



RIU Malawi, Africa Country Programme

Annual report, 2009-2010

Fish farming/aquaculture innovation platform

Dissemination of improved fish strain of *Oreochromis shiranus*

i. Why are you working on/facilitating this innovation experience?

The fisheries sector is very important to both Malawi's economy and its overall food security. However, fish catches from water bodies like lakes and rivers have declined due to overfishing caused by increase in human population. Fish farming/aquaculture is therefore seen as an option to increase fish production in Malawi. The government has shown commitment to boosting fish farming through establishing the Presidential Initiative on Aquaculture Development (PIAD) in 2006. The fish farming innovation platform identified four major challenges to the development of aquaculture in Malawi namely: inputs supply (fingerlings and feed), extension services, inefficient marketing systems (fingerlings and table fish) and lack of capital. The platform aims to address these challenges in the aquaculture value chain with the view of meeting the PIAD targets. The priority challenge for the platform is that of lack of quality fingerlings of improved species for access by fish farmers. The platform is therefore engaged in increasing production and dissemination of quality fingerlings of improved fish strain of *Oreochromis shiranus* (NARS research output). The improved strain grows 60% faster than the unimproved strain and this would translate into more economic gains to fish farmers when they access fingerlings of improved strain.

ii. What is your role (what do you mainly do) and how has this changed development(s)?

RIU facilitates the bringing together of all stakeholders in the fish farming/aquaculture industry value chain to discuss modalities for improving the fish farming sector; coordinating various institutional efforts towards addressing the identified priorities; providing grant funds to the platform for unblocking identified bottlenecks such as quality fingerlings supply, developing marketing strategy and hatchery guidelines; empowering the innovative fish farmers network so that farmers are effective partners in the fish farming platform.

iii. What is driving the innovation (market, project, policy change, etc)?

The innovation is being driven by market i.e. improved strain of fingerlings are fast growing than the local strains hence fast economic returns to the farmers.

iv. What forms of partnership are involved and what is their significance in respect of the outcomes thus far?

The partnerships are in form of facilitated joint meetings to review and plan together the activities of the platform; task forces have been established to look into specific technical issues identified in the platform such as developing quality hatchery standards and marketing strategy for fingerlings and table fish.

v. What is different/special about the way partners interact and how is this evolving over time?

This arrangement has enhanced the communication between partners that were not normally interacting. There is increased interest of the private sector companies such as MALDECO because the platform issues are in line with its challenges which on its own were unable to influence changes by government – the platform is seen to be offering that positive option.

vi. Are there any special ways of working required/evolving that will allow the innovation to be achieved?

The fish farming platform has been recognized as the implementing arm of the Presidential Initiative for Aquaculture Development (PIAD) a framework initiative launched by the President in 2006 to boost fish production in Malawi.

vii. Who are the key players and why are they important – and how are key players and their respective roles evolving?

The key players contribute resources, expertise and goodwill towards identified challenges and opportunities. The main players include: National Aquaculture Centre and World Fish Centre – these are premier aquaculture research institutions in Malawi; private companies (MALDECO Aquaculture limited, African Novel Resources ANR – an aquaculture technology transfer company), commercial farmers (Mandebvu Integrated Farm and Solace Fish Farm); Aquaculture and Fisheries Science of Bunda College; Economics Department of Chancellor College; representations of fish farmers associations, NGOs (World Vision International, Project Concern International government); and Opportunity International Bank of Malawi (OIBM) which provides loans to farmers on fish farming activities. These players synergistically support each other in the areas of technical advice, policy linkage, and offering markets for fingerlings and table fish.

viii. Is there an innovation champion or coordinator?

There is an innovation champion elected by the platform members.

ix. What strategies are in place to link local innovation activities to the wider economic and policy environment?

There is the National Innovation Coalition (NIC) that acts as platform for leveraging policy advocacy with government. The Department of Fisheries is also represented in the platform by very senior members who are at policy level in the department who quickly take up platform issues for policy consideration.

x. What strategies are used to ensure inclusiveness of stakeholders and opinions – particularly the poor?

There are lined up capacity building activities to empower the innovative fish farmer network, a farmer based organization with the aim of ensuring that farmers become effective partners in the platform and are able to demand for information and services; devolvement of responsibilities for certain activities as well as establishment of thematic groups to accomplish specific tasks within the platform.

xi. What have been the unexpected outcomes thus far, and what was/is their significance?

Unexpected outcomes: the technology clearing committee has approved the adoption of sex reversal technology under the facilitation of the fish farming platform. This will now enable some private companies involved in aquaculture such as MALDECO compete effectively in the export market.

xii. What strategies/mechanisms are used to learn, adjust and refocus during the innovation experience?

There are quarterly platform meetings where members review progress and share experiences; platforms also document and produce quarterly reports capturing progress, successes, challenges and lessons learned.

xiii. What have been the main lessons learned thus far and how has this influenced your way of working and the innovation experience?

The membership in the platform keeps on evolving depending on the issues/challenges that the platform is working on at a particular moment in time.

xiv. To what extent is the innovation experience influenced by/ dependent upon the political environment and how are you dealing with this?

The fish farming platform prioritised activities are viewed as implementation mechanisms for the Presidential Initiative for Aquaculture Development (PIAD) launched by the President in year 2006. The PIAD framework also recognises the importance of stakeholder participation in boosting pond and aquaculture fish production in Malawi.

xv. What new skills and knowledge are emerging as a result of your work?

The hatcheries are gaining knowledge in production of quality fingerlings of improved strain. There is now the market strategy for the produced fingerlings and table fish. The new skills are negotiation skills, networking amongst stakeholders and sharing of information.

xvi. What indicators quantify the social and economic changes occurring through your activities in this innovation experience?

Indicators: Increased access by farmers to quality fingerlings of improved strain for increased production and incomes; Hatchery guidelines for fingerlings production finalised; Fingerlings and table fish marketing strategy in place.

xvii. Formulate a statement that builds plausible connections between your activities and the indicators identified under (xvi), to substantiate – in hard figures – the scale of the impact, and indicate how you expect this to evolve over time.

Around 5 million quality fingerlings of improved strain of *Oreochromis shiranus* will be produced by 2011 and 4000 farmers will increase their incomes by accessing high quality fingerlings with potential of producing up to 400 tons of table fish. This tonnage will translate to around US\$1.8 million of income for the participating farmers.