

Formalizing Sweetpotato Seed System; experiences from MISST project in Malawi



SEED SYSTEM DESCRIPTION

Most sweetpotato farmers in Malawi depend on the informal seed system resulting in inadequate quantities of good quality vines at onset of the rains. The Feed the Future Malawi Improved Seed Systems and Technologies (MISST) project has introduced decentralized and commercial vine multipliers (CVMs and DVMs) as formal seed system approaches. The Department of Agricultural Research Services (DARS) produces tissue culture plantlets and early generation planting materials as a source of planting material for CVMs and DVMs. It also provides "seed" inspection and certification services. Six orange-fleshed sweetpotato (OFSP) varieties are available in Malawi and include; *Anaakwanire, Chipika, Kadyaubwerere, Kaphulira, Mathuthu* and *Zondeni*.



Figure 1. First DVM established by MISST project in Mangochi district.

SCALING STRATEGY

The main actors in this seed system include CIP, DARS, vine multipliers and buyers of planting material. Other players in the sweetpotato value chain such as NGOs and root producers are now appreciating the importance of an effective seed system to boost root production in Malawi. All the actors interact through stakeholder meetings and trainings facilitated by MISST. MISST has trained 40 CVMs and 90 DVMs in rapid multiplication of sweetpotato vines across the seven districts in central and southern Malawi. These now ensure that farmers have access to clean and fresh vines in good time. MISST distributes vines from these multipliers to farmers who test the varieties under their own conditions through a mother baby trial (MBT) approach and in some cases through a voucher system. There is a growing interest from private commercial farmers to start production of pre-basic and basic planting materials. NGOs and other buyers are now approaching CIP and are appreciating the importance of using clean planting materials from certified sources. The Ministry of Agriculture, Irrigation and Water Development has reviewed the National Seed Policy and incorporated vegetative propagated crops. Inspection and certification standards for root and tuber crops have also been reviewed.

END USERS AND BENEFITS

MISST targets rural farming households with under-five children, pregnant or lactating women as main end users of the OFSP planting materials to reduce vitamin A deficiency (VAD). Households will are enjoying economic benefits through sales of excess vines and roots. This target group is used to sharing vines within the social networks for free or at low costs. CVMs and DVMs face market challenges because of seasonality of demand and farmers in the communities are not able to pay the same prices as NGO's pay for planting material.

LEVEL OF ADOPTION OR USE

There is growing interest from male commercial farmers to venture into vine multiplication as it looks lucrative. Out of 40 trained CVMs, 28 are still surviving. Twenty of these are managed by male farmers, six by female and two by groups. Seventy DVMs are managed by individuals (56 male and 14 female) and 20 by groups. Over 40,000 smallholder root producing farmers (>50% female) directly benefitted from the planting material within MISST project but many additional bundles were sold to other organizations and farmers.

CRITICAL GAPS AND NEXT STEPS

There are limited human resources in DARS to provide seed inspection and certification services to a growing seed sector in Malawi. In response MISST has contributed to training of >70 para-inspectors. Two private sector players have shown interest to invest in screen houses for production of basic planting material, though demand for basic material needs to be assessed and stimulated. The revised inspection and certification standards for root and tuber crops are not fully operationalized as the Seed Act and Policy is waiting for government approval. Finally, there is inadequate knowledge among farmers and some NGOs on the importance of using clean sweetpotato planting materials. Stakeholder workshop and continuous trainings are needed to address this challenge.



Figure 2. Beneficiaries of clean planting material in Mchinji district.

KEY PARTNERS FOR SCALING

MISST is working with different implementing partners including Ministry of Agriculture, We Effect, Concern Worldwide, Project Concern International, Emanuel International, Welt Hunger Hilfe, CADECOM and Tetra Tech-PERFORM. Their main role is to facilitate establishment of DVMs and promote production and consumption of OFSP among smallholder farmers.









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