

**Popular Article** 

## **Exploring the Advantages of Backyard Poultry**

Ankur Pandey, Aryak Mishra, Akshat Kaushik, Ajay Patel, Abhinov Verma<sup>\*</sup> and Shripraksh Singh College of Veterinary Science and Animal Husbandry U.P. Pt. Deen Dayal Upadhyaya Pashu Chikitsa VigyanVishwavidyalaya Evam Go-Anusandhan Sansthan (DUVASU), Mathura, Uttar Pradesh, India, 281001 <u>https://doi.org/10.5281/zenodo.10969735</u>

Backyard poultry farming is highly popular in rural and resource-poor areas of India and provides rural families with income, nutritionally rich food sources as meat and eggs, and reduces the gap between demand and supply of poultry eggs and meat. In India, about 65 percent of the human population lives in villages where the staple food is either rice or wheat and the protein intake is considerably low. It is essential to provide nutritious food with supplementation of animal protein to these rural and tribal people to protect them from protein malnutrition and ensure their proper growth, and sound health. Though the intensive production system is well established, backyard poultry farming (BYPF) with improved chicken varieties or native breeds is gaining popularity in the recent past as a potential tool to alleviate protein hunger and generate subsidiary income among the rural and tribal people across the country.

Backyard poultry contributes about 17.8% (18.41 billion) of the total egg production (103.32 billion) of India (BAHS 2019). Of the total egg production from the BYPF, the native fowls produce about 11.9 billion eggs, the improved fowl's lay about 5.19 billion eggs, while other avian species produce 1.32 billion eggs in the country. India ranks 3rd in egg production and 5<sup>th</sup> in meat production in the world and the per capita availability is 79 eggs and 3.12 kg chicken meat per annum. The availability of eggs and chicken meat is highly variable in different parts of the country due to disparities in production levels and their transportation and availability between urban and rural areas. The Backyard poultry farming has a proven potential to alleviate poverty, eradicate malnutrition, generate subsidiary income, empower women, and provide gainful employment in rural and tribal areas of the country (Islam et al. 2020). The Backyard poultry farming is considered as an integral part of many families and as an income generating activity in developing countries for women.

1396



Published 13.04.2024

The backyard poultry farming is comprised of two phases of rearing, i.e., **Nursery** and **Free-range rearing** for the sustenance of the activity.

**Nursery rearing**: - Rearing of newborn chicks by artificially providing all the requirements (warmth, feed, protection from the predators, etc.) that are provided by the mother to young chicks is called nursery rearing. The management of backyard type chicks during this phase resembles that of intensive poultry farming in terms of feeding, management, and health care practices. Chicks are reared in this system till they grow enough to protect themselves from the predators and start scavenging for feed, which is usually practiced up to 4–6 weeks of age.

**Free-range rearing:** - The chicks are introduced into the farmer's backyards at 4–6 weeks of age depending on the environmental temperature The number of chicks per household depends on the area and the natural food base available. However, a unit with 15 to 20 birds per household is ideal for the successful and effective management of birds.

## **Backyard poultry farming Benefits:**

- 1. Backyard poultry can survive in harsh and inclement climatic conditions. They are resilient to climate change and better adapt to different environments.
- 2. Backyard poultry birds convert waste material such as kitchen waste, vegetable waste, and green grass into high-quality animal protein.
- 3. Backyard poultry farming involves minimal initial investment.
- 4. It provides employment to the rural poor farmers, women, unemployed youth, and old members of the family along with subsidiary income.
- 5. Eggs and meat from backyard poultry farming fetch a high price as compared to those from commercial poultry farming.
- 6. Produce of backyard poultry is a source of good-quality animal protein and hence a source of food and nutritional security to vulnerable communities.
- 7. Backyard poultry may well-integrate with other agricultural operations such as poultry–fish integrated farming system.
- 8. Manure from backyard poultry is a rich source of soil nutrients and can be utilized to enhance soil fertility.
- 9. Women empowerment: Backyard poultry are generally owned and managed by women of the household. the sense of ownership and income from backyard poultry empowers rural women.
- 10. Conservation of biodiversity: Backyard poultry consists of native or indigenous birds, which are welladapted to the local climate and are resistant to diseases. There is high genetic and phenotypic diversity in indigenous chickens. this can be utilized as a base resource for further improving the productivity of backyard chickens.

1397



## References

- Rajkumar U, Rama Rao SV, Raju MV, Chatterjee RN. Backyard poultry farming for sustained production and enhanced nutritional and livelihood security with special reference to India: a review. Tropical Animal Health and Production, 53(1):176.
- Chatterjee, R.N., and Rajkumar, U., 2015. An overview of poultry production in India. Indian Journal of Animal Health, 54(2), 89-108.
- Rajkumar, U., and Rama Rao, S. V., 2015. Gramapriya, a prolific brown egg layer for rural backyards. Indian Farming, 65, 32-34.
- Sambo, E., Bettridge, J. Dessie, T., Amare, A., Habte, T., Wigley, P., and Christley, R. M., 2015. Participatory evaluation of chicken health and production constraints in Ethiopia. Preventive Veterinary Medicine, 118, 117–127.
- FAO., 2007. Poultry proceedings of the International Conference Poultry in the Twenty-first Century: avian influenza and beyond, held 5–7 November 2007, Bangkok, Thailand. Rome.
- BAHS., 2019. Basic Animal Husbandry Statistics. Department of Animal Husbandry and Dairying. Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.
- Islam, R., Sapcota, D., Saikia, A.K., and Sheikh, I.U., 2020. Performances of Improved Dual Type Backyard Chicken in Free Range System: A Review. Journal of Poultry Science and Technology, 8 (2), 32-40.
- Singh M, Mollier RT, Paton RN, Pongener N, Yadav R, Singh V, Katiyar R, Kumar R, Sonia C, Bhatt M, Babu S. Backyard poultry farming with improved germplasm: Sustainable food production and nutritional security in fragile ecosystem. Frontiers in Sustainable Food Systems. 18;6:962268.

