

Fisheries

Development of rice-fish systems in the Ayeyarwady Delta, Myanmar



Rice and fish are key elements of the diet and major agricultural production sectors in Myanmar. Rice-fish systems encompass a spectrum of farming and fishing practices, from traditional capture of fish in rice-dominated landscapes through to controlled farming of fish in rice fields.

Rice farming covers approximately 8 million ha and involves more than 5 million rural households. Governments of the recent past favoured 'command and control' based policies that discouraged rice farmers from diversification and making production decisions based on market demand.

Such policies have constrained crop and land use diversity, as well as opportunities for poverty reduction. Recent policy shifts are now encouraging farmers to diversify farming systems in agriculture, livestock and fisheries, presenting a window of opportunity for developing and implementing diversified and productive rice-fish systems.

Such developments contribute to the Government's overarching policy goals for poverty reduction, addressing under-nutrition and rural development.





KEY FACTS

ACIAR Project No. FIS/2016/135

Duration: July 2017 to December 2021 (4 years)

Target areas: Myanmar **Budget:** A\$2,599,137

Project Leader

Dr Michael Phillips, WorldFish

Key partners

- International Rice Research Institute (IRRI)
- Department of Fisheries, Myanmar
- Department of Agriculture, Myanmar
- Department of Agriculture Research, Myanmar

ACIAR Research Program Manager

Dr Ann Fleming

Objective

The overall aim of this project is to improve productivity and profitability of rice-fish systems in Myanmar, with a focus on favourable agroecological zones in the Ayeyarwady Delta.

The project's three main objectives are to:

- Characterise rice-fish systems in the Ayeyarwady Delta.
- Identify improvements in rice-fish production and management systems that optimise genderequitable income, food and nutritional outcomes.
- Strengthen the capacity and enabling environment for research, dissemination and uptake of improvements in rice-fish systems.

Expected scientific results

- Enhanced understanding of the status, economic and social values and functioning of ricefish systems, and options for their sustainable development.
- Increased awareness of the multiple functions and diversification choices for farmers, investors and governments in rice fields and rice-dominated landscapes.
- Gender-disaggregated information on fish consumption, diets and incomes from rice-fish systems.
- Influence of new knowledge on Myanmar's rice-fish systems will also be used by government and private sector partners to improve policies and extension practices.

Expected outcomes

- Better understanding of rice-fish systems potential and evidence-based improvement options for policy development and extension.
- Prototype rice-fish systems are available and being adopted by lead farmers and producer groups within selected areas of the Ayeyarwady Delta.
- Mapping and modelling has identified promising areas for promoting new domains of rice-fish system practice and its adaptability to climate change.
- Private sector engaged at different points in the rice and fish value chains to promote adoption of ricefish system improvements.
- Evidence-based and gender sensitive extension activities are promoting promising rice-fish system improvements.
- Increased profitability and productivity of rice and fish systems delivering improved income, nutrition and gender equity in small-scale rice farming households.





