

Despite significant strides in reducing poverty during recent decades, there are still about 1.2 billion extremely poor people in the world. In addition, about 870 million people are undernourished, and about 2 billion people suffer from micronutrient deficiency. About 70 percent of the world's poor people live in rural areas, and many have some dependency on agriculture. Over time, however, there has been progress in reducing the total number of undernourished people and in reducing the number of poor people in Asia and in Latin America. Did agricultural performance help bring down the poverty and hunger rates?

There is evidence that agricultural growth has a high poverty reduction payoff. Higher agricultural productivity growth underpinned early development in Japan, the United States, and Western Europe, and later in China, the Republic of Korea, and Taiwan. Analysis by the International Fund for Agricultural Development (IFAD), the World Bank, and IFPRI shows that there is a clear correlation between the developing countries with the largest reduction in poverty rates and incidence of undernourishment and those with the most rapid agricultural growth. For example, a 1 percent per annum increase in agricultural growth, on average, leads to a 2.7 percent increase in the income of people in the lowest three income deciles in developing countries. Investment in agriculture is 2.5 to 3.0 times more effective in increasing the income of the poor than is nonagricultural investment. And agricultural growth, as opposed to growth in general, is typically the primary source of poverty reduction. The contrary is also true: a decline in agricultural growth throws many poor people into poverty. This explains some of the increase in poverty and hunger in developing countries during 2008 and 2010, when food prices increased worldwide.

How to stimulate agricultural production

Do we know how to stimulate agricultural growth and rural development in low income countries, and what is the relationship of such stimulation to "scaling up?" There is now a large body of literature indicating that domestic and international investment in agriculture and rural development, combined with supportive policies, stimulates agricultural growth. What is needed first are measures to improve farmer and agro-industrial access to markets through better government and partner country policy, investment in infrastructure, and government services. These involve the creation of an enabling environment for private investment in marketing, farm input supply, agroprocessing, and, of course, farming itself. The investments need to be both private and public, with the latter focused on rural infrastructure, rural education, information supply, regulation, and policy.

Second, international donor and individual government attention on smallholder farming is needed, because smallholders have special informational, infrastructure, and support needs. Such attention would focus on smallholder productivity, food production, reversal of environmental degradation, and management of

natural resources. This focus involves research and development, instruments to reduce farmer risk, rural financial services, development of farmers' organizations, improvement of labor mobility, and a higher quality of public sector governance.

Where agricultural production has been stimulated and why

If agricultural growth is so effective in reducing poverty and we know how to get such growth, why is agricultural production growth and rural development in most developing countries so problematic? Why is the global rural poverty and nutrition problem not being resolved in most countries? Why are known solutions not more widely applied?

The reality is that investment in agriculture, both by developing country governments and aid donors, has declined since the 1980s. Specifically, the share of agriculture in total bilateral and multilateral aid fell from a peak of 22.5 percent in 1979–1981 to a low of 5.4 percent in 2003–2005, before increasing to 6 percent, according to 2009 data from the Development Assistance Committee of the Organisation for Economic Co-operation and Development. The combination of declining aid to agriculture and low public investment in agriculture by developing countries in recent decades has resulted in a huge public investment gap between what is needed and what is supplied. In Africa, most governments still spend less than 10 percent of public budgets on agriculture, despite their commitment in the Maputo Declaration of 2003 to reach or surpass that target.

It is instructive to look at those African countries meeting the 10 percent target since 2000: Ethiopia, Madagascar, Malawi, Mali, Niger, and Senegal. Several of them had large public sector investment programs, operating on a large, nationwide scale, generally assisted by donors. This stimulated agriculture in Ethiopia, Mali, and Niger, but not in Madagascar, Malawi, and Senegal. In the latter cases, overriding factors affected agricultural growth, including poor agricultural price and marketing policy in Senegal and Malawi and civil strife in Madagascar. The implication is that bigger public expenditure programs for agriculture, supported by bigger aid allocations for the sector and combined with good policy and adequate governance in Africa, can lead to agricultural growth exceeding that of the benchmark Chinese rate of 4 percent per annum, as was the case for Ethiopia, Mali, and Niger. Looking back on the longer period of the 1990s and early 2000s, the available data suggest that good policies and high investment in large-scale agricultural programs by the governments of Brazil, China, Laos, Morocco, Mozambique, Peru, Tanzania, and Vietnam achieved excellent agricultural growth (over 4 percent per annum) and good poverty reduction.

Good performers also receive much donor aid for agriculture, helped by the fact that the governments have large-scale programs that donors can support. Scale, therefore, matters; large-scale programs financed by governments and donors boost agricultural growth, in turn reducing poverty, if policy is broadly enabling.

In countries that invest little in agriculture there is generally little scaling up. Investments are generally undertaken in small projects, with small amounts of donor aid and small portions of public sector budgets allocated to agriculture. Thus, very rarely are the investments at a sufficient scale to have an impact on large numbers of people. This situation, when combined with poor policy environments, leads to low agricultural growth and contributes to the hunger and rural poverty problem characteristic of these countries.

How the aid community participates in scaling up

Though donors are generally not as critical for scaling up as are developing country governments, they can be helpful—or harmful—to this agenda. The reason that the donors have often been harmful is, first, that there are so many of them. According to research by the Brookings Institution, the aid business is generally characterized by numerous small projects. Official aid data provides information on 925,000 projects covering 327 donor agencies since 1946, with around 100,000 active projects in any given recent year. An example is Ethiopia, where the World Bank documented 20 donors supporting 100 agricultural projects in 2005. This fragmented aid, when placed in a poor policy environment, often has little to show in terms of impact on significant numbers of people or agricultural growth rates. Creating aid-financed projects in support of larger government programs, or convincing governments and other donors to scale up successful projects, is the direction shown to be successful.

In the wake of the recent global food crisis, this is beginning to happen. At the G8 summit in L'Aquila in 2009, governments from North and South committed themselves to ratcheting up investments in and donor funding for agriculture, improving policies, and forging public-private partnerships at the country level and globally. Specific actions include

- the commitment by donors to dedicate \$20 billion to this cause;
- the establishment of new facilities, such as the Global Agricultural and Food Security Program;
- the commitment to regionally focused public-private alliances such as the Alliance for a Green Revolution in Africa and the Coalition for African Rice Development, which focuses on scaling up rice value chains;
- the increase in funding for agriculture and rural development by IFAD and other donor agencies; and
- the creation of the Council for Food Security and the Comprehensive Framework of Action, with its High Level Task Force.

In addition, improved sector investment planning and harmonized implementation in countries have been reinvigorated under initiatives such as the Comprehensive Africa Agricultural Development Program. Most of these initiatives are at an early stage, and most of the L'Aquila aid pledges have not been forthcoming, so results are not yet apparent. However, donors and countries are beginning to recognize the importance of scaling up. For example, during the 9th Replenishment Consultation of IFAD, which concluded in December 2011, all members enthusiastically endorsed a scaling-up agenda.

Conclusion

There is clear evidence that where agriculture contributes a significant portion of gross domestic product, rapid agricultural growth is an effective tool for generating overall economic growth and reducing poverty. There is also good evidence about the types of private and public investment and policy that stimulate agricultural growth. The contrary is also true: there are policies and investments (massive fertilizer subsidies, export restrictions, and severe farm price controls) that inhibit agricultural growth or have negative impacts on natural resources, making agriculture less sustainable. Poor governance and civil unrest also curtail agricultural growth; good governance and stability help it. Public investment programs, supported by aid, in large-scale agricultural programs focused on what works can generate very high agricultural growth rates, in turn contributing to poverty reduction. But operating at scale with substantial resources is no panacea. If policies are not enabling, or governance is bad, big programs at scale are much less likely to work. Scaling up successful projects and policies is effective in generating growth and poverty reduction, but more readily so in countries with good policy environments and under reasonably good governance regimes. Brazil, China, Laos, Morocco, and Vietnam, and more recently Burkina Faso, Ethiopia, Mali, and Peru provide good models.

For further reading: S. Benin, A. Kennedy, M. Lambert, and L. McBride, *Monitoring African Agricultural Development Processes and Performance: A Comparative Analysis*. ReSAKSS Africa-Wide Annual Trends and Outlook Report (ATOR) 2010 (Washington, DC: International Food Policy Research Institute, 2011); International Fund for Agricultural Development (IFAD), "Experiencias Innovadoras en los Proyectos del FIDA en la República del Perú, Evaluación Temática." Rome: 2004; N. Islam, "Foreign Aid to Agriculture: Review of Facts and Analysis." IFPRI Discussion Paper 1053, Washington, DC: 2011, based on OECD DAC data World Bank, *Agriculture for Development: World Development Report 2008* (Washington, DC: 2007).

Kevin Cleaver (k.cleaver@ifad.org) is associate vice president, Programs, International Fund for Agricultural Development. Contributions to this brief by Johannes Linn, David Nabarro, Rodney Cooke, Elwyn Grainger-Jones, Shyam Khadka, Cheikh Sourang, and Sara Bridges are acknowledged.