
Quail farming in India

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abstract

The quail also known as Bater, belong to family pheasantidae. In India there are two species, one is Japanese quail (*Coturnix Coturnix Japonica*), which is reared for meat purpose and other is black breasted quail (*Coturnix Coromandelica*) mostly found in jungle. It is one of smallest in bird's species among all the avians. The broiler quail can be sold at the five weeks of age. Quail begin laying eggs in about six weeks to continue producing high-quality eggs up to 24 weeks of age. Weight of adult Japanese quail reaches 250 - 300 gm and lays 250-280 eggs in a laying cycle. Meat is used as a delicacy for cooked meat, minced meat and tandoori quail. The egg of quail can make a variety of recipes such as boiled eggs and egg pickles. The size of an egg can be up to 10 g. It requires a small house to raise. about 10 quails that need space are equal to the need for one chicken.

Keywords: Quail, small, weeks, meat, egg.

Introduction



Quail are one of the smallest bird species in the Pheasant family. This species was first bred by Japan in 1595. Quail are fast-growing birds with a short generation gap. Quail were first introduced to India in 1974 from California. Broiler quail can be sold in 5 weeks of age. Quail start laying eggs at the age of 6 weeks, and then they continue to lay eggs until they are 24 weeks old. Quail meat is considered a delicacy. From quail meat makes various recipes for chopped meat, tandoori quail and use them

as a ready to cook meat. and eggs were eaten as boiled or made into egg pickles. Quail need a smaller house than chickens. In particular, commercial chicks are housed in multitier cages, thus increasing labor efficiency and better utilization of land space. Japanese quails (*Coturnix coturnix japonica*) are small flying birds weighing around 150 to 200 g. They make a peculiar sound and are considered a delicacy as a meat bird. Due to their small size, this bird is also used as a laboratory model of chicken and other birds. So, cost of conducting experiments can be greatly reduced because they eat less, need less space and reproduce faster than chicken. In addition, they are also easy to handle. With growing consumer awareness and appreciation for the quail's tender and tasty meat quality, the commercial quail production industry has gradually captured a sizeable section of the poultry meat another type of quail, the Japanese quail (*coturnix japonica*) has made a huge impact in recent years and many quail farms have been established around the country to produce eggs and meat. This is because increasing consumer awareness of high quality meat, necessitated the production of high quality quail meat. It is very important to choose stocks, which have high reproductive capacity to produce high quality meat and eggs.

Pre-Requirements for Quail Farming

To start a quail farm, it is important that you have the following preferences: Farms should be no more than 5 km from the forest if uninhabited. Farms should not be more than 3 km from the forest in the event of human settlement.

Birds should always be protected in enclosed areas with appropriate safety measures. In other words, they should not be allowed to roam in the open. appropriate sanitation and hygiene measures must be followed on the farm. adequate fencing should be created to protect stray animals or visitors to the farm as this can cause bird disturbance. It can also cause noise between birds.

Benefits of quail farming

Need less space to expand. Need less money. Quail are powerful birds. Birds can sell as young as five weeks of age. It matures when we are six to seven weeks old and begins to lay eggs. High clutch level of up to 280. Quail meat tastes great as compared to other chicken and has a low fat content. It promotes physical and mental growth in

young people. In terms of a healthy diet, quail eggs are much better than chicken eggs. It has a low percentage of cholesterol. Quail eggs & meat are ideal for pregnant women and nursing mothers.

Employment: Growing quail is a cheap business compared to poultry farming. It helps as much as food choices. Quail are an important bird in scientific research. This species can be grown in indoor areas. It does not need to be vaccinated with medication. Quail litter has a high amount of fertilizer and can be used to increase crop yields. Quail weigh up to 100 gm and lay 100 eggs a year, Japanese quails weigh up to 250 gm and lay 250 eggs a year.

Future of the Quail farming

Today the market quails meat for more demand. There is a great deal of hypermarket hotels, etc. The Indian government has encouraged people to start quail and try to provide infrastructure to help people. However, a government license is required to sell Japanese quail. The Department of Environment and Forestry issues a license from the Department of animal Husbandry. The Central avian Research Institute (CaRI) in Izzatnagar, Bareilly Uttar Pradesh is keen to distribute quail for commercial purposes and has shown a willingness to supply entrepreneurs who wish to incubate eggs.

Housing System

To ensure product efficiency, housing is of paramount importance. Quail can be raised in both deep litter and cage system.

Deep Litter

Since quail are the smallest birds, about six birds can easily land on one square foot [1 sq m]. However, as they grow older it is advisable to introduce them to the cage system. This can prevent unwanted wandering and help them gain weight.

Cage System

Plastic cages are widely used to grow quail farming. There are different types of cage systems depending on the purpose of the birds. about 100 quail can be placed in the 3ft X 2.5ft X 1.5ft in the first two weeks. Old quail need more space. The whole unit is 6 meters by 1 foot thick and divided into six parts. There should be a removable

wooden plate under the cage. This is to clean the faeces that could fall on the plate. The cages must have adequate ventilation system and adequate provision for drinking water and feed.

Quail have a natural habitat. Therefore, when introducing two groups of birds they should be raised separately for a few days before introducing themselves in the same cage to avoid fighting in cages. additional light should be provided in the barn or sheds during the rainy season and winter. While they are being raised for commercial purposes, they should be given light for 24 hours. This increases their growth and thus increases their market value. If they are raised in cages for reproductive purposes, the male ratio: for females should be 1: 3.

Feeding Management in Quail

The quail feed should be well balanced and economical. about 70% of total farming costs are spent on feed alone. In the case of quail farming in the background, the feed may contain agricultural products and household residues. This will ensure maximum profit. In the event that a feed is sold, the price will vary. Feed is usually well digested. Three-week-old quail should be fed with ground corn. Older ones can be given rice polish, sunflower extract, soybean extract, corn, peanut extract, etc. Commercial feeds have low protein content. Therefore, proteinaceous extracts should be added such as soy extracts. Feed can be formulated as shown in Table. 01

The following points should be taken into account when eating quail

Feed particles should be small in size. a six-month-old quail could eat up to 30 grams of feed. For egg-laying purposes, quail need about 450 grams of feed. It requires a 400 gram feed to produce ten eggs. The broiler starter mash can be used by adding 5 kg of oil cakes to a 75 gram feed. The particle should be well grounded.

Table 01: Feed can be formulated as follows:

INGREDIENT	Chick mash (%)	Grower mash (%)
Maize	27	31
Sorghum	15	14
Deoiled Rice Bran	8	8

Sunflower Cake	12.5	12.5
Soya meal	8	-----
Fishmeal	10	10
Míneral Mixture	2.5	2.5
Shell grít	5	---

Reproduction

Quail are first clutch when they are seven weeks old. They receive 50% of egg production at eight weeks of age. In the production of fertile eggs, male quail should be raised with females for 8-10 weeks. The average male, female ratio is 1: 5. The incubation period is 18 days. The maximum breeding season for quail is between 2-8 months of age. However they start laying eggs from the 7th week. Male and female quails eight weeks of age and older are raised together to produce sound, fertile eggs. Eggs are smoked and incubated at 37.5°C with a humidity of 70-75%. Quail eggs are incubated at 60% humidity for 2 weeks after which the humidity is maintained at 70% until hatching. after hatching the first week is the most important time in the quail's life. Newborn chicks weigh about 8 grams and are therefore less sensitive. Lighting should be provided throughout the hour when the chicks can gather together. This is likely to create a stamp-like situation. Farmers often continue to cut themselves for the first three weeks. Some also extend it to 5 weeks to make a better product.

Quail egg

There is an increasing need for quail eggs for health benefits. The quail egg is about one-fifth the size of a chicken egg and weighs about 10gm. Egg shells are visible, varying in color from white to brown. In terms of healthy eating, the quality of these eggs is much better than that of chicken eggs; instead they contain low cholesterol. The size of the yolk (yellow inside) to albumen (white part), 39:61, is higher than chicken eggs (Table 2). They can produce 1500 quail chicks per week from the 500 quail laid.

Table2: Components of egg

Nutrient	Quantity
Water	74 %
Protein	13 %

Lípíd	11%
Carbohydrates	1%
Total ash	1%
Calorífic value	649 k J/100g líquíd

Quaíl meat

From healthy quaíl, we wear meat up to 70- 73% of their body weight. The quaíl weigh 140 grams and provide 100 grams of meat.

Health problems in quaíl farming

When quaíl parents suffer from a deficiency of vitamins and minerals, resulting in the chicks found in their fertilized eggs often leaning on weak legs. To control this problem female breeder should be supplemented with nutrients and good vitamins and minerals. Quaíl are stronger immune system against from infectious diseases than chickens.

Therefore no vaccine is needed to prevent infections. Proper management of quaíl chicks, disinfection on farm premises, provision of clean quaíl drinking water and nutritious food will prevent outbreaks on quaíl farms.

Barriers Male quaíl often make a distinct noise that often disturbs a man. When male and female quaíl are raised together, male quaíl bark at other quaíl and blind them.

Disease Management

Quaíl like strong birds, the incidence of disease is less compared to other poultry birds. However, improper care and management can lead to lower productivity and higher mortality. Other diseases that occur between quaíl are ulcerative enteritis and coccidiosis. Both of these diseases can be controlled with a combination of dietary supplements. In the event of ulcerative enteritis, a gram of streptomycin mixed with a liter of water should be given to the birds for a period of three days. 2 grams of coxial 20 to one liter of water for three days can treat coccidiosis.

The best way to prevent diseases between quail is to ensure good hygiene. Cages should be cleaned regularly. Supporters should be disinfected and water changed from time to time. The bottom of the cage should be dry and there should be a proper air conditioning system in place. Good air circulation ensures that diseases exist. It is best to group the birds according to their age to ensure healthy growth. Sick birds should be separated from healthy ones as soon as infection is detected. In addition, dead birds should be burned immediately.

Licensing in Quail Farming

Quail birds fall under the category of protected species. Therefore, it is compulsory to obtain a quail farming license from the Government of India. The local Department of Animal Husbandry should be contacted for this purpose. The license is usually issued by the Department of Animal Husbandry, Dairy and Fisheries for a period of one year after which it can be renewed. The licensee can only obtain quails for commercial farming from another licensed owner. In addition, a license is granted only if the original requirements of the farm are met and the required documents are produced as proof of original ownership.

Conclusion

It is concluded that the quail farming in India is not common but their management is easy as compared to other poultry farming. They required less space requirement and feed intake as compared to chicken. It starts laying eggs at 7th weeks of age and egg is enriched with all essential nutrients. Quail are stronger as compared to chicken so that less medicinal cost or disease management is required.

References

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