

## Topical Synthesis Paper

# Having skin in the game: Creating demand for quality seed



## **ISSD Africa Topical Synthesis Paper**

**Title:** Having skin in the game: creating demand for quality seed

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This report synthesises learning from the action research and dialogue activities conducted under the Integrated Seed Sector Development in Africa (ISSD Africa) programme, 2019-2023.

More information: [www.issdafrica.org](http://www.issdafrica.org)

Under the ISSD Africa topic "Creating demand for quality seed", Wageningen University & Research and partners conducted activities in Burundi, Ethiopia, Uganda, Zimbabwe

**Cover photo:**

From EWS & WCDI case study on seed demand, Uganda

Credit: Roger Reuver

## 1. Background

Despite billions of dollars invested in the development of improved crop varieties, yields in Africa lag significantly behind other regions of the world. Farmers' limited use of quality seed of improved varieties is one of the main reasons for low productivity. Even if having adopted an improved variety, in most cases it was released more than a decade ago. And farmers, particularly smallholders, seldom replenish their stocks from a source that is quality assured.

Becoming and remaining food secure in the face of an ever changing and uncertain climate requires greater uptake of quality seed and turnover of varieties that yield more consistently, under local conditions, and in the presence of abiotic stresses and pests and diseases. Enhanced nutrition, healthy diets, and resilience to shocks and stresses also call for greater diversity in the range of options available to farmers. The portfolio of crops and varieties for which quality seed products are on offer is no exception.

Whilst many of us think we know a lot about what farmers *need*, we understand the least about what it is they *want*. Too often we consider farmers beneficiaries and not clients. This calls for a better understanding of their consumer behaviour and how to promote quality seed products in a way that really appeals to their wants and needs. Generating seed market intelligence and making a sale require having more skin in the game.

## 2. Approach and ambition of the topic

Together with partners, Wageningen Centre for Development Innovation (WCIDI) aims to equip commercial seed enterprises, both big and small, and development practitioners in non-/governmental organizations with the knowledge of what works effectively in creating demand for quality seed. Through an action-oriented learning approach that includes research and dialogue, we seek answers to the following questions:

1. What knowledge do key stakeholders need to better understand markets and demand, and where can they turn to for relevant information?
2. What are effective policies, strategies and/or practices in promoting the use of quality seed?
3. How can we influence that these effective policies, strategies and/or practices are applied?

Activities led to several outputs, which are summarised as follows.

- [An investors' guide to Africa's emerging seed markets](#): Report of the research on generating seed market intelligence. Wageningen Centre for Development Innovation offers a substantiated value proposition and minimum viable product for an entrepreneur or institution interested in anchoring a service of helping investors assess the attractiveness of investing in Africa's emerging seed markets.
- Seasonal seed scenario planning: A [decision support procedure](#) for matching seed supply and demand using climate forecasts. Together with the African multinational SeedCo Ltd., the Alliance of Bioversity International and CIAT developed a systematic yet simple and heuristic procedure to support seed supply planning.
- [Sowing the seed: Adoption processes of good horticulture practices in northern Uganda](#). In this case, which observes surprisingly strong uptake of good horticultural practices for an area not formerly known for its vegetable production, WCIDI documents the approach, strategy, and extension and promotion efforts of East-West Seed Knowledge Transfer and ISSD Uganda and explains their contribution to this trend.
- Seed for sale: Last mile sales tactics of seed producers in Burundi. In this case study, WCIDI captures the last mile distribution and sales strategy promoted by IFDC's Private Seed Sector Development project, tactics of seed producers in applying this strategy, and their tentative impacts.
- Nudging farmers to use seed? Reducing information asymmetry in Uganda's maize seed market. This blog (forthcoming) looks at the experimental research of the Seed Market Development project led by Wageningen University and IFPRI and its innovation; the SeedAdvisor agrodealer rating system, which has shown to increase agrodealers' efforts to improve the quality of their products and sell more seed.
- Lastly, spanning these knowledge products, [several webinars](#) and [conference sessions](#), [a blog](#), [news items](#), and [video](#) have been employed to share insights and perspectives and facilitate learning. Some of which is already being taken up in the programming of the [Ethiopia-Netherlands Seed Partnership](#).

### 3. Outcomes and lessons learned

#### What knowledge do key stakeholders need to better understand markets and demand, and where can they turn to for relevant information?

*Insight: Information asymmetry is bad for business. Buyer and seller need to have access to the same information. If not, then too much remains a mystery and the safest strategy for farmers is not to try new things.*

The problem with seed is that its quality is often detected at a moment too late. You have to plant it and hope that it germinates. Crowdsourced information clearinghouses can make the quality of seed more observable. An agrodealer rating system in Uganda, called SeedAdvisor (think Yelp, but for seed), helps farmers identify more reliable sources of maize seed. Anticipating this, agrodealers increase their efforts to improve the quality of their products in competition with others to sell and earn more. SeedAdvisor reduces information asymmetry in the market and has a greater impact on agrodealer sales and farmers' adoption of improved varieties than offering training to these dealers on how to better handle seed. Both the information clearinghouse and agrodealer training were experimental trials carried out by Wageningen University and IFPRI with partners in the [Seed Market Development project in Uganda](#).

Our research on generating seed market intelligence and an [investors' guide](#) revealed several platforms, indices, and reports offering data of importance to investors. These resources are publicly accessible. However, each does not cover all the countries and dimensions of interest. We assessed 12 of them and learned that [The African Seed Access Index \(TASAI\)](#), [Access to Seeds Index](#) of the World Benchmarking Alliance, and [Enabling the Business of Agriculture index](#) of the World Bank overlap in 17 countries where data from [CAADP Biennial Reviews](#) are also available. These countries across Western and Central, and Eastern and Southern Africa offer the most readily available information for making investment decisions.

Investors (e.g., equity and debt partners, DFIs, donors and governments) have an interest in many different indicators to support their decision making. We see these indicators converge around four main categories and subtopics (Fig. 1).

SEED SECTOR	OUTPUT MARKETS	IMPACT	COUNTRY CONTEXT
Seed demand	Market size	Poverty	Demo-graphics
Seed supply	Farmer investments	Food & nutrition	Stability
Regulation	Farmer organization	Climate & bio-diversity	Infra-structure

Fig. 1. Topics of interest to investors in seed markets

*Perspective: There is a value proposition in collating seed market intelligence and making informed recommendations to investors on which emerging markets to invest in, in Africa.*

Interviews conducted by WCDI and discussion by a panel of experts during our [virtual conference in June 2021](#) reveal a high level of demand for such a service assessing the attractiveness of emerging seed markets for (impact) investment. The research report offers a substantiated value proposition and minimum viable product for an entrepreneur or institution interested in anchoring this service in Africa.

#### What are effective policies, strategies and/or practices in promoting the use of quality seed?

*Insight: Seed suppliers ultimately need to get out there and sell their products and that requires having more skin in the game than what we are currently seeing.*

We have tried to understand the drivers of demand and how best to predict it, but what we have found is that estimates are only as strong as our efforts to achieve them. They are really better taken as targets for promotion efforts and not an assumed outcome.

Take for example our tool for seasonal seed scenario planning. Climate forecasts can be useful information in estimating seed demand, and historical records reveal what kinds of varieties sell most when rainfall is above or below average. Extrapolating these trends, and also those correlating with political and economic drivers (e.g., an election campaign and free seed handouts), helps predict likely scenarios for the season ahead. This can assist seed suppliers in planning for scenarios and potentially avoiding the costs of over- or under-supply.

Whilst relatively straightforward and a useful heuristic for decision making, seed supply planning does require adaptive management and ideally a rolling response to ever more likely scenarios. This implies greater flexibility in seed supply chains and re-evaluating, for example, what varieties to process and package seed of, when, and where to stock it. Not only do seed suppliers lack the systems to adapt their management, many also do not have a firm grip on their inventory at present.

This needs changing. Further, giving farmers access to the same climate forecasts and likely scenarios would go a step further in making them a reality. This is what the research of the Alliance of Bioversity International and CIAT, together with SeedCo Ltd, tells us.

But that still leaves the challenge of promotion. What our case studies on the efforts of East-West Seed Knowledge Transfer and ISSD Uganda, to increase uptake of good horticultural practices in Lira and Gulu, and IFDC, to strengthen private seed sector development [forthcoming] in Burundi, have shown us is that additional investment and partnerships in promotion leverage great returns. More on that shortly.

*Perspective: A more gendered understanding of seed consumer behaviour is needed. Too great a share of the market is currently underexplored. The rise and success of women in seed business is key to this more gendered understanding.*

It is important that we come to understand the pains and gains and preferences of both men *and* women in agriculture and what this means for the suitability of seed products on offer. Due to divisions in tasks of men and women, both in the household and community at large, demands for seed differ.

In addition to yield and pest and disease resistance, traits of importance to consumption, like colour, taste, and cooking time, should also be considered to appeal to more interests. The size of packages in which seed is sold, their location of retail, and information provided about the product should also be tailored to the needs of (different groups) of men and women. Lastly, it is important to recognize that men and women farmers are not homogenous groups, and that even more segmentation of the market is possible. If you are interested to learn more, read the outputs from the ISSD Africa topic on [Gender Dynamics in Seed Systems](#).

### **How can we influence that these effective policies, strategies and/or practices are applied?**

*Insight: Uptake is really evidence of systems change. To say that demand is simply a product of promotion is an oversimplification. Change depends on a systemic approach and the distributed but coordinated efforts of many.*

Our case study in northern Uganda observes surprisingly strong uptake of good horticultural practices for an area not formerly known for its vegetable production. It attributes this in part to multiple efforts distributed across a system of trainings, demos, radio programmes, extension workers, model farmers, agrodealers, and ICT (Fig. 2). Technical Field Officers (TFOs) train key farmers and input dealers who in turn transfer knowledge to the broader community. They select key farmers and sites of demonstration plots, manage these demos and hold trainings, and facilitate networks and market linkages.

Key farmers are essential in running good demos to showcase improved technologies and in responding to the interests of passers-by. Input dealers ensure availability of inputs and inform customers how to use them. The efforts of all those concerned are amplified by farmer field days, radio broadcasts, and ICT. TFOs, farmers, and input dealers are connected via WhatsApp for rapid Q&A, and informed by the app; GrowHow, with over 50 illustrated guides and training materials in multiple languages.

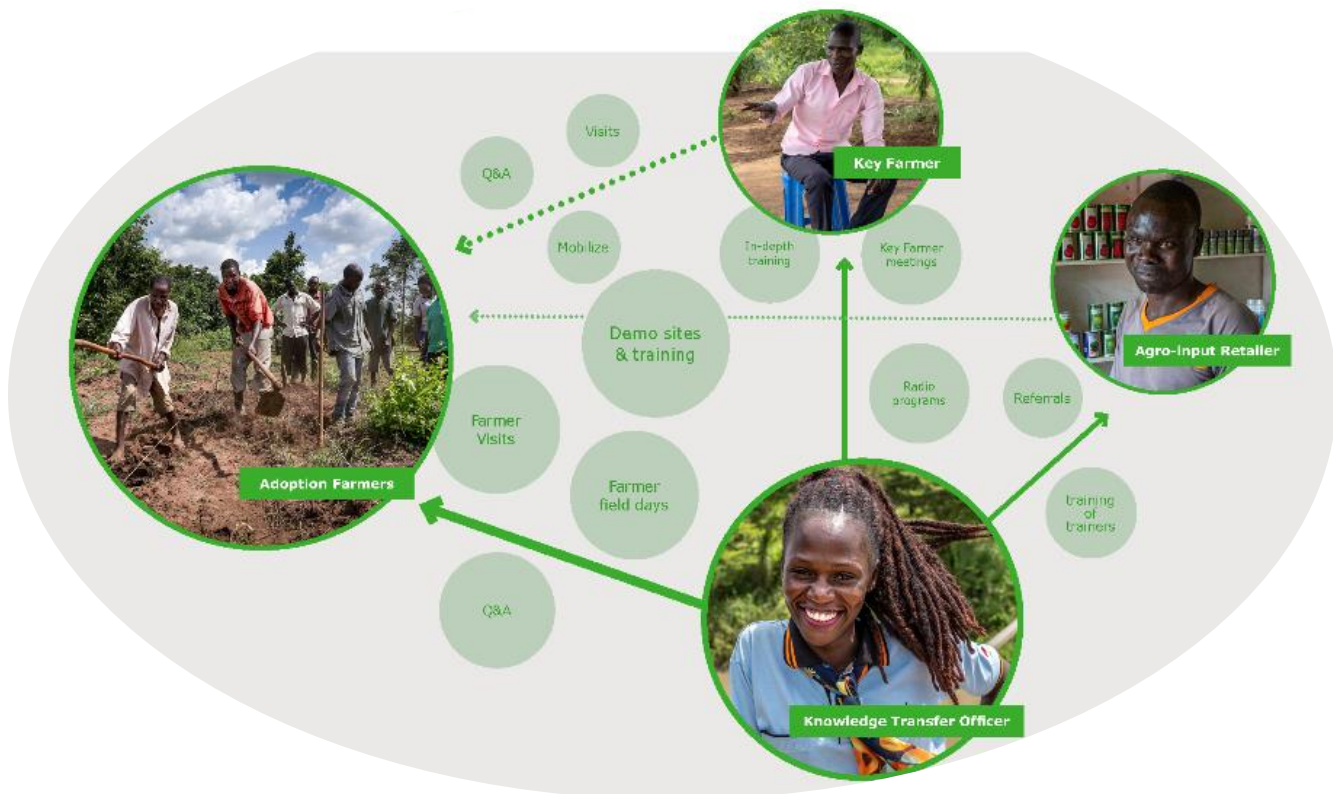


Fig. 2. Knowledge transfer routes in northern Uganda's horticulture

The core paradigm of the knowledge transfer approach is that farmers will be convinced by what they see. In Northern Uganda, this seems to be even more powerful because farmers believe that what they are seeing is impossible. Due to the disastrous spread of blight and bacterial wilt, and lack of water in the dry season, tomato and other solanaceous crops, including potato, eggplant, and pepper, were wiped out of production. Seeing tomatoes being grown again and successfully, in the wet as well as the dry season, is unbelievable. Other reasons why farmers are taking up horticulture are consistency in the provision of high-quality training, access to continuous support from TFOs, key farmers, and input dealers, and proven returns on investment.

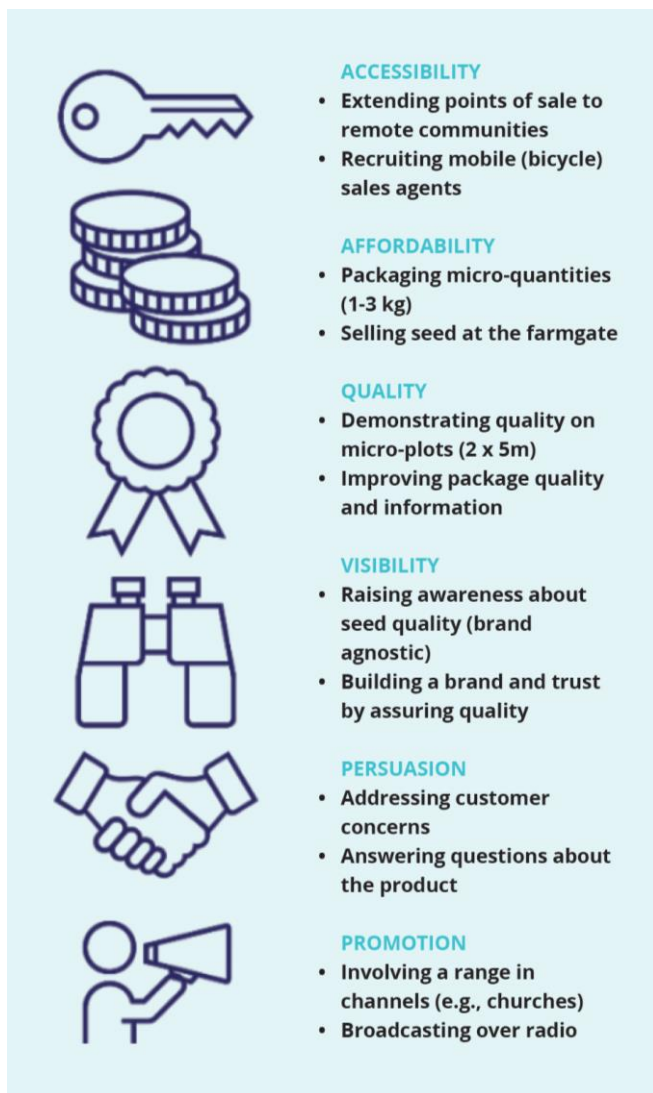


Fig. 3. Attributes of the A<sup>2</sup>QVP<sup>2</sup> strategy in action in Burundi

IFDC's also demonstrates a systemic approach to private seed sector development in Burundi. Besides working on an enabling environment by facilitating dialogue, the piloting of improved service delivery models, and regulatory reforms, IFDC promotes A<sup>2</sup>QVP<sup>2</sup> as a winning formula to marketing strategy. The formula stands for Accessibility, Affordability, Quality, Visibility, Persuasion, and Promotion. Fig. 3 describes some of the tactics applied by seed producers in applying this strategy. Some key innovations include remote points of sale, mobile sales agents, micro-packaging, and micro-demonstration plots.

Coming back to our guide to Africa's emerging seed markets, investors regard fragmentation of market intelligence as *the* major barrier to investment. Whilst there is a value proposition in collating relevant data and making informed recommendations to investors, achieving the minimum viable product and business model for the service are critical for any entrepreneur or institution interested in anchoring it. It will require technical expertise as well. Not all indicators are equal; especially not to different types of investors, and giving weight to each and making a valid interpretation and informed recommendation to investors poses a challenge.

*Perspective: Digitalization promises a quantum leap for the transformation of Africa's seed sector. It reduces information asymmetries and transaction costs. We expect eCommerce in agriculture to be a force to be reckoned with very soon.*

We live in a digital age and digital offers both the accessibility and dynamism required by, among other services, collating seed market intelligence. We recommend to any entrepreneur or institution interested in anchoring the service to consider a dashboard as the platform to use. A great example is the [TASAI Dashboard](#).

## 4. Conclusion and next steps

Demand is a complex concept. We have looked at seed demand with specific lenses from both the demand and supply sides, recognizing the '*en-strangled*' relationship of the two. Our synthesis is by no means comprehensive.

On the demand side, we have identified (some of the) knowledge that key stakeholders need to have to better understand markets. This pertains to drivers of demand and largely in the form of quantitative and qualitative (proxy) indicators. Our inquiry did not include either psychometric or econometric analyses, and there is a lot to farmer consumer behaviour that we simply do not know. Whilst the ISSD Africa topic on Gender Dynamics in Seed Systems may have more knowledge to share, farmer behaviour is an important field of further action research.

On the supply side, we have studied specific cases of seed promotion to reveal policies, strategies, and practices that work. We do not need a vast number of case studies to already conclude that: i. context matters; and ii. dynamics are complex. A better understanding of innovation and adoption as socio-technical processes is required before taking lessons and applying them elsewhere. That is why we try to unpack systemically what was observed in the two cases of promotion (in Uganda and Burundi). More case study and comparison would enrich this understanding.

The perspectives shared above are a great place to pick up where the current phase of ISSD Africa has left off. These are: i. There is a value proposition in collating seed market intelligence in Africa; ii. A more gendered understanding of seed consumer behaviour is needed; and iii. Digitalization promises a quantum leap for the transformation of Africa's seed sector. Action research, piloting, and dialogue can build upon what is already known within the Community of Practice by pursuing these directions.

## 5. Acknowledgements

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