AVRDC The World Vegetable Center

http:// avrdc.org

Research on Vegetable Seed Systems for Smallholders: Impact Market Pathways & Future Perspectives

Dr. Victor Afari-Sefa

AVRDC – The World Vegetable Center

Email:<victor.afari-sefa@worldveg.org>

2016 Africa Seed Trade (AFSTA) Congress

Laico Regency Hotel, Nairobi, March 1, 2016

Overview: Types of Vegetable Seed Systems

- **Public seed sector: inefficient in operations (1970s & 80s)**
  - Less market oriented
  - Less access to remote areas
  - High volume, low value crops (?)

- **Private seed sector: selective of business**
  - Profit maximization motive
  - High value / cash crops, low volume
  - Hybrid seeds (mostly, imported & not locally adapted)
  - Challenges with seed adulteration

  - **Small farmers: flexibility and diversity**
  - Diverse agro-ecology, many varieties
  - Small quantity, relevant quality
  - Place/time of delivery, less cost

Overview of Smallholder Vegetable Seed VCs

- Informal sector: **Comprises a multitude of individual private farmers who select and save their own seed or exchange seed with others through:**
  - exchanges between farmers,
  - community sharing systems
  - and local markets

- Semi-formal sector: farmer recognized community seed producers and seed sellers from various actors of the value chain (i.e., traders, NGOs, CBOs etc.). Typical examples are: QDS and ISSD.

- Research has shown that the semi-formal/informal seed systems combined on average account for between 60-90% of seed supplies in SSA depending on the type of crop and other factors (e.g., Rohrbach et al, 2003; McQuire & Sperling, 2016).

Overview of Smallholder Vegetable Seed VCs

- Yet vegetable seed can be an important entry point for delivering a range of advances related to smallholder livelihoods
  - Promoting productivity: better access to more productive, yield-enhancing traits.
  - Increased income from seed production (formal & semi-formal sectors)
  - Enhanced nutrition (nutrient dense varieties), and
  - Enhance system resilience (climate variation, stress-tolerant varieties or clusters of diverse varieties are promoted as ‘good practice)

- Varied and often opposing philosophies shape seed sector development and much depends on what actors see as the starting point (McQuire & Sperling, 2016).

- As per the recently released 2016 Access to Seeds Index Report, there is a prudent need for private seed companies to meet needs of diverse smallholder market segments: Focus on smallholder centric business models (http://www.accesstoseeds.org/the-index/).

Overview of Smallholder Seed VCs

- While investments by organizations such as World Bank & AGRA/PASS, have primarily focused on strengthening the formal sector (i.e., promotion of private commercial seed and formal sector input companies), research shows that the degree to which the semi-formal and informal sector in SSA still remains the core for seed acquisition.

- In contrast, select NGOs and donors (e.g., GTZ 2000) have signaled the need to support more locally-driven/community initiatives and particularly those that organize around what are called FLSEs.

- Farmers, in practice, often engage in actions to smooth the divides between the formal and informal/semi-formal sectors spheres of seed sector development agencies by:
  - accessing seed for different crops from distinct channels
  - Farmers involved in PVS sit on variety release committees, or access improved varieties through local trader networks

Why FLSEs are still attractive to Smallholders?

- **Contribute to addressing notable gaps in seed supply and distribution systems locally given:**
  - Technically well equipped
  - Well organized to cater for regionally specific varietal preferences
  - Market-driven and innovative (small size packs that are affordable to farmers
  - Autonomous in their seed business
  - Decentralization of seed distribution, smaller packs
  - Possibilities for establishing linkages to formal institutions to enhance seed quality

Noted Challenges Encountered by Formal Seed Sector

- Challenges encountered in the spatial, time, information and value gaps in seed systems.
- Still a large quantity of SSA seed demand (trade) filled-in by imports of seeds not adapted to specific agro-ecologies in region.
- Challenges of harmonization of national and regional seed laws and varietal releases that sometimes make it more attractive for private companies to focus on import and resale of seed.
- Challenges with adulteration of seed in the formal sector that tend to frustrate both farmers and private seed companies.
- Challenges encountered by farmers in nursery management, esp. pest and disease control further accentuate problems of seed management.

Challenges encountered by FLSEs that can be complemented by formal sector

- Difficulties encountered by some FLSEs (e.g., QDS farmers to access viable markets. *Lack of differentiation / branding of small seed packs*

- Lack of enabling seed policy and regulatory environment is critical for the successful uptake and sustainability of FLSEs

- Continuous technical backstopping of FLSEs through capacity building, especially for contracted farmers is necessary to ensure efficiency and high profitability for smallholders

- Lack of strong collaborative links between actors, private seed companies and other seed sector stakeholders

Conclusions

1. FLSEs, focusing mainly on OPVs should be seen as complementary to formal systems for specific crops and/or meet spatial distribution challenges of the latter.

2. For some crops and under agro-ecologies, consider investments and capacity building in community-based or private sector led healthy-seedling production against specific soil borne diseases e.g., grafted tomato seedlings to control bacteria wilt.

3. Targeted interventions aimed at rendering formal/semi-formal seed sector more smallholder-responsive and for scaling up positive impacts are required e.g., *inclusive business models*.

4. No "one-size fits" system". Critical is that approach / blend of approach(es) should be demand driven for specific contexts

Want more on vegetables?

AVRDC
The World Vegetable Center
http://avrdc.org

Get FRESH!

Enjoy our biweekly digest of AVRDC activities.

Feedback from the Field

Read field reports from farmers, cooperators and other partners.

THANK YOU!

AVRDC
The World Vegetable Center
http://avrdc.org