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Role of women in backyard poultry farming: SWOT Analysis

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Introduction

Backyard poultry farming plays a vital role in millions of rural livelihoods, especially in developing countries, by providing household food of high-quality protein, supplementary income generation, and nutrition. Backyard poultry is a low input or no input business (Mandal et al., 2006). Women play a major role to this activity, by managing the routine operations of poultry rearing besides, domestic responsibilities. Their active involvement in backyard poultry farming not only improve their socio-economic status but also empowers them within the household as well as in the society. Animal production particularly rural backyard production can bring economic benefit to rural marginal poor. Rural backyard poultry involves keeping a small flock of chickens, which survive under adverse climatic conditions prevalent in rural areas. Rural backyard poultry farming can be practiced in areas where the land is not suitable for cultivation of agricultural crops. To better understand and encourage women's contributions in in backyard poultry rearing, a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) provides a strategic framework. This analysis helps in identifying internal strengths and weaknesses of women's involvement, while also highlighting the external opportunities that can be leveraged and the threats that need to be addressed. By evaluating these factors, policymakers, development agencies, and local communities can design more effective interventions to support and sustain women's participation in backyard poultry farming.

Understanding these elements helps farmers focus on what they do best while addressing areas needing improvement. A well-conducted SWOT analysis paves the way for strategic planning that aligns with your farm's goals and future development of the farming practice.

Strength

- **Low Initial Investment:** Since minimal infrastructure and startup cost required. Suitable for marginal and small farmers. No elaborate housing is required. A SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) offers a strategic framework to better understand and support women's contributions to backyard chicken rearing.
- **Supplementary Income generation:** Provides additional income, especially for women and landless laborers. The meat and egg of backyard chicken is more valued and fetches premium prices 50-100% higher than commercial one. No additional labourer is required; women can take care of the birds besides managing other household works. In the underdeveloped countries, village poultry significantly contributes to household food security. It offers premium food and fertilizer, serves as a type of home savings and insurance, and aids in income diversification. Subhadra and Durgga (2009).
- **Employment Generation:** Encourages rural employment and self-reliance. Can be managed by any family member. Women in villages are involved in household and agriculture work. Agriculture has seasonal unemployment which women can use productively in pursuit of backyard poultry.
- **Efficient utilization of Local Resources:** Utilizes kitchen waste and locally available feed. Village backyard poultry scavenge in open spaces to meet their feed requirement; they don't compete with humans. Efficient converter of low-quality feed into high quality protein. They are sustainable in long runs. Helps in natural pest control as backyard chickens are good scavengers and help control pests like insects, weeds, and worms in gardens and farms.
- **Nutritional Security:** Because commercial poultry development rearing is concentrated in urban and peri-urban regions, rural poor people, especially those below the poverty line, do not have access to chicken goods. Backyard chickens offer a consistent supply of affordable, high-quality protein (meat and eggs) for domestic use. Meat and eggs are more affordable and nutrient-dense protein sources that can help fight malnutrition, particularly in impoverished populations.

  Disease Resistant: Local or indigenous chickens are naturally more resilient than commercial hybrids, largely because they have evolved under harsh scavenging conditions with minimal management. Over generations, this natural selection has strengthened their immunity, making them better able to withstand common bacterial, protozoan, and parasitic infections typically found in village systems (Minga et al., 2004). As a result, they show higher survival

rates and remain productive even when exposed to stressors that often affect commercial strains (Sonaiya et al., 1999).

- **Simple marketing channel:** Produce like meat and are sold directly to consumers. Consumers prefer eggs or poultry produced from backyard due to golden yellow yolk, coloured plumage, good aroma, taste and other organoleptic attributes.
- **Other advantages**: No religious taboo for poultry farming and consumption. native chickens or birds developed for rural poultry are hardier and disease resistant. Poultry manure is a rich source of nitrogen and organic material that can be used as fertilizer for crops, improving soil fertility. Management system can be modified as and when required: Free range or traditional, backyard, semi-intensive and intensive. Backyard system is commonly seen in village areas.

Weaknesses:

Low productivity: Indigenous and desi hens are known for strong mothering instincts and broodiness, often laying 10–12 eggs per cycle and sitting on them until they hatch. Broody hens display characteristic behaviours such as reduced feed intake, constant nest occupancy, egg turning, defensive temperament, and a complete pause in egg production (Romanov et al., 2002). Although highly reliable for natural hatching, these birds produce far fewer eggs and meat than commercial strains, with village hens typically yielding only 40–60 small eggs per year across a few clutches (Gueye, 1998).

High mortality: Inadequate biosecurity in backyard flocks increases their susceptibility to disease outbreaks, often leading to high mortality rates if effective control measures are not implemented. Common threats like avian influenza, Newcastle disease, and Salmonella can devastate small flocks if biosecurity protocols are not followed.

- **Attack of predators:** Without proper enclosures, backyard birds are at high risk from predators such as hawks, foxes, and raccoons. According to Durgga and Subhadra (2009), they were particularly susceptible to a number of predators, including dogs, mongooses, and snakes that prey on poultry birds and cause bird deaths.
- **Dependence on scavenging: Under** backyard systems, birds may encounter nutritional deficiencies if their scavenging alone does not provide a balanced diet. During non-harvesting seasons birds may not fulfil their requirements from scavenging.
- **Limited access to healthcare:** Under backyard system small-scale farmers often lack access to proper veterinary services, vaccinations medication, and treatment of common diseases.

- **Market limitations:** Backyard producers often face challenges in marketing and distribution, and selling small quantities of their produces can be difficult compared to large commercial farms.
- **Disturbance from neighbourhood:** Backyard chickens can cause damage to kitchen gardens, make dirty yards due to faecal material and their noise and odour can lead to complaints from neighbours.
- **Lack of Awareness:** Farmers often lack knowledge on balanced feeding, disease management, and record keeping. Some people also considered poultry rearing as a dirty job.

Opportunities:

- **Improved Breeds:** Many improve dual-purpose birds (like Vanaraja, Giriraja, Kamrupa etc.) which performed better than indigenous birds developed by various institutes suitable for backyard poultry farming can be reared under backyard system to enhance the production.
- **Government Schemes:** Farmer can take advantage like access to subsidies, free training regarding rearing of birds, and veterinary support under rural development and livestock missions programmes.
- **Organic/Ethical Market:** There is great demand for free-range, organic, and local poultry products. Health-conscious people prefer free rage chicken products and ready to pay higher prices which is 50-100% more than commercial chicken products. Compared to commercial eggs and broilers, the sale price of eggs and birds raised on a free range was significantly higher (Selvam, 2004).
- **Self Help Groups (DHG):** with a small number of female members to use this activity to advance rural development, SHGs can be established. In rural areas, women make up a significant portion of the labor that performs farming tasks. Its members borrow from and lend to their own savings. Women can exchange resources, ideas, produce, and training through Self-Help Groups (SHGs). This allows impoverished individuals, particularly women, to earn enough money to pay back loans and sell their goods.
- **Women Empowerment: Backyard poultry farming c**an be a tool for financial independence and empowerment of rural women. They can meet their petty house hold expenses by backyard poultry farming.
- **Integrated farming:** Rearing of backyard poultry can be combined with other agricultural activities, like crop production, gardening or vermicomposting with poultry manure and earn profit easily.

Threats:

- **Disease Outbreaks:** The disease outbreak in backyard Poultry farms is more common. They feed on insects, earthworms that are intermediate hosts of various parasites. Village poultry production does not follow biosecurity measures. Threat of diseases like Ranikhet disease and epidemics like Avian Influenza which can wipe out flocks.
- **Predation and Theft:** Birds are vulnerable to predators (dogs, hawks) and theft due to open housing. Sometimes the bid lays egg in outside and somewhere in neighoubour's house.
- **Unorganized Market:** Lack of organized market leads to dependence on middlemen and fetches low prices of their products. Commercially produced poultry is often cheaper, affecting market access for backyard farmers.
- **Poor nutrition:** During non-harvesting seasons and inclement weather condition feeding of birds may be a problem. Feeding a single grain source can lead to a lack of essential nutrients like calcium and protein, can affect bird health and productivity.
- **Pollution of environment:** Proper disposal of waste is a challenge which contain pollutants, microorganisms, and pathogens that contaminate soil, water, and air. Poultry waste and litter can lead to air pollution from ammonia and greenhouse gas emissions, impacting local air quality.

Conclusion:

Backyard chicken farming contributes significantly to rural livelihoods by reducing poverty, creating jobs, and supplementing income, especially for rural women. By consuming premium protein in the form of eggs and poultry meat, it also offers nutritional security. Rural backyard poultry has advantages and disadvantages of its own. On the other hand, backyard chicken farming can help rural women become financially independent and empowered, which would strengthen society as a whole.

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