

POULTRY FARMING

M.SHAMILI¹, P.B.N.MADHAVI², G.PRADEEPTHI³, P.TEJA SRI⁴

¹PG scholar, Department of Zoology and Aquaculture, V.S.M College(A), Ramachandrapuram.

²PG scholar, Department of Zoology and Aquaculture, V.S.M College(A), Ramachandrapuram

³PG scholar, Department of Zoology and Aquaculture, V.S.M College(A), Ramachandrapuram

⁴Lecturer in Zoology and Aquaculture, V.S.M College(A), Ramachandrapuram

Abstract

A significant source of high-quality protein in the form of meat and eggs, poultry farming is one of the agricultural industries with the fastest rate of growth and economic significance. It is essential for increasing revenue generation, rural employment, and food security, especially in emerging nations. In order to maximize output, modern poultry farming integrates scientific management strategies that concentrate on breed selection, feeding, housing, disease control, and effective production methods. Automated feeding systems, climate-controlled housing, and better veterinary care are examples of technological innovations that have greatly raised productivity and decreased mortality rates. The main elements of chicken farming are examined in this study, including management techniques, production systems, difficulties, and new prospects. Sustainable expansion is nevertheless severely hampered by problems including biosecurity threats, disease outbreaks, and changes in feed prices. However, there is a lot of room for growth due to the growing demand for chicken products, the growing use of integrated farming techniques, and government backing. All things considered, chicken farming is still a vital part of the agricultural economy, providing opportunities for improved livelihoods and sustainable growth.

Keywords: Poultry Farming, Broilers, Layers, Hatchery, Feed Management, Biosecurity, Vaccination, Disease Control, Housing Systems, Nutrition, Breeding, Poultry Health, Productivity, Livestock Management, Sustainable Farming, Integrated Farming, Poultry Production, Livelihoods, Rural Development, Commercial Farming.

INTRODUCTION

One of the livestock industry's fastest-growing segments, poultry farming is essential to supplying the world's need for high-quality protein in the form of meat and eggs. For both commercial and subsistence uses, it entails the breeding, raising, and management of domesticated birds like chickens, ducks, turkeys, and quails. Poultry farming has changed over time from conventional backyard ways to contemporary, intense production systems that use cutting-edge technologies and scientific techniques to increase output and profitability.

Poultry farming is important because it can produce wholesome food at a reasonable price, create jobs, and make a substantial contribution to the agricultural economy. While large-scale commercial farms provide steady, high-volume production to satisfy market demand, it is a significant source of income for rural households and small-scale farmers. Successful chicken production depends on a number of factors, including better breeds, balanced diet, good disease management, and efficient housing systems.

The industry has experienced tremendous growth on a global scale due to growing consumer demand for poultry products and population growth. Productivity is nevertheless impacted by issues including disease outbreaks, growing feed costs, environmental concerns, and biosecurity hazards. Strengthening the poultry sector requires addressing these issues through scientific management, sustainable practices, and government backing.

All things considered, chicken farming continues to be an essential part of agricultural development, supporting economic expansion, improved livelihoods, and food security.

Key Points

1. Poultry farming involves raising domesticated birds such as chickens, ducks, turkeys, and quails for egg and meat production.
2. It is one of the fastest-growing sectors in the agriculture and livestock industry.
3. Provides high-quality protein through poultry meat and eggs at affordable prices.
4. **Includes two major categories:**
5. Broiler farming – for meat production
6. Layer farming – for egg production
7. Success in poultry farming depends on scientific management, including proper housing, nutrition, temperature control, and hygiene.
8. Feed accounts for nearly 60–70% of the total cost of poultry production.
9. Biosecurity and disease control are essential to prevent outbreaks like Newcastle Disease and Avian Influenza.
10. Modern farms use technological advancements such as automated feeders, controlled-environment sheds, and improved breeding techniques.
11. Poultry farming provides employment opportunities and supports rural livelihoods.
12. Poultry manure is a valuable by-product and can be used as organic fertilizer in agriculture.
13. Major challenges include rising feed costs, disease risks, environmental issues, and market fluctuations.
14. Government and agricultural organizations offer training, subsidies, and support to promote poultry farming.
15. Poultry farming contributes significantly to food security, nutrition, and economic growth.

**REPORTING**

In poultry farming, reporting entails recording the critical data pertaining to farm management, bird performance, health, and production results. Farmers may assess production, pinpoint issues, and develop efficient management plans for improvement with the use of accurate reporting.

Abbreviations

1. FAO – Food and Agriculture Organization
2. ICAR – Indian Council of Agricultural Research

3. ND – Newcastle Disease
4. IBD – Infectious Bursal Disease
5. AI – Avian Influenza
6. FCR – Feed Conversion Ratio
7. CP – Crude Protein
8. ME – Metabolizable Energy
9. TPR – Total Poultry Ration
10. RIP – Respiratory Infection in Poultry
11. DOC – Day-Old Chicks
12. RIR – Rhode Island Red (breed)
13. WLH – White Leghorn (breed)
14. BRO – Broilers
15. LAY – Layers
16. IB – Infectious Bronchitis
17. HPAI – Highly Pathogenic Avian Influenza
18. LPAI – Low Pathogenic Avian Influenza
19. NPK – Nitrogen–Phosphorus–Potassium (used in manure management)

Conclusion

A vital and quickly growing segment of the livestock industry, poultry farming makes a substantial contribution to nutrition, food security, and the growth of rural livelihoods. It is an essential part of the agricultural economy since it can supply high-quality protein in the form of meat and eggs. Poultry farming can achieve high productivity and profitability by implementing scientific management approaches, such as appropriate housing, balanced diet, effective disease control, and biosecurity measures.

The industry is still expanding because of rising consumer demand and technical developments, despite obstacles including disease outbreaks, growing feed costs, and environmental concerns. Modern farming methods, better breeds, and government assistance all contribute to increased sustainability and efficiency.

All things considered, chicken farming presents enormous potential for employment, revenue generating, and economic growth. Sustainable methods, ongoing education, and effective management may guarantee long-term success and enhance the poultry sector.

References

1. Banerjee, G. C. (2018). *A Textbook of Animal Husbandry*. Oxford & IBH Publishing.
2. Bell, D. D., & Weaver, W. D. (2013). *Commercial Chicken Production Manual* (5th ed.). Springer.
3. FAO. (2020). *Poultry Production and Health Manual*. Food and Agriculture Organization of the United Nations.
4. North, M. O., & Bell, D. D. (2014). *Commercial Chicken Production Manual*. Springer Science & Business Media.
5. Singh, R. A. (2007). *Poultry Production*. Kalyani Publishers.
6. ICAR. (2013). *Handbook of Poultry Production*. Indian Council of Agricultural Research.
7. Leeson, S., & Summers, J. D. (2009). *Broiler Breeder Production*. University Books.
8. Ministry of Agriculture & Farmers Welfare, Govt. of India. (2021). *Poultry Development Report*.
9. Hafez, H. M. (2008). *Poultry Diseases: Diagnosis and Treatment*. Global Veterinary.
10. Ravindran, V. (2013). *Nutrition and Feeding of Poultry*. CAB International.