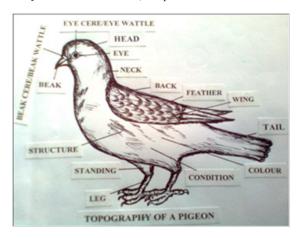
(Table 1)

Table I Following points are helpful for identifying class one pigeons

Characteristics	Tegetmeier 1868	Levi 1992	Kabir 2014
colour	-	-	30
structure/carriage	12	16	15
body	-	10	-
condition	-	10	-
standing	-	-	10
leg	-	4	10
feather	-	-	5
tail	-	7	5
breast	-	10	5
head	21	7	4
beak	12	3	3
eye	-	3	3
neck	8	7	3
wing	-	8	3
back	-	9	-
cere	24	4	2
wattle	20	2	2
thinness of jowl	22	-	-
Total	119	100	100

#### Remember such disqualifications

It shows off colour; Split feathers all over the body; Pearl eyed; Deformed keel; Leg feathers in shank and toes; Always showing sickness; Shows hanging wing or below the tail; Showing tampered; Less number of feathers found in wing and tail or sometimes cut feathers by the readers or sellers; Shape is not like Carneau.<sup>8</sup>



#### **Breeding management**

The best production output of pigeons<sup>9</sup> is occurred between September and January. Breeding then slows towards the February (March output is low) and in June/July when the days are short and cold (July/August output is low). A degree of infertility can be

expected during the months of February, June and early July. Infertility problems do occurs in fantail, pouter and Jacobin. By trimming 2-3 tail feathers from the both sides of male and female and some feathers around the vent could be a good result for fertilizing the eggs. From August to November molting occurs. Fifth day of incubation under a bulb indicates its fertility. In very hot weather, before two days before hatching dip the eggs in water for maintaining humidity otherwise most chicks' dies as they could not broke the egg.

## **Results and discussion**

Pigeons basically get maturation after six months. Before this some external observation is helpful tips for sex identification but mostly this is wrong. 10 At the time of mating dust of oyster shell is good for egg shell formation. Always maintain the breeding pair with same-age or female will be slight higher than male. Not pair your pigeons both in large size; it causes the maximum males in your loft. For intensive of semi-intensive rearing most of the pigeon shows fight to each other. So, be very careful mainly after laying and hatching. If that happen separate the pair and alternative use of both parents. 6 Till seven days of squab its parents will not take any medicines and hardy or large sized grains. Due to production of crop milk that time both parents loss huge antibody from their body. So, special care, timely feeding and supply of fresh food is important. After hatching to seven day's supply two times feeding and after seven three times. In caging due to see the parents feeding basically squab takes feed within 21 days. If females again lay egg separate this squab and introduce its father for feeding if required. Some animals are the predator or hazardous to the pigeons. If any pigeon die of course don't forget to complete a post-mortem report by vet. It will be helpful in your farm's future attack. Always pair your pigeons which are not in brother sister (sib) relation. Ensure out breeding so it will make good characteristics and pigeons will be viable. After 4-5 years of age replaced by new one. Always observe the market (running breeds and price) for the business. Transportation of pigeons by nice cages is must and in winter season due to cold weather paper box is good. Not hold your birds by hands for a long time. Feathered pigeons (fantail) need to transport by cloth-layered boxes. 11 For the management of lotan (ground tumbler) pigeon it need more care to avoid its fighting for egg and after hatching.<sup>12</sup>

# **Conclusion**

Pigeons need to release regular one or two times during group feeding. But this situation was rare in all farms of Bangladesh. Cages size is not important here because when they will release it get enjoy for flying. Feed is a major problem here. Peoples don't know the feed value and actual ratio. Readers are not well conscious to clean their lofts. So, they often falls a lot of problems especially pox, twisted neck, eye problems, Newcastle etc. Most readers don't know the actual characteristics of pigeons. So, when they buy it some bad characteristics come and ultimately they cannot preserve the pure breed and not get real value. Peoples don't know which are real foster or broiler breed. Not only birds but also need to try your farm totally clean and prevention are the best. After attack such diseases in most cases it's really tough to overcome that disaster. In 6x6x6 inches is good for 10 pair of pigeons; it could a baseline for rearing pigeons. Need to use very common disinfectants once a week. Feeding time, amount of feed, clean water all are very important to manage a commercial and well profit farm. Pigeons have no sexual dimorphism so during buying its better to buy new adult and after 4-5 years of breeding performance need to make another pair by mixing with same breed but different male and female.

# **Acknowledgments**

None

#### **Conflicts of interest**

The author declares that there is no conflicts of interest.

#### Reference

- 1. Blochmann H. The Ain I Akbari by Abul Fazl Allami. 1873.
- 2. Kabir MA. Known and unknown pigeons in mughal history. *Social and Basic Sciences Research Review*. 2014d;2(5):277–283.
- 3. Kabir MA. Productivity, management and marketing of pigeons in pet shop. *J Agric Econ Dev.* 2013b;2(4):147–153.
- Kabir MA. Symptomatic treatments of some common diseases of fancy pigeons in Bangladesh. Acme J of Animal Science, Livestock Production and Animal Breeding. 2014g;1(1):1–4.

- Hazard FA. Profitable pigeon breeding. American Pigeon Journal Company. 1922.
- Kabir MA. Productivity of crossed indigenous pigeon in semi intensive system. Basic Res J Agric Sci & Rev. 2013a;2(1):1–4.
- 7. Kabir MA. Grading system of ten common fancy pigeons of Bangladesh. *Integrated Journal of British.* 2014c;1(1):19–26.
- 8. Levi WM. The Pigeon. Levi Publishing Co. Inc. Sumter, SC. 1992.
- 9. Tegetmeier WB. *Pigeons: structure, varieties, habits, and management.* 1868.
- Kabir MA. Sexing in pigeons by phenotypic method. *Intl J Adv Res Biol Sci*. 2014f;1(5):33–38.
- 11. Kabir MA. Major pigeon markets in Dhaka, Bangladesh. *Extensive J of Applied Sciences*. 2014h;2(1):6–8.
- 12. Kabir MA. Management and breeding of lotan pigeon. *Palgo J of Agriculture*. 2014e;1(1):8–9.