## The Agenda for Agriculture-Based Countries of Sub-Saharan Africa

Agriculture is critical to overall growth, food security, and poverty reduction in agriculture-based countries, most of which are in Sub-Saharan Africa. Improving smallholder competitiveness in high- and medium-potential areas—where returns to investment are highest—and improving livelihoods, food security, and environmental resilience in remote and risky environments are priorities. A multisectoral approach is needed to capture synergies between improved technologies, sustainable soil and water management, institutional support, and human capital development—all linked to market development. Decision making on many actions is best decentralized in order to tailor them to heterogeneous local conditions, but others need to be coordinated across countries to provide an expanded market and to achieve economies of scale in such services as research and development.

In agriculture-based countries, agriculture accounts for about a third of overall economic growth and most poor people live in rural areas. More than half a billion people live in these countries, 49 percent of them on less than US\$1 a day. Sub-Saharan African countries account for 89 percent of the rural population in agriculture-based countries.

Agriculture can be the engine of overall growth in these countries (see brief on Agriculture and Economic Growth). Agricultural growth in Sub-Saharan Africa has accelerated from 2.3 percent per year in the 1980s, to 3.3 percent in the 1990s, and to 3.8 percent per year between 2000 and 2005. Except for the most recent period, agricultural growth in Sub-Saharan Africa has exceeded growth in nonagricultural sectors. Rural poverty has also started to decline in 10 of 13 countries analyzed over the period from 1990 to 2005. Agricultural growth is also critical to household food security, mainly because it increases the incomes of the poor so that they can acquire food but also because it increases local food production in remote areas with poorly developed infrastructure and markets. Faster growth, sustained poverty reduction, and improved food security in many countries can now be achieved but will require commitment and resources as reflected in the Comprehensive Africa Agricultural Development Program of the New Partnership for Africa's Development (NEPAD).

## Agriculture-based countries have several common structural features.

Specific structural features of agriculture-based countries must be considered in designing an appropriate policy agenda.

*Diverse local conditions.* The path to productivity growth in Sub-Saharan Africa will differ considerably from that in irrigated Asian rice and wheat-based systems. Sub-Saharan African agriculture is 96 percent rain fed and highly vulnerable to weather shocks. And diverse agroecological conditions produce a wide range of farming systems based on many food staples and livestock.

Small and landlocked countries. Most agriculture-based countries are small, making it difficult for them to achieve scale economies in research and training. Unless regional markets are better integrated, markets will also be small. Nearly 40 percent of Africa's population lives in landlocked countries which face transport costs that, on average, are 50 percent higher than in the typical coastal country.

Low population density. Vast distances and low population densities in many countries in Sub-Saharan Africa make trade, infrastructure, and service provision costly and slow down the emergence of competitive markets. Conversely, areas of low population density with good agricultural potential represent untapped reserves for agricultural expansion.

Conflict and postconflict. More than half the world's conflicts in 1999 occurred in Sub-Saharan Africa. Although the number of conflicts has declined in recent years, the negative impacts on growth and poverty are still significant. Reduced conflict offers the scope for rapid agricultural growth as demonstrated by Mozambique's recent experience.

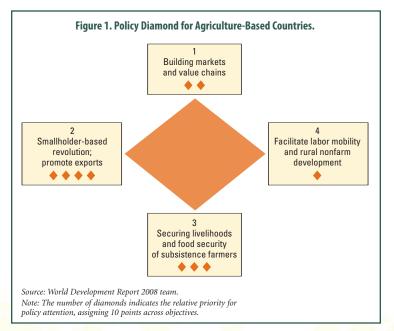
Human resources. The human capital base of the agriculture profession is aging as a result of the decline in support for training during the past 20 years and the HIV/AIDS epidemic. But major accomplishments in rural primary education are ensuring a future generation of literate and numerate African smallholders and nonfarm entrepreneurs.

Despite these common features, the diversity across Sub-Saharan African countries and across regions within countries is huge in terms of size, agricultural potential, transport links, reliance on natural resources, and state capacity, and the policy agenda will have to be carefully tailored to country-specific circumstances.

## A comprehensive policy agenda for agriculture-based countries calls for sharply increased investment.

Harnessing agriculture's potential contribution to African development will require success in two priority areas: improving smallholder competitiveness in high- and medium-potential areas, where returns to investment are highest and improving livelihoods, food security, and resilience in remote and risky environments (figure 1).

<sup>&</sup>lt;sup>1</sup> Agriculture-based countries are defined as countries where a high share of overall growth originates in agriculture and where the poor are concentrated in rural areas. Some countries that are not included in this category have sub-national regions that can also be classified as agriculture based.



Agricultural growth must rest on a balance of food staples, traditional bulk exports, and higher-value products, including livestock, with different groups of smallholders likely to participate in each. Staple crops dominate current production, and they will continue to do so in the near future. Demand for food in Sub-Saharan Africa is expected to reach US\$100 billion by 2015, double its level of 2000.

Building markets and value chains. Agricultural growth will be secured and sustained only if markets work better. Continuing progress is needed to build on gains from the significant market reforms of the 1990s, particularly in facilitating private sector development and regional trade. In many countries, better functioning input markets are needed at least as much as expanding product markets to increase agricultural productivity. Strengthening markets requires "hard" investments in infrastructure, with particular attention to roads and communications to link farmers to towns, and "soft" (institutional) investments for regulation, risk management, market information, and organizing producers. Risk management instruments such as futures and options are being piloted for organized smallholders to reduce risks from price volatility in a few countries. Weather-based index insurance, which is now being explored in Malawi, can reduce risks and facilitate loans to finance new technologies. Many countries subject to frequent climate shocks manage public grain reserves to reduce price instability—with very mixed success.

A smallholder-based productivity revolution in agriculture. Because the easy gains from price reforms have already been captured in many countries, future growth will have to rely more on increased productivity. Large gaps between current yields and what can be economically achieved with better support services, especially in high-potential areas, provide optimism that rapid productivity growth can be achieved. Accelerating adoption of new technologies requires improved incentives, investments in agricultural research and extension systems, access to financial services, "market-smart" subsidies to stimulate input markets, and better mechanisms for risk management. Decentralized approaches are required to address the wide heterogeneity of rainfed production systems in Sub-Saharan Africa—an approach different from the one applied during the green revolution in South Asia.

Special efforts are also needed to tailor technologies and support services to women farmers who produce and process most of the food (see brief on Agriculture and Gender).

Higher productivity will not be achieved without urgent attention to better soil and water management. Sub-Saharan Africa must replace the soil nutrients it has mined for decades. Programs to develop efficient fertilizer markets (as in Kenya) and agroforestry systems in which crops and trees are grown together to replenish soil fertility (as in Zambia) need to be scaled up.

New approaches offer good prospects for expanding irrigated areas. Examples include Mali's institutional reforms for large-scale irrigation management and Nigeria's fadama schemes, based on small-scale technologies. Effective water management in rainfed systems can also be achieved and needs greater emphasis.

Expanding agricultural exports. Sub-Saharan Africa has considerable potential to expand exports, but trade barriers in industrial countries and taxation of agricultural exports continue to reduce incentives. Where export markets have

been liberalized, however, incomes have generally improved (for example, cotton in Zambia and coffee in Uganda). Regional markets offer excellent prospects for growth.

Securing the livelihood and food security of subsistence farmers. Not all smallholders will be able to farm their way out of poverty. For those with limited access to resources and market opportunities, improving productivity in subsistence agriculture can allow them to secure their food consumption and health. Their greatest needs are for yield-stabilizing technologies, such as pestresistant varieties that require few purchased inputs; resilient farming systems, through practices such as water harvesting, to reduce risks; and better access to small livestock and off-farm employment. The adverse impact of climate change on agricultural productivity, which is expected to be particularly severe in agriculture-based countries, increases the urgency of those risk-reducing measures.

Beyond agriculture through labor mobility and rural nonfarm development. Greater geographic labor mobility and improvements in skills of younger generations are central to reducing rural poverty. Rural investment climates that are attractive enough to draw in capital from remittances and locally generated savings can magnify spillovers from agricultural growth and create much-needed employment. Because of HIV/AIDS and malaria, better health care and education must be an integral part of a broader set of safety nets that protect the assets of the poor from drought, disease, and the death of a family member.

The agenda outlined requires significantly higher levels of investment. Public spending on agriculture as a share of agricultural gross domestic product in Sub-Saharan Africa is currently less than half that in other regions, and less than half the NEPAD target of 10 percent of the national budget. The top priorities are to reverse the stagnation of investment in agricultural research and advisory services and to increase spending on rural infrastructure to facilitate development of efficient markets. Although efficiency gains can be made in current spending, higher levels of spending are needed, including from donors. In addition, much of the investment needs will have to come from rural savings and from private sector investment, with the investment climate an important determining factor.

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 Sub-Saharan 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.