

# BRIEFING II



## TAAT CDTO TECHNICAL WEBINAR SERIES

### Enhancing Commercialization of Africa's Agricultural Research Products Aquaculture and Maize Value Chains

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#### Key Messages

1. The technical webinar series have accelerated the complementary role of engaging the various stakeholders and especially the private sector, in driving the Africa continent's agribusiness and agricultural transformation.
2. Female tilapia has a low conversion of feed to flesh and the males, therefore, are preferred to females because of better growth rate. All-Male/Mono-sex tilapia is promoted for commercial production
3. Climate-smart hybrid maize is drought-tolerant, Striga resistant, MLN tolerant, have high nutritional properties and produce 30% better grain yield over the best commercial checks and can lead up to 20% increased profit margins.



**O**n September 2, 2020, the Forum for Agricultural Research in Africa (FARA), Africa Forum for Agricultural Advisory Services (AFAAS), IITA, World Fish International and AATF, convened the second TAAT CDTO technical webinar of a series of 6 webinars. These webinars are organized under the Technologies for African Agricultural Transformation (TAAT) Program of the Feed Africa initiative funded by the African Development Bank (AfDB).

FARA's role in creating the enabling environment for Capacity Development and Technologies Outreach within the technology delivery infrastructure of TAAT has ensured support to the Aquaculture and Maize commodity compacts of the program, mainly through the instrumentalities of multi-stakeholder programmes/partnerships and Integrated Agricultural Research for Development (IAR4D), with the Innovation Platform (IP) as the main model. In the wake of the COVID-19 pandemic, the technical webinar series have accelerated the complementary role of engaging the various stakeholders and especially the private sector, in driving the Africa continent's agribusiness and agricultural transformation. As demonstrated by the compact beneficiaries during the webinar, the TAAT programme results is a clear manifestation of Africa's commitment towards achieving the Science Agenda (S3A) goal of doubling productivity by 2025.

## How technologies in Aquaculture are being scaled through agribusiness

The second webinar attracted over 600 participants, 24% female and 41% being youth. Prof. Bernadette Fregene, the TAAT Aquaculture Compact Leader, hosted by World Fish International, presented three categories of technologies being scaled out in Burundi, Cameroon, Cote d'Ivoire, Republic of Benin, Tanzania, Togo, DRC, Ghana, Kenya, Malawi, Nigeria, Zambia. a) Fast-growing disease resist fish seeds and improved fish rearing system b) Quality low-cost fish feed using locally available raw materials c) Improved post-harvest technologies and product development



*Figure 1: Mass Production of Fingerlings in Hapa (a cage like, rectangular or square net impoundment placed in a pond for holding fish)*

In the compact's presentation on the mono sex tilapia, Prof. Fregene alluded that the female tilapia has a low conversion of feed to flesh and the males, therefore, are preferred to females because of better growth rate. All-Male/Mono-sex tilapia is promoted for commercial production and is obtained by manual sexing, hormones, YY male technology, and hybrids. The benefits include a) higher average growth rate, b) reduction of sexual/territorial behaviour, c) reduction of variation in harvest size, d) higher economic value and profitability, e) high adoption rate for commercialization

Mr Royd Mukonda who is a beneficiary from the Aquaculture compact demonstrated a 50% increase in yield and 33% increase in turnover while attracting 200 new entrepreneurs and private investment from adopting the mono- sexed tilapia. He has also strengthened the skills of over 500 fish farmers including youth and women and achieved a successful sex reversal rate from 70-98%.

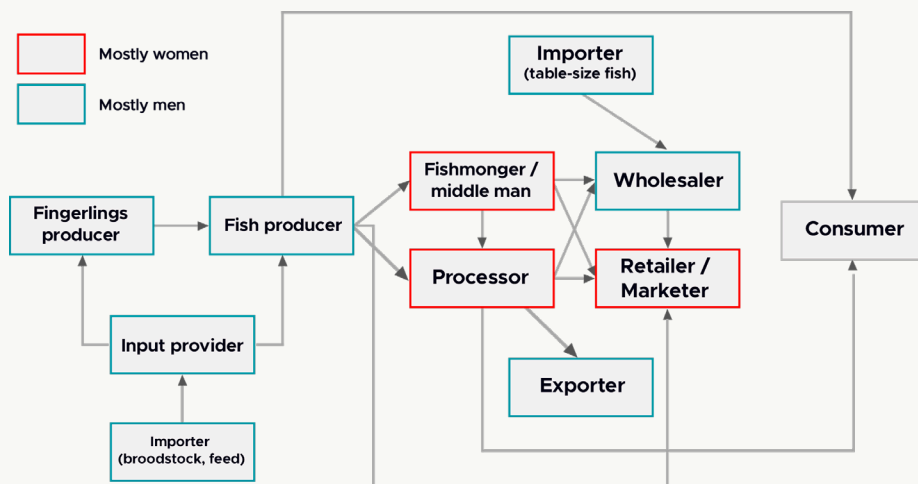


Figure 2: Business Opportunities Identified in Aquaculture Value Chain

## Showcasing Proven Technologies in Maize

Mr Samuel Angwenyi, the TAAT Maize Compact Technology Transfer Officer, hosted by African Agricultural Transformation Foundation (AATF), presented eight technologies being scaled out in 18 countries. a) Elite-Climate Smart Maize Varieties, b) Appropriate Fertilizer Blends, c) Optimal Maize Planting Density, d) Efficient Weed Management, e) Mechanized Implements f) Post-harvest Management g) Pest and Disease Management Technologies (FAW and MLN management) h) Timely Planting

In his presentation on the climate-smart hybrid maize, Mr Angwenyi noted that the seeds are drought-tolerant, Striga resistant, MLN tolerant, have high nutritional properties and produce 30% better grain yield over the best commercial checks and can lead up to 20% increased profit margins. The seeds take between 125 – 135 days to mature and grow at an altitude of 1000-1600 metres above sea level. They have tight husks cover on the cob – Protects grain from bird/pest, damage as well as rot. It has white grain, which is preferred by many milling companies, sweet flour which is suitable for both processors (corn syrup).



Figure 3: WEMA Seeds at Production Sites



Figure 4: Whole Grain Flour: Processor linked to TAAT Maize farmers displays finished whole grain flour from climate smart maize hybrids ready for the market, Kenya, 2019

Food chain millers which are an agribusiness beneficiary of the maize compact and a member of Agroprocessors Association of Kenya (APAK) has been able to employ youth and women in the milling premises. They also buy grains from off-takers and process into finished products such as maize flour. The compact recorded rapid adoption of climate-smart maize hybrid seeds by millers due to the customer preferences in taste, grain quality and flour texture.

To access the webinar videos, click <https://www.youtube.com/user/FARAAfrica>

To access the webinar videos, click <https://dgroups.org/?dzp8gfnv>

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