



## AGRICULTURE FOR DEVELOPMENT POLICY BRIEF

## Agriculture and Economic Growth

*In the agriculture-based countries of Sub-Saharan Africa, agriculture is essential to growth, which is in turn necessary to reduce poverty and food insecurity. New markets have dramatically changed the world of agriculture in the 21st century and created new opportunities for faster growth. Tapping these opportunities requires a comprehensive policy approach to foster growth, including providing better producer incentives, increasing public and private investment, and strengthening the supporting institutions, underpinned by macroeconomic and political stability.*

### Agriculture can be the lead sector for overall growth in agriculture-based countries.

Agricultural growth was the precursor to the industrial revolutions that spread across the temperate world, from England in the mid 18th century to Japan in the late 19th century. More recently, rapid agricultural growth in China, India, and Vietnam was the precursor to the rise of industry. Higher agricultural productivity generating an agricultural surplus (which was partially taxed to finance industrial development) and enabling lower food prices underpinned these success stories of the structural transformation. The paradox in this transformation is that higher agricultural growth was necessary to stimulate overall economic growth, resulting in an eventual decline in the share of the agricultural sector in gross domestic product (GDP).

In today's globalizing world, can agricultural growth still jump-start overall growth? And what are the essential policies to accelerate agricultural growth to fulfill its historic role? These are the questions addressed by this brief, which focuses on Sub-Saharan Africa, where the growth rate of agricultural GDP per capita was close to zero during the early 1970s and negative through the 1980s and early 1990s. But positive growth rates in the past 10 years suggest that the stagnation in Sub-Saharan African agriculture may be over and that agriculture could be the engine of faster growth and poverty reduction in the region.

### Four reasons why agriculture can kick-start overall growth in the early stages of development.

1. *A large sector.* In low-income countries at an early stage of transformation, the large share of agriculture in GDP suggests that strong growth in agriculture is necessary for overall economic growth. Indeed, agriculture accounted for about one-third of growth in Sub-Saharan Africa over the past 15 years. As GDP per capita rises, agriculture's share in GDP declines, and so does its contribution to growth, but it can still remain important in some regions of more advanced economies, such as Bihar state in India, and several states of Brazil.

2. *Reducing food prices.* In many countries of Sub-Saharan Africa, food remains imperfectly tradable because of the prevalence of staple foods that are only lightly traded internationally, such as roots, tubers, and local cereals. Even for staples that are widely traded globally, much of the domestic food economy remains insulated from global markets by high transport and marketing costs, especially in the rural hinterlands and in landlocked countries. In these countries, agricultural productivity determines the price of food, which in turn determines wage costs and global competitiveness. Productivity of food staples is thus key to growth.
3. *Comparative advantage.* Most Sub-Saharan Africa economies depend on a diverse portfolio of unprocessed and processed primary-based exports (including mining and tourism). For many years, comparative advantage in Sub-Saharan Africa will still lie in primary activities and agroprocessing because of natural resource endowments that favor agriculture, a lack of skilled labor, and a difficult investment climate that reduces competitiveness of manufactured goods.
4. *Growth linkages.* Agricultural growth has strong growth linkages to other economic sectors. When agricultural incomes are spent on domestically produced nontradable goods and services, it stimulates demand for domestic industry and services. Production linkages foster growth in agroprocessing and food marketing and demand for intermediate inputs and services.

### New market opportunities for faster growth exist.

Growth must balance food staples, traditional bulk exports, and higher-value products, including livestock. Staple crops dominate current production, and they will continue to do so in the near future. In Africa, demand for food is expected to reach US\$100 billion by 2015, double its level of 2000. The challenge is to improve productivity in food staples production to keep food prices from rising and tradable sectors competitive. In addition, with urbanization and economic growth, livestock and horticulture are providing new markets for food producers. Both nontra-



ditional and traditional exports are important, as are regional export markets for food staples and livestock. Markets for nontraditional exports such as horticulture are expanding rapidly, although in most countries this sector is still too small to substantially affect aggregate growth. Yet there are many local success stories of emergence of new markets (cassava chips in Ghana, organic coffee in Tanzania, aquaculture in Malawi); and expanding markets such as dairy production in East Africa, which are transforming livelihoods and could be scaled up for faster growth.

## Policies can enhance agricultural growth in the new global context.

A comprehensive policy approach to stimulate agricultural growth includes four key elements: improving producer incentives, providing core public goods and a better climate for private investment, building effective institutions, and ensuring sustainable use of natural resources.

### *Getting the right balance in agricultural taxation and incentives*

As the largest sector, agriculture has an important role in providing resources for the development of the overall economy. Successful countries have invested in agriculture to stimulate growth and taxed part of the surplus generated to finance industrial development. However, the heavy exploitation of agriculture before meaningful investment in agricultural development can prove lethal, as has often been the case in Africa.

In the 1980s, developing countries taxed agriculture relative to other sectors at a level of about 30 percent on average and 45 percent in Sub-Saharan Africa, with overvalued exchange rates, high tariff protection in industry, and taxes on agricultural exports all contributing to the bias. It has been estimated that a 10 percentage point reduction in total taxation to the sector would increase overall annual growth by 0.4 percentage points.

Over the past two decades, most developing countries have substantially improved their macroeconomic policy and reduced policy biases against agriculture. A positive association can be observed between these improvements and the growth of agriculture in Sub-Saharan Africa. Periods of rapid growth in agriculture have also followed reforms in specific subsectors, such as coffee in Uganda and cotton in Zambia.

But international trade policies—especially protection and subsidies in rich countries—continue to impose substantial costs on agriculture in developing countries. Overall trade policies depress the prices of agricultural products in international markets by an average of 5 percent and impose a cost of 0.3 percent of annual agricultural output growth (see the brief on Agricultural Trade).

### *More and better investment in agriculture*

Investments in core public goods—science, infrastructure, and human capital—combined with better policies and institutions are major drivers of agricultural productivity growth. Despite high returns on these investments, Sub-Saharan African countries grossly underinvest in these public goods and urgently need to scale up spending on core public goods for agriculture (see the brief on More and Better Investment in Agriculture).

In addition, much of the needed investments will have to come from rural savings and the private sector, with the rural investment climate an important determining factor. Investment in public goods such as infrastructure is part of a good investment climate for the private sector, but well-functioning institutions and regulations are equally important.

### *Stronger institutions*

Institutional innovations can be major sources of productivity growth, although few studies have explicitly quantified the effects. In China, 60 percent of the dramatic expansion of agricultural output between 1978 and 1984 has been attributed to institutional reforms—especially the household production responsibility system—and to price reforms.

Three major groups of institutions are important for agriculture.

- Institutions to make markets work better, such as market regulation and information systems, instruments to manage risks, and financial institutions
- Secure property rights for land and water to motivate private investment in agriculture, especially investments with a longer-term payoff
- Collective action by farmers through well-performing farmer organizations to reduce transactions costs, connect farmers to markets, and improve their bargaining position in those markets

### *Reducing the environmental drag*

Long-term productivity growth could have been higher in many situations if the cost of natural resources degradation had been reduced. Many of the productivity gains from technical progress have been negated by soil and water degradation (see the brief on Agriculture and the Environment).

With a growing recognition of the essential role of agriculture as an engine of growth in the early stages of development, better policies, new market opportunities, and a commitment to higher investment can bring faster agricultural and overall economic growth in Sub-Saharan Africa. Rapid growth is also essential to poverty reduction, but growth will not guarantee poverty reduction unless policies are designed to ensure that the poor participate in the growth process (see the brief on Agriculture and Poverty).

This policy brief has been extracted from the World Bank's 2008 World Development Report, *Agriculture for Development*. Further information and detailed sources are available in the Report. The Report uses a simple typology of countries based on the contribution of agriculture to overall growth, 1990-2005 and the share of rural poor in the total number of poor (2002 US\$2-a-day level). In agriculture-based countries (mostly Africa), agriculture contributes a significant (>20%) share of overall growth. In transforming countries (mostly in Asia), nonagricultural sectors dominate growth but a great majority of the poor are in rural areas. In urbanized countries (mostly in Latin America and Europe and Central Asia), the largest number of poor people are in urban areas, although poverty rates are often highest in rural areas.