



## QUAIL FARMING AND ITS USEFULNESS IN INDIA: AN OVERVIEW

Siraj Ansari<sup>1\*</sup>, Shruti Dehru<sup>1</sup>, Vinita Rajpurohit<sup>1</sup>, Ravi Dabas<sup>1</sup>, Geetanjali<sup>2</sup>, Waseem Farooq<sup>1</sup>,  
Anurag Patel<sup>3</sup>

<sup>1</sup>M.V.Sc. Scholar, Division of Medicine, ICAR- Indian Veterinary Research Institute, Izatnagar, Bareilly

<sup>2</sup>M.V.Sc. Scholar, Division of Parasitology, ICAR- Indian Veterinary Research Institute, Izatnagar, Bareilly

<sup>3</sup>B.V.Sc & A.H, College of veterinary and animal science, SVPUAT, Meerut, India

\*Corresponding Author Mail ID: [sirajansari1998@yahoo.com](mailto:sirajansari1998@yahoo.com)

### Abstract

Quail farming in India, particularly with Japanese quail, offers high productivity with minimal investment and space requirements. It supports economic growth, provides nutritious meat and eggs, generates rural employment, and promotes sustainable agriculture, promising significant benefits for livelihoods and food security.

**Keywords:** Poultry, Japanese quail, Cage rearing, Brooding

### 1. Introduction

India's poultry farming industry has found success and sustainability in quail rearing, especially with the Japanese quail (*Coturnix coturnix japonica*). Quail is also popularly known as "Bater" Quails are a popular crop in India and the country's agricultural economy because of its quick development, high egg production, and low maintenance requirements.



Figure 1. Japanese quail

### 2. Benefits of Rearing Quails

#### A. High Productivity:

**Egg Production:** Japanese quails can lay up to 300 eggs a year after they begin laying at around 6-7 weeks of age.

**Meat Production:** Quail meat is renowned for being thin and nutrient-dense, making it a delicacy.

#### B. Minimal Investment and Space Needs:

Small-scale and home farming are perfect for quails because they require less room than other fowl. Housing and food infrastructure for quail are less expensive, thus the initial investment is minimal.

**C. Quick Growth and Early Maturity:** Quails provide a quicker return on investment because they grow quickly and achieve marketable weight in 5–6 weeks. For farmers, early maturity also translates into faster turnover and more regular income.

**D. Effective Feed Conversion:** Quails are more efficient than other poultry at converting feed into body mass, which results in lower feed costs. This is known as their high feed conversion ratio.

**E. Resistance to Disease:** Quails often have a strong resilience to common poultry diseases, making frequent veterinarian interventions unnecessary.

### 3. Rearing Practices

**A. Housing:** Cages or the ground can be used to raise quail. Predator protection, adequate ventilation, and temperature management are crucial components of a basic house structure. It just takes a small amount of space—roughly 75–100 cm<sup>2</sup>—for each bird. Housing systems with temperature control (20–25°C) and sufficient lighting (16–18 hours per day) can be deep litter, cages, or battery installations. Quails can be reared in multideck/singledeck cages. The size of cage should be 120 cm length, 60 cm height and 25 cm height with provision of faecal trays. This cage can be used to raise 20–30 quails for commercial purposes.



**Fig. 3.** Deep litter system and Cage rearing

**B. Breeding and Incubation:** Quail mature sexually at the age of six to seven weeks. For breeding reasons, a male to three female ratio is optimum. Body weight, egg production, and disease resistance are some of the desired features to consider while choosing breeding stock. Keep the eggs in an incubator for 17–18 days at 37.5°C and 60–70% humidity. Eggs that have been artificially incubated typically hatch in 17–18 days.

**C. Brooding:** Quail chicks are raised under 24-hour light for the first two to three weeks of their lives. After that, a 12-hour photoperiod is sufficient for the first five weeks of life. For laying quails, a photoperiod of 14–16 hours is advised. Given the small size of the chick, battery brooding appears to be preferable to floor brooding up to three weeks of age. In order to improve footing, the floor should ideally be coated with corrugated

paper, as splayed legs are the primary cause of high mortality. During this time, 2-3 cm and 1-1.5 cm of feeder and water space, respectively, are needed. With increasing age, floor, feeder, and water areas should be expanded.

**D. Feeding:** A well-balanced meal high in protein is necessary for quail (20–24 percent for juveniles and 18–20 percent for adults). One can use commercial quail feed or a combination of greens, grains, and protein supplements. There should always be access to freshwater.

**Table1: Average feed consumptions bird/day**

1st week	4 gm
2nd week	9 gm
3rd week	15 gm
4th week	18 gm
5th week	20-25 gm
6th week onwards	30-35 gm

**E. Health Management:** Although they are resilient in general, quail can contract illnesses such as respiratory infections and coccidiosis. Maintaining flock health requires frequent health checkups, vaccinations, and proper sanitation.

### 4. Usefulness of Quail Rearing in India

**A. Benefits to the economy:** When compared to other forms of poultry production, quail farming demands a smaller initial investment. It's quite profitable because of the quick turnover rate brought on by their early egg production and swift growth. Small and marginal farmers can supplement their income by raising quail. Profitable profits are guaranteed by the market's strong demand for quail eggs and meat.

**B. Nutritional Value:** Meat from quail is a nutritious food choice because it's high in protein, vitamins, and minerals. Because of this, they are seen as healthier substitutes for chicken. Given their higher levels of vital amino acids, minerals, and vitamins—particularly B vitamins—quail eggs are thought to be more nutrient-dense than chicken eggs.

**C. Employment Generation:** Quail farming contributes to rural development and poverty reduction by generating jobs in rural areas. It can involve different groups of people in fruitful agricultural operations, such as women and young people.

**D. Health Benefits:** Compared to other poultry products, quail meat and eggs have lower cholesterol levels. They are therefore a healthier choice, particularly for those who are worried about their heart health. Iron, zinc, and selenium are just a few of the vital micronutrients found in quail products, all of which are vital for preserving health and avoiding dietary deficits.

**E. Sustainable Farming:** Quail farming is a sustainable agricultural activity since it has less of an impact on the environment than other animal farming methods. It helps to maximize resource usage by requiring less feed, water, and acreage.

## 5. Conclusion

Raising quail in India has major advantages for the environment, economy, and nutrition. Quail farming can significantly improve rural livelihoods, provide food security, and advance sustainable agriculture with the right management techniques and supportive legislation in place. Quail farming has enormous potential, and promoting and assisting farmers in implementing it can help the agricultural industry in India as a whole flourish.

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