

Transforming Backyard Poultry into a Sustainable Business: A Farmer's Journey

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Introduction

Backyard poultry farming has long been a cornerstone of rural livelihoods, offering both nutritional and economic benefits to small-scale farmers. However, in the village of Nawadih, Koderma district, low productivity from traditional breeds made poultry farming less profitable. This case study showcases how Satyanarayan Singh, a 42-year-old farmer, transformed his backyard poultry farm using modern practices after participating in a training program by Krishi Vigyan Kendra (KVK), Koderma.

The Challenge: Low Productivity and Lack of Knowledge

Before adopting improved practices, Mr. Singh faced challenges typical of rural backyard poultry farming:

- Low Productivity: Local poultry breeds produced fewer eggs and had low meat yield, limiting profitability.
- Limited Scientific Knowledge: Farmers lacked knowledge of disease prevention, nutritional management, and proper vaccination schedules, contributing to poor flock health.
- Adverse Climatic Conditions: Traditional methods didn't address weather-related stress, leading to higher bird mortality.
- Marketing Barriers: Without understanding market dynamics, farmers struggled to obtain fair prices for their products.

Training and Capacity Building: The Game Changer

Mr. Singh's journey of transformation began when he attended a capacity-building training program organized by KVK-Koderma. The training covered:

- Housing, Sanitation, and Waste Management
- Stress Management of Poultry



- Disease Management and Vaccination Schedules
- Poultry Nutrition and Feed Formulation

These modules addressed the most critical gaps in traditional poultry farming, empowering farmers to adopt scientific techniques.

Adoption of the Sonali Breed: A Strategic Shift

After completing the training, Mr. Singh transitioned to the *Sonali* breed, a dualpurpose bird renowned for both egg and meat production. The Sonali variety, known for its disease resistance and adaptability, was ideal for the semi-intensive system that allowed the birds to scavenge freely during the day while being housed at night. This system reduced feed costs while maximizing bird health and productivity.

Implementation of Scientific Practices

Mr. Singh adopted several new practices based on the training:

- **Deep-litter Housing System**: He reared 1,000 Sonali chicks, ensuring proper ventilation, sanitation, and waste management. This improved flock health and reduced disease outbreaks.
- **Disease Prevention**: Following vaccination schedules and health checks, he significantly reduced disease incidence.
- Feed Formulation: Mr. Singh formulated balanced, high-quality feed tailored to the birds' nutritional needs, boosting both egg and meat production.

Economic Benefits and Profitability

The shift to Sonali birds and scientific management led to remarkable improvements:

- Egg Production: Each hen laid 180-200 eggs per year, compared to only 60-65 from local breeds.
- Meat Yield: The average weight of a Sonali bird reached 3.14 kg at 40 weeks, compared to 1.32 kg for local birds.

In a year, Mr. Singh generated an estimated ₹3,60,000 to ₹6,00,000 from egg sales and another ₹3,00,000 to ₹4,00,000 from meat sales. After deducting costs, his net profit ranged from ₹3,50,000 to ₹5,00,000, with a benefit-cost ratio (BCR) of 2 to 2.5. This means that for every ₹1 invested, Mr. Singh earned ₹2 to ₹2.50 in return.

Social and Community Impact

Mr. Singh's success had a ripple effect in his village. Seeing his profitability, many farmers from Nawadih and nearby villages adopted the Sonali breed and scientific poultry



management practices. His farm became a model of success, and through knowledge-sharing, he helped improve disease prevention, feed formulation, and housing practices among other farmers, enhancing poultry productivity in the area.

Challenges and Overcoming Barriers

Despite the clear benefits, Mr. Singh faced some challenges:

- **Initial High Costs**: Sonali chicks and feed were more expensive than local breeds. However, the long-term profitability proved to be worth the investment.
- Weather Sensitivity: Harsh weather impacted poultry health, but with proper housing and stress management, Mr. Singh mitigated losses.
- Marketing Difficulties: Selling the produce at fair prices remained a challenge. To overcome this, Mr. Singh formed a cooperative with other farmers, which helped them negotiate better rates with buyers.

Conclusion

Satyanarayan Singh's journey highlights the transformative impact of scientific poultry farming. By adopting improved techniques and transitioning to a high-yield breed, Mr. Singh significantly enhanced his farm's productivity and profitability. His success not only improved his family's income and living standards but also inspired a wider shift in the community. The training program from KVK-Koderma played a pivotal role in bridging the gap between traditional methods and modern farming techniques, leading to socio-economic upliftment for Mr. Singh and other farmers in Nawadih. This case exemplifies how the right knowledge, combined with dedication, can transform rural livelihoods, making backyard poultry farming a sustainable and profitable enterprise.

