

Developing Rural Agricultural Input Supply Systems for Farmers in Africa

The Rockefeller Foundation is supporting three institutions to develop agricultural input supply pipelines in rural Kenya, Malawi, and Uganda with an emphasis on three key factors: (a) affordability; (b) accessibility; and (c) incentives. Key lessons include:

- Development of rural stockists (agro-dealers) is critical for accelerating smallholders' access to quality agricultural inputs in Africa.
- There is a strong positive correlation between availability of credit and the volume of trade in fertilizers and other agricultural inputs in rural areas.
- Distribution/sale of appropriate small packs of agricultural inputs increases their affordability, safety, and quality.

Name of project or program: Developing rural agricultural input supply systems for farmers in Africa (Malawi, Kenya, and Uganda)

Initiation: 2001

Completion date: Ongoing

1. Description of project, program or approach:

Following market liberalization, the private sector moved in to undertake the functions performed previously by the public sector on the import, procurement, and distribution of agricultural inputs. Unfortunately, a majority of the farm input supply companies remains concentrated in urban areas or rural zones with large concentrations of commercial farmers. Therefore, millions of poor farmers in rural areas without large commercial farms do not have access to affordable agricultural inputs such as improved seeds, chemical fertilizers, and other agro-chemicals needed to help them raise their farm productivity. Poor development and weak performance of rural agricultural input markets explain the current low productivity of smallholder farmers

To improve food security and achieve Millennium Development Goals, there is a need to put in place a public-private partnership framework that will: (a) raise the awareness of and improve the efficiency of use of improved technologies and inputs among poor farmers, thereby creating a high demand for these inputs; (b) lower the transaction costs of supplying rural areas with agricultural inputs; (c) improve the linkages between importers, wholesalers, and retailers by removing marketing inefficiencies; and (d) improve the economies of scale in marketing of inputs at the wholesale and retail levels.

The Rockefeller Foundation is supporting three institutions to develop these agricultural input supply pipelines in rural Kenya, Malawi, and Uganda. The projects are being implemented by the Citizens Network for Foreign Affairs (CNFA)/Agricultural Market Development Trust (AGMARK) for work in Kenya; and AT-Uganda, for work in Uganda; and CNFA/RAISE project in Malawi.

2. Implementation details

First, there is need to train a network of rural stockists that can supply fertilizers and other inputs to farmers. Many of the stockists, where available, do not have knowledge of improved seeds and fertilizers, or of safe handling of agrochemicals. Consequently, they are unable to provide farmers with credible information on agricultural inputs use. To solve this problem, the stockists are trained -- using commercially-delivered training modules -- to develop their technical, product, and business management skills. The modules cover areas such as knowledge of fertilizers and seeds, book keeping, costing and pricing, managing business relations, sales and marketing, stock management, and managing working capital. Once completed, these stockists become certified as "agro-dealers."

Second, these certified agro-dealers are linked, using credit guarantees, to major agricultural input supply firms who supply them with stocks for 30-60 days credit period. The credit guarantee covers 50% of the risk of default. The choice of agro-dealers, to whom credit guarantees are provided, is made independently by the companies based on their own selection criteria. In other words, becoming a "certified" dealer does not guarantee access to supplier credit.

Third, to improve affordability of inputs for farmers, the agro-dealers pack and sell seeds and fertilizers in small packages, ranging from 1 kg for seeds, to between 2 kg and 10 kg packs for fertilizers.

Fourth, to help achieve economies of scale in sourcing and transporting fertilizers and other inputs, the agro-dealers form themselves, at the district levels, into "purchasing groups" -- with group members providing joint collateral to guarantee the supply of inputs from the companies. Furthermore, the agro-dealers have organized themselves into national level agro-dealer associations which allow them to better negotiate for lower prices and better credit financing arrangements with the agricultural input supply companies, while it also helps them to influence government policies on imports, pricing, distribution, and marketing of agricultural inputs. As the numbers of agro-dealers have expanded in each of these countries, the flow of farm inputs, particularly fertilizers and improved seeds, into rural areas have increased significantly.

3. Results/Impact

In Malawi where the CNFA/RUMARK project started in 2001, 322 agro-dealers have been trained and certified across the country. A recent survey of rural markets showed that the majority of farmers now buy their inputs from the agro-dealers, compared to buying directly from the government-owned Agricultural Development and Marketing Agency (ADMARK) or the commercial companies. The distances that the poor travel in search of inputs have been significantly reduced in many districts as the number of agrodealers expanded; in Kenya for example, average distances to the nearest dealer declined from 8 to 4 kms between 1997 and 2004. The range, volume, quality, and prices of agricultural inputs supplied into rural areas have also improved significantly. Within two seasons, these agro-dealers moved seeds and fertilizers worth close to \$900,000 into rural areas based on the credit guarantees. In addition, even greater volume of seeds, fertilizers, and agrochemicals were supplied into rural areas by the agricultural input supply companies, without the need for credit guarantees. The sale of fertilizers by certified rural stockists rose from \$125,000 at the end of April 2003 to \$676,000 at the end of April 2004 -- an

increase of 441%. The default rate on the credit guarantee over the past three years has been less than one percent. This is associated with the quality of technical and business management training the agrodealers receive and their use of collective action to ensure repayment. The expansion of the agro-dealers has also led to an increase in rural employment as they employ casual laborers to assist in loading and off-loading inputs, while also employing permanent sales staff for their operations.

The agro-dealers have also become the most important extension nodes for the rural poor. Several local and multi-national seed, fertilizer, and agro-chemical companies now conduct demonstrations of new technologies with the agro-dealers in rural areas. In western Kenya, GIS-based "rural input access maps" have been developed, which now make it possible to determine the distances farmers in various locations have to travel to purchase inputs. These maps, recently launched by the Government of Kenya, will be of great value to the government and donors in their attempts to better target fertilizer subsidy programs. They will also assist the private sector in determining where they should focus their attention to reach under-served markets.

4. Lessons learned

- (i) *The development of rural stockists (agrodealers) is critical for accelerating the access of the rural poor to quality agricultural inputs in Africa.* Their development significantly reduces search costs faced by farmers, making much needed production inputs available in rural areas at the right time and in appropriate volumes, sizes, and affordable prices. A new form of private sector driven extension system is emerging in these countries as the major agricultural input supply companies are increasingly conducting commercial demonstrations of new technologies in rural areas with rural stockists.
- (ii) *There is a strong positive correlation between availability of credit and the volume of trade in fertilizers and other agricultural inputs in rural areas.* The use of credit guarantees in Kenya, Malawi, and Uganda is showing impressive results. It is helping to relax the high capital constraints faced by rural stockists, allowing them to significantly expand the range and volume of fertilizers and other inputs supplied to rural areas. The experience with the credit guarantees in Malawi shows that every dollar of credit guarantee provided to the agricultural input supply companies generated sixteen dollars worth of supply of fertilizers and hybrid maize seeds from the companies into rural areas -- a leveraging ratio of 1:16. Efforts are needed now to scale-up training and establishment of rural stockists across sub-Saharan Africa. Governments could consider the establishment of national agricultural input credit guarantee facilities to be implemented by commercial banks to link rural stockists to agricultural input manufacturers, importers, and suppliers, and accelerate the access of the rural poor to productivity enhancing inputs.
- (iii) *To improve affordability of agricultural inputs, it is important that suppliers of agricultural inputs be encouraged to package their products in smaller sizes that are affordable to the rural poor.* This helps improve effective demand. Agro-dealers are already selling seeds and fertilizers in small affordable sizes to the rural poor. Although the possibility for adulteration exists when stockists try to sell unpackaged and re-bagged fertilizers, such cases are becoming increasingly less likely as the government regulatory agencies become closely involved in quality control, training, and certification of

stockists. However, if agricultural input supply companies higher up in the supply chain can develop appropriate small packs for the poor, it will go a long way to facilitate affordability, safety, and quality of agricultural inputs.

- (iv) *Although these rural stockists are becoming important sources of agricultural inputs in rural areas, government subsidy programs continue to create uncertainties capable of undermining their operations.* For example in Malawi, the country's recent program offering large quantities of subsidized fertilizer distributed only through government channels (ADMARK) negatively affected the operations of the rural stockists, with many going out of business in a single season due to displaced demand. Efforts to promote subsidies of fertilizers for farmers should be done in ways that do not distort or displace these emerging rural input markets. To ensure this, fertilizer subsidies could be provided to poor and vulnerable households in the form of vouchers. If the vouchers are specified as redeemable from certified rural stockists, then such "smart fertilizer subsidies" could be used to further develop, rather than undermine, rural agricultural input markets that serve the poor.
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The above information was provided by the Rockefeller Foundation.

Additional Reading Available on the Internet:

See <http://www.cnfa.org/page.cfm?pageID=143> for a "success story" about a CNFA trainee in Malawi .