

TOWARDS THE DEVELOPMENT OF SUSTAINABLE FRESHWATER AQUACULTURE AND FISHERIES MANAGEMENT IN MALI: COLLABORATIVE WORK UNDER THE AQUAFISH CRSP

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INTRODUCTION

In 2007 the AquaFish Collaborative Research Support Program partnered with the Direction Nationale de la Pêche (Mali) and collaborators from Moi University (Kenya), Shanghai Ocean University (China), and FishAfrica (Kenya) to begin the *Mali Project*, an effort to promote the sustainable development of the aquaculture and fisheries sectors in Mali. Support for the project is being provided by the Mali Mission of the United States Agency for International Development (USAID), through a cooperative agreement with Oregon State University.

The Mali Project works within the framework of three thematic areas: Pond Culture, Rice-fish Culture, and Fisheries Planning. For the aquaculture themes, the project seeks to identify appropriate strategies for pond aquaculture and rice-fish culture and to make those strategies available for implementation by farmers in selected areas. For the fisheries sector, it seeks to evaluate the present status of the Lake Sélingué fishery, identify fishery management concerns, and involve local stakeholders in the planning processes necessary for sustainable management of their fishery.



POND CULTURE



The objectives of the pond culture component are accomplished by providing hands-on training in pond construction, fish propagation, and pond management, and by conducting field trials to identify pond culture systems suitable for implementation in Mali. Summary of activities to date:

- POND CULTURE WORKSHOP IN MALI- February 2009, Bamako: 24 trainees
- CATFISH PROPAGATION/HATCHERY MANAGEMENT TRAINING- April 2009, Sagana, Kenya: 4 trainees
- CATFISH PROPAGATION/HATCHERY MANAGEMENT TRAINING- July 2009, Bamako: 22 trainees
- PRELIMINARY ON-FARM TRIALS WORKSHOPS- June 2009, Bamako: 20 trainees
- SETUP AND RUNNING OF ON-FARM TRIALS- July 2009 – January 2010: various locations in Mali

RICE-FISH CULTURE

This theme provides training and field testing and evaluates potential adaptations of rice-fish systems for introduction into irrigated systems along Mali's Niger River. Summary of activities to date:

- TRAINING COURSE ON RICE-FISH CULTURE- September 2008, Shanghai Ocean University, China: 2 Malian trainees
- WORKSHOP ON UP-TO-DATE TECHNIQUES FOR RICE FISH CULTURE- June 2009, Bamako: 21 trainees
- SETUP AND RUNNING OF RICE-FISH DEMONSTRATIONS- July – November 2009, Baguineda irrigation area: 4 rice farmers
- WORKSHOP ON APPROPRIATE AQUACULTURE POST-HARVEST TECHNIQUES- November 2009, Baguineda: 22 trainees
- WORKSHOP ON TRAINING AND EXTENSION CAPACITY BUILDING FOR RICE-FISH CULTURE- November 2009, Mali: 27 trainees

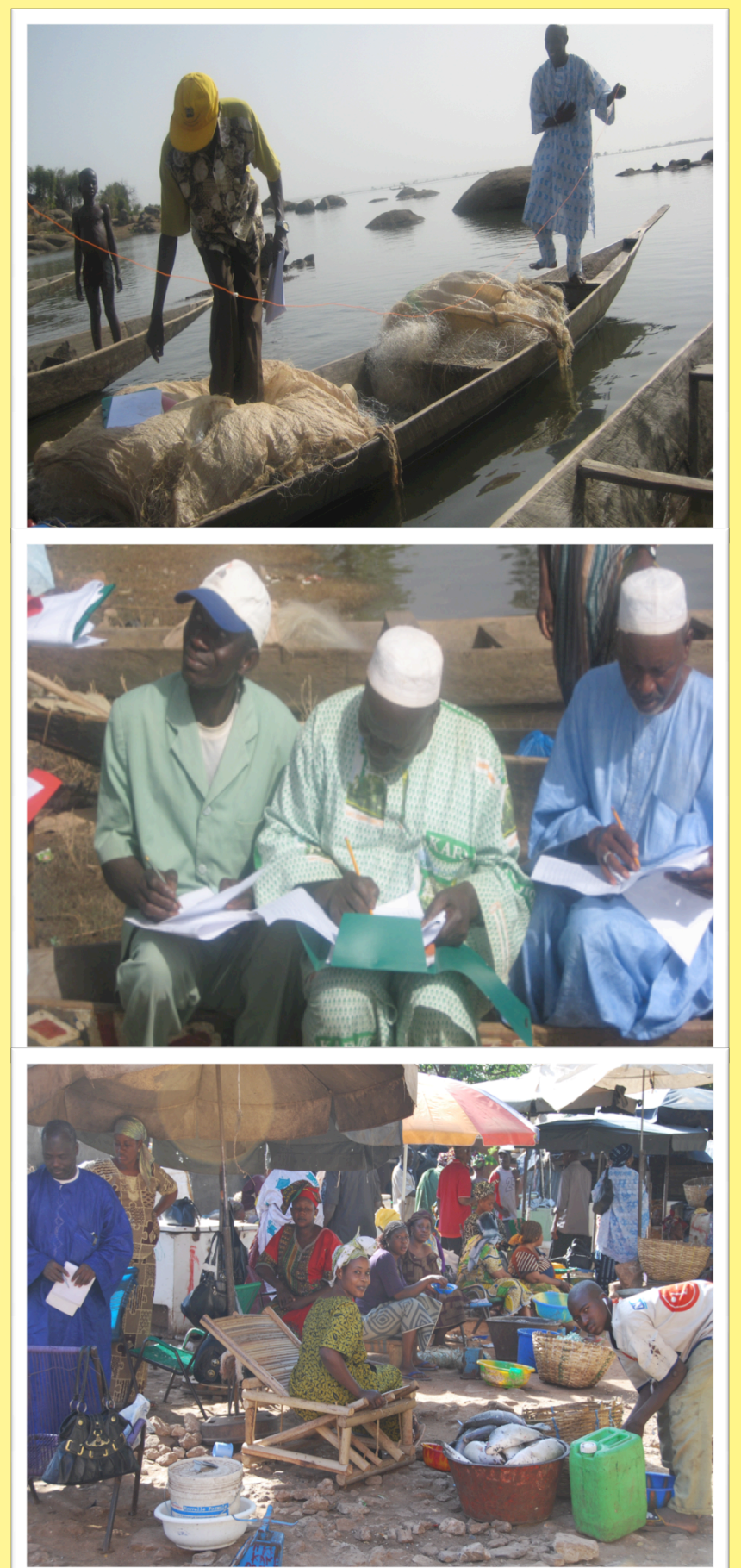


FISHERIES PLANNING

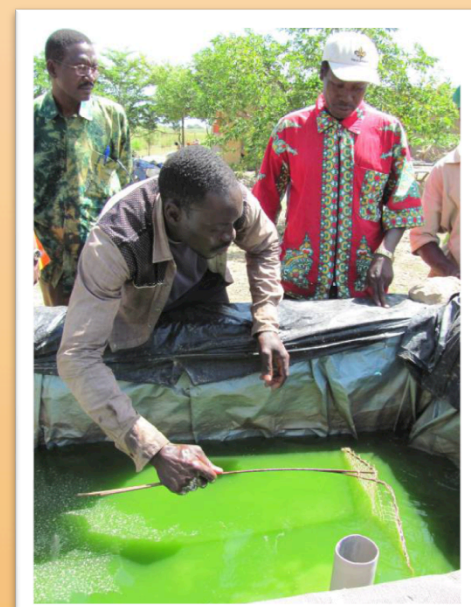
This theme provides assistance to the Mali Government in conducting frame surveys and involving local fishing groups in the development of sound fisheries management agreements, working initially in the Lake Sélingué area. Summary of activities to date:

- FRAME SURVEY TRAINING FOR SUPERVISORS- February 2009, Lake Sélingué: 11 trainees
- FRAME SURVEY TRAINING FOR ENUMERATORS- February 2009, Lake Sélingué: 20 trainees
- FRAME SURVEY OF LAKE SELINGUE- February, 2009
- ANALYSIS OF FRAME SURVEY DATA- Analysis completed and full report submitted to the Government of Mali June 2009

Stakeholder workshops to discuss the survey results, consider lake management options, and begin the planning process are planned for February 2010.



Success Stories



Fish farmer Seydou Toé: Mr. Toé is farmer who had previously tried fish farming but experienced problems due to insufficient technical information on pond construction and management. Following participation in project pond culture training events, he has greatly improved his own fish farming efforts, by renovating old ponds, building new ponds, and producing catfish fingerlings for sale. He is also now training other farmers.



Enhancements to existing training facilities: A new catfish hatchery setup was built and installed at the Sotuba Centre de Formation Pratique en Elevage by CRSP trainees returning from project-sponsored pond culture training in Kenya in April 2009. This facility was used in a subsequent training course for Malian farmers, and continues to be operated by the Association des Pisciculteurs et Aquaculteurs du Mali to produce catfish fry.



Rice farmer Mamadou Samake: Mr. Samake is a rice producer in the Baguineda irrigation area east of Bamako. In June 2009, he volunteered to participate in the project's rice-fish demonstrations by modifying his rice field and stocking it with fish. His field was stocked in July and by November, more than 106 kg of fish were harvested, generating additional income for Mr. Samake. His experience also generated interest among other rice producers, many of whom now plan to go into rice-fish culture during their next production cycle.



Formation of the Jigiya ("Hope") Association: Following his participation in a CRSP pond culture training course in February 2009, Moussa Ballo returned home to form the Jigiya ("Hope") Association. This 11-member group of fishers is now building ponds and growing fish together. The Jigiya Association offered their first pond they constructed in on-farm trials organized by the CRSP pond culture component. The pond was stocked in July 2009 and is scheduled to be harvested in February 2010.

SUMMARY

Across its three themes, the project emphasizes creating capacity building opportunities, finding and promoting sustainable solutions to aquaculture and fisheries development, and fostering collaboration between the public and private sectors. Farmers, fishers and fishing communities, extension and technical personnel, and members of NGOs are the beneficiaries of the workshops, training courses, and field trials being conducted under this project. Through training and participatory field trials, recent and prospective fish farmers are learning current, practicable techniques for the culture of tilapia and catfish in Mali, rice producers are discovering and applying techniques for producing crops of fish alongside their rice crops, and members of Lake Sélingué fishing groups are participating in the development of lake management plans that will ensure optimum sustainable production.



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