



**Sweetpotato Genetic Advances and Innovative Seed Systems (SweetGAINS)  
SpeedBreed and Seed Systems Community of Practice  
Summary of online Discussion**

**TOPIC 2\_2020: Enhancing marketing among farmer-multipliers (DVMs) to reduce dependence on NGO customers**

**Lead discussant: Doreen Chelangat, National Crops Resources Research Institute (NaCRRI)**

**Introduction**

Over the past years, tremendous progress has been made towards the development of sweetpotato varieties for the consumers in various African countries. These efforts have been funded by the different African governments or (and) international donors. As a result, the availability of improved sweetpotato varieties is no longer the greatest bottleneck to sweetpotato production. Prevailing limitations lie in the areas of having planting material at the start of each crop season and marketing for storage roots and vines. The African market is mainly dominated by informal seed markets for clonally propagated crops; however, various projects have spearheaded the formalization of the seed systems.

In the sweetpotato seed system, several approaches have been undertaken and this led to the development of decentralized vine multipliers (DVMs). Previous studies have shown that these DVMs have three markets (customers) they serve namely; 1) Small holders lacking wetlands 2) Mid-to large-scale farmers lacking wetlands and 3) Projects, mostly led by non-governmental organizations (NGOs) but sometimes by local or national governments. The DVMs have however relied on the NGOs as their primary market. This market is characterized by its large size of purchase, very few number of sales, very high vine price, distant (location) from the DVMs and unpredictability of the regularity of purchase. The pitfalls of this market lead to unforeseen losses by the DVMs. As a result, many DVMs find the business non lucrative and drop out shortly after the support from any funding project ends.

This discussion therefore sought to 1) identify marketing models to enhance the broader inclusion of the other two sweetpotato vine customers 2) Identify the challenges the DVMs face in marketing and possible interventions. The following are key point raised during the discussion.

**a) Improve market segmentation and targeting**

In order to develop a sustainable market for sweetpotato vines there must be a need and a clear benefit. A good market for roots will create a pull on the use of quality seed. Given the subsistence nature of sweetpotato farming in SSA it is important to understand the point at which a farmer transitions from subsistence to commercial. Conducting a small number of market-oriented case studies in different countries on successful farmer integration into the market can provide more information on how to better segment available markets in the sweetpotato value chain. Understanding the needs of the different customers enables producers to plan seed production accordingly i.e. what amount of which varieties to produce. A high demand from NGOs would mean increasing area under orange-fleshed sweetpotato (OFSP) varieties. On the other hand, a high demand among smallholder farmers would mean higher production of varieties with high dry matter content e.g. white and yellow-fleshed varieties. Good product profiling will ensure that released varieties meet the customer needs. A product that meets consumer needs will create a vibrant root market consequently creating a pull for quality seed.

**b) Create a strong interdependence between DVMs and root producers**

It was noted that there is a disconnect between DVMs and root producers in some countries. They usually lack the spirit of commercial enterprise because they are mostly established to supply planting material to projects. Whereas this is so, there exists a vibrant informal system for production and exchange of planting material. Understanding how this system works can help build more sustainable seed systems. This includes providing needed training such as on agronomic and business skills to traditional vine multipliers and linking them with sources of improved varieties. Traditional vine multipliers can act as an entry point for introducing new varieties. The traditional vine multipliers have established market networks that can be harnessed in sustainable dissemination of improved varieties. It is important to have a good system of characterizing the people who produce planting material.

**c) Promoting DVM-led marketing initiatives**

Low customer base among DVMs is also occasioned by passive marketing efforts. Most seed producers do not reach out to potential customers but rather wait for buyers to go to them. In addition, most of them do not regard smallholder farmers as a key market segment because they buy small quantities. However, the small quantities bought by smallholders add up to a significant sum within a short time. Revenue generated from these small purchases is the one that caters for day to day management of production fields. It is important to encourage the various multipliers to get out of their comfort zones and reach out to potential customers. This should be done the earliest possible after planting.

**d) Educate NGOs about the market system and distortion caused by free vine distribution**

Several NGOs usually buy and distribute vines to root producers without any cash payment. Whereas this is a good way of reaching vulnerable communities it reduces willingness to pay for quality vines among beneficiaries of such initiatives. It is therefore important for all stakeholders

to work together to ensure development initiatives can continue without negatively affecting sustainability of the seed system.

**e) DVMs playing an intermediary role between TVMs and EGS producers**

Having been trained on seed production and business skills DVMs can act as a link between traditional vine multipliers and early generation seed producers therefore enhancing access to new varieties.

**Emerging issues**

**a) Quality of planting material produced by DVMs and TVMs**

It was indicated that in some cases TVMs produce cleaner planting material compared to DVMs. One of the reasons might be the resilience of the landraces multiplied by the traditional vine multipliers. It has been observed that many local varieties have a very strong ability to revert from virus infections. This is an inherent trait which does not exist in OFSP varieties multiplied by DVMs. In addition, multiplication by the informal sector is on a much smaller scale so virus diseases are less likely to become rampant. However, it is important to do a systematic comparative study on the quality of planting material between DVMs and TVMs in Mozambique. That might be of interest and with a large sample size to draw uncontested conclusion.

**b) Lack of in-depth studies characterizing different stages of the sweetpotato seed system**

More in-depth research studies are needed at national level to determine what drives both root and vine markets. These should include analysis of behavioural and social aspects of value chain actors.

**c) Misconceptions on how and why DVMs were established and their evolution beyond projects**

It is often perceived that:

- DVMs were established to supply OFSP to projects and therefore cannot serve the large segment of customers who demand white-fleshed, yellow-fleshed and other varieties with high dry matter content.
- DVMs had no prior experience with sweetpotato seed production and were created to suit the convenience of projects.
- All DVMs stop seed production when projects end

The first view is wrong because DVMs have always been supplied with clean virus-tested planting material of both white-fleshed and orange-fleshed varieties. The white-fleshed varieties are often local farmer-preferred varieties that are sampled from farmers' fields, taken for virus cleaning and disseminated back in a healthier form. I think the misconception rises from the fact that when talking about OFSP one automatically talks about DVMs. Why is this so and why the failure to mention other varieties produced by the same DVMs? My take is that this is because most sweetpotato projects also have a nutrition component aimed at addressing vitamin A deficiency in

vulnerable communities. The nutrition message tends to override everything because targets are usually in terms of reaching X number of households with X number of varieties with high beta carotene (read OFSP) by the year XXXX.

The second perception is wrong because not all DVMs were established from scratch. A good number of DVMs were farmers who were already doing sweetpotato vine conservation and multiplication. This is the ideal starting point but sometimes difficult to implement in districts that have limited swamps, rivers or other appropriate areas for vine conservation. Farmers from such areas travel to other districts to buy vines.

**d) Effect of agroecology on purchase of planting material**

It was noted that long dry seasons increase the demand for planting material, whether OFSP or non-OFSP. The smallholder farmers will buy from both the DVMs and the traditional vine multipliers. In places with short dry spells, vine selling is almost non-existent.

**e) Evolution of DVMs beyond projects**

Whereas some projects started by establishing DVMs through groups, or through convenience (i.e where the project is located), most of the groups DVMs evolved into one serious DVM. Most projects currently consider the entrepreneurial acumen of the DVMs, often determined from prior engagement in seed business, and other factors such as access to permanent source of water. Such DVMs continue to operate even when NGOs phase out their activities. In Zambia, DVMs continue to exist and to multiply seed even without project support. This is mainly because of the entrepreneurial aspects, the dire need for planting material, government support and many NGOs that are now focusing on sweetpotato as a food security crop as well as nutrition value. In addition, a recent study traced 81 out of 88 DVMs established at the Lake Zone Tanzania five years after project support ended. 40% of the 81 DVMs had sold vines in the year prior to the study and 20% had continued to maintain the improved varieties (white- and orange-fleshed) for own use.

**Summary of the respondents:**

<b>Duration</b>	<b>No. of contributions</b>	<b>No. of unique respondents</b>	<b>No. and type of institutions</b>	<b>Number of countries</b>
9/4/2020 – 5/5/2020	23	13 (All male)	NARIs: 2 CIP: 7 Independent: 3 Donor: 1	10 (Botswana, Ethiopia, Kenya, Mozambique, Nigeria, Rwanda, Tanzania, Uganda, UK and USA)

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