INTERNATIONAL SEMINAR ON DROUGHT AND AGRICULTURE

PREDICT, PLAN, PREPARE: STOP DROUGHT BECOMING A FAMINE

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SESSION 2: CONNECTING FARMERS TO TECHNOLOGIES – CHANGING THREATS TO OPPORTUNITIES

1. DROUGHT-TOLERANT MAIZE FOR AFRICA SEED SCALING (DTMASS) PROJECT (2014-2018)

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Project Overview

The Drought Tolerant Maize1 for Africa Seed Scaling (DTMASS) project is funded by USAID's Bureau for Food Security, and runs from 2014-2018. The overall goal of the project is to contribute to improved food, livelihood and nutritional security of smallholder farm families in targeted FTF (Feed-the-Future) Zones of Influence (ZOI) areas in Ethiopia, Kenya, Uganda, Tanzania, Mozambique, Zambia and Malawi. This shall be accomplished through accelerated and inclusive deployment of new <u>drought-tolerant (DT)</u> maize seed through public-private partnerships in-country. The project has three Strategic Objectives:

- o Sustainably increase the availability of select DT maize varieties in target areas (Supply)
- o Enhance the sustainable uptake of these varieties by smallholder farming communities in the target areas (Demand)
- o Enhanced impacts through effective knowledge management and sharing

Theory of Change

The theory of change of the DTMASS project is that viable in-country seed systems coupled with innovative outreach and risk reduction strategies will create a virtuous cycle of incentives for both producers and farmers to take up DTM varieties. While the key measure of success is farmer uptake, sustainability will be measured by the viability of national seed sectors in the six target countries. This project defines 'viability' as having quality production, reduced donor dependence, sufficient profitability to incentivize continued production at scale, and access at a scale to reach a critical mass of maize farmers per country. 'Access' itself unpacks into awareness, technical knowledge, physical access/sales points, and affordability of seed of improved DTM varieties.

Approach

The DTMASS approach focuses on <u>incentive-based scaling</u>, considering both the supply and demand sides of the improved maize seed value chain, <u>to engender sustained uptake</u>. The focus is on a few identified stakeholders within specific aspects of the value chain: on both the supply and demand sides. DTMASS works

¹ Drought tolerant maize varieties are defined as those that can produce about 30% of its potential yield (1-3MT/ Ha) after suffering water stress for six weeks before and during flowering and grain-filling (Magorokosho et al., 2009).

with producers and regulatory agencies on seed production, foundation seed supply, and quality assurance/quality control (QA/QC). On the demand side, focus is on distribution, working with in-country partners to identify and train Agro Dealers and local farmer networks creating enhanced awareness of the benefits of DTM seed; conducting Field Days and On-farm Demos to demonstrate how to maximize maize performance with proper seed and growing techniques; and strengthening marketing capacity of the producers to maximize the distribution and sales of DTM seed.

Innovations in Approach

As an essentially scaling pilot project, DTMASS' approach includes testing various scaling interventions to increase uptake of DTM varieties in target geographies. These include: real-time, two-way digital data exchange directly with farmers and distributors; participatory evaluations of DTM varieties vis-a-vis non-DTM commercial checks through on-farm demos by farmers; creation and dissemination of tailored information products designed for farmers and agro-dealers; revitalizing and digitizing the Seed Road Maps; testing bundling of interventions such as Index Insurance to reduce risk aversion; and training agro-dealers in both DTM technical knowledge as well as marketing to significantly increase sales.

Innovations in Knowledge Management

Other exciting innovations that took off in FY17 include great strides in digitizing and geo-localizing tracking of DTM adoption and impact data. More detailed data on seed access (where DTM is being sold), and densities of DTM-trained dealers and lead farmers are now being collected. To better capture DTM seed scale-out and uptake in real-time, DTMASS has enlisted a sub-contractor to track seed uptake directly from the farmers and dealers per country and season. Using SMS and specialized apps, farmers and dealers are polled per season on what they planted, price they paid, and source of purchase.