What do high food prices mean for farmers' seed access?

Synthesis of Discussion at the Project Workshop Using Markets to Promote the Sustainable Utilization of Crop Genetic Resources

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Access to seeds of locally-adapted crops – both landraces and improved varieties – is crucial for farmers to maintain and increase the productivity of basic food crops. Access is defined by three dimensions: physical availability, cost, and information. Increasing seed supply is only one way of increasing physical access – and in many cases it might not be the most effective, if lack of information or capacity to purchase seed are the problem, rather than a lack of seed.

How may high food prices affect the different dimensions of seed access?

- **Availability:** In most parts of the developing world, farmers use their own seed saved from the previous year's harvest. In extreme cases, food insecure farmers who are net food purchasers may be driven to consume their own seed as food -- generating a vicious cycle of food and seed insecurity in the medium and long run.
- **Cost:** Food and seed markets are often indistinguishable and farmers may rely on grain sold in food markets for their seed supply, even though it may be inferior as seed. Rising food prices results in an increase in seed prices faced by this group.
- **Information:** Locally-adapted crop varieties are essential for farmers to meet harsh and variable production conditions. Farmers need to be able to identify the origin and adaptation of crop varieties in order to choose seeds that will perform under their specific production conditions.

1 **Rising food prices could result in farmers facing higher de facto seed prices, where food grain is used as seed. Improving farmers' access to food is likely to be a more effective response than increasing seed supply, and more compatible with long-run development.**

Food grown in other regions can be consumed but it is unlikely to be adapted as seed unless the farmer or trader who is selling it knows the variety and its geographical origin and shares this information with the buyer. Increasing farmers' access to food, to circumvent their need to consume seeds, is likely to be a more effective long run strategy to encourage local productive capacity.

2 **Improving the food security of farmers requires improving access to seed of local varieties[1], and for minor crops.**

[1] Local varieties includes landraces produced through farmer selection, as well as non-certified, improved varieties that farmers have recycled for seed use for some time.

Food insecure farmers often produce in marginal agricultural ecologies, relying on uncertain rainfall and subject to pest and disease problems. These farmers seldom use fertilizer, agricultural chemicals and irrigation which are required for good yields with improved varieties. Under these marginal conditions, improved varieties cannot be assumed to be better performing than landraces. Minor crops and local varieties often play a critical role in food security, including nutrition. They also play an important role in strengthening food and agriculture systems' resilience. Greater public support of private producer groups, associations or producer boards would help to insure that minor crops are not dominated by blanket strategies designed for primary staples, long the beneficiary of government commodity boards.

3 Strengthening the capacity of local seed systems is a neglected strategy that offers an effective approach to improving farmer's seed access.

Local seed systems, where non-certified seeds of local varieties are exchanged, are the primary source of seeds for most farmers in developing countries. Seed sources in this system include exchanges from social networks such as family and neighbours, community seed banks and local agricultural markets. Strengthening this part of the seed system involves a variety of strategies including seed diversity fairs, variety demonstration plots, participatory plant breeding and variety selection, Farmer Field Schools to test and identify appropriate varieties, as well for seed production and storage, marketing small packets of improved varieties in local markets and improving the marketing of landraces. Breeding locally-adapted improved varieties for regions where they are not currently available is a more long term approach. In these locations, access to certified seed is generally limited so these proposed strategies are complimentary to the formal seed system. Plant breeding and development of improved varieties remains important as part of a wider strategy of increasing access to quality seeds of both improved varieties and landraces important for many crops and production systems, especially for the world's poorest farmers.

4 Agricultural markets are an important part of the local seed system: policy reform can strengthen their capacity to provide farmers access to seeds.

Research from this project indicates local agricultural markets are an important part of the seed system, but there are barriers to increasing their effectiveness as a source of seed. Some nations prohibit the trade of seed unless it is officially certified. These regulations, designed to insure the quality of seeds of primary staples, impose high costs on seed producers and limit the facilitating role of markets for seed of minor crops and local varieties. While some regulation is essential to guarantee minimum quality standards, the laws of many countries prohibit the trade of landraces. Markets could function more effectively if countries would reform seed regulatory systems to facilitate the trade of local varieties. For example, guarantees could come from accredited seed inspectors or developing local seed brands, with information on the variety and its origin. In agricultural systems with high variability and a strong need for local adaptation, the latter is probably the single most important piece of information that a farmer can have to assess whether the seed may work under his or her specific conditions. Where commercial seed is viable, interventions could be developed to encourage its marketing and distribution through local entrepreneurs and traders.

*High food prices have intensified the call for increasing the supply of seeds and other inputs to increase farm production and further a second green revolution. These recommendations were discussed at FAO on May 6, 2008 in a meeting of 25 experts from FAO, CGIAR centers, national agricultural research institutes, NGOS and academia who have been working together for three years under a FAO lead project "Using Markets to Promote the Sustainable Utilization of Crop Genetic Resources.


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