Agri Articles
(e-Magazine for Agricultural Articles)
Volume: 06, Issue: 06 (NOV-DEC, 2026)
Available online at http://www.agriarticles.com
©Agri Articles, ISSN: 2582-9882

Woman Empowerment through Integrated Pig cum Fish Farming

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Farmer Profile

Name of Farmer: Mrs Minakhi Rabha
Village: Kacharital
District: Udalguri, Assam

Introduction

Integrated Farming System (IFS) has emerged as an effective and sustainable approach for enhancing the livelihood of small and marginal farmers. By integrating complementary enterprises such as fish farming, piggery, crop cultivation and horticulture, farmers can efficiently utilize available resources, recycle farm wastes and generate income throughout the year. This approach not only improves farm productivity but also reduces production costs and minimizes risks associated with dependence on a single enterprise. The success story of Mrs. Minakhi Rabha from Kacharital village of Udalguri district demonstrates how scientific interventions and technical guidance from Krishi Vigyan Kendra (KVK), Udalguri transformed a traditional fish farming enterprise into a profitable and sustainable integrated farming system. Her journey is an excellent example of women's empowerment through agriculture and entrepreneurship.

Farmer's Background

Mrs. Minakhi Rabha is a progressive farmer from Kacharital village under Udalguri district of Assam. She initially depended solely on fish farming for her family's livelihood. In 2012, she started composite fish culture in a pond covering about 0.5 bigha. Although she managed the enterprise with dedication, fish production remained below the desired level due to high feed costs and inadequate nutrient management. The limited returns from aquaculture alone were insufficient to support her family, motivating her to explore alternative farming practices that could provide better income and livelihood security.

Situation Before Intervention

Before receiving technical support, Mrs. Rabha faced several constraints:

- Low fish productivity and poor pond nutrient management.
- High expenditure on commercial fish feed.
- Limited income from fish farming alone.
- Lack of diversification, making the family vulnerable to fluctuations in farm income.

These challenges highlighted the need for an integrated farming model that could recycle farm resources, reduce production costs and enhance overall profitability.

Intervention by KVK, Udalguri

During 2017–18, Mrs. Rabha came in contact with Krishi Vigyan Kendra, Udalguri and actively participated in various training programmes, demonstrations and extension activities. Scientists of KVK provided technical guidance on improved fish farming practices and encouraged her to adopt an Integrated Farming System. In 2021, under a NABARD-sponsored Integrated Farming System project, KVK, Udalguri established an Integrated Pig-cum-Fish

Farming model on her farm. The intervention included the introduction of the improved pig breed Yorkshire, scientific pond management practices and efficient nutrient recycling techniques.

Adoption of Integrated Pig-cum-Fish Farming

After adopting the integrated pig-cum-fish farming model, Mrs. Rabha effectively utilized pig manure as a natural nutrient source for fish production, thereby reducing dependence on costly external inputs. The integration improved pond fertility, increased natural fish food availability and lowered feed costs. The piggery enterprise also generated an additional source of income through the sale of piglets. The integration of both enterprises significantly enhanced overall farm productivity, profitability and sustainability while ensuring efficient recycling of farm resources.

Diversification of Farm Enterprises

Encouraged by the success of the integrated farming model, Mrs. Rabha further diversified her farming activities. Besides fish farming and piggery, she undertook:

- Paddy seed production on 6 bighas of land.
- Cultivation of banana and Arecanut on 2 bighas.

KVK, Udalguri also facilitated her participation in district and state-level agricultural exhibitions, where she showcased her farm products and interacted with fellow farmers, researchers and agricultural entrepreneurs. These exposure visits strengthened her marketing skills and expanded market linkages.

Income Enhancement and Outcomes

The adoption of Integrated Farming System and improved scientific management resulted in remarkable economic improvement. Between 2022–23 and 2025–26, Mrs. Rabha sold 34 Yorkshire piglets to farmers within the district. At present, she earns an average annual net income of ₹3.25 lakh, equivalent to approximately ₹27,100.00 per month. Overall, her net income increased by 41.3 percent after adopting the Integrated Farming System compared to her previous farming practice.






Glimpses of Photographs

Impact on Nearby Farmers

The remarkable success achieved by Mrs. Rabha has inspired many neighbouring farmers, particularly rural women, to adopt integrated farming practices. Her farm has become a demonstration and learning site where farmers regularly visit to observe scientific pig-cum-fish farming and interact with her. Several farmers have successfully replicated similar Integrated Farming System models after receiving guidance from KVK, Udalguri, thereby contributing to increased adoption of sustainable farming practices in the district.

Sustainability and Livelihood Improvement

The Integrated Farming System has enabled Mrs. Rabha to optimize the utilization of land, labour and farm resources while generating income from multiple enterprises throughout the year. Recycling of pig manure within the fish production system has reduced input costs, enhanced nutrient use efficiency and improved environmental sustainability. The diversified farming system has also strengthened household food and nutritional security, reduced dependence on a single enterprise and increased resilience against climatic and market uncertainties. The model demonstrates that integrating fisheries, piggery, crop production and horticulture can substantially improve farm profitability and ensure sustainable rural livelihoods.

Conclusion

The journey of Mrs. Minakhi Rabha illustrates how scientific interventions, appropriate technologies and continuous technical support from KVK, Udalguri can transform the livelihood of rural women through Integrated Farming System. From a low-income traditional fish farmer, she has emerged as a successful integrated farming entrepreneur, earning a stable annual income while serving as a role model for other farmers in the district. Her success clearly demonstrates that Integrated Farming System is an effective strategy for enhancing farmers' income, promoting women empowerment, ensuring resource conservation and achieving sustainable agricultural development.