



Research Into Use *sharing lessons to enable innovation in agriculture*

RIU operations in Malawi and possible research narratives

Nobel Moyo

Malawi RIU Country Coordinator

BACKGROUND

Research into Use (RIU) was officially launched in Malawi in July 2008. Prior to this, there were several consultative processes from 2006 that culminated into development of country assessment report (2006), development of strategy (Dec. 2007) and implementation plan (Feb. 2008). The main thrust of RIU in Malawi is built around the overall RIU's main research question of understanding the configurations of actors, policies and institutions that allow agricultural research to contribute to innovation and development in different circumstances. The programme is mostly focused on commodity based innovation platforms. Research into Use (RIU) in Malawi has so far facilitated the establishment and functioning of four innovation platforms namely: Fish farming innovation platform, Legume platform (beans, soybeans & g/nuts), Cotton Development Platform and Livestock platform (Dairy & piggery). An innovation platform is defined as a network of partners working on a common theme and using knowledge in ways it has not been used before to generate goods and services for the benefit of the poor- (RIU definition). The innovation platform approach brings together main stakeholders along the value chain to identify blockages to research knowledge uptake focusing on issues bordering technologies, policies, marketing, inputs/services provision, etc. The actors (stakeholders) have a major stake in making the value chain work and each is committed to deliver in order to bring success to the system. The innovation platform acts as a forum for enhancing demand & consulted commitments at resolving bottlenecks; creates an enabling environment for triggering the demand and utilization of research outputs; and it enhances communication and sharing of information among stakeholders.

So far, the existing platforms have had some periodic working sessions and consultative meetings resulting in identification of the innovation challenge that the platform(s) would work on; the priority bottlenecks and challenges in the platform; devising strategies for unblocking the identified challenges; developing platform projects for accessing funds for implementation and utilization of research outputs for unblocking the challenges. Each platform has a "Champion" or Chairperson to provide leadership in the platform. The Platform Champion was selected based on professional competence, drive, interest and being well conversant with the innovation challenge that is being pursued by the platform.

Brief description of specific innovation platforms under RIU in Malawi

FISH FARMING INNOVATION PLATFORM

a. Background and Innovation Context

In Malawi, per capita fish supply has declined precipitously by over 40% from 14 kg to 5.8kg in the past 20 years due to declining production, rapid population growth and urbanization. During the same period, capture fisheries have declined from a high of 70,000mt to 55,000mt with the Chambo fishery exhibiting the most significant drop from 13,000mt to 3,000mt. Because of the growing gap between fish supply and demand, fish prices have increased by over 800% between 1990 and 2005. In order to maintain the current low per capita fish consumption, the country needs to produce an additional 17,000 metric tons of fish per annum. Because of stagnating catches, wild fisheries in Malawi provide limited scope for reversing the declining trend since major efforts are targeted at stabilizing catches and where possible exploiting offshore stocks which can yield utmost additional 10,000 metric tons per year. Aquaculture therefore offers potential to narrow the gap between supply and demand and stabilize the declining trend in fish consumption.

So far aquaculture has not been able to meet the fish supply gap and production has, until 2005 averaged 800mt. However based on FAO estimates of 1993, Malawi has an estimated 1.8million ha of total land that is suitable for pond aquaculture and potential also exists in Lakes Malombe, Chiuta, Chilwa and Malawi for commercial and community based cage culture.

In order to realize the full potential of aquaculture to contribute towards food security and economic growth, the Malawi Government launched the Presidential Initiative on Aquaculture Development (PIAD) which seeks to increase the contribution of aquaculture to total fish production from 550 in 2005 to 5000 tons per year by 2011. The PIAD, coupled with increasing high fish market demand and prices is attracting new small and large-scale commercial investments. In March 2008, a Fish Innovation Platform was launched with the major aim of unblocking bottlenecks in the aquaculture value chain and serving as an implementing mechanism for the PIAD.

In Malawi, the Fish Innovation platform has identified four major challenges to the development of aquaculture namely input supply (fingerlings, feed, ponds and cages); extension services and information systems; inefficient marketing systems (feed, fingerlings and table fish) and lack of capital. These challenges are similar to those identified by the PIAD and other aquaculture stakeholders in Malawi. The fish innovation platform aims to address these challenges in the aquaculture value chain with the view of meeting the PIAD targets and developing aquaculture into an industry that can contribute to national economic growth. In addition to meeting the PIAD targets, the initiative is also in line with the NEPAD CAADP as reflected in the Malawi Agricultural Development Programme (ADP) which is the Malawi CAADP compact where fish production through aquaculture has been identified as one of the key agricultural sectors where investments can lead to the country attaining a 6% annual growth in agricultural productivity.

The innovation challenge for the fish farming platform is *'How to increase production of competitively priced fish from aquaculture for domestic market by small, medium and large scale aquaculture producers through intensification and increased aquaculture investments'*.

b. Putting Research Into Use

Malawi fish farmers have been rearing slow growing indigenous fish species. The use of fast growing exotic fish species in Malawi is restricted under the Malawi Fisheries Conservation and Management Act of 1997 which prohibits the introductions of exotic species into Malawi for fear of negative effect these exotics could bring to the aquatic fauna. Hence, fish breeding focuses on improving indigenous species.

The Government of Malawi with support from CGIAR, World Fish Centre, implemented a National Tilapia Programme to develop an improved strain of *Oreochromis shiranus* at its NARS - National Aquaculture Centre (NAC). The strain has been developed through a rigorous selective breeding programme for 5 generations and the output has been tested on farm condition and has shown to grow 60% faster than their local counterparts.

Bunda College of Agriculture have come up with improved feed formulations which are being used as a basis for developing cost-effective plant based feed for chambo.

The National Aquaculture Centre (NAC) and World Fish Centre (WFC) have realized that use of quality fingerlings has several advantages. Good quality fingerlings are of known age and have little if any combination with parents. This reduces stuntedness thereby improve on yield.

Further information

- info@researchintouse.com
- www.researchintouse.com