

Sustainable Aquaculture in Madagascar



Context

Some 70% of the population of Madagascar live in rural areas, where food rich in protein and nutrients is in short supply. Alongside poverty, this is the leading cause of widespread undernourishment and malnutrition among the rural population – and children are hardest hit. Although fish is a popular and high-quality food, it is available almost solely in the coastal region and urban centres. Aquaculture provides one way of supplying the upland population with fish.

The Malagasy Government has set itself the goal of creating enabling political, legal and administrative frameworks for the sustainable development of freshwater aquaculture, particularly among smallholders.

The project is supporting the Malagasy Government in achieving this goal, and is also promoting two forms of aquaculture that are already practised in the uplands of Madagascar.

In rice-fish culture, fish farming can be integrated into existing rice cultivation. Through the project, farmers are learning to identify suitable paddies and put them to use accordingly. Currently only about 20% of these fields are being used for this purpose.

Another form of aquaculture practised in Madagascar is the farming of carp and tilapia in ponds. Pond farmers are being trained to improve their management practices and thus increase their yields significantly.

Our objective

People suffering from food and nutrition insecurity in selected upland regions and the greater Antananarivo area have access to more fish products and higher income from sustainable aquaculture.

Activities in Madagascar

- **Scaling-up rice-fish culture.** Small farmers are being trained to identify suitable paddy fields and use them to rear fish.
- **Managing ponds more efficiently.** Pond farmers receive training in methods that will increase production (pond design, fish stocking, feeding).
- **Improving conditions for sustainable and environmentally sound aquaculture.** The project is delivering advice on formulating and introducing legislation.
- **Promoting knowledge-sharing.** The project is establishing a platform that brings together the various stakeholders and interests in the aquaculture sector, and enables the actors involved to jointly devise practical solutions for further development of the sector.
- **Creating awareness.** A public awareness-raising campaign is communicating the importance of fish for a healthy diet.



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Region

Upland regions, plus the area surrounding the capital Antananarivo

Term

April 2017 to August 2021

Budget

Up to EUR 5 million

Implementing partners

The non-governmental organisation APDRA
The consortium COFAD / GOPA

Lead executing agency

Ministère des Ressources Halieutiques et de la Pêche (MRHP)
(Malagasy Ministry of Marine Resources and Fisheries)

Target group

Small farmers practising aquaculture in rice-fish systems or ponds
Small farmers producing fingerlings
The food and nutrition-insecure population

WHERE WE WORK



A real-life example

Should we farm fish or grow rice? Some farmers in Madagascar never ask themselves this question. They produce both – concurrently. In rice-fish culture, fish farming can be integrated into existing rice cultivation. Once the rice seedlings are planted, so-called fingerlings are released into the flooded paddies. Thanks to the avoidance of chemical fertilisers and pesticides the fish then encounter a healthy habitat where they find sufficient food such as snails, insects and other small animals. For the rice farmers this investment pays off twofold: On average it enables them to harvest 50 kg of fish in addition to their rice crop. Moreover, the rice harvest is about 10% higher because additional nutrients are released in the soil as the carp rummage around in search of food.

Currently only about 20% of suitable paddy fields are being used for rice-cum-fish farming. There is a lack of extension services to disseminate the knowledge required. This is why one aim of activities in Madagascar is to scale up paddy-cum-fish culture.



The project reaches out to rice farmers, and especially women who grow and process rice. Through training and best practice examples, farmers are learning which paddies are suitable for fish production, how they can manage their fields optimally for this purpose, and what they need to do to produce high quality fingerlings.

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