

Improving maize seed marketing in eastern and southern Africa



Improved seed varieties can drastically help improve the food security and livelihoods of small-scale farm families. However, an unreliable seed deployment system in eastern and southern Africa (ESA) prevents many farmers from accessing these benefits.

According to a 2007 study conducted among 117 seed providers in 10 African countries in eastern and southern Africa (ESA), low seed sales stem from a faulty extension system, poor infrastructure, and a lack of farmers' adoption of new seed varieties. And despite a dramatic jump in the number of operating seed companies (from 19 companies in 1997 to 80 in 2007) in major ESA maize-producing countries, (excluding South Africa), the quantity of seed marketed has only barely doubled (from 49,000 tons to 103,000 tons during the same years).

Obstacles to effective seed marketing

To successfully market maize seed, the product must be of high quality and be developed specifically for the target sale area. Maize variety performance varies depending on the environment, management system, and season. The majority of ESA's seed markets consist of widely dispersed, small-scale farmers who grow maize on small areas and therefore purchase a limited amount of seed. This makes it difficult for seed

companies to determine the best type of seed to market since they are trying to meet a varied and fluctuating demand in far-flung locations.

Successful seed marketing is also hindered by poor road conditions, limited transportation and storage facilities, and rising costs of transportation. The bad roads and long shipping distances limit the transport services and drive up the cost of carting seeds, a cost that is passed on to farmers in terms of final seed price. In hopes of bypassing these logistical difficulties, many seed companies have outsourced the retail of their seed to other partners, such as agro-dealers (the most common), non-governmental organizations, retail chain stores, and government organizations. But there are often problems with intermediaries: questionable dependability, lack of appropriate information on seed characteristics, improper storage facilities, and seed adulteration. Agro-dealers also often lack sufficient capital to stock up on the seed that farmers want.

Additionally, some intermediaries do not fully return profits from seed sales to the seed companies, while others mix seed with grain. Diluting the seed quality leads to a loss of farmers' confidence in the given brands, and subsequently, loss of revenue for both the farmers and the seed companies. It is also common to find seed and chemicals stored side-by-side and exposed to sun, heat, or humid conditions for extended periods of time, thus reducing the viability of the seed. In addition to lack of proper storage knowledge or follow-through, when seed stockers do not have appropriate information on seed characteristics they cannot adequately promote the improved varieties they are providing. And since many farmers are already resistant to change—many ESA fields are sown today with varieties that were released over 20 years ago—these discouraging factors only increase farmers' resistance. Seed sales remain lower than they could be, robbing farmers of the economic benefits that can result from selecting and growing improved varieties. Market monopolies can also lead to high seed prices.

On the other end of the spectrum, an uncompetitive grain market lowers grain prices. With high seed prices and low grain prices, a farmer typically has to sell at least 8 kilograms of grain to buy 1 kilogram of seed.

Strategies to help expand seed sales in Africa.

	Eastern Africa	Southern Africa	Regional average
Improve farmers' access to credit	26	37	32
Capacity building for production	18	9	14
Increased building for production	15	1	8
Extension support to create awareness	11	13	12
Improvement in infrastructure	10	20	15
Improve grain markets	7	1	1
Provide exclusivity of varieties	5	3	4
Other	8	17	13

Source: DTMA seed sector survey, 2007/08

A way forward: possible solutions

Because farmers purchase yield-improving inputs with the expectation of increasing their output, the returns on these investments need to be encouraging. To improve the adoption rate of improved maize varieties among smallholder farms and ensure resulting benefits, seed retail and extension networks must be reliable, well-informed, and available to the farmers. One way to do this is for seed companies to provide training on seed characteristics and seed handling practices. This would boost sales and reduce value loss from improper seed handling.

Some companies have experimented with simplifying the extension system and reducing the education gap by labeling varieties with symbols. SeedCo Ltd, for example, uses a picture of an elephant to show that a variety is long-maturing, and a picture of a zebra to label an early-maturing variety. Simple and reliable information on seed varieties can help improve and possibly increase marketing of new maize varieties which will help ensure seed sector growth in ESA.

Providing credit to retailers and establishing a system for seed demand estimates would also improve seed sales. Agro-dealers would have the credit to purchase seed and farmers would have an appropriate selection of the seed they desire. Seed companies can also support targeted subsidies for inputs to help resource-poor farmers achieve the most out of their seed.

The seed sector survey can be accessed at www.cimmyt.org/english/docs/eco_paper/ssanalysisAfrica.pdf

References

- Hassan, R.M., M. Mekuria, and W.M. Mwangi. 2001. Maize breeding research in eastern and southern Africa: Current status and impacts of past investments by the public and private sectors, 1966-1997. Mexico, D.F. (Mexico): CIMMYT.
- Langyintuo, A.S., 2004. Challenges of the seed sector of southern Africa. International Maize and Wheat Improvement Center (CIMMYT) Report, Harare, Zimbabwe. Pp 39. www.cimmyt.org/gis/rfseedsafrica/
- Langyintuo, A.S., W. Mwangi, A.O. Diallo, J. MacRobert, J. Dixon, and M. Bänziger. 2008. An analysis of the bottlenecks affecting the production and deployment of maize seeds in eastern and southern Africa. Harare, Zimbabwe, CIMMYT.
- Lemonius, M., 2005. The impact of seed policy and regulatory initiatives on seed Programme performance and seed supply in developing countries. Paper presented at CIMMYT Seed Systems Learning Workshop, Rome, October 24-26.
- Krull, C.F., J.M. Prescott, and C.W. Crum. 1998. "Seed Marketing and Distribution". In: Morris, M.L. (Ed.) Maize Seed Industries in Developing Countries. Lynne Rienner Publishers, Inc. Lynne Rienner Publishers, pp. 125 – 141.

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Drought-Tolerant Maize for Africa (DTMA) Project

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