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Popular Article

## Quail Farming: An Emerging Venture for Sustainable Livelihoods

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### Introduction:

Quails are small game birds belonging to the family *Phasianidae*. Among the various species, the Japanese quail (*Coturnix coturnix japonica*) is the most commonly reared for commercial purposes. Quail rearing is becoming increasingly popular among farmers and poultry enthusiasts due to its low investment requirements, quick returns, and high nutritional value of quail meat and eggs. Quail meat is rich in protein, vitamins, and minerals while containing lower fat and cholesterol compared to chicken meat. Quail eggs are also highly nutritious and are believed to possess medicinal value in some cultures. These birds require less space, consume less feed, and are resistant to many common poultry diseases. They grow rapidly and start laying eggs at the age of 6–7 weeks (Minvielle, 2004). Due to these characteristics, quail farming is suitable for small and marginal farmers, women entrepreneurs, and backyard poultry systems. Scientific and low-cost housing systems are especially important for small and medium-scale farmers because they reduce initial investment while ensuring suitable environmental conditions for the birds (Panda and Singh, 1990).

### Breeds of Quail:

The most common breeds used for commercial farming include:

1. **Japanese Quail:** Primarily used for egg and meat production.
2. **Bobwhite Quail:** Mostly reared for game and ornamental purposes.
3. **Button (Chinese Painted) Quail:** Reared for ornamental purposes.

Among these, the Japanese quail is preferred because it matures quickly and produces about 250–300 eggs annually under proper management (Chastain, 2026).

### Housing Management:

Quails can be reared either in deep litter systems or cage systems. The house should be clean, dry,

and well-ventilated. Cage systems are preferred in commercial farming because they facilitate easy management, better sanitation, and efficient egg collection. Floor space requirement of 1 square foot in a cage and 1.5 square feet on a deep-litter system is recommended (Chastain, 2026).

### Breeding and Incubation:

Quails attain sexual maturity at about 6-7 weeks of age and continue egg laying up to 22 weeks of age. For breeding purposes, a male-to-female ratio of 1:3 or 1:5 is ideal (Sree and Sarma, 2023). Fertile eggs should be collected carefully and stored at cool temperatures before incubation.

### Incubation Details:

- **Incubation Period:** 16–18 days
- **Incubation Temperature:** Approximately 37.5°C
- **Relative Humidity:** 60–70%

Artificial incubators are commonly used in commercial farms to ensure higher hatchability.

### Brooding Temperature:

Young quail chicks require supplementary heat during the brooding period.

- First week: 35–37°C
- Reduce by 3°C each week until normal room temperature is reached.
- Low-cost heating sources such as electric bulbs, kerosene lamps, or charcoal brooders may be used carefully under safe conditions. Curtains made of jute sacks or plastic sheets can help protect chicks from cold drafts during winter.

### Lighting Management:

Lighting influences feed intake, growth, and egg production. Quails require adequate light intensity for optimum performance.

- **Chicks:** 24-hour light during the first two to three week
- **Growing birds:** 12–14 hours light
- **Layers:** 16–17 hours light daily for maximum egg production. (Kumari et al., 2008).

### Feeding Management:

Quails require feed rich in protein and energy for proper growth and egg production.

Age Group	Protein Requirement
Starter (0–3 weeks)	24-27 %
Grower (3–6 weeks)	20-24 %
Layer birds	18-22 % (Ansari et al., 2024).

### Health Care and Disease Management:

Although quails are relatively hardy birds, proper sanitation and preventive care are essential. Diseases like coccidiosis, ulcerative enteritis, respiratory infections and nutritional deficiencies are

common. To prevent these, maintain cleanliness in housing units, provide balanced feed and clean water, avoid overcrowding, isolate sick birds immediately and follow proper vaccination and biosecurity measures where recommended. Regular observation helps in early disease detection and reduces mortality.

### Conclusion:

Quail rearing is a promising poultry enterprise that can contribute significantly to rural income generation, nutritional security, and employment opportunities. Due to their rapid growth, high egg production, and low maintenance cost, quails are ideal for small-scale and commercial farming alike. With proper housing, feeding, disease control, and marketing strategies, quail farming can become a sustainable and profitable agribusiness venture.

### References:

- Ansari, S., Dehru, S., Rajpurohit, V., Dabas, R., Geetanjali., Farooq, W., & Patel, A. (2024). Quail farming and its usefulness in India: An Overview. *Greenaria*. 02(11): 168 – 170.
- Chastain, L. (2026). How to start raising quail: A beginner's guide. *Waddle and Cluck*. <https://waddleandcluck.com/how-to-start-raising-quail/>
- Kumari, K. N., Panda, B., & Reddy, P. V. V. S. (2008). Quail Farming: Technical Bulletin. Central Avian Research Institute, Izatnagar, India.
- Minvielle, F. (2004). The future of Japanese quail for research and production. *World's Poultry Science Journal*. 60(4): 500–507. <https://doi.org/10.1079/WPS200433>
- Panda, B., & Singh, R. P. (1990). Developments in processing quail meat and eggs. *World's Poultry Science Journal*. 46(3): 219–234. <https://doi.org/10.1079/WPS19900022>
- Sree, D.M., & Sarma, G. (2023). Quail Rearing- An increasingly popular poultry farming option. *Just Agriculture*. 03(11): 378-381.