

The Bill & Melinda Gates Foundation is a very recent entrant in the agricultural development space. We have been active in this area for just over five years, yet we quickly became a major donor and advocate for smallholder agricultural development. Between the years 2006 and 2011, the Foundation invested close to US\$2 billion to promote sustainable agricultural productivity growth, with a particular emphasis on Sub-Saharan Africa and South Asia. The Foundation is currently among the top five donors providing grants for agricultural development in Sub-Saharan Africa and possibly the top source of public research and development (R&D) support for the region.

The Gates Foundation approach to scaling up agricultural innovation

Our approach to improving lives at scale embodies the concept of catalytic philanthropy, which seeks to identify market and government failures and address those gaps. Since our inception, we have focused on supporting the provision of international public goods and on catalyzing the invention of innovative, high-leverage solutions that other sectors can adopt, adapt, or otherwise use. For instance, we have invested in such critically important yet underfunded areas as agricultural R&D for food staples important to the developing world.

But we recognize that upstream activities alone are not enough to achieve transformative results. Our large investments at national and subnational levels reflect a comprehensive approach to helping farmers prosper. This includes helping them access new tools and farm management techniques, opening doors to markets, and supporting effective policies. For example, some of our strongest investments in Africa support increased farmer access to farm storage technologies, warehouse receipt systems, market information systems, and low-cost, small-to-medium-scale processing facilities, which together improve market infrastructure, increase value addition, and stimulate end uses. Through support for regional research networks focusing on agricultural economics, we also invest in individual countries' capacities to analyze and better design policies to improve smallholder productivity and reduce poverty.

Our approach to achieving impact is also not restricted to large dollar investments. Focused advocacy, alliance building, and consensus-building interventions help create an environment that fosters success across our portfolio. For example, our insistence that women participate in and benefit from all our grants has resulted in widespread attention to women farmers as untapped economic agents, notably through reform efforts from the US Feed the Future initiative and the Consultative Group in International Agricultural Research (CGIAR).

Refining our approach

In 2011, we initiated a mid-course correction to our strategy, with the aim of becoming more effective in our ability to significantly

reduce hunger and poverty in our target regions: Sub-Saharan Africa and South Asia. Our first four years of grant-making provided us with the following useful lessons that we used to recalibrate our work going forward.

1. Our grant-making, although substantial, was too diffuse to have widespread impact on the ground.
2. We lacked a clear pathway from global innovation to smallholder poverty reduction.
3. We were not well coordinated with contemporaneous efforts by governments, other donors, and development agencies along the chain from R&D to impact on farmers' fields.

We have now embarked on a refreshed grant-making strategy that tries to address these shortcomings. It places strong emphasis on three design principles: focus, integration, and partnership. By incorporating the full meaning of these principles in the reorganization of our work, we aim to move away from geographically dispersed boutiques of success, and toward integrated national models in which our portfolio can add up to more than the sum of its parts.

Sharper focus

Our resources are now more sharply focused on a set of priority commodities and a set of priority countries. Priority commodities are both crops and livestock products, and they are distinct for Sub-Saharan Africa and South Asia.

Priority commodities

Our prioritization of commodities was based on (1) an assessment of the food consumption basket of the poor, (2) demand projections through 2030, (3) the current supply situation, (4) productivity gaps, and (5) market failures in technology generation, diffusion, and marketing. We settled on a set of staple food crops that are important to the poor and that are grown in 11 of the 14 agroecologies of Sub-Saharan Africa; they are widely adaptable and amenable to scaling up across regions. We excluded high-value crops even though we are fully aware of the pro-poor benefits of smallholder participation in high-value supply chains. We do not believe that there is an R&D market failure for high-value crops where the private sector is already active. The rapid spread of *Bt* cotton in India is an excellent example.

Priority countries

Our refreshed strategy also provides a much sharper geographic focus for our efforts. When we started our work in agricultural development, we chose to restrict ourselves to Sub-Saharan Africa and South Asia. However, we found that even that delineation was too broad and diffuse for us to have a transformative impact on the ground. We therefore decided to take to scale our efforts in a few priority countries and depend on spillover effects for reaching the rest. The country prioritization was based on three major criteria.

1. Number of rural poor people: We selected geographies with the highest absolute number of poor people living in rural high-density areas. The seven selected African countries account for half of the urban and rural poor in Sub-Saharan Africa.
2. Potential for productivity improvement: We invest in areas of high and growing demand for staple-food and high-productivity potential and where cross-national spillover benefits between agroecologies can be maximized.
3. Probability of success: We estimated the likelihood of success in terms of an enabling political and economic environment as well as the potential to expand on our existing partnerships.

Integration across the commodity value chain

Traditionally, the concept of a value chain is meant to trace all components and processes involved in the movement of a commodity from the farm to the consumer's plate. Our more expansive view considers the entire chain from "molecule to mouth." Our definition of an integrated value chain is inclusive of the R&D associated with commodity improvement, all processes and components involved in technology transfer and dissemination, access to inputs, farm production and management, postharvest operations, access to markets, and the links to the food retail sector.

The integrated value chain approach helps us prioritize and integrate our work externally as well as internally. Strong internal teams around each of the value chains allow us to take a comprehensive approach to priority interventions and grant design. In each anchor geography, these teams look across the value chain to identify constraints and opportunities. For example, our investment in stress-tolerant varieties of rice for Africa and South Asia has resulted in several new varieties for flood and drought tolerance. But weak seed policies in Sub-Saharan Africa constrain the rapid movement of these varieties from experiment stations to farmers' fields. Complementary investments in an enabling seed policy environment at the national and regional levels improves farmer access to seed and enables more rapid productivity growth.

Effective partnerships for reaching scale

We recognize that our ability to scale up our efforts depends on aligning with and leveraging the skills, capacity, and resources of a wide set of partners in the region. While at the global level, we partner with a broad range of public and private partners to boost the pace of and ensure the relevance of our international R&D and policy agendas, one reason for deepening our engagement in a

limited number of anchor geographies is to leverage partnerships that can heighten our impact on the ground.

Creating effective "hand-off" from global public good R&D to technology dissemination at the national and local levels requires identifying and strengthening partnerships with all players along the commodity value chain. The Alliance for a Green Revolution in Africa (AGRA) is a critical partner in building the bridge from global innovation to local adoption. The AGRA Program on African Seed Systems (PASS) has already released and disseminated more than 150 new and improved varieties of the major staple crops across Sub-Saharan Africa. PASS has shown the crucial importance of working with the local private sector, including small agro-dealers, in order to have impact on a large scale.

Our work in Ethiopia provides an early example of the way we can achieve widespread impact through improved coordination. Working with the Agricultural Transformation Agency (ATA), we are helping the Government of Ethiopia design and implement a long-term strategy for agricultural development through smallholder productivity growth. The ATA has been instrumental in bringing about improved coordination not just among the national agencies involved in agricultural development but also across the multitude of bilateral and multilateral agencies supporting Ethiopia's development.

Nevertheless, our ability to partner with institutions at the national and local levels is constrained by poor capacity at the technical, policy, and management levels. The few strong organizations that exist tend to be overwhelmed by donor requests to rapidly scale up programs. Broad-based capacity building efforts, though crucial, are beyond the scope of a single donor and require sustained commitment from a larger coalition of bilateral and multilateral funders. Developing countries themselves need to make a strong commitment to building broad-based capacity at all levels.

Finally, effective monitoring-and-evaluation and impact-assessment systems are needed to monitor progress toward our sustainable-productivity targets and poverty-reduction goals. Our investments in household data and other "real-time" M&E systems, including environmental monitoring, help us track progress.

For further reading: Bill and Melinda Gates Foundation, Agricultural Development Strategy Overview, <http://www.gatesfoundation.org/agriculturaldevelopment/Documents/agricultural-development-strategy-overview.pdf>; Bill and Melinda Gates Foundation, Agricultural Development Grant Overview, www.gatesfoundation.org/agriculturaldevelopment/Documents/agricultural-development-grant-overview.pdf.

Prabhu Pingali (Prabhu.Pingali@gatesfoundation.org) is deputy director of agricultural development at the Bill & Melinda Gates Foundation, Seattle Washington.



INTERNATIONAL FOOD POLICY
RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty
IFPRI®
A member of the CGIAR Consortium

www.ifpri.org