

**EXTENDING THE BENEFITS OF IMPROVED SEED
AND OTHER MODERN FARMING PRACTICES TO FARMERS
IN COUNTRIES LEFT BEHIND IN AFRICA'S
EMERGING GREEN REVOLUTION**

Executive Summary

An estimated 38 million farming families in 15 sub-Saharan African countries have been left behind in the wake of recent African Green Revolution advances. They have little reason to hope that their children's lives will be different. Average child malnutrition rates in these countries are 38%. Meanwhile, population growth rates average 2.8%, leading to a doubling of populations every 25 years. But there can be hope; many African countries facing a similar future ten years ago are now on a significantly improved trajectory. Developing modernized seed systems which leverage other key technologies such as increased fertilizer use and improved crop management has made the difference.

Population growth in Sub-Saharan Africa is exerting increasing pressures on the already-depleted production potential of rural farming areas throughout the continent, where 65% of all employment is based on agriculture. Recent trends in rural-urban migration and the flight of desperately poor people to developed countries give rise to an urgent need for sound strategies for increasing the productivity of farmers in order to reduce under-nutrition and create the opportunity for inclusive economic growth. The development of sustainable seed systems which supply local farmers with knowledge of and access to quality seed of higher-yielding crop varieties of a nutritionally diverse range of crops and other modern farming technologies is one of the most promising interventions to have emerged in recent decades.

Experience gained working with farmers, researchers, private agri-business entrepreneurs, and public officials has allowed for the validation and refinement of a proven model for seed systems development in Africa. This model, together with the recently completed effort to breed over 700 improved varieties of Africa's main food crops, reduces the costs, risks and inefficiencies normally associated with seed system development, and makes related investments more sustainable. As a result, it is now within our reach to establish regular, dependable access to high-yielding seed of a wide range of nutritious crops among poor, smallholder farmers in virtually all countries of Africa.

Importantly, farmers who have already been given access to this seed have eagerly adopted its use. Many have significantly increased their crop yields, reducing hunger locally and increasing the supply of food more broadly.

Keys to success in this approach are:

- active support to public crop breeding teams to identify and release a series of improved crop varieties that are well suited to local crop environments;
- the establishment of a critical number of private, independent seed companies which produce, process, package, and market improved, adapted seed of staple food crops;

- the broad popularization of seed of the new varieties among local farmers through private-sector-led extension activities; and,
- the building of a network of private, village-based agro-dealers to supply seed at village level.

Unfortunately, efforts to develop modernized seed systems have so far been concentrated in a select group of approximately 15 countries of Africa. This narrow geographic focus, while necessary in the early stages, has left farmers in the majority of sub-Saharan Africa's landmass without the benefit of seed of higher-yielding crop varieties and other productivity-enhancing technologies. However, the consistency with which positive results have been achieved using a public-private partnership approach to seed systems development has provided the proof-of-concept required to expand the approach to countries left behind, thus far.

This document makes the case that we are now ready to extend to poor, smallholder farmers in these countries the benefits of using modern seed, fertilizer, and other modern crop production practices. They, too, deserve the opportunity to increase their harvests and improve the supply of nutritious grains, legumes, and other food crops that make up local diets. They, too, deserve the tools which will enable them to become more resilient in the face of climate change. And by intentionally including seed of higher-yielding legumes, vegetables, and fruit crops, farm families can improve their nutritional status

The proposal identifies a process for rapidly analyzing current agricultural practices and opportunities for building national seed systems in the 15 left-behind countries. This involves a one-year period of feasibility studies and elaboration of a business plan for a newly-formed organization, the Seed Systems Group, to intervene in at least 10 countries that present the highest probability for success.

The cost associated with this analysis and business plan formulation over a Phase One period of one year is \$985,499. These resources will also be used to recruit a small team and establish a Nairobi base of operations for Seed Systems Group and begin raising funds for Phase Two.

After undertaking the initial planning and feasibility study, costs for implementation of the strategy in 10 countries are estimated at roughly \$58 million over a five-year Phase Two of operations, followed by a subsequent five-year Phase Three investment of \$40 million. As has been experienced in the 15 countries that have benefitted from focused seed sector attention over the last decade, it is projected that at the end of Phase Three national seed systems in most program countries will be capable of further growth on their own. A map showing how this intervention would complete the existing efforts in seed systems development is attached, below.

