

Agricultural Growth as a Key to Poverty Alleviation

by Lynn Brown and Lawrence Haddad

Poverty is a significant and persistent problem in developing countries. Over 1.1 billion people live in households that earn a dollar a day or less per person. Almost half of the population of South Asia and Sub-Saharan Africa lives in absolute poverty; only East Asia has managed to substantially reduce the proportion of its population that is absolutely poor.

Poverty, given its close relationship with food insecurity, poor health and nutrition, and lack of education, results in lives falling short of their human potential. Insufficient calorie and nutrient intake impairs cognitive development and school performance of children, reduces the productivity of adults, and renders individuals more susceptible to disease. Poor health and diseases, often as a result of inadequate sanitation, reduce work productivity directly and hamper the attainment of satisfactory nutritional status. They also have an indirect effect on productivity through the need to care for sick family members. Improvements to household food security are limited by lack of education, in particular women's education. Thus the spiral of poverty, disease, and hunger continues, resulting in 700 million people in the developing countries without access to sufficient food to lead healthy and productive lives, 184 million preschool children who are underweight, and 14 million preschool children suffering eye damage as a result of vitamin A deficiency, with up to half a million going blind each year.

Eradicating poverty and hunger must be central pillar of development goals. Policies that foster broad-based economic growth are a critical component. Economic growth, while by no means a sufficient condition for sustained poverty alleviation, is undoubtedly anecessary one.

Agriculture as a Growth Strategy

For many developing countries, agriculture is the most effective and frequently the only viable lead sector to generate economic growth. Very few countries have experienced rapid economic growth without agricultural growth preceding or accompanying it. In the last 20 years countries that experienced real declines in agriculture had the lowest economic growth rates. Agricultural growth stimulates economic growth in nonagricultural sectors, which, in turn, results in increased employment and reduced poverty. This further stimulates demand for agricultural goods, acting as a growth multiplier in the agricultural sector. The limited availability of new land, however, means that agricultural intensification--increasing the productivity of land already under cultivation--is the key to alleviating poverty through an agricultural growth strategy.

Agricultural intensification is dependent on the availability of sustainable alternative technologies and farming practices that will not further degrade the natural resource base. The availability of

these technologies and practices is driven by agricultural research and development. The Green Revolution testifies to the benefits of investment in agricultural research, but to maintain and secure future yield increases, research must be ongoing. Yet, a recent IFPRI study has shown that real external assistance to agriculture in low-income countries declined from US\$12 billion in 1980 to US\$10 billion in 1990, while the share of agriculture in development assistance declined from 20 percent in 1980 to 14 percent in 1990. Reversing this downward trend is crucial to ensuring that appropriate agricultural intensification strategies are available in the future.

Growing concerns that the agricultural intensification process may lead to degradation of natural resources, while valid, are somewhat misplaced. Experience from Kenya shows that land that was heavily degraded a few decades ago has been rehabilitated, despite a fivefold increase in the population, and it has even experienced a threefold increase in per capita agricultural output. The "secret" of the transformation was agricultural intensification, encouraged by local land use innovations, infrastructural development, institutional development, access to a high-income market, and access to off-farm income that could then be reinvested in land. Lack of access to appropriate technology and modern inputs for agriculture is a much more serious cause of environmental degradation than excessive intensification. Rural poverty, exacerbated by increasing population densities and an inability to produce sufficient food due to inadequate agricultural intensification, is responsible for much of the forced exploitation and consequent degradation of environmentally fragile lands.

Thus addressing rural poverty in the first instance is a crucial catalyst in igniting agriculture as an engine of growth in an economy. This requires effective programs that target assistance to the poor, raising incomes in tandem with provision of social services in the form of health care and access to safe water and adequate sanitation, thus enabling the poor to be good stewards of their natural resource base and to participate in the growth and development process.

Programs that Work

Three programs have already proven effective in targeting assistance to the poor.

1. Food transfer schemes, such as targeted feeding programs, which have the capacity to improve the nutritional status of the most vulnerable groups, often children and pregnant or lactating women, are critical. Adequate calorie and nutrient intakes for these vulnerable groups result in lower maternal, neonatal, and infant mortality rates; ensure child growth and cognitive development; and reduce the demand for additional children. Consumer food price subsidies on foods predominantly consumed by the poor can also be used to raise real household incomes.
2. Labor-intensive public works programs, appropriate in situations where infrastructure and employment demand is

inadequate, can be used to generate multiple benefits that continue long after the program has finished. The provision of employment for those who are under- or unemployed raises household incomes through wage earnings in the short run, improves health and nutrition outcomes, and through income flows from improved infrastructure, affords access to markets and income-earning opportunities in the long run. Labor-intensive public works programs can be used to create much needed social and physical infrastructure. Rural infrastructure coverage, especially roads, transport, marketing and storage, and irrigation facilities, is very low and of poor quality in many developing countries, which acts as a limiting factor to rapid agricultural growth. Use of public-works programs for environmental rehabilitation activities can address current degradation and raise land productivity and future earnings.

3. Access to credit is an important mechanism to both protect the current standards of living of the poor and to permit investment in productive resources to enhance future living standards. In the short run, credit enables the poor to weather economic and climatic shocks; it protects their food security and removes the need to dispose of productive assets in order to ensure their survival. This ensures a faster return to full productivity and income generation after the shock. In the long run, credit permits the poor to finance investments in new agricultural and nonagricultural assets and to adopt new farming technologies and farming methods to increase their production and productivity without consequent environmental degradation. The most successful programs combine small-scale credit with group motivation, technical advice, and other forms of assistance such as nutrition and health programs.

All of these policies require good governance. This does not imply a particular political dogma or procedure. Rather it means (1) using resources in an efficient and accountable manner; (2) allocating resources in a way that is transparent and nondiscriminatory in regional, ethnic, or gender terms (this would address many concerns that lead to civil conflict and unrest); and (3) planning the use and control of resources in a participatory and decentralized manner at the local level. The last point is particularly important with regard to agricultural sustainability and the environment. It is the poor who are most dependent on the natural resource base for their livelihoods: without their involvement and participation in the development process, policies designed to promote sustainable agriculture, to provide adequate food supplies, and to protect the natural resource base will be doomed to failure.

Recommendations

Thus we conclude with a set of recommendations that, while addressing poverty in its most immediate form, promotes sustained poverty alleviation and economic growth.

- Target assistance programs to vulnerable groups such as children and pregnant and lactating women, including feeding programs and micronutrient supplementation.
- Undertake credit and labor-intensive public works programs, which go a long way to achieving sustainable poverty alleviation and strengthening self-help capacities.
- Provide rural infrastructure, which is critical to securing the full benefits from new agricultural technologies and farming practices.
- Provide social infrastructure to ensure minimum facilities for primary education and health care, including access to family planning measures, because rapid population growth increases demand on limited resources.
- Reverse the recent downward trend in investment in agricultural development in low-income developing countries in order to increase production in a sustainable manner and raise incomes of the poor.
- Expand financial and technical support of agricultural research, which will increase agricultural productivity, avoid environmental degradation, and alleviate poverty in low-income developing countries.

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"A 2020 Vision for Food, Agriculture, and the Environment" is an initiative of the International Food Policy Research Institute (IFPRI) to develop a shared vision and consensus for action on how to meet future world food needs while reducing poverty and protecting the environment. Through the 2020 Vision initiative, IFPRI is bringing together divergent schools of thought on these issues, generating research, and identifying recommendations. The *2020 Briefs* present information on various aspects of the issues.