



## SUCCESS STORY

### Empowering Livelihood through Integrated Pig cum Fish Farming

P. Rajbongshi<sup>1\*</sup>, K. D. Nath<sup>1</sup>, D. Sharmah<sup>1</sup> and D Borah<sup>2</sup>

<sup>1</sup>Krishi Vigyan Kendra, AAU, Udalguri, Lalpool, 784514

<sup>2</sup>Advanced Centre for Integrated Farming Systems Research, AICRP on IFS, AAU, Jorhat, 785013

\*Email: [vetspradip@gmail.com](mailto:vetspradip@gmail.com)

Received: 03 July 2026  
Revised: 04 July 2026  
Accepted: 06 July 2026  
Published online: 07 July 2026

Article ID: SR01135

Citation: Rajbongshi, P., Nath, K. D., Sharmah, D., & Borah, D. (2026). Empowering Livelihood through Integrated Pig cum Fish Farming. *Scientia Review*, 2(7), 14-15

#### Introduction

Integrated Farming System has emerged as a practical and sustainable approach for improving the livelihood of small and marginal farmers. In rural areas where farmers often depend on a single enterprise, income remains limited and uncertain. By combining different farm components such as fishery, piggery, crop production and horticulture, farmers can make better use of available land, labour and resources.

The success of Shri Lalit Deka from Jhargaon village of Udalguri district is a good example of how scientific intervention and proper guidance can improve farm income and livelihood security. His journey shows that integrated farming is not only about increasing production but also about creating a stable source of income throughout the year.

#### Farmer's Background

Shri Lalit Deka is a farmer from Jhargaon village under Udalguri district of Assam. Like many farmers of the area, he earlier depended mainly on fish farming for his livelihood. However, income from aquaculture alone was not sufficient to meet the needs of his family. The high cost of fish feed and low productivity were major challenges for him.

He started fish farming in 2013 in an area of about 0.5 bigha. Initially, he followed composite fish farming practices but the productivity remained low compared to the expected standard. This situation encouraged him to look for better farming options that could provide higher income from the same available resources.

#### Situation Before Intervention

Before receiving technical guidance, Shri Deka faced several limitations in fish farming. The production was low and the income generated from the fish pond was not enough to maintain his family comfortably. Due to poor economic condition, it was also difficult for him to provide high-quality protein-rich feed to the fish.

As a result, the cost of production remained high and the return from aquaculture was limited. He needed a farming model that could reduce input cost, recycle farm waste and increase total farm income.

#### Intervention by KVK, Udalguri

During 2017-18, Shri Deka came in contact with Krishi Vigyan Kendra, Udalguri and started participating in different extension activities. The scientists of KVK, Udalguri guided him on improved farming practices and motivated him to adopt an Integrated Farming System.

In 2021, under a NABARD-sponsored Integrated Farming System project, KVK, Udalguri demonstrated an integrated pig-cum-fish farming model in his field. The model included fish farming along with rearing of the improved pig breed HDK-75. This intervention helped him understand the benefit of linking different farm enterprises for better income generation.

#### Adoption of Integrated Pig cum Fish Farming

After adopting the integrated pig-cum-fish farming system, Shri Deka was able to use the waste and by-products from one component as input for another. The piggery unit supported the fish farming activity by reducing dependence on external inputs and improving nutrient recycling within the farm.

This system helped him reduce the cost of production and improve the overall productivity of the farm. The integration of piggery with fish farming also created an additional source of income through the sale of piglets. Gradually, his farm became more productive, profitable and sustainable.

#### Diversification of Farm Enterprises

At present, Shri Deka is not dependent on fish farming alone. He has diversified his farm

activities and now earns his livelihood through an Integrated Farming System along with paddy seed production from 6 bighas of land. He has also started cultivating horticultural crops such as Apple ber and Dragon fruit in 2 bighas of land.

KVK, Udalguri also motivated and helped him to participate in different district and state-level exhibitions. These exposures helped him promote his farm products and improve market linkage.

**Income Enhancement and Outcomes**

The adoption of improved agricultural practices and Integrated Farming System brought a remarkable change in the income of Shri Deka. During the financial year 2022-23 to 2025-26, he sold 24 piglets of HDK-75 breed to other farmers of the district.

At present, he earns an average annual net income of Rs. 4.25 lakh, which is approximately Rs. 35,400 per month. His net income increased by 46.3 percent after adopting the Integrated Farming System and improved farming practices.

**Impact on Nearby Farmers**

The success of Shri Deka created a positive impact among farmers of nearby villages. Many farmers visited his farm to observe the integrated farming model and learn about the technology. After seeing the practical benefits, several farmers started adopting integrated farming practices in their own farms.

His farm has now become a learning site and source of motivation for other farmers. The story of Shri Deka proves that when farmers

receive proper technical support and adopt suitable technologies, they can significantly improve their income and livelihood.

**Sustainability and Livelihood Improvement**

The Integrated Farming System helped Shri Deka achieve better use of land, labour and farm resources. It provided income from different enterprises and reduced the risk of depending on a single source. The system also supported recycling of farm waste, reduced production cost and improved farm sustainability.

Such a model is especially useful for small and marginal farmers because it provides regular income, improves food and nutritional security and enhances productivity per unit area. By linking fishery, piggery, crop production and horticulture, Shri Deka was able to build a more stable and profitable farming system.

**Conclusion**

The journey of Shri Lalit Deka is an inspiring example of how Integrated Farming System can transform the livelihood of a farmer. From low productivity in traditional fish farming, he successfully moved towards a diversified and sustainable farming model with the support of KVK, Udalguri.

His achievement clearly shows that scientific guidance, improved technology and proper management can help farmers increase income and reduce farming risks. Shri Deka’s success is a strong example of how Integrated Farming System can contribute towards doubling farmers income and improving rural livelihood in a sustainable manner.

