Production and Economics

The farmer harvests around 60 tonnes of rice (average grain yield, 3 t/ha) and 135 or more tonnes of fish from the farm. The fish yield increases in the case of release of fingerlings.

Sri Mishra realized an income of around ₹16 lakhs in the first year, which increased to 30 lakhs in the 2nd year and around 150 lakhs in the 3rd year due to diversification of the farm with horticultural crops and intensification of mainly fish culture activities. The farmer spent around ₹25 lakhs as input costs against the gross income of ₹150 lakhs. He returned the whole loan amount (₹113 lakhs) in the 3rd year itself. He expects still higher income with the produce from long term fruit crops.

Farmer’s Perception and Future Plan

Sri Mishra claimed that he experienced the benefit of rice-fish farming by way of bio-control of weeds and also rice pests through fish culture and for this, he does not apply herbicide and insecticide in the rice field. Besides, he also perceives that the soil fertility level increases in this farming due to addition of fish excreta and left over fish feed.

After realizing the enormous benefit in rice-fish-horticulture crop based farming system, he recently purchased another patch of 180 acres of lowland and he has a target of extending this practice to even 600 acres of farm area.

Commercialization of Rice-Fish Farming System Model of CRRI - A Success Story

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Commercialization of Rice-Fish Farming System Model of CRRI - A Success Story

D.P. Sinhababu and G.A.K. Kumar

A highly progressive farmer, Sri Sunakar Mishra, Proprietor of a combined farm in village Mahisara under Dharmasala block of Jajpur district in Odisha has made exemplary achievement and impact by way of making huge benefits through successful adoption of rice-fish farming system model developed by the Central Rice Research Institute (CRRI), Cuttack in commercial scale.

Background

Sri Mishra initially started shrimp farming in the year 1980-81 by taking lease of 15 acres farm in the coastal saline areas of Baleswar district of Odisha, which was extended to 80 acres through purchase of additional areas during 1983-84. But due to outbreak of White Spot Virus disease in the farm, he incurred a heavy loss and left shrimp farming. He then thought of alternate farming of fresh water prawn and fish in rice field. Accordingly, he purchased 65 acres of lowland in village Mahisara in the year 1992, which was later extended to 79 acres and started practicing rice-fish farming in traditional way with some benefit. But due to flood in 2003, he experienced a heavy loss because of improper farm development and management practices and stopped farming. He was
Compost and Production Practices

In the possession of one 20 HP diesel and four regular tractors, two farmers possess various virus-resistant and disease-free plants and crops. Various viruses, antibiotics, and pesticides are used on the plants.

Harvesting of crops in standing water. Vegetables and watermelons are harvested from the field, ready for sale.

For cultivation of crops, and other crops after laying the appropriate soil, the first step is to pay attention to the soil and its preparation. The use of organic matter is important for healthy growth and development of the crops. In the absence of proper preparation of the soil, the crops may not grow properly. Moreover, the soil type, climate, and other factors also play a crucial role in the growth and development of the crops. The use of proper fertilizers and pesticides is also important to ensure the healthy growth of the crops.

Farms Development

With the support of agricultural technology and financial assistance, the farmers are able to produce high-quality crops. The use of advanced technologies and techniques has improved the efficiency and productivity of the farms. The farmers are also provided with regular training and support to ensure the successful development of the farms. The government has also taken several initiatives to support the farmers, such as providing loans, subsidies, and other financial assistance. The success of the farms is measured by the production, income, and overall development of the farms.