

# Executive Summary

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Sub-Saharan Africa is a highly complex Region of 47 countries with 7 distinctly different colonial histories. It is also highly diverse, with more than 700 million people and at least 1,000 different ethnic groups. The Region is a critical development priority. It includes some of the world's poorest countries, and during the past two decades the number of poor in the Region has doubled to 300 million—more than 40 percent of the Region's population. Africa remains behind on most of the Millennium Development Goals (MDGs) and is unlikely to reach them by 2015.

A major drag on Africa's development is the underperformance of the agriculture sector. This is a critical sector in the Region, because it accounts for a large share of gross domestic product (GDP) and employment. The weak performance of the sector stems from a variety of constraints that are particular to agriculture in Africa and make its development a complex challenge. Poor governance and conflict in several of the countries further complicate matters. IEG has assessed the development effectiveness of World Bank assistance in addressing constraints to agricultural development in Africa over the period of fiscal years 1991–2006 in a pilot for a wider assessment of the Bank's assistance to agriculture worldwide.

The central finding of the study is that the agriculture sector has been neglected by both governments and the donor community, including the World Bank. The Bank's strategy for agriculture has been increasingly subsumed within a broader rural focus, which has diminished its importance. Both arising from and contributing to this, the technical skills needed to support agricultural development adequately have also declined over time.

The Bank's limited—and, until recently, declining—support for addressing the constraints on

agriculture has not been used strategically to meet the diverse needs of a sector that requires coordinated intervention across a range of activities. The lending support from the Bank has been “sprinkled” across various agricultural activities such as research, extension, credit, seeds, and policy reforms in rural space, but with little recognition of the potential synergy among them to effectively contribute to agricultural development. As a result, though there have been areas of comparatively greater success—research, for example—results have been limited because of weak linkage with extension and limited availability of such complementary and critical inputs as fertilizers and water. Hence the Bank has had limited success in contributing to the development of African agriculture.

## **The Challenges of African Agriculture**

Agricultural output has grown in Africa, but it is difficult to calculate a reliable growth rate for the Region over the study period because of wide variations across countries and over time. Some countries, such as Gabon, moved from poor performance in 1990–2000 to better performance in 2000–04; others, such as Malawi, moved in the opposite direction. The change has often been dramatic, which makes aggregate growth rates misleading. For example, agriculture in Angola grew at 13.7 percent a year during

2000–04, although growth had retreated by 1.4 percent yearly during 1990–2000. Only about a quarter of the countries in the Region, among them Benin, Burkina Faso, Ghana, Nigeria, and Tanzania, show consistent agricultural growth of over 3 percent in the 1990–2004 period.

Total agricultural output in Africa consists primarily of food crops. Agricultural export crops account for less than 10 percent of total production. While some export crops, including cotton, have contributed to poverty alleviation in countries such as Burkina Faso, food crops have performed poorly in most countries. Cereal yields in Africa, even in 2003–05, were less than half those in South Asia and one-third those in Latin America. Africa also lags behind other Regions in the percentage of cropland irrigated, fertilizer use, and labor and land productivity per worker. While the great strides in South Asia’s agricultural production from 1961 to 2001 were mainly the result of increased yields, gains in food production in Africa were produced primarily through the expansion of cultivated land. Meanwhile, crop yields stagnated.

Beginning in 1973, Africa became a net food importer. Since that time, food production has not kept pace with the rapidly growing population, and food imports have grown rapidly. Meanwhile, Africa’s exports, which are primarily agriculture-based, declined; for several commodities, including coffee, the Region’s share of the world market evaporated. Agricultural subsidies in Organisation for Economic Co-operation and Development (OECD) countries have played a major role in keeping world prices low for several of these crops. This, among other factors, has impacted the adequacy of returns to farmers.

Agriculture in Africa is primarily a family activity, and the majority of farmers are smallholders who own between 0.5 and 2.0 hectares of land, as determined by socio-cultural factors. Women provide about half of the labor force and produce most of the food crops consumed by the family.

Agricultural land in Africa falls into several agro-ecological zones that run across countries. It is largely characterized by poor soils, highly vari-

able rainfall, and frequent droughts. Transport infrastructure is poor, access to irrigation is limited, and under rain-fed conditions, chronic food insecurity is a reality for millions of small farmers. To survive in this harsh environment, most farmers rely on diversified coping strategies. To ensure at least some produce from their land, African farmers normally plant several varieties of crops (typically 10 or more) with different maturation periods, together with trees. Livestock is also an important source of security for farmers in Africa, particularly in lean years. The average smallholder’s access to credit is also extremely limited. Hardy crops such as millet, sorghum, cassava, and other root crops are more important than cereals such as rice and wheat, which were the mainstay of the Asian Green Revolution.

In this environment, for farmers to have an incentive to practice intensive agriculture and take risks with new crop varieties, a number of factors need to come together at the same time, or at least appear in an optimal sequence, including improved seeds, water, credit, and access to markets; good extension advice; and adequate returns through undistorted prices for inputs and outputs. A strategy for development of agriculture in Africa must consider each of these factors in the context of Africa’s unique characteristics and specific local conditions.

### **Past Approaches to African Agriculture**

Until very recently, agricultural development in Africa was neglected by both governments and donors. During the 1960s, immediately following independence, governments in several African countries considered agriculture primarily a source of resources for industrialization. Then, in the 1970s, the World Bank led the shift toward a broader development model in Africa that was consistent with a more general shift in the understanding of development. This committed the institution to integrated rural development to directly attack Africa’s rural poverty and underdevelopment. In the mid-1980s, when African countries faced severe fiscal crises, donors prioritized improvements in the efficiency of resource allocation and pressed agriculture marketing reforms. But structural reforms also fell short of producing the desired growth effects.

## The Role of Aid

Bilateral and multilateral donor aid for development of African agriculture declined from \$1,921 million in 1981 to \$997 million in 2001 (in 2001 dollars). Lending from both sources has since rebounded with the increasing focus on African development. OECD data show that although bilateral donors as a group have played a comparatively larger role, the World Bank was the single largest donor to African agriculture between 1990 and 2005. The largest bilateral donors were the United States and Japan.

Foreign private sector flows into Africa are modest in comparison with bilateral and multilateral aid (Hazell and von Braun 2006). Private commercial investment in African agriculture has been largely limited to export crops and higher-potential zones. A number of international seed companies have invested in maize seed multiplication, and in September 2006 the Rockefeller and Bill and Melinda Gates Foundations together launched a new partnership to help Africa develop its agriculture.

## Agriculture's Potential and the Bank's Strategy

For Africa to meet the MDGs, it will be necessary to realize the potential of the agriculture sector, to provide the support needed for it to contribute to growth and poverty reduction. Research by Dorosh and Haggblade (2003) and IFPRI (2006a) found that investments in agriculture generally favor Africa's poor more than similar investments in manufacturing.

The World Bank has not had a separate strategy for agriculture in Africa except as part of its wider rural development strategies, and over time the agriculture strategy was subsumed in a broader rural focus. More recently, however, the Africa Action Plan has recognized the agriculture sector as a potential driver of growth.

## The Bank's Overall Assistance and Its Assessment

Over fiscal years 1991–2006, the Bank provided the countries of the Africa Region with \$2.8 billion in investment lending (as distinct from

adjustment lending) in agriculture, constituting 8 percent of total Bank investment lending to the Region. A large part of this lending has been in the form of agriculture components in rural projects. In addition, there have been 77 Development Policy Loans with agriculture components, and in 18 of these, agriculture was a significant dimension.

This limited investment lending has performed below par. IEG data show that the percentage of satisfactory outcome ratings for largely agricultural investment projects during 1991–2006 is lower than that for non-agriculture investments in the Region (60 against 65 percent satisfactory). It is also lower than the percentage for similar investment projects in other Bank Regions (73 percent satisfactory). Sustainability ratings are also below average. Although further analysis is needed, the study found that largely agricultural projects in countries with less favorable agricultural conditions have done better than similar projects in countries with more favorable conditions.

The Bank's activities in support of agricultural development in Africa have comprised lending, analytical work, and policy advice. Until very recently the analytical work—necessary for the diagnosis of issues and actions and to help shape the policy advice and lending—has been limited, scattered, of variable quality, and not easily available. In addition, IEG found that there are no specific procedures in place to ensure that the findings of analytical work are systematically reflected in lending and policy dialogue.

IEG found that the lending support provided by the Bank has not reflected the interconnected nature of agriculture activities. Rather, the lending has been “sprinkled” across an array of activities in rural space, including research, extension, marketing reform, drought relief, seed development, and transport, but with little recognition of the relationships among them and the need for all of these areas to be developed at the same time, or at least in an optimal sequence, to effectively contribute to agricultural development. While the Bank's broader rural focus from

the mid-1980s was justified, an unintended result was that it led to less focused attention on the need for various activities that are critical for agricultural development in rural space to come together at the same time or to take place in some optimal sequence.

This review found that none of the top 10 borrowers, among them Côte d'Ivoire, Ethiopia, Tanzania, and Uganda, had received *consistent* and *simultaneous* support across all critical subsectors. That is not to suggest that the Bank should do this alone—it might well be done better in partnership—but the Bank could reasonably be expected to take the lead in fostering such a multifaceted approach, based on its comparative advantage as a multisector lending institution.

### Thematic Performance

An assessment of the achievements and shortcomings in the Bank's support by main theme reveals a mixed record:

**Agro-ecological diversity.** Bank support has helped build the capacity of national research systems and develop zonal stations to give an agro-ecological focus to research. However, there is little indication that Bank projects other than research interventions have systematically adapted activities to diverse country agro-ecological conditions. The ability to respond to local conditions has been the primary appeal of projects that use community-based approaches, but there is little evidence that these approaches, as used in projects in Ghana and Tanzania, for example, are able to respond to agro-ecological diversity.

**Fluctuating rainfall and droughts.** Bank projects completed through fiscal 2006 have been responsive to drought emergencies and have helped governments set up drought management systems. But they have not been able to help countries such as Malawi, for example, develop a long-term strategic approach to address the basic factors that create food insecurity—that is, to help countries increase agricultural productivity sufficiently to arrest declining

per capita food availability. In this connection, while the Bank has contributed to development of improved millet and cassava varieties through support to research, it has missed the opportunity to recognize the important role that cassava can play in promoting food security in most countries.

**Poor soil fertility.** The Bank has been party to several international and regional initiatives on this issue, including the *Terr Africa Regional Initiative*, launched in 2005. This multidimensional partnership is expected to promote a collective approach to sustainable land management in the Region. But Bank lending appears to have addressed soil fertility more as an environmental than as an agricultural productivity issue.

**Access to water.** Though the Bank has identified the need for investment in irrigation, it has done very limited lending for that purpose. The Bank interventions that support water management in rain-fed areas have achieved physical targets, but because of poor monitoring and evaluation (M&E), it is difficult to tell what has worked and what has not.

**Improved seeds.** The Bank has contributed to the Consultative Group on International Agricultural Research (CGIAR), which has made significant contributions in this area, and Bank projects have also provided opportunity for testing and scaling up technologies, as in Ethiopia and Togo. Nonetheless, seed-related activities have so far made only a modest contribution to increases in crop production. Bank projects have also not been able to address the issue of limited use of seeds by farmers because of inadequate access to complementary inputs.

**Farmers' access to credit and rural finance.** Overall support from the Bank in this critical area has been limited. Aside from institutional capacity weaknesses in client countries, one reason for this low level of support has been weak project performance in this area, brought about by, among other things, weak implementation of Bank guidelines, particularly regarding eligibility and performance of financial intermediaries.

There is need for the Bank to take greater care in designing and supervising these operations, and all options should continue to be explored for the most appropriate way to provide farmers with the means necessary to increase productivity and incomes.

**Poor transport infrastructure.** Bank-supported agriculture interventions have made only a limited contribution to improving transport infrastructure to promote market access for agricultural development.

**Weak extension.** The Bank has helped raise client awareness about the importance of extension to agricultural development. It currently supports a range of partnership approaches (public-private, demand-driven, nongovernmental organizations, and so on), as in Uganda. But the cost, effectiveness, and sustainability of these approaches need to be systematically evaluated.

**Price and marketing reform.** Though results have been variable across countries, the Bank's effort has contributed to improving the macroeconomic environment and fiscal discipline in several countries. However, these changes were not enough to stimulate private sector investments in several critical areas from which the public sector withdrew. Consequently, most countries in Africa face exorbitant fertilizer prices, inadequate seed production, poor transport, and limited credit access. While the reform process had limited positive impact on food production, it nevertheless boosted production of nontraditional export crops such as mangoes from Mali and flowers from Kenya. Beyond individual countries, the Bank lobbied for a genuinely pro-development Doha Round and for elimination of OECD agricultural subsidies in international forums, but with limited success to date.

**Insecurity of tenure.** Analytical work has contributed to a better understanding of property rights regimes. But the Bank has found it difficult to provide effective support in this area because of its political, social, and cultural sensitivity.

The Millennium Development Project Hunger Task Force concluded in 2005 that the world could meet the MDG of halving hunger by 2015. Development of African agriculture is critical to achieving this goal, and the World Bank can make a major contribution because it is one of the largest sources of development finance for agriculture and can provide policy advice to governments.

## Key Findings on Bank and Country Factors of Performance

### Bank factors

- The institution's strategy for the development of the agriculture sector has been part of its rural strategy, and over time the importance of agriculture in the Bank's rural strategy has declined. Both arising from and contributing to this, technical skills to support agricultural development adequately have also declined over time. Data from the Human Resources Department of the World Bank show that there were 17 technical experts mapped to the Agriculture and Rural Development Department in Sub-Saharan Africa in 2006, compared with 40 in 1997.
- The Bank's diagnosis of a country's development status and priorities in the agriculture sector is carried out primarily through analytical work. Until very recently this work has been limited and not readily available. Nor have the findings from analytical work strategically informed Bank-client policy dialogue and lending program design.
- Bank policy advice appears to have had far-reaching implications for the direction of agricultural development in African countries, in particular its policy advice associated with the adjustment agenda. However, results have fallen short of expectations because of weak political support and insufficient appreciation of reality on the ground, among other things.
- The Bank's data systems and support for M&E have been insufficient to adequately inform the institution's effort to develop agriculture in Africa across a broad front. Current data systems do not allow the institution to track in

enough detail how much is being provided for development of specific activities such as seed development and credit. M&E at the project level has been of limited value in answering fundamental questions about outcome, impact, and efficiency, such as who benefited, which crops received support and how, what has been the comparative cost effectiveness, and to what can one attribute gains.

### **Country factors**

- Although the governance environment in several African countries continues to be weak, political commitment for the development of agriculture in client countries appears stronger than in the past. African governments, many of which were allocating less than 1 percent of their budget to agriculture, agreed in July 2003 at the African Union Summit to allocate at least 10 percent of national budgetary resources for programs to support agricultural growth in the next five years.
- Considerable agricultural research capacity exists, although the sustainability of the activities supported remains uncertain. Overall, government capacity in several countries remains weak, and local agriculture ministries are still relatively ineffective partners in promoting development of the agriculture sector. Though further analysis is needed, the study finding that largely agricultural projects in countries with less favorable agricultural conditions have done better than similar projects in countries with more favorable conditions suggests that other factors—such as political economy and country capacity—are also a challenge for agricultural development in Africa.

### **Recommendations**

To effectively support the implementation of the Africa Action Plan and its appropriate focus on agricultural development as a key priority, IEG recommends that the Bank:

1. Focus attention to achieve improvements in agricultural productivity:
  - Establish realistic goals for expansion of irrigation and recognize the need to increase productivity of rain-fed agriculture through improvements in land quality, as well as water and drought management.
  - Help design efficient mechanisms, including public-private partnerships, to provide farmers with critical inputs, including fertilizers, water, credit, and seeds.
  - Support the development of marketing and transport infrastructure.
2. Improve its work on agriculture:
  - Increase the quantity and quality of analytical work on agriculture and ensure that policy advice and lending are grounded in its findings.
  - Support public expenditure analyses to assess resource availability for agriculture and to help set Bank priorities.
  - Rebuild its technical skills, based on a comprehensive assessment of current gaps.
3. Establish benchmarks for measuring progress:
  - Improve data systems to better track activities supported by the Bank.
  - Strengthen M&E to report on project activities in various agro-ecological zones and for different crops and farmer categories, including women.
  - Develop a system to coordinate agricultural activities in a country with road access, market proximity, and soil conditions.