

# BRIEFING V



## TAAT CDTO TECHNICAL WEBINAR SERIES

### Enhancing Commercialization of Africa's Agricultural Research Products Orange-fleshed Sweet Potato Value chain and Water Management Enabler Compact

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### Key Messages

1. The technical webinar series have been key for outreach, to promoting business opportunities along specific value chains. So far, the webinars have attracted over 3,000 participants: 37% youth, 24% women. The distribution of young women among the youth was 26%.
2. The development of Orange-fleshed Sweet Potato Puree has opened new markets for smallholder sweet potato farmers as bakers realize a 12 – 20% decrease in the total cost of production.
3. TAAT-WEC promoted water efficient technologies and drought resistant varieties lead to a 60% increase in average wheat yields, 18% decrease in water-use and a 119% increase in water productivity.



 On October 14, 2020, the Forum for Agricultural Research in Africa (FARA), Africa Forum for Agricultural Advisory Services (AFAAS), International Potato Center (CIP) and International Water Management Institute (IWMI) convened the 5th Technologies for African Agricultural Transformation (TAAT), Capacity Development & Technology Outreach (CDTO) Enabler Compact's 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 leads the CDTO Compact of TAAT playing the role with African Forum for Agricultural Advisory Services (AFAAS) and the Sub-Regional Organizations (SROs). The CDTO supports the commodity compacts to develop the capacities required for the deployment of their technologies at a large scale. The work in this webinar contributes to supporting the commercialization of agricultural research products. The first of this series of webinars was convened on the 15th of July 2020. So far, the webinars have attracted over 3,000 participants: 37% of these are youth, 24% women. The distribution of women among the youth was slightly higher at 26%. The four webinars earlier held focused on the following value chains: livestock, high iron bean, aquaculture, maize, rice, millet, sorghum, wheat; and the soil fertility compact.

These TAAT webinars have proved to be an efficient forum for outreach to promote business opportunities along the various value chains. The webinars have aimed to engage the private sector to commercialize proven technologies. Thereby facilitating the engagement of entrepreneurs and researchers on commercializing agricultural research products. Thus, the webinar is a platform for researchers and entrepreneurs to exploit the opportunities that exist with these technologies.

## How Technologies in Orange-fleshed Sweet Potato Compact are being Scaled through Agribusiness

The fifth webinar attracted over 300 participants: 29% female and 49% being youth. Joyce Maru, Program Coordinator of the sweet potato program, at the International Potato Center (CIP) presented the following technologies being scaled; (1) Improved OFSP varieties (nutritious, high-yielding and climate-resilient) and hybrids, (2) Seed system development (3) improved OFSP product processing and enhanced markets linkages and (4) processing and value addition.

These are being scaled out in five focus countries (Nigeria, Uganda, Kenya, Malawi and Mozambique) and 8 spill-over countries in Africa. The compact has promoted and introduced over 93 improved OFSP varieties (nutritious, high-yielding and climate-resilient) reaching 5,000 direct beneficiaries in different agro-ecological zones in 12 countries in SSA. Over 100,000 beneficiaries have been reached through sustainable intensification. More than 18,659 individuals have been trained on improved skills in agriculture enterprises development and consequently, over 555 new entrepreneurs have been engaged in Agribusiness-Small and Medium Enterprises (ASMEs).

Ms. Maru presented the processing and marketing of OFSP Puree as one of the technologies with a potential towards commercialization. This technology provides a cheaper nutritious alternative which is easy to process. This replaces 30 - 60% of wheat flour in a range of baked products such as bread. The development of this technology has opened new markets for smallholder sweet potato farmers as bakers realize a 12 - 20% decrease in the total cost of production. In further support of informal markets to adopt the use of OFSP Puree, CIP has developed a vacuum pack storage technology with which the shelf-life of the puree is 6 months, without refrigeration.



*Figure 1: Business Opportunities in the OFSP Value Chains*

## Showcasing Proven Technologies in Water Management Enabler Compact

Dr. Sander Zwart, the TAAT water enabler compact coordinator, hosted by International Water Management Institute (IMWI), presented the small-scale irrigation and water management solutions. These are aimed at achieving sustainable increase in agricultural productivity, reduction in poverty and rural transformation through viable value chains across Africa. The water enabler compact is scaling 20 technologies for irrigated and rainfed agriculture, grouped into four sets. For irrigated agriculture, the technologies are a) Irrigation Water Development b) Irrigation Water Application and c) Irrigation Scheduling d) In-situ moisture conservation techniques are being scaled in the case of rainfed agriculture.

These are currently being scaled in 6 countries: Mali, Burkina Faso, Nigeria, Sudan, Ethiopia and Malawi. The technologies have been integrated into the production systems of rice, sorghum, orange-fleshed sweet potato and wheat. Mr. Zwart also presented the shallow tube-wells for groundwater as a technology with the potential for commercialization. He noted that the initial investment is low since water can be lifted at relatively low cost with small motorized pumps or for free using solar pumps. The shallow tube-well technology permits farmers to cultivate off-season or deploy supplementary irrigation during the main season in case of drought spells.



Figure 2: Use of the Shallow Tube-wells for irrigation water development.

The use of this technology in rice production in Nigeria, Mali and Burkina Faso have resulted in the expansion of the cultivated area of rice in the off-season. It has also led to agricultural intensification and diversification of income, and increased income for female rice farmer groups. Incorporating this technology into wheat production leads to an average yield increase of 60%. Employing this technology in Ethiopia resulted in a decrease of water use by 18%. It also resulted in an increase in water productivity by 119%. Correspondingly, the Tube-well technology proved to lead to irrigated area expansion in Nigeria.

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

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