

Popular Article

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# Backyard Poultry Farming a Boon for Marginal Farmers of India

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#### Introduction

In the era when we are celebrating Azadi ka Amrit Mohatsav and moving towards completing 100 years of independence a stratum of society that must be looked upon are the marginal farmers of India. In the present time when we are talking about doubling the farmer's income through various strategies framed by the government of India. Livestock forms one of the 7 sources that are contributing to farmer's income. Backyard poultry farming can be a possible and a sure-shot solution for the upliftment of the marginal farmers of India. Backyard poultry is a low-cost low-input option for these farmers that can give them great gains not only in form of nutritional benefits but in form of economic profits. The Indian poultry sector has improved immensely in the past years but there is a whole lot of scope for improvement in backyard poultry farming. Today the Indian poultry population stands at a total of 851.81 million of which 317.07 million are contributed by backyard poultry according to the 19th livestock census. As compared to the previous livestock census the commercial poultry population has increased by 4.50% whereas the backyard poultry population has increased by 45.79%. This shows that backyard poultry is attracting farmers to this enterprise, and they are opting for it with satisfaction and zeal.

Poultry sector in India is mainly divided into two sub-sectors, first one with a highly organized commercial sector with about 80% of the total market share and the second one is being unorganized with about 20% of the total market share. The unorganized sector is also referred to as backyard poultry which plays an important role in up-liftment of socioeconomic and nutritional



status of poor people. In a study by Mehta *et al.*, 2003, revealed that the production of agricultural crops has been growing at a rate of 1.5–2% per annum, however, that of eggs and broilers has been growing at a rate of 8–10% per annum. In India, Kumaresan has reported that native chicken varieties reared in backyard conditions contribute about 11 percent of total egg production. According to the report of DADF 2018, India stands 3<sup>rd</sup> in egg production and 5<sup>th</sup> in broiler production in the world with annual production of 88 billion eggs and 3.46 million tonnes of broiler meat. According to the BAHS 2017 data, the present per capita availability of eggs and meat is 69 and 2.5 kg per annum, respectively, is lesser than the recommendation of the nutritional advisory committee, ICMR, i.e. 180 eggs and 10.8 kg poultry meat per annum. There is a huge gap between the supply and demand of the poultry egg and meat in India. Backyard poultry farming have huge potential to fulfill the requirements in minimum input along with the fulfillment of nutritional requirements and boosting of marginal farmers income in India.

There are different types of ways through which backyard poultry farming can be proved as a boon for land less farmers in India (Fig.1).



Fig. 1. Types of ways through which backyard poultry help to helpless farmers.

#### I. A tool for waste to best management

Backyard poultry farming provides balanced nutritious food by converting waste material like home kitchen waste, vegetable waste, green grass, etc., into high-quality eggs and meat for human consumption. Thus, this makes it a very low-cost enterprise that can be started from a very vague and minimal investment. Poultry droppings are a good source of nitrogen and phosphorus thus it contributes towards enhancing the soil fertility of the ground on which it is raised (15 chickens can produce 1 to 1.2 kg of manure per day). Backyard poultry can also be raised on an extensive system where the birds are set free in the morning in an open area where they feed themselves and at night, they are sheltered under bamboo baskets to protect from any predators. Backyard poultry birds kept along with the other livestock species can control the different ectoparasites like ticks, mites and other arthropods. It can be helpful in the eradication of malnutrition, to alleviate rural unemployment, creation of profitable employment and reduction of poverty in rural areas. The indigenous poultry birds come in a wide variety of plumage colors that has a huge market among consumers thus making it more profitable.

## II. A tool for nutritional security

Egg production in the India has increased from around 83 billion numbers in 2015–16 to around 88 billion in 2016–17, thus registering a growth of about 6% (DADF 2018). The per capita availability of egg has increased from 61 in 2013–14 to 69 in 2016–17 and poultry meat production in the country has increased to nearly 3.46 million tonnes during the year 2016–17 from 3.26 million tonnes during the year 2015-16 at around 6% growth rate (BAHS 2017). Chicken contribution towards the total egg production in India is nearly 95% and the rest is contributed by ducks and others (DADF 2014). Eggs are cheap and easily available source of protein, vitamin A, vitamin B12, riboflavin, iron and zinc. Eggs also have sufficient amount of folate, selenium, vitamin D and vitamin K. Eggs also contain two important nutrients named as lutein and zeaxanthin. Recent studies have shown that consuming lutein and zeaxanthin can significantly lower risk of blindness affecting people over the age of 65 and there is a less probability of cataracts. Poultry meat is an important source of protein, vitamins and minerals such as iron, selenium, zinc, vitamins as well as rich source of omega-3 fatty acids. Backyard chickens are a good source of minerals and vitamins because of their varied diet. In a country like India where a major portion of the population is facing the deficiency of good quality protein poultry products can be a cheaper and more wholesome option. Promoting the backyard poultry farming will meet this protein demand of the population. Poultry meat can reach a wide stratum of the society because it is free from any religious taboos and readily accepted by everyone. Indigenous or desi chicken plays very significant role for protein requirement in developing countries including India.

## III. Women empowerment

Women's security, decision-making power, and mobility are three indicators for women's empowerment in India, and more so for rural and less educated women. These three indicators are significantly low in India. According to the 2006 National Sample Survey (NSS) Report on Livestock Ownership, the landless, marginal and small-scale farmers, which account for about 90 percent of the 107 million agricultural households in India, keep about 85 percent of the poultry stock of the country. Poultry sector growth can contribute to empowered women through improved nutrition, decision making power and poverty reduction in India, including direct benefits from poultry farming, employment generation and consumption of poultry meat and eggs. There is hardly any requirement of infrastructure setup for backyard poultry farming and it can be easily handled by women, aged family members and children. It has been observed that the backyard poultry farming can be an essential tool for the empowerment of women. The participation of women in backyard poultry farming is steady but quite enough comparison to previous years. In the year 2014, Ruchi Singh in West Bengal State, conducted a study on women empowerment in rural area involved in backyard poultry farming. She found that 51.82% women make monthly income of Rs 3000 to 10,000 from backyard poultry farming. The women of Barampur Village under Pachim Mangaldai block of Darrang district, Assam. These determined ladies have updated their backyard poultry practice with scientific technology like maintaining hygiene, suitable poultry house, balance feeding and also by replaced their flock with high yielding birds. Now, they are successfully doing it and enjoying the job. A self-help groups (SHG) women members who have reared backyard poultry belonging district of Bankura. The 75% of the women have been economically empowered and their savings habit have improved after participation in the project of ATMA related to backyard poultry farming. An unemployed woman from Sethikema a village in Dimapur district of Nagaland has earned a net benefit of Rs. 39,470 from 400 birds by scientific backyard poultry farming. In another case study, one hundred and fifty rural women farmers of Nalbari district were selected through Participatory Rural appraisal technique under different programs of Krishi Vigyan Kendra, Nalbari for rearing of poultry in backyard system. The venture of backyard poultry farming with improved poultry varieties for egg and meat production under agro-climatic condition of Assam by rural women, youths or SHGs have made them economically independent and socially empowered.



## IV. Organic poultry farming

The issue of antimicrobial resistance is raising alarm all over the world. One of its contributors is commercial poultry farming due to the antimicrobials used for the growth of these chickens. Along with the antibiotics the presence of growth regulators in commercial poultry eggs and meat pose a serious threat to young ones in human as they can cause disturbance in the normal growth and development of children. The tetracycline used in poultry production hamper the calcium absorption thus leading to improper development of bones and overall development of the body. These threats are shifting the consumers focus towards organic produce free from any sort of synthetic antibiotic and growth regulators. The organic produce fetches a high profit for the farmers. It has been reported that the indigenous breeds of chickens are comparatively more disease resistant and well-adapted to the climate across the country with respect to commercial poultry. So, these indigenous birds require less supplementation with antibiotics and growth regulators. Backyard poultry can be a solution for this significant health threat to humans. Because in rearing of backyard poultry no such antimicrobials are used and thus the birds rose can fetch a good price to farmers thereby increasing their profit significantly.

### Conclusion

Backyard poultry farming can play a crucial role in nation building. This can raise the standard of living of marginal farmers and women of India. It can make them self-reliant as a form of employment thus gaining a recognition in the society. The nutritional benefits of backyard poultry are immense and can help alleviate the nutritional insecurity of a major portion of the society. Thus, significantly contributing toward nation building.