

ReSAKSS

Annual
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Report

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ReSAKSS

Africa Wide

Regional Strategic Analysis and Knowledge Support System

Monitoring Agricultural Sector Performance, Growth, and Poverty in Africa

Authors

Michael Johnson, Babatunde Omilola, Kathleen Flaherty, Tsitsi Makombe, Marcia MacNeil, and Leah Horowitz

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The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) is an Africa-wide network that provides analysis, data, and tools to promote evidence-based decisionmaking, improve awareness of the role of agriculture for development in Africa, fill knowledge gaps, promote dialogue, and facilitate the implementation of the Comprehensive Africa Agriculture Development Programme (www.nepad.org/2005/files/caadp.php) of the New Partnership for Africa's Development and the African Union Commission (www.africa-union.org) and other regional agricultural development initiatives in Africa.

KEY PARTNERS

African Union Commission
AUC | www.africa-union.org

The New Partnership for Africa's Development
NEPAD | www.nepad.org

The Southern African Development Community
SADC | www.sadc.int

The Common Market of Eastern and Southern Africa
COMESA | www.comesa.int

The Economic Community of West African States
ECOWAS | www.ecowas.int

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Acronyms

AGOA	<i>African Growth and Opportunity Act</i>	PMA	<i>Plan for the Modernization of Agriculture (Uganda)</i>
APRM	<i>African Peer Review Mechanism</i>	PROAGRI	<i>Agricultural Sector Public Expenditure Program (Mozambique)</i>
ASIP	<i>Agricultural Sector Investment Program (Zambia)</i>	PRSP	<i>Poverty Reduction Strategy Paper</i>
AU	<i>African Union</i>	R&D	<i>research and development</i>
CAADP	<i>Comprehensive Africa Agriculture Development Programme</i>	RECs	<i>Regional Economic Communities</i>
COMESA	<i>Common Market for East and Southern Africa</i>	ROPPA	<i>Network of Farmers' Organizations and Agricultural Producers of West Africa</i>
CORAF /	<i>West and Central African Council for</i>	SADC	<i>Southern African Development Community</i>
WECARD	<i>Agricultural Research and Development</i>	SSA	<i>Sub-Saharan Africa</i>
DFID	<i>Department for International Development (UK)</i>	TFP	<i>total factor productivity</i>
DRC	<i>Democratic Republic of the Congo</i>	UEMOA	<i>West African Economic and Monetary Union</i>
EAC	<i>East African Community</i>	USAID	<i>United States Agency for International Development</i>
ECA	<i>Eastern and Central Africa</i>	WTO	<i>World Trade Organization</i>
ECOWAS	<i>Economic Community of West African States</i>		
ERS	<i>Economic Recovery Strategy (Kenya)</i>		
FDI	<i>foreign direct investment</i>		
FTA	<i>free trade area</i>		
GDP	<i>gross domestic product</i>		
IFPRI	<i>International Food Policy Research Institute</i>		
MDG	<i>Millennium Development Goal</i>		
NEPAD	<i>New Partnership for Africa's Development</i>		
ODA	<i>overseas development assistance</i>		
OECD	<i>Organization for Economic Cooperation and Development</i>		

1. Introduction

Agriculture provides the backbone of the economy in many African countries. Moreover, the majority of the rural poor depend on agriculture either directly or indirectly for their livelihoods.¹ Developing agriculture specifically and the rural sector more broadly are key components of Africa's pathway out of poverty. Yet in the last decades of the 20th century, agriculture in Sub-Saharan Africa (SSA) suffered from a tragedy of political inattention and disinvestment.

On average, agricultural spending as a share of government budgets in SSA declined from 7 percent in 1980 to 6 percent in 2005. Agriculture also lost its traditional prominence as a target for foreign aid to Africa as the donor agenda grew to include many new priorities such as environmental and social goals. The drive to see quick results in a sector that reflects change very slowly also explains some of the donor fatigue concerning agriculture. At the same time, structural adjustment programs forced African leaders to dismantle state-led agricultural support programs, which deepened

¹ The strong theoretical and empirical evidence for agriculture's role in generating pro-poor economic growth for Africa has been thoroughly reviewed elsewhere (see Christensen et al. 2006; Diao, et al, 2006; Timmer, 2005; Byerlee, Diao, and Jackson, 2005).

the traditional urban bias in many post-independence African states (Eicher, 2003; Dresrusse, 1995; Fan and Rao, 2003).

Over this same period, SSA has become more vulnerable to food crises. The number of food emergencies on the continent has nearly tripled since the mid-1980s, and without sufficient production levels, African governments turned to food imports and aid donations. Shipments of cereal food aid grew by a third between 1994–1998 and 1999–2003. One-third of the population is chronically undernourished. Poverty rates have also remained stubbornly high. Three-quarters of Africans live on less than two dollars a day, and almost half fall below the international poverty line of less than one dollar a day. SSA remains the only region of the world expected to have more poor people in 2015 than in 1990. As governments and donors feel pressure to respond to these situations, they divert resources from development to emergency assistance. Decreasing investment in key productive sectors such as agriculture further undermines the ability of countries to generate economic and agricultural growth levels that can help reduce poverty and hunger in the future. The need for faster and more sustained overall economic and agricultural growth in SSA is urgent.

Fortunately, after more than two decades of neglect, African governments and their development partners have once again embraced agriculture as a priority for poverty reduction and economic growth strategies. In 2003, the African heads of state and government adopted the Comprehensive Africa Agriculture Development Programme (CAADP) of the New Partnership for Africa's Development (NEPAD) and the African Union (AU), a new, African-led plan to stimulate agriculture on the continent. The main principle of CAADP is to employ agriculture-led growth to achieve the first Millennium Development Goal of halving poverty and hunger by 2015 (MDG 1). CAADP's other principles include:

- *the pursuit of 6 percent average annual sector growth at the national level;*
- *the allocation of 10 percent of national budgets to the agricultural sector;*
- *the exploitation of regional complementarities and cooperation to boost growth;*
- *policy efficiency, dialogue,*

review, and accountability, principles shared by all NEPAD programs; and • partnerships and alliances, to include farmers, agribusiness, and civil society communities (NEPAD Secretariat, 2005).

Donors and the international community have also recognized that rebuilding the agricultural sector in SSA is key to achieving MDG 1 and have pledged their commitment to supporting CAADP.

Along with the renewed attention to the agricultural sector, positive signs of sustained economic and agricultural growth are appearing in SSA. Several countries are also showing persistent reductions in poverty and hunger. Is this the beginning of a new era for African agriculture? Or will these promises and trends evaporate as they have in the past? How can policymakers help sustain and accelerate this agricultural growth and also ensure that the poor and hungry benefit?

The main purpose of this paper is to review the growth, policy, and investment trends in African agriculture, along with possible driving forces, by drawing from various International Food Policy Research Institute (IFPRI) studies. The paper will also highlight some of the strategic policy options that could help accelerate the recent growth momentum in African agriculture and also ensure that growth will be shared more broadly.

2. What Are the Signs of Optimism in the Agricultural Sector?

2.1 Economic and Agricultural Performance

ECONOMIC GROWTH RATES HAVE BEEN FOLLOWING A POSITIVE and more stable path in the past decade (**Figure 2.1**). This trend is new for Africa, which in the past has seen great inconsistencies in its growth patterns. Average gross domestic product (GDP) growth rates have been increasing, from around 2.5 percent in 1990–2000 to 3.8 percent in 2001–2003 and to over 5 percent in 2004–2006 (**Table 2.1**) (World Bank, 2007a). The growth rate for SSA is expected to reach 6.8 percent for 2007 and remain over 6 percent for 2008 (IMF, 2007). The combined effects of a stable macroeconomic environment, debt relief, rising exports, and favorable prices for crude oil, minerals, and raw materials appear to be the major sources of this growth (**Figure 2.2**).

While the performance of agriculture varies greatly within and across countries in SSA, recent annual agricultural GDP growth trends show a steady increase from the average levels in the 1990s. For the subcontinent as a whole, growth increased from an average of 3.3 percent over the period of 1990–2000 to around 5 percent in 2003–2005 (**Figure 2.1**). Many of the countries that have witnessed higher and

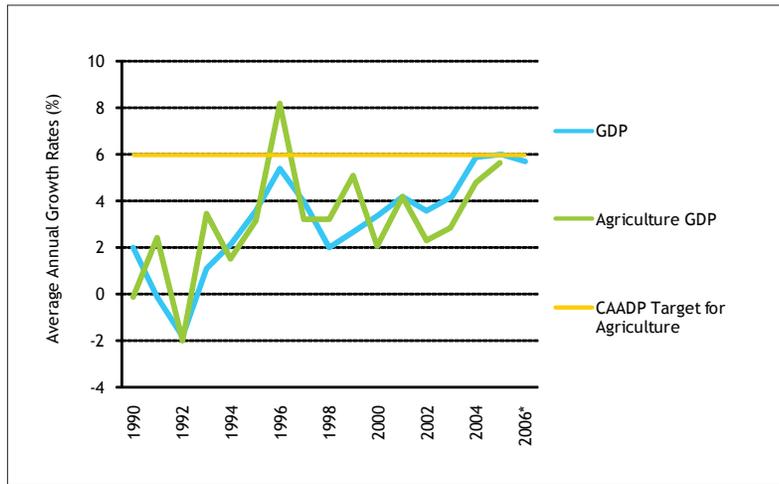


FIGURE 2.1 GDP AND AGRICULTURAL GDP GROWTH RATES, 1990-2006
 Source: ReSAKSS, data from World Development Indicators, 2007.
 * IMF estimates for GDP

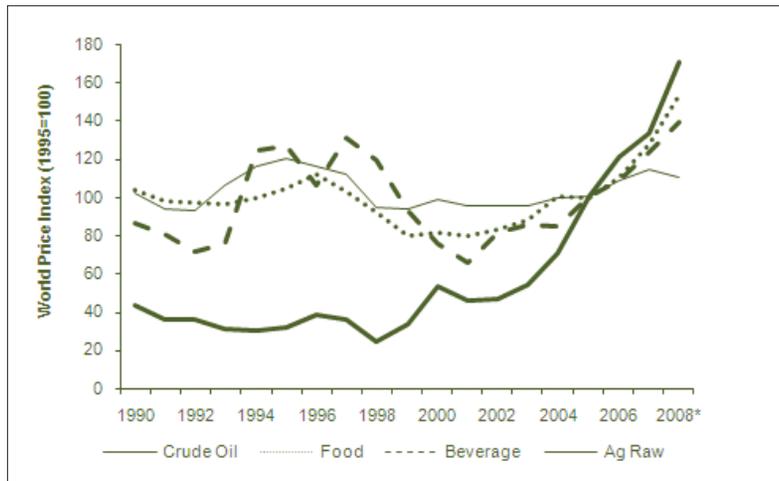


FIGURE 2.2 WORLD COMMODITY PRICE INDICES, 1990-2008
 Source: IMF, 2007; Note: 2008 covers the month of January only.

steady agricultural growth rates over the most recent period (near or greater than 5 percent per year on average between 2000 and 2005) are in West Africa: Benin, Burkina Faso, Cameroon, the Republic of the Congo, Gabon, Ghana, Mali, and Nigeria. In East Africa, only Tanzania and Uganda experienced consistent agricultural growth rates close to 5 percent, while in Southern Africa, Angola and Mozambique have both witnessed high growth rates. Negative agricultural growth occurred in countries such as Burundi, the Democratic Republic of the Congo (DRC), Eritrea, Lesotho, Mauritania, and Zimbabwe (World Bank, 2007a).

Typically, agricultural growth in SSA has barely kept up with population growth. However, this pattern may be changing, considering that quite a few countries achieved steady per capita agricultural growth rates of above 3 percent in recent years (**Table 2.2**). Most of these countries are in West Africa, with only a handful in East and Southern Africa, namely, Angola, Mozambique, and Tanzania. Labor productivity, measured as agricultural GDP per worker, also increased steadily during the same period, providing another sign of improved agricultural performance overall. Not surprisingly, the worst performers have been countries experiencing conflict and political uncertainty, such as Burundi, the DRC, and Zimbabwe.

Future growth in African agriculture will depend on productivity growth, as land resources have become increasingly limited. Output per unit of land and output per unit of labor are partial productivities and measure only the efficiency or productivity of one particular production factor. A more appropriate measure is the total factor productivity (TFP) index, which is a ratio of total output to total inputs used in the production process.¹ Overall, the agricultural TFP growth rate of SSA has been minimal on average—at just over 1 percent per year since 1970 (based on recent estimates calculated by IFPRI). While this may be low, a promising trend is the striking improvement that has occurred in more recent years (1994–2003), when much of the growth in TFP took place (**Figure 2.3**). During this period, the value of agricultural output grew faster than the value of inputs allocated to agricultural production. The

¹ TFP is typically derived as the difference between the weighted averages of the rates of growth in the value of the individual products and inputs used.

West African coastal region was a major contributor to this TFP growth index and to the overall performance of African agriculture, accounting for more than 50 percent of the growth. The countries that have experienced the greatest improvements in performance in this region include Cameroon, Ghana, and Nigeria. Elsewhere, another 20–30 percent of total productivity growth is explained by improved performance in Mozambique, Tanzania, and Uganda. All these countries experienced annual TFP growth rates of 2–3 percent after 1994. Underlying these growth rates have been sustained increases in both labor and land productivity. At a more aggregate level, the regions that have lagged behind have been Southern Africa and the Sahel (Nin Pratt, 2008).

Expansion within the staples and livestock sectors has undoubtedly had a positive influence on net agricultural output. Both sectors typically constitute more than half the share of agricultural GDP in most African countries. Both have maintained a steady increase in value over time, but especially livestock, in response to increased urban demand (Table 2.3). Meanwhile, the rising demand for livestock products induces demand for coarse grains (sorghum and millet) and root crops (cassava) as feed (Vitale and Sanders, 2005). This phenomenon is expected to continue if urban incomes continue to rise steadily over the next decade or so (Delgado et al., 1999). Among food

	Country/Region	Annual GDP Growth (%)						Average Annual GDP Per Capita (CONSTANT 2000 US\$)			Annual GDP per Capita Growth (%)		
		•	•	•	2006	2007	2008	•	•	•	•	•	•
EAST AFRICA	Burundi	-2.9	1.6	2.9	5.1	5.5	6.6	130	109	106	-4.1	-1.4	-0.7
	DRC	-4.9	4.6	6.5	5.1	6.5	6.9	127	83	88	-7.5	1.7	3.4
	Eritrea	5.7	3.3	1.2	-0.1	1.3	1.3	192	183	177	3.8	-1.2	-2.9
	Ethiopia	3.5	-1.6	10.5	9.0	6.5	6.6	113	125	131	1.2	-3.6	8.4
	Kenya	2.2	1.8	5.3	5.7	6.2	5.8	424	417	429	-0.6	-0.4	3.0
	Madagascar	2.0	-2.1	4.9	4.9	5.6	5.6	239	227	229	-1.0	-4.8	2.1
	Rwanda	-0.3	5.1	5.0	5.3	4.7	4.9	235	240	251	-1.4	2.8	3.3
	Sudan	5.4	6.0	6.6	13.0	11.1	10.2	319	407	441	3.0	4.0	4.5
	Tanzania	2.9	7.2	6.8	5.9	7.3	7.6	249	286	315	0.1	5.1	4.8
Uganda	7.1	5.5	6.0	5.3	6.2	6.5	206	253	264	3.9	2.0	2.4	
SOUTHERN AFRICA	Angola	1.6	8.8	15.8	14.6	35.3	16.0	637	713	825	-1.1	5.7	12.5
	Botswana	6.0	6.0	6.1	4.2	4.3	4.4	2758	3890	4378	3.8	5.8	6.3
	Lesotho	3.9	3.3	2.2	2.8	5.1	5.2	446	510	540	2.6	3.2	2.3
	Malawi	3.7	4.5	4.8	8.5	5.7	5.5	142	143	151	1.8	2.1	2.6
	Mozambique	5.9	8.0	7.6	8.5	6.8	7.6	178	248	276	2.8	5.9	5.6
	Namibia	4.0	5.1	4.7	4.6	4.8	4.6	1729	1885	2020	0.8	3.6	3.5
	South Africa	2.1	3.3	4.7	5.0	4.7	4.5	2996	3116	3290	-0.1	2.2	3.5
	Swaziland	3.3	2.6	2.0	2.0	1.2	1.0	1318	1336	1358	0.1	0.9	0.8
	Zambia	0.5	4.2	5.3	6.0	6.0	6.0	320	318	339	-1.9	2.4	3.6
	Zimbabwe	2.1	-7.4	-5.2	-4.8	-5.7	-3.6	627	528	455	0.3	-8.0	-5.7
WEST AFRICA	Benin	4.8	4.2	3.5	4.1	4.7	5.2	287	322	325	1.4	0.9	0.3
	Burkina Faso	4.0	5.4	4.3	5.6	6.5	6.3	219	241	249	1.2	2.1	1.1
	Cameroon	1.7	4.0	2.9	3.9	4.0	4.1	654	709	733	-0.7	2.0	1.0
	Central African Rep.	2.0	-4.3	1.7	3.5	4.0	4.3	247	241	226	-0.3	-5.5	0.5
	Chad	2.2	11.6	16.9	1.3	-1.2	7.4	178	192	245	-0.8	7.7	13.2
	Congo, Rep.	1.2	2.7	6.4	6.4	3.7	7.3	1003	944	957	-2.1	-0.4	3.3
	Cote d'Ivoire	3.2	-1.5	1.8	4.1	1.7	3.3	629	592	575	0.4	-3.1	0.2
	Equatorial Guinea	21.3	16.2	10.0	-4.9	7.1	9.0	1423	3393	3958	18.4	13.5	7.5
	Gabon	2.8	1.3	1.8	1.2	4.7	2.2	4043	3865	3870	-0.1	-0.4	0.2
	Gambia	3.0	1.7	5.1	4.5	7.0	6.0	313	319	328	-0.5	-1.2	2.3
	Ghana	4.3	4.8	5.7	6.2	6.3	6.9	229	261	278	1.7	2.6	3.6
	Guinea	4.4	2.7	3.0	2.8	2.5	5.0	344	379	382	1.2	0.5	0.8
	Guinea-Bissau	1.2	-3.3	2.8	4.2	5.0	4.7	178	142	135	-1.8	-6.2	-0.2
	Mali	4.1	5.8	4.1	5.4	5.9	5.7	191	231	240	1.3	2.7	1.1
	Mauritania	2.9	3.3	5.3	11.7	1.9	5.0	405	407	420	0.3	0.3	2.2
Niger	2.4	4.2	2.2	3.4	4.1	4.3	162	158	157	-1.0	0.7	-1.1	
Nigeria	2.5	6.0	6.5	5.9	8.2	6.7	387	403	440	-0.1	3.7	4.2	
Senegal	3.2	3.8	5.6	3.3	5.6	5.6	400	435	460	0.6	1.3	3.2	
Togo	3.5	3.4	2.9	1.5	2.9	3.9	249	242	244	0.4	0.6	0.3	
	East Africa	2.1	3.1	5.6	n/a	n/a	n/a	223.5	233.0	243.0	-0.3	0.4	2.8
	Southern Africa	3.3	3.8	4.8	n/a	n/a	n/a	1115.1	1268.8	1363.3	0.9	2.4	3.5
	West Africa	3.0	3.1	4.6	n/a	n/a	n/a	562.1	560.2	570.2	0.1	0.5	2.0
	SSA	2.5	3.8	5.4	5.6	6.8	6.1	506.98	527.60	551.96	-0.05	1.44	3.08

TABLE 2.1 ECONOMIC PERFORMANCE, 1990-2008

Source: Calculated from World Bank WDI 2007 data.; Note: Projected Figures for 2007 and 2008 from the April 2007 issue of IMF's World Economic Outlook, Statistical Appendix.

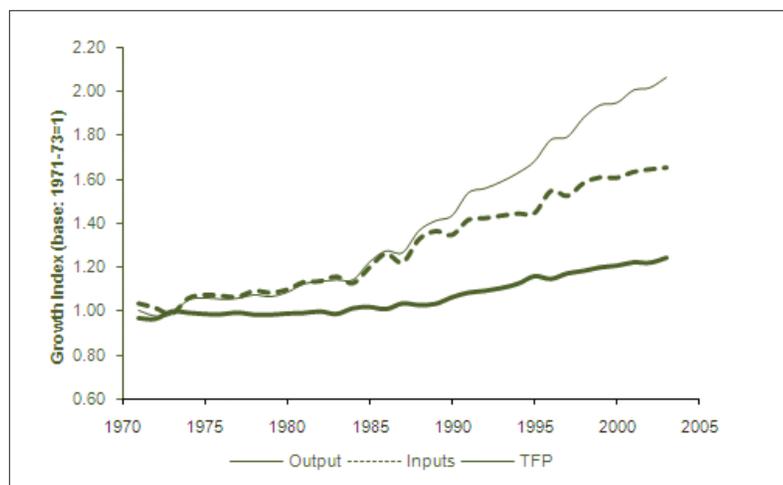


FIGURE 2.3 GROWTH INDICES OF VALUE ADDED AGRICULTURE, INPUTS, AND TOTAL FACTOR PRODUCTIVITY (TFP)

Source: Nin Pratt, 2008

BOX 2.1 OUTGROWER SCHEMES IN ZAMBIA

The agricultural sector has contributed about 18 percent to Zambia's GDP over the last decade. Nontraditional agricultural exports increased from US\$46.5 million in 1995 to US \$133.9 million in 1999. The diversification of the agricultural sector has been attributed to the increasing number of outgrower schemes in the country. Following Zambia's market reforms and liberalization in 1991, outgrower schemes and agribusiness companies became more prominent due to the need to fill the vacuum left by the privatization of public sector organizations. By 1999, the number of small-scale farmers involved in outgrowing or contract farming had increased to 180,000 in cotton production, while there were 1,500 smallholder farmers in paprika production and 6,000 in tobacco production.

Smallholders have been involved in producing both traditional and nontraditional crops. Increased private sector participation—in this case, by smallholder outgrowers—was due in part to the comparative advantage small-scale farmers are able to gain in production and marketing. Outgrower schemes also facilitate the efficient provision of inputs, extension services, and marketing services to small farmers. Yet, since most of the outgrower schemes started with inadequate research, staffing, finance, and management skills, they were accompanied by long and expensive learning curves, poor loan repayments rates, and loss of capital.

SOURCE: MWANAUMO, 1999

staples, higher output growth occurred for cassava relative to rice and maize. Cassava's low demand for purchased inputs and its resilience to both man-made and natural disasters explains part of this growth. In some countries, however, the growth has been principally led by a growing urban demand for cassava products, especially where it is traditionally a staple food, such as in Ghana and Nigeria (Nweke, 2003).

Throughout the 1990s, globalization added new dimensions to the challenges faced by smallholder agriculture. It opened up new opportunities, as evidenced in the rise of supermarkets on the subcontinent. Larger supermarkets, such as South Africa's Shoprite, have engaged in contracting with smallholder farmers (Weatherspoon and Reardon, 2003), and some countries, such as Zambia, have had success with these private outgrower schemes in the horticultural sector (**Box 2.1**). However, the trend has so far mostly benefited consumers and well-established farmers, both small and large scale, near major metropolitan areas. Similarly, while growth in the production of cut flowers and vanilla has contributed to greater product diversification, it has primarily benefited producers with better access to airports and storage facilities. For the majority of smallholder farmers, therefore, supplying to supermarkets or growing cut flowers has been an elusive option, especially given the poor status of transport infrastructure, high-cost and variable input markets (e.g., fertilizer and seeds), and poor access to credit. For those with better market access, the difficulties in meeting quality control standards and overcoming input supply constraints still impose a barrier to entry.

One positive trade trend for SSA comes from the economic growth of China, India, and Brazil. These emerging markets are strengthening demand and driving up prices for Africa's resources. Concurrently, these countries are increasing their aid to and investments in Africa. Asia's share of African exports has almost doubled since 2000, to 27 percent, a similar share to that held by the European Union and by the United States. China and India account for almost half of the exports to Asia, with shares of 40 and 9 percent, respectively, and exports to these two countries have more than doubled over the past decade. Exports to Asia have been increasing at a fast pace, with recent growth

rates of almost 30 percent. Oil makes up about half of the exports, followed by non-oil minerals, metals, and agricultural raw materials, which together comprise about 40 percent of total trade. Foreign direct investment (FDI) has increased from both China and India. Although the investments are primarily in the energy and natural resources sectors, other sectors are also receiving FDI, including manufacturing and services (Broadman, 2007). There are, however, serious risks that go along with these emerging opportunities. If governments do not manage the growth in trade and FDI well, corruption, inflation, and price shocks in undiversified economies will erase any benefits to the country at large. As in the cases of Nigeria and Sudan, violence and conflict often break out when the newfound wealth accrues to a small elite and the majority poor are left behind.

While traditional exports continue to dominate agricultural exports to the international market, a source of growing importance in regional markets is in the staples, livestock, and processed foods sectors (Table 2.4). The potential for expansion is especially high in these sectors given that trade in these types of commodities has remained very limited relative to traditional exports destined for markets outside the subcontinent. Research suggests that there would be a significant impact on broad-based growth and poverty reduction if intraregional markets and trade were allowed to expand further. Per capita annual growth rates in value-added agriculture could increase by an additional 0.9 percent as a result (Diao and Hazell, 2004).

	Country/Region	Annual Agricultural GDP Growth (%)				Annual Agricultural GDP Per Capita Growth		
		1990-2000	2001-2003	2003-2005	2006	1990-2000	2001-2003	2003-2005
EAST AFRICA	Burundi	-1.88	0.3	-3.5	n/a	-3.1	-2.6	-6.8
	DRC	1.38	0.8	1.7	2.5	-1.4	-1.9	-1.2
	Eritrea	1.51	-12.0	7.7	5.3	-0.4	-15.9	3.4
	Ethiopia	2.23	-7.0	14.6	11.2	0.0	-8.9	12.5
	Kenya	1.94	-0.5	4.2	5.4	-0.8	-2.6	1.9
	Madagascar	1.85	0.0	2.8	2.2	-1.1	-2.8	0.1
	Rwanda	2.56	5.3	2.8	0.1	1.3	3.0	1.2
	Sudan	9.23	7.5	-0.7	7.4	6.7	5.5	n/a
	Tanzania	3.20	4.5	5.7	3.8	0.3	2.4	3.7
Uganda	3.70	3.1	5.2	5.0	0.5	-0.3	1.6	
SOUTHERN AFRICA	Angola	-1.4	12.1	15.5	9.8	-4.1	9.0	12.3
	Botswana	-1.2	1.0	3.1	-0.7	-3.2	0.8	3.3
	Lesotho	2.0	-3.0	1.0	1.7	0.8	-3.1	1.1
	Malawi	8.6	4.3	-3.4	11.9	6.6	2.0	-5.4
	Mozambique	4.9	10.0	5.0	9.0	1.8	7.7	3.0
	Namibia	3.8	6.7	0.2	-0.7	0.7	5.2	-0.9
	South Africa	1.0	2.1	1.8	-13.1	-1.2	1.0	0.6
	Swaziland	1.2	2.1	1.7	2.2	-1.9	0.3	0.6
	Zambia	4.2	1.6	1.8	2.2	1.7	-0.2	0.2
Zimbabwe	4.3	-12.5	-6.5	n/a	2.5	-13.1	-7.0	
WEST AFRICA	Benin	5.8	4.7	5.1	n/a	2.4	0.8	1.8
	Burkina Faso	4.2	4.1	10.7	2.7	1.3	4.2	7.2
	Cameroon	5.4	3.7	3.9	3.0	2.9	1.7	2.1
	Central African Rep.	3.8	3.8	1.0	3.1	1.4	2.4	-0.2
	Chad	4.9	2.2	0.2	3.2	1.7	-1.4	-3.0
	Congo, Rep.	1.0	5.3	6.0	n/a	-2.3	2.2	2.9
	Côte d'Ivoire	3.5	-0.6	2.6	1.5	0.6	-2.1	1.0
	Equatorial Guinea	7.3	-3.8	n/a	0.9	4.7	-6.0	n/a
	Gabon	-1.4	5.1	4.6	2.1	-4.2	3.4	3.0
	Gambia	3.3	-7.3	8.1	4.5	-0.1	-9.9	5.3
	Ghana	3.4	4.6	5.5	6.0	0.8	2.4	3.4
	Guinea	4.6	4.0	3.3	4.2	1.4	1.7	1.0
	Guinea-Bissau	3.9	3.1	6.0	5.5	0.9	0.0	2.9
	Mali	2.6	6.5	1.3	5.7	-0.1	3.3	-1.7
	Mauritania	-0.2	-2.7	-0.1	11.7	-2.8	-5.6	-3.0
	Niger	3.0	n/a	n/a	n/a	-0.3	0.5	n/a
Nigeria	3.4	5.3	7.3	n/a	0.7	3.0	5.0	
Senegal	2.9	-2.5	5.9	-2.9	0.3	-4.8	3.4	
Togo	4.0	3.0	3.5	n/a	0.9	0.2	0.8	
East Africa	2.6	0.2	4.6	4.8	0.2	-2.4	1.8	
Southern Africa	2.7	2.4	2.0	2.5	0.4	1.0	0.8	
West Africa	3.4	2.1	4.4	3.7	0.5	-0.2	1.9	
SSA	3.3	2.6	5.2	3.5	0.8	1.6	2.9	

TABLE 2.2 AGRICULTURAL PERFORMANCE, 1990-2006
Source: Authors' calculations based on World Bank WDI, 2007/2008.

2.2 Poverty Reduction and Food Security Trends

THE RECENT YEARS OF RELATIVELY HIGH AND STABLE GROWTH do not yet seem to be translating into dramatic reductions in poverty and food insecurity across the sub-continent. While recent poverty data are not yet available for most SSA countries, there is a concern about whether high growth in GDP can directly affect the welfare of the majority of the poor if such growth is driven by an enclave sector (e.g., oil or other mineral exports). Indeed, the high economic growth rates witnessed in some countries, such as Nigeria and Zambia, have been due to a more favorable global climate for mineral and oil exports. At the same time, however, preliminary evidence from the most recent household surveys in countries that rely heavily on agriculture show dramatic declines in poverty rates—for example, in Malawi and Uganda. Recent IFPRI analysis also shows improving poverty and income trends in Ghana, Mali, and Mozambique, albeit at slower rates (Benin and Randriamamonjy, 2008). **Figure 2.4** shows how these trends measure against other trends in agricultural GDP, TFP, and hunger for selected countries. Ghana has experienced one of the greatest reductions in hunger in the past 25 years among all SSA countries, although Gabon, Lesotho, and South Africa have the lowest rates of hunger currently. Benin and Nigeria have also made progress in reducing hunger, while Angola, Ethiopia, and Mozambique are starting to see declines (Wiesmann, Weingärtner, and Schöninger, 2006).

Despite the substantial decreases in poverty in some countries, the overall rates of poverty and hunger in SSA have not declined much. In addition, the intensity of this type of poverty and hunger is much more severe in SSA than in other areas of the world. SSA has the greatest number of people who fall into the category of ultra-poor, meaning that they live on less than US\$0.50 per day. The ultra-poor are less able to move out of poverty compared to those considered less poor, and evidence seems to indicate that poverty traps are preventing them from benefiting from any growth (Ahmed et al., 2007). Poverty in SSA is also not declining at the rate needed to reach MDG 1, even under a more optimistic scenario (**Figure 2.5**). Only Cameroon, Ghana,

Mozambique, and Uganda appear to be on their way to achieving the first MDG (Fan et al., 2008). However, most other countries will need even higher annual agricultural growth than the CAADP target of 6 percent to be able to halve poverty by 2015 (Figure 2.6).

In general, growth should lead to a decline in poverty rates. However, the diversity of outcomes seen in Figure 2.4 shows how growth is not always pro-poor. For example, rapid growth in Ghana, Mozambique, and Uganda has been accompanied by a decline in poverty. However, the high growth rates in Mozambique have not resulted in major reductions in poverty as they did in Uganda in the past. In part, the slow reduction of poverty has occurred because the country maintains one of the lowest per capita income levels relative to other poor countries. Even as national income grows rapidly, few of the majority poor rise above the poverty line. Meanwhile, such high growth rates are also typical of the sudden economic recovery that occurs when previously underutilized resources are brought into productive use in countries that have experienced many years of war and/or political instability. A big dent in the poverty rate in Mozambique is likely as long as the country can maintain its current high growth rates.

The degree of income inequality within a country limits the rate at which growth can affect poverty. This constraint seems to be evident in countries such as Lesotho, where despite achieving modest economic growth,

Commodity	Subsector Group	% of Total Value of Production 2000	Average Annual Growth Rates (%)				
			1961-1970	1971-1980	1981-1990	1991-2000	1961-2000
Beef	Livestock	10.1	2.3	3.0	0.6	1.2	1.7
Cassava	Roots & Tubers	8.3	2.6	2.5	3.5	2.0	3.0
Yams	Roots & Tubers	6.5	9.3	-2.5	6.5	3.7	3.4
Maize	Cereals	5.9	2.6	2.0	4.8	3.0	2.5
Groundnuts	Oil Crops	5.1	0.7	-3.0	1.8	6.9	0.3
Cow Milk	Livestock	4.8	2.3	1.6	2.9	2.1	2.1
Sorghum	Cereals	3.0	0.1	1.6	1.5	2.2	1.9
Rice	Cereals	2.9	4.1	2.6	5.0	2.2	3.3
Millet	Cereals	2.8	1.8	-0.3	4.5	2.7	1.8
Plantains	Fruits	2.7	4.4	0.4	2.2	0.7	2.0
Chicken Meat	Livestock	2.7	7.3	6.3	5.2	3.5	5.4
Cotton	Fiber Crops	2.5	7.7	-2.1	5.8	5.0	2.6
Vegetables, Net	Vegetables	2.3	2.0	1.6	2.3	2.6	2.2
Cocoa	Tree Nuts	1.9	1.9	-1.3	6.4	5.7	2.2
Goat Meat	Livestock	1.9	2.3	3.8	3.7	3.0	2.9
Mutton/Lamb	Livestock	1.9	3.6	1.8	0.6	2.6	1.5
Hen Eggs	Livestock	1.8	5.2	4.8	3.1	2.6	3.8
Sugarcane	Tree Nuts	1.5	6.3	2.3	0.7	3.2	2.3
Beans, Dry	Pulses	1.4	3.0	1.9	1.8	0.8	1.9
Coffee	Tree Nuts	1.4	4.2	-2.0	0.8	0.1	0.1
Bananas	Fruits	1.3	3.0	2.1	1.9	0.5	1.9
Taro	Roots & Tubers	1.1	2.4	-8.1	6.7	10.7	1.1
Pig Meat	Livestock	1.1	4.2	2.4	6.1	1.2	3.4
Cowpeas	Pulses	1.0	5.4	0.4	7.2	4.8	3.4
	Total	75.9					

TABLE 2.3 VALUE OF PRODUCTION RANKINGS OF KEY COMMODITIES IN SUB-SAHARAN AFRICA

Sources: i) Year totals: FAOSTAT 2002 and international prices 1989–1991; ii) Growth rates: least squares regression method.

Notes: Percent production value is calculated as the percent of value of production of current crop in total value of agricultural production of regional average (1998–2000). Values were constant 1989–1991 international dollars. Only crops with at least 1% of value of production are included.

Commodity	Group	% of Total Value of Production 2000	Average Annual Growth Rates (%)				
			1961-1970	1971-1980	1981-1990	1991-2000	1961-2000
Beef	Livestock	15.2	0.7	2.7	1.2	-1.8	1.3
Maize	Cereals	13.4	2.1	1.7	1.6	5.5	1.2
Chicken Meat	Livestock	7.2	13.5	7.7	6.1	4.6	7.3
Cow Milk	Livestock	6.6	1.9	-0.3	-0.1	1.2	0.3
Cassava	Roots & Tubers	5.0	1.8	0.7	2.2	7.6	2.0
Sugarcane	Tree Nuts	4.8	5.8	0.9	-0.1	4.6	1.6
Tobacco	Tree Nuts	3.8	-1.5	6.0	4.4	0.4	2.8
Grapes	Fruits, Primary	3.5	5.5	2.5	1.5	1.7	2.4
Hen Eggs	Livestock	3.1	8.9	4.5	2.4	4.9	3.9
Potatoes	Roots & Tubers	2.7	6.8	3.6	3.5	10.1	4.8
Wheat	Cereals	2.3	6.3	0.9	1.4	2.4	2.7
Groundnuts	Oil Crops	2.1	4.1	-3.7	-0.9	6.5	-1.6
Cotton Lint	Fiber Crops	2.0	12.0	0.1	5.4	8.2	2.3
Pig Meat	Livestock	1.9	4.4	0.9	2.5	0.6	2.2
Mutton/Lamb	Livestock	1.9	6.0	-2.2	0.0	-3.0	-0.3
Sunflower	Oil Crops	1.7	0.2	11.4	6.6	8.2	5.6
Oranges	Fruits	1.4	3.0	1.0	4.0	4.1	2.2
Vegetables, Net	Vegetables	1.4	1.3	2.1	1.3	0.3	1.2
Wool	Livestock	1.3	0.9	-1.7	-2.2	-6.5	-2.3
Apples	Fruits	1.3	10.3	4.6	1.9	1.3	4.2
Goat Meat	Livestock	1.1	3.5	0.7	3.8	1.7	2.2
Beans, Dry	Pulses	1.0	3.4	0.9	3.7	0.9	1.5
	Total	82.8					

TABLE 2.3a VALUE OF PRODUCTION RANKINGS OF KEY COMMODITIES IN SOUTHERN AFRICA
Sources and notes: See Table 2.3.

poverty rates have continued to rise. The country has a high Gini coefficient of about 0.6 (UNIDO, 2004). If growth excludes the majority of the poor population, poverty rates will not decline as much. For countries that derive much of their growth from minerals and crude oil exports, for example, agricultural incomes are usually unaffected or can even erode further with rapid growth. This situation typically happens under the so-called Dutch Disease syndrome when the agricultural sector suffers from an exchange rate appreciation caused by a sudden increase in export earnings as world prices for minerals and/or oil rise. The agricultural sector's competitiveness erodes quickly in both domestic and international markets as imports become cheaper and exports more expensive. For example, rising world oil prices are contributing to the high GDP growth rates in both Chad and Nigeria, while copper prices are driving Zambia's economic performance. Given that a majority of the poor are employed in agriculture, poverty rates in these countries will hardly change under this structure of growth unless the economy grows at an even faster pace. In the case of Zambia, the growth required to have a significant impact on poverty is estimated at about 9 percent per year (Thurlow and Wobst, 2004). It remains a development challenge for countries to translate their oil and mineral revenues into concrete improvements in the livelihoods of their populations.

Growth contractions have occurred in some countries, especially those experiencing political instability or conflict. These countries, including Côte d'Ivoire, the DRC, and Zimbabwe, have witnessed negative growth rates in per capita GDP as well as a rise in poverty. Even in the absence of war, political uncertainty and poor governance can damage the prospects for growth and poverty reduction by discouraging private investments and increasing unemployment. The 10 percent rise in the national poverty rate in Madagascar, for example, has been partially attributed to the impact of a political crisis during the year in which the survey was taken (Government of Madagascar, 2004).

The difficulty that countries in SSA have experienced in achieving pro-poor growth illustrates the necessity of broad-based growth strategies that target country-specific strengths and weaknesses. Even if growth is driven by the agricultural sector, a sustainable reduction in poverty is not guaranteed. Wide variations in poverty rates exist in most countries, as can be seen in the poorer northern arid regions of Kenya, Nigeria, and Uganda that are less productive and more isolated from markets. In addition, overdependence on a single agricultural commodity for export earnings leaves many African countries vulnerable to world price swings. Whenever commodity prices become unfavorable, growth can slow and be followed by increased poverty rates.

Commodity	Subsector Group	% of Total Value of Production 2000	Average Annual Growth Rates (%)				
			1961-1970	1971-1980	1981-1990	1991-2000	1961-2000
Beef	Livestock	12.8	2.6	2.9	1.2	2.3	1.7
Cow Milk	Livestock	8.6	2.5	3.2	5.0	2.5	3.4
Cassava	Roots & Tubers	8.2	2.4	2.6	2.6	-1.0	2.3
Plantains	Fruits	5.0	5.4	-0.3	2.5	-0.7	1.8
Maize	Cereals	4.9	3.4	4.9	5.0	2.9	3.1
Groundnuts	Oil Crops	3.1	3.5	2.4	-0.7	4.6	1.7
Beans, Dry	Pulses	2.9	3.4	1.8	2.1	-0.3	1.9
Sorghum	Cereals	2.8	1.5	3.6	-2.2	0.9	2.0
Rice	Cereals	2.7	3.4	1.7	4.1	0.2	2.2
Mutton/Lamb	Livestock	2.6	1.3	3.3	0.0	3.7	1.6
Coffee	Tree Nuts	2.5	4.0	0.0	1.3	-0.3	0.9
Goat Meat	Livestock	2.5	0.7	2.5	3.2	2.9	2.1
Bananas	Fruits	2.4	3.1	1.3	2.2	0.3	1.4
Vegetables, Net	Vegetables	2.3	2.2	2.8	1.3	0.2	1.7
Goat Milk	Livestock	2.1	1.0	4.0	0.6	4.5	2.2
Tea	Tree Nuts	1.8	10.7	5.6	7.7	3.6	6.2
Sweet Potatoes	Roots & Tubers	1.8	2.8	4.0	2.0	1.6	2.6
Chicken Meat	Livestock	1.4	4.2	3.5	2.9	2.2	3.1
Sugarcane	Tree Nuts	1.4	6.2	2.9	2.2	2.0	3.1
Sheep Milk	Livestock	1.3	3.7	10.0	-0.1	2.5	3.5
Sesame Seed	Oil Crops	1.1	3.3	-3.3	-0.9	5.3	1.0
Wheat	Cereals	1.1	5.4	-2.1	2.5	2.4	2.2
Pig Meat	Livestock	1.1	3.1	2.2	8.2	1.7	4.8
Hen Eggs	Livestock	1.1	2.7	4.1	1.9	1.5	2.6
Millet	Cereals	1.1	4.6	1.8	-1.5	2.0	0.7
Potatoes	Roots & Tubers	1.0	2.9	4.9	0.5	4.6	2.9
	Total	79.6					

TABLE 2.3b VALUE OF PRODUCTION RANKINGS OF KEY COMMODITIES IN EAST AFRICA
Sources and notes: See Table 2.3.

Commodity	Group	% of Total Value of Production 2000	Average Annual Growth Rates (%)				
			1961-1970	1971-1980	1981-1990	1991-2000	1961-2000
Yams	Roots & Tubers	13.6	9.5	-2.6	6.9	3.8	3.8
Cassava	Roots & Tubers	9.8	3.0	2.9	5.0	3.0	3.0
Groundnuts	Oil Crops	7.8	-0.5	-5.1	3.4	7.7	7.7
Beef	Livestock	5.9	3.9	3.4	-1.3	3.1	3.1
Millet	Cereals	5.0	1.2	-0.5	5.6	2.8	2.8
Cocoa	Tree Nuts	4.1	1.9	-1.3	6.4	5.7	5.7
Sorghum	Cereals	4.1	-1.0	0.7	4.1	2.6	2.6
Rice	Cereals	4.0	5.2	3.8	5.7	3.0	3.0
Cotton	Fiber Crops	3.9	9.5	4.1	11.3	6.2	6.2
Maize	Cereals	3.7	2.8	-1.1	15.9	0.9	0.9
Vegetables, Net	Vegetables	2.6	2.1	-0.1	4.0	5.2	5.2
Taro	Roots & Tubers	2.2	2.3	-9.0	7.0	11.8	11.8
Cowpeas	Pulses	2.1	5.9	0.9	7.6	5.0	5.0
Plantains	Fruits	2.1	2.2	2.1	1.3	3.9	3.9
Goat Meat	Livestock	1.8	5.0	7.3	4.3	3.6	3.6
Hen Eggs	Livestock	1.8	4.4	5.7	4.3	1.6	1.6
Chicken Meat	Livestock	1.7	5.9	7.2	5.5	2.6	2.6
Citrus Fruits	Fruits	1.6	2.5	1.6	1.4	2.3	2.3
Mutton/Lamb	Livestock	1.4	4.5	5.7	2.4	5.2	5.2
Cow Milk	Livestock	1.2	3.3	2.4	1.4	2.1	2.1
Chilies & Peppers	Vegetables	1.1	3.1	1.8	3.6	4.6	4.6
Game Meat	Livestock	1.1	2.4	1.4	0.9	0.4	0.4
Coffee, Green	Tree Nuts	1.1	5.6	0.6	0.0	0.7	0.7
	Total	83.7					

TABLE 2.3c VALUE OF PRODUCTION RANKINGS OF KEY COMMODITIES IN WEST AFRICA

Sources and notes: See Table 2.3.

2.3 Governance and Policy Trends

THROUGH NATIONAL STRATEGIES AND THE POVERTY REDUCTION

STRATEGY PAPER (PRSP) PROCESS, many African governments have articulated their commitment to reducing poverty by improving governance, changing policies, and increasing investment within the agricultural sector. One encouraging sign of increased commitment to governance has been the willingness of several countries, including Ghana, Kenya, and Rwanda, to undergo peer review through the African Peer Review Mechanism (APRM), an AU and NEPAD initiative. APRM represents the potential for countries to address governance issues that are preventing growth. A similar type of peer review system by the Organization for Economic Cooperation and Development (OECD) member countries has been found to be useful for encouraging reforms (Kanbur, 2004). By holding countries accountable for their progress, NEPAD and CAADP will enhance their chances of being more successful than previous development efforts.

A recent World Bank report on governance identifies positive trends in many African countries (World Bank, 2007b). Governance indicators reveal that countries that are politically stable and have demonstrated willingness to undertake political and economic reforms, such as Ghana and Mozambique, have shown improvements in governance over time. In contrast, countries experiencing economic decline and political instability, such as Côte d'Ivoire and Zimbabwe, show worsening governance over the same period. **Figure 2.7** illustrates how much some countries have improved in the period be-

East Africa	Exports to Non-East Africa	Exports to East Africa (\$US MILLION)	Total Exports	Percent of Total Exports to East Africa (%)
Staples	213	61	274	0.22
Nontraditional	1,298	128	1,426	0.09
Traditional	2,381	86	2,467	0.03
Other ¹	304	26	330	0.08
Southern Africa	Exports to Non-Southern Africa	Exports to Southern Africa (\$US MILLION)	Total Exports	Percent of Total Exports to Southern Africa (%)
Staples	492	226	718	0.31
Nontraditional	2,823	273	3,096	0.09
Traditional	2,359	187	2,546	0.07
Other ¹	380	92	472	0.19
West Africa	Exports to Non-West Africa	Exports to West Africa (\$US MILLION)	Total Exports	Percent of Total Exports to West Africa (%)
Staples	12	40	52	0.77
Nontraditional	1,960	234	2,194	0.11
Traditional	4,021	51	4,072	0.01
Other ¹	727	38	765	0.05

TABLE 2.4 COMPARISON OF TRADE WITHIN AND ACROSS REGIONS, 1996–2002 AVERAGE

Source: Diao and Yanoma, 2003. Note: ¹ Includes cigarettes, feedstuffs, processed cocoa, animal skins, spices, and roasted coffee.

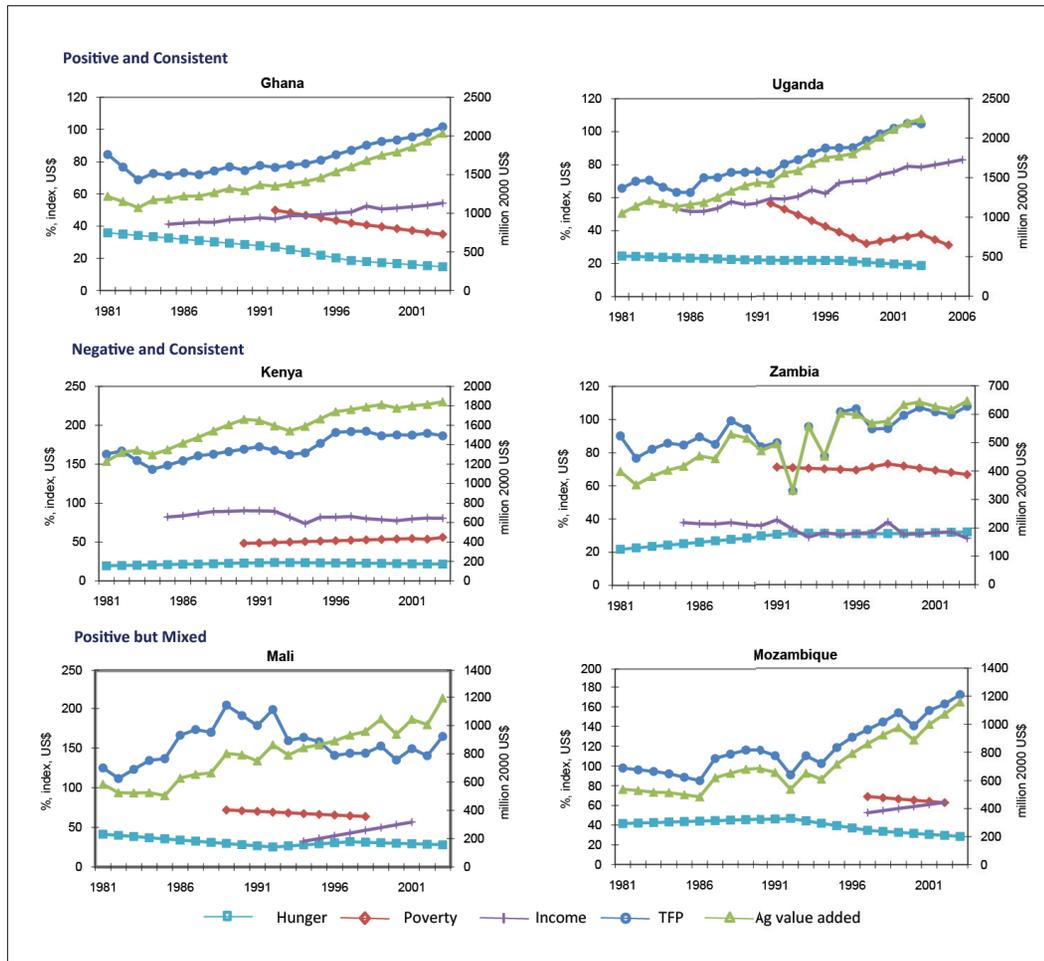


FIGURE 2.4 TRENDS FOR SELECTED SUB-SAHARAN AFRICAN COUNTRIES

Source: Authors' calculations based on Benin and Randriamamonjy, 2008.

tween 1996 and 2006 in the area of government effectiveness, one of the six worldwide governance indicators. Though the direction of causality between governance and growth remains unclear,¹ examining the different dimensions of governance in tandem with economic growth rates reveals that on average, countries with higher estimates of governance (i.e., better governance) are associated with higher economic growth rates. For instance, Botswana rates highly on the various dimensions of governance and has relatively high growth rates. Conversely, countries with low governance estimates (e.g., Côte d'Ivoire and Zimbabwe) also have lower economic growth rates.

Donors and the international community have also stated their commitment to policy change and increasing investment in the agricultural sector. Kofi Annan has called for a “uniquely African Green Revolution” to end the continent’s plague of hunger. The theme of the World Bank’s World Development Report 2008—a key gauge of contemporary development theory—is agriculture for development (World Bank, 2007c). A number of other recent landmark reports and programs have also placed agricultural growth at the center of their strategies for combating poverty and hunger in Africa, including the United States Agency for International Development’s (USAID’s) Initiative to End Hunger in Africa; the UK Department for International Development’s (DFID’s) 2005 white paper *Growth and Poverty Reduction: The Role of Agriculture*; the United Nations Millennium Project Task Force on Hunger report

Halving Hunger; and Tony Blair’s Commission for Africa report. In fact, donors are attempting an unprecedented level of coordination of agricultural assistance. In 2003, 26 donor nations, development agencies, and international finance institutions established the Global Donor Platform for Rural Development to harmonize efforts and increase overall aid effectiveness in rural development.² The largest private foundations are turning their gaze toward African agriculture as well, as evidenced by the partnership between the Bill and Melinda Gates Foundation and the Rockefeller Foundation to increase agricultural productivity in Africa.

The following sections examine some of the actions that have accompanied the renewed attention to policies and investment in the agricultural sector.

- 1 An IFPRI study by Resnick and Birner (2005) reviews the relationship between governance and pro-poor growth at length.
- 2 More generally, the “new architecture of aid” that has emerged since the millennium has been characterized by an effort toward harmonization among donors with regard to priorities and approaches (Farrington and Lomax, 2001). To the extent that a revitalization of agriculture is included among these priorities, the sector is well positioned to benefit from an infusion of new resources and new attention to effectiveness.

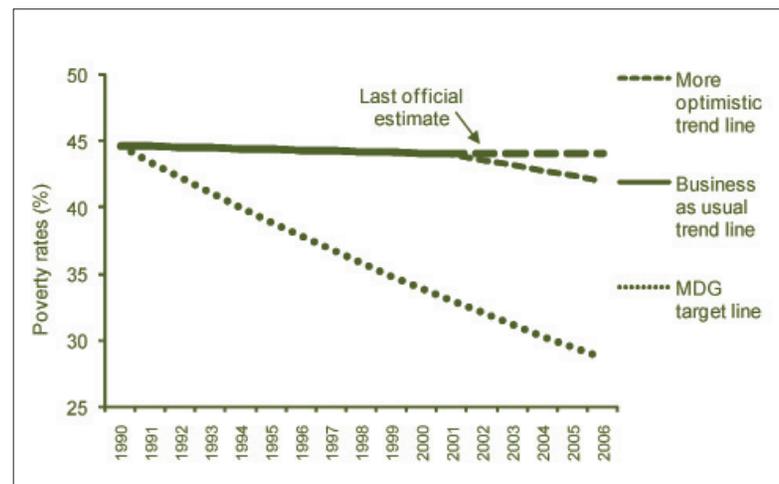


FIGURE 2.5 BUSINESS AS USUAL AND MORE OPTIMISTIC FORECASTS OF SSA POVERTY RATES TO 2006

Source: Authors’ calculations based on work in progress. Notes: The forecast under the “business as usual” scenario uses a linear trend between the base year (1990) and most recent year a poverty rate is reported. The second “more optimistic” scenario uses poverty elasticities with respect to agriculture and non-agricultural growth to estimate the reductions in the poverty rate in the years following the last year poverty rates were reported (see Fan et al., 2008 for more details). Actual growth rates in both sectors are real, based on constant 2000 local currency units (LCU) and calculated from World Bank WDI, 2006 version.

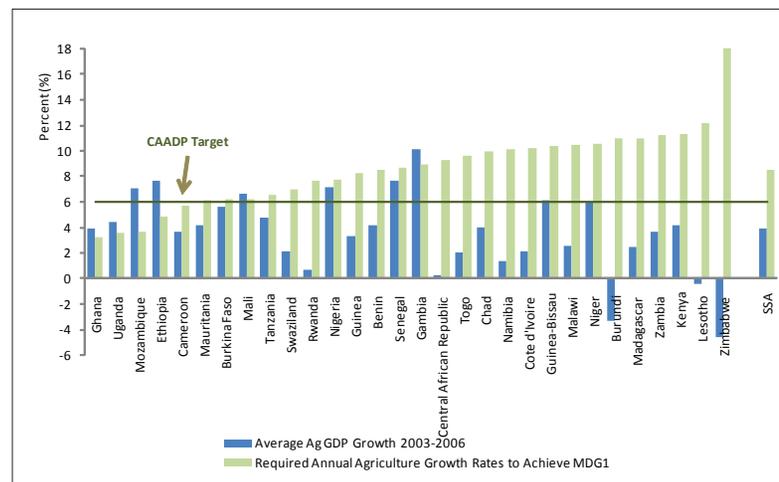


FIGURE 2.6 AGRICULTURAL GROWTH RATES TO MEET MDG 1

Source: Ag GDP rates from World Bank WDI, 2008. Required rates to achieve MDG 1 from conservative scenario in Fan et al., 2008. Note: Average agricultural GDP growth for Benin, Burundi, Nigeria, Togo, and Zimbabwe covers only the period of 2003–2005.

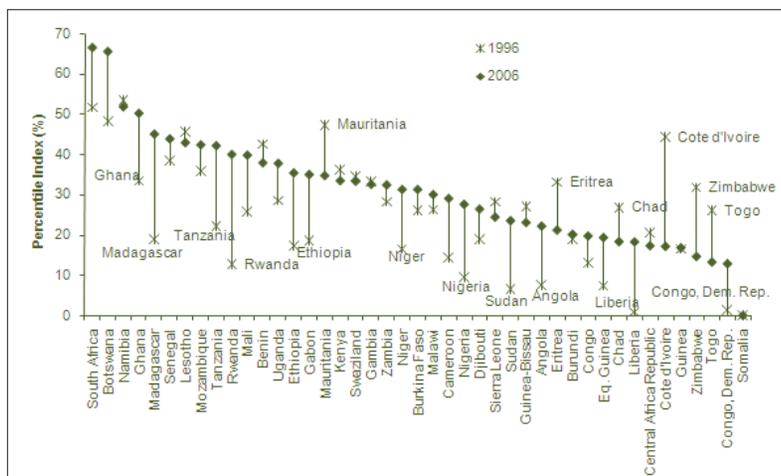


FIGURE 2.7 GOVERNMENT EFFECTIVENESS IN SUB-SAHARAN AFRICA, 1996–2006
 Source: 2006 Worldwide Governance Indicators (World Bank, 2007) Note: The percentile index refers to a ranking for each country shown relative to other countries in the World. It measures the percentage of countries worldwide that rate below that country on “government effectiveness.” So higher values indicate better governance ratings.

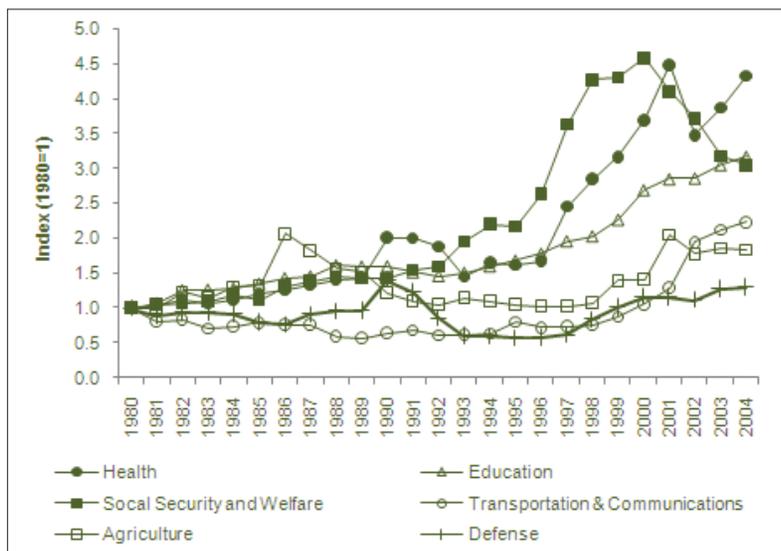


FIGURE 2.8 CHANGES IN GOVERNMENT SPENDING IN SELECT AFRICAN COUNTRIES, 1980–2002
 Source: Authors’ calculations based on IMF public expenditure data, 1990–2005. Note: Uses sample of only 12 countries for which sufficient data on government spending were available: Burkina Faso, Cameroon, Côte d’Ivoire, Ethiopia, Ghana, Kenya, Malawi, Mali, Nigeria, Uganda, Zambia, and Zimbabwe. Source: Authors’ calculations based on IMF public expenditure data, 1990–2005. Note: Uses sample of only 12 countries for which sufficient data on government spending were available: Burkina Faso, Cameroon, Côte d’Ivoire, Ethiopia, Ghana, Kenya, Malawi, Mali, Nigeria, Uganda, Zambia, and Zimbabwe.

2.3.1 Market and Trade Policies

RAISING AGRICULTURAL PRODUCTIVITY IS NOT SUFFICIENT FOR GROWTH without adequate access to domestic, regional, and international markets to absorb the increase in supply. This access to markets is particularly important in SSA, where it is still severely limited due to high transportation and market transaction costs. Transaction costs in many countries remain exorbitantly high due to the continued presence of distorted trade policies, lack of roads, information asymmetries, and poor storage facilities. Conditions such as these are limiting the ability of smallholder farmers to compete effectively in a constantly changing global marketplace.

Slow but steady progress in reducing distortions to agricultural and trade policies has occurred since the 1970s, supported by decreasing taxation of agricultural production and exports. According to a recent study by Anderson and Masters (2007), import protection has also fallen from the highs of the 1980s, although significant variation exists among SSA countries. Recognizing the need to improve market access and expand smallholder participation in domestic and global markets, several countries have stressed a commitment to creating an enabling institutional and marketing environment. For instance, the government of Uganda has been putting in place commercial laws as well as a legal and regulatory framework that allows the efficient functioning of domestic agricultural markets (Government of Uganda, 2003). Mozambique’s government has institutionalized market information systems throughout the country to help overcome the information asymmetries faced by many smallholder farmers (Government of Mozambique, 2001). Similar efforts are under way in various other countries in the region. For instance, Ghana and Kenya have prioritized the use of information and communication technologies, such as cell phones, computers, and radios, as tools for (1) optimizing the provision of agricultural extension services in rural areas, (2) improving information flows between producers and consumers, (3) promoting e-commerce and delivering meteorological information to smallholder farmers, and (4) removing impediments associated with standardization and quality control (Government of Kenya, 2004; Government of Ghana, 2003).

Another important trend and an integral feature of CAADP is the strengthened position of Regional Economic Communities (RECs) in the agricultural sector. In the area of trade, regional bodies such as the Common Market for East and Southern Africa (COMESA), the Southern African Development Community (SADC), and the East African Community (EAC) are becoming increasingly proactive in assisting member countries to take part in World Trade Organization (WTO) negotiations, as well as accede to and implement WTO agreements. The RECs are also encouraging member countries to open up their markets to trade and investments, by promoting the removal of tariffs and nontariff barriers in order to move toward the establishment of free trade areas (FTAs). The intended goal for some is to eventually advance toward customs unions and subsequently monetary unions (COMESA and EAC websites). COMESA, for example, established an FTA in October 2000 after 9 of its 20 member countries eliminated all tariff and nontariff barriers for select goods and services (COMESA website).¹

While these efforts are worthwhile, policies are still falling short of developing the necessary human, institutional, and physical (including infrastructure) capacity for functioning markets and agricultural trade. Enhanced capacity can facilitate better local, regional, and global trade networks; increase production of tradable commodities by smallholder farmers; improve farmers' ability to meet sanitary and phytosanitary standards; and enable the formulation and implementation of better trade policies by governments. In addition, improved capacity can go a long way toward enhancing smallholder farmers' ability to take part in trade initiatives such as the African Growth and Opportunity Act (AGOA) where the share of African agricultural exports to the United States has remained low. Also, development partners have not followed up on their commitment to agriculture in Africa by reducing their own domestic tariffs and subsidies, which have decreased the competitiveness of African smallholder farmers and hence damaged their livelihoods. The declaration of the intention to eliminate agricultural export subsidies by 2013, issued at the WTO Hong Kong Ministerial Conference in December 2005, is encouraging, although many issues such as subsidy definitions are still to be resolved.

¹ Since 2000, two additional countries have joined the FTA: Burundi and Rwanda. The original nine members are Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia, and Zimbabwe.

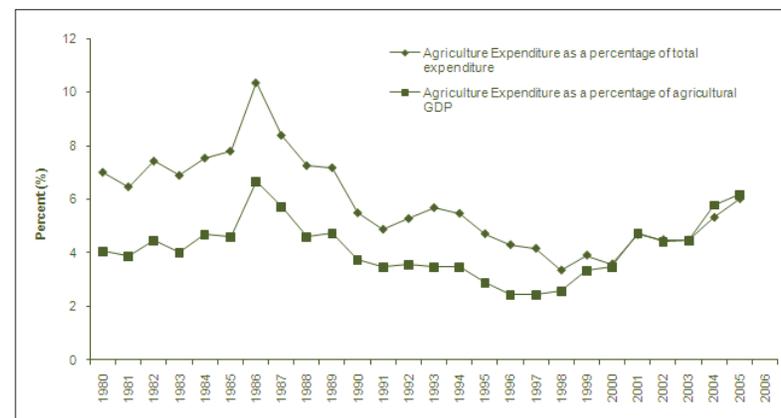


FIGURE 2.9 GOVERNMENT EXPENDITURE SHARES FOR AGRICULTURE IN AFRICA

Source: See Figure 2.8.

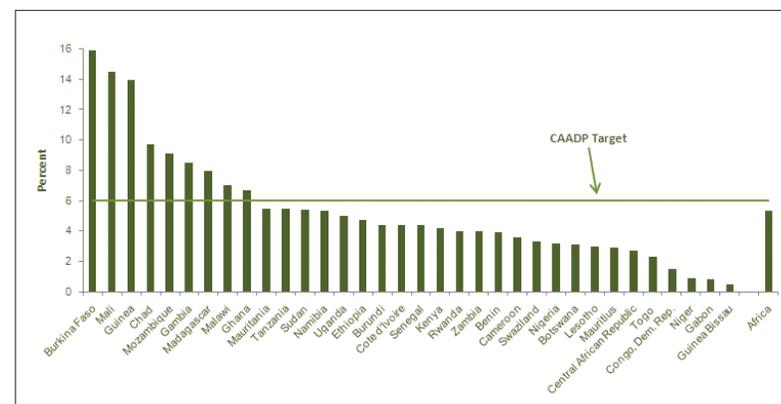


FIGURE 2.10 AGRICULTURAL SPENDING AS A SHARE OF TOTAL GOVERNMENT EXPENDITURE, 2004

Source: See Figure 2.8.

2.3.2 Resource Flows & Investments

FOR A MAJORITY OF SSA COUNTRIES, a serious symptom of structural adjustment and the expansion of the aid agenda has been a general failure to allocate sufficient resources to key productive sectors such as agriculture. In fact, health and social services have seen the most dramatic rise in their shares of budget allocations throughout the 1990s, and even more so in more recent years (**Figure 2.8**). While these sectors are important, the neglect of productive sectors explains much of the persistence of poverty and food insecurity in the region. This neglect has reduced the capacity of the majority poor to earn incomes (Eicher, 2003).

According to the most recent data available, both government and donor allocations for agriculture have remained very low. On average, African governments allocated 6 percent of public spending for agriculture in 2005 (**Figure 2.9**). Very few countries have reached the CAADP goal of 10 percent spending on agriculture as a share of total government expenditure (**Figure 2.10**). This amount implies decreasing per capita spending on agriculture, particularly in terms of dollars spent per poor person (**Figure 2.11**). Total overseas development assistance (ODA) for agriculture in SSA has hovered around \$1 billion a year since the 1990s. Meanwhile, the share of total ODA spent on agriculture in SSA has steadily decreased—from a high of about 12 percent in 1995 to just over 4 percent in 2003 (**Figure 2.12**). In comparison, the share of ODA spent on aid for emergencies doubled, and in actual dollars more than quadrupled, during that same time. However, despite

	Country/Region	Agriculture Expenditure	Percent of Total Expenditures	Percent of Agricultural GDP (%)	Agricultural ODA from All Donors
EAST AFRICA	Ethiopia	295.0	10.6	9.4	29.0
	Kenya	110.0	4.5	6.0	10.7
	Tanzania	30.0	2.3	0.7	54.0
	Uganda	27.0	2.3	1.2	24.5
SOUTHERN AFRICA	Botswana	83.0	3.9	57.9	3.0
	Malawi	27.0	5.2	4.9	20.5
	Mozambique	2.0	0.2	0.1	37.5
	Zambia	38.0	5.9	6.2	14.2
	Zimbabwe	5.0	0.3	0.51	3.3
WEST AFRICA	Burkina Faso	97.0	17.2	10.5	11.9
	Cameroon	31.0	1.6	0.7	12.5
	Côte d'Ivoire	25.0	1.5	1.0	8.4
	Ghana	25.0	2.5	1.3	5.1
	Mali	131.0	16.1	13.0	17.5
	Nigeria	761.0	3.3	6.0	5.8
	Togo	7.0	2.0	1.5	0.2

TABLE 2.5 ANNUAL AGRICULTURAL SPENDING, 2002

Sources: National expenditure data sources were various issues of the IMF's Government Statistics Yearbook and statistical annexes, and PRSPs and PERs (public expenditure reviews). ODA data were from OECD's Creditor Reporting System Database. Agriculture, value added (Agricultural GDP) is from World Bank WDI, 2005. Note: All amounts are in constant 2000 U.S. dollars.

Region	Total Public Spending (MILLIONS OF 1993 INTERNATIONAL DOLLARS PER YEAR)			Annual Growth Rates (%)			Agricultural Research Intensity Ratios (1981–2000d)		
	1971–1980	1981–1990	1991–2000	1971–1981	1981–1991	1991–2000	1971–1981	1981–1991	1991–2000
East Africa ^a	160	208	304	2.2	5.1	0.9	0.47	0.61	0.52
Southern Africa ^b	332	389	437	-0.2	0.3	1.2	1.45	1.92	2.28
West Africa ^c	303	339	317	4.6	0.1	0.1	0.8	0.59	0.44
Total	795	936	1,058	2	1.3	0.8	0.84	0.81	0.7

TABLE 2.6 PUBLIC SPENDING ON AGRICULTURAL RESEARCH AND DEVELOPMENT, 1971–2000

Source: Beintema and Stads, 2004. Notes: ^a Includes Burundi, Eritrea, Ethiopia, Kenya, Sudan, Tanzania, and Uganda. ^b Includes Botswana, Madagascar, Malawi, Mauritius, South Africa, and Zambia. ^c Includes Benin, Burkina Faso, Republic of Congo, Côte d'Ivoire, Gabon, Gambia, Ghana, Guinea, Mali, Mauritania, Niger, Nigeria, Senegal, and Togo. ^d Agricultural research intensity ratios are research expenditures expressed as a percentage of agricultural GDP.

the declining share of donor resources going to agriculture, in some countries such as Mozambique and Tanzania, ODA for agriculture greatly overshadows the amounts spent by the governments themselves (Table 2.5). The risk is that these contributions may be “crowding out” domestic agriculture investments by reducing the governments’ political incentives to increase their shares. So far, neither governments nor donors are meeting their stated commitments to increase agricultural spending.

In addition to public resources, private sector sources such as FDI and remittances have the potential to provide additional capital for agricultural investments. However, it is not clear just how much of the growth in FDI flows to Africa has translated into benefits for the agricultural sector. Part of the problem is that there is little organized tracking of private sector flows in SSA, especially for agriculture. The figure for agriculture is likely to be very small given that the bulk of FDI has traditionally gone into the oil and mineral sectors (UNCTAD, 2005). Remittances are a fast-growing source of capital in SSA. In 2005, remittances reached US\$8 billion, about half of the US\$16.5 billion in FDI that same year (World Bank, 2006). While remittances may not have much impact on overall growth, they have been shown to have an effect on poverty reduction (Wagh and Pattillo, 2007). Their direct input into agriculture is less well known.

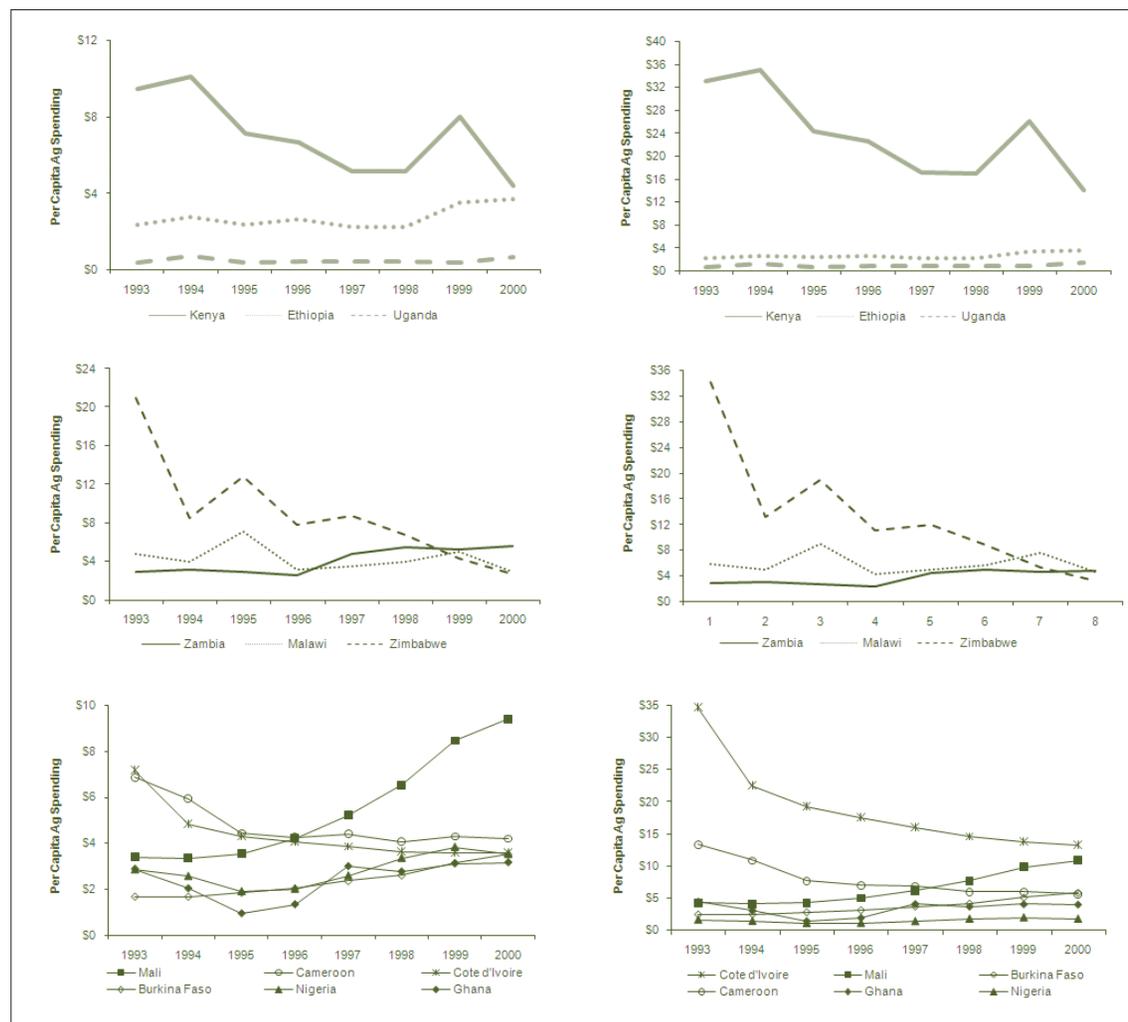


FIGURE 2.11 PER CAPITA GOVERNMENT SPENDING FOR AGRICULTURE, BY AGRICULTURAL POPULATION AND RELATIVE TO NUMBER OF POOR PEOPLE, 1993–2000

Source: See Figure 2.8. Notes: All amounts are in constant 2002 U.S. dollars. The figures on the left are annual spending for agriculture divided by total population in agriculture. The second set, on the right, divides spending by the total number of poor people who earn less \$1/day.

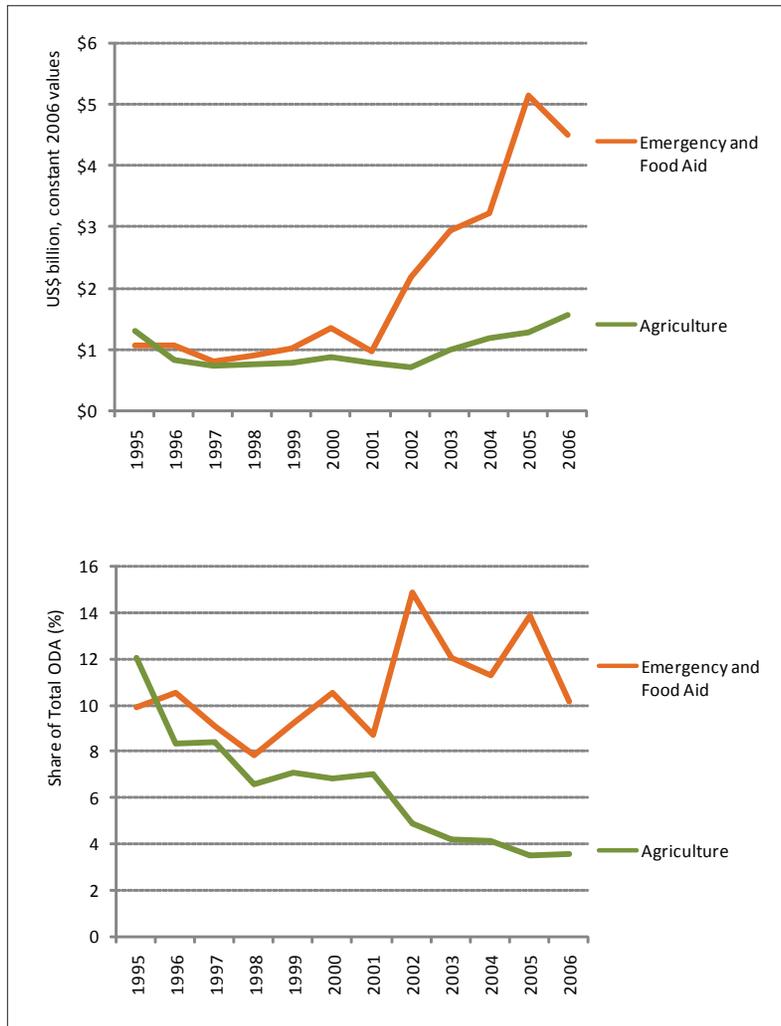


FIGURE 2.12 TRENDS IN AID FOR FOOD EMERGENCIES VERSUS AGRICULTURE IN SUB-SAHARAN AFRICA
 Source: OECD Credit Reporting System (CRS) database on ODA commitments, 2008.

A key investment area that has been shown to have a high economic return and long-term impact on rural farm earnings is agricultural research and development (R&D). Unfortunately, government spending on R&D has declined substantially in some countries. As **Table 2.6** illustrates, R&D spending in the subcontinent slowed significantly, growing at a rate of only 0.8 percent per year in the 1990s, compared to 2 percent per year in the 1970s (Beintema and Stads, 2004). Spending intensity ratios (R&D spending as a share of agricultural GDP) also declined. As with CAADP, most individual country strategies for agriculture also stress the need to raise the productivity and competitiveness of smallholder agriculture through research and extension. For example, the Plan for the Modernization of Agriculture (PMA) in Uganda focuses attention on targeting smallholder farmers in the provision of productivity-enhancing technologies (Government of Uganda, 2003). Mozambique’s Agricultural Sector Public Expenditure Program (PROAGRI) also aims to boost the agricultural productivity of staples and cash crops through research and extension, in addition to small-scale irrigation systems and water depots (Government of Mozambique, 2001). While this sounds positive, an overall review of 24 African PRSPs by the Inter-Academy Science Council found that only half of the PRSPs actually stressed the importance of science and technology, and only four mentioned agricultural research as a priority for poverty reduction (IAC, 2004). Moreover, what is on paper may not translate into action. Countries that have expressed a commitment to agricultural R&D have not always devoted the necessary resources to it, either because of a lack of political will or because of budgetary constraints. A case in point is Zambia. Although the government committed US\$350 million to its Agricultural Sector Investment Program (ASIP) over a period of four years, only US\$184 million was actually disbursed (Government of Zambia, 2002).

3. Ensuring Growth in the Agricultural Sector

As seen in the previous section, the trends for some African countries show great promise for delivering improved agricultural growth. However, this growth could be derailed, as it has been in the past, by external shocks, conflict, or poor governance—the same factors that are keeping other African countries off a positive growth trajectory altogether. Fulfilling the current commitments to CAADP and MDG targets is an important first step in avoiding a relapse and building a foundation for growth. Some countries are already following through on their commitments, but many other countries are behind. For many countries, greater efforts, even beyond simply reaching the targets, will be needed to ensure long-term growth. In this section, we examine what countries will need to do on the investment and policy fronts to sustain agricultural sector growth.

3.1 Increase Investment in Agriculture

INADEQUATE AND OFTEN DECLINING AGRICULTURAL INVESTMENTS in key areas such as infrastructure, agricultural R&D, market information systems, and agricultural inputs have all contributed to low agricultural productivity levels and the inability of smallholder farmers to access markets. Various studies have consistently shown that government spending on agriculture and infrastructure has a significant effect on both economic growth and poverty reduction. Therefore, reversing the trends in agricultural investments is imperative to achieve broad-based poverty and hunger reduction on the continent. Analysis suggests that most African countries will need to increase their agricultural spending by 20–30 percent per year to be able to reach MDG 1 (Fan et al., 2008).

Among the investment priorities needed, there is an urgent need to increase investment in rural infrastructure, agricultural R&D, and extension and delivery services. The reality for most African countries is that roads and transportation infrastructure, as well as storage and postharvest handling facilities, are seriously lacking and prevent smallholder agriculture from competing in domestic urban markets, let alone in global markets. This deficiency means that any rapid growth in the production of staples is likely to meet significant demand constraints. Given the fact that Africa's road network is far behind that of India's a few decades ago (Spencer, 1994), simply improving roads and transportation infrastructure can go a long way toward improving smallholder access to affordable, yield-enhancing inputs and inexpensive marketing channels, and, in the end, improving the ability to compete in high-value-added markets. Investments in feeder roads alone have been shown to have large poverty reduction effects per unit of investment (Fan, Zhang, and Rao, 2004).

Innovations in agricultural technologies are also needed to help overcome land and labor constraints, improve food security and nutrition, address the effects of climate change, promote environmental sustainability, and allow smallholder farmers to better compete in markets. Impressive strides in agricultural R&D for such commodi-

ties as maize, cassava, and rice have already helped improve nutritional intake in Africa (Haggblade, 2004). IFPRI research on Uganda highlights the fact that investments in agricultural R&D offer the greatest potential of all public investments for enhancing productivity and reducing poverty (Fan, Zhang, and Rao, 2004). Thirtle, Lin, and Piesse (2003) showed that for every 1 percent increase in yield brought about by investments in agricultural R&D, two million Africans can be lifted out of poverty. To have a broad-based impact on rural incomes and growth, priority areas for R&D should target key commodities or production systems that are of the greatest importance to smallholder farmers, such as staples and livestock, while also paying attention to nontraditional sectors, based on proximity to markets.

3.2 Encourage Broad-Based, Balanced Agricultural Growth

THE INTRINSIC IMPORTANCE OF AGRICULTURAL GROWTH to poverty reduction does not mean that investment in nonagricultural sectors should be neglected. While rural poverty reduction cannot be achieved without agricultural growth, neither is it likely to happen by simply investing in the agricultural sector alone, without, for example, complementary investments in infrastructure, markets, education, and health. At the same time, within the agricultural sector, some subsectors may contribute more to poverty reduction and growth than others. Productivity growth in the staples and livestock subsectors, by virtue of their large domestic demand and share of total value-added agriculture, have the greatest potential to affect pro-poor growth in most African countries, given sufficient infrastructure and well-functioning markets to absorb the rapid increase in supply. These are sectors that will require greater public sector involvement because they typically offer little incentive for private sector investments and yet offer the best potential for growth, poverty reduction, and food security. To achieve sustainable growth, countries must evaluate the potential contribution of all sectors and subsectors to growth. The following country case studies illustrate the need for broad-based, balanced growth and demonstrate how analysis can suggest the strategic priorities that will promote this growth and poverty reduction.

GHANA

Ghana is one of the most positive success stories in Africa. It is on track to reach MDG 1, and poverty and hunger have been declining at steady rates. Although not yet spending 10 percent of the government budget on agriculture, the country has been achieving GDP and agricultural GDP growth rates close to or exceeding 6 percent in recent years. However, many of the advantages of the high positive growth are accruing to more urban and centrally located regions, which have benefited from higher prices for cocoa and other export crops. In contrast, poverty rates in the more remote northern

regions range from 70 percent to 90 percent. Inequality is likely to continue increasing as smallholders who grow staple food crops in the northern regions are left behind. However, a more agriculturally focused, pro-poor growth strategy could help reverse this trend in inequality. Al-Hassan and Diao (2007) have identified groundnut, cassava, and cowpea as the staple crops having the most potential to reduce poverty in northern Ghana. The positive attributes and benefits of these particular crops are significant: income and food security improvement, drought resistance, processing enterprise potential, unmet regional and domestic demand, and sources of livestock feed and soil nitrogen regeneration. For the country in general, staple-led growth would lead to an even greater reduction in the national poverty rate by 2015 than would export-led growth. By diversifying and expanding the agricultural sector to become more broad-based, Ghana could weather any price shocks affecting its current primary exports of cocoa and horticultural crops that would otherwise lead to a significant deceleration in growth and poverty reduction. Additional investments in infrastructure and institutions would be needed to encourage more domestic and regional trade, while investments in research and extension would improve the potential of staple crops in less productive areas.

ETHIOPIA

Growth in Ethiopia in the past has been very inconsistent, with repeated episodes of negative growth, caused by droughts and food security crises, followed by years of rebound growth. If growth follows the same pattern in the future, poverty is expected to increase. The country's poverty rate is about 45 percent, while 85 percent of the population lives in rural areas. With so many of the poor dependent on agriculture for their livelihood, growth in that sector would reduce poverty the most. A study by Diao and Nin Pratt (2007) examined which subsectors within agriculture had the best potential to improve growth and reduce poverty. As cereals and other staple crops constitute the largest share of smallholder income, even a low growth rate of 1.5 percent over baseline

in that sector would result in a decrease in the poverty rate to about 37 percent. The second greatest decrease in poverty would occur with growth in the livestock sector. Growth in nontraditional exports and the coffee subsector would not have as significant an effect, as their share of agricultural GDP is small, and the more impoverished farmers usually cannot afford to make the investments to grow these types of crops. However, the study emphasized that combined growth in all subsectors would have the greatest effect on poverty. Each subsector has important linkages with the others, as growth in one sector can help increase demand for others. Greater income received from staple and export crops would increase demand for livestock products, while a larger livestock sector would demand more cereal crops for livestock feed. Investment is needed in irrigation, the adoption of improved seed and fertilizer, and modern technology in livestock production to help increase productivity and agricultural growth. However, these investments must be accompanied by investments in the transportation infrastructure in order to improve farmers' access to markets. With better access, the increased productivity would result in greater profitability and the danger of a price collapse due to oversupply would be mitigated.

ZAMBIA

Zambia's growth trends in the past few years appear positive, with economic and agricultural growth rates of around 5 percent since 2003. However, the growth seems to be driven by high global prices for its main export, copper, and does not appear to be having much effect on poverty. While the country's poverty rate declined from a high of 84 percent in 1993 to 67 percent in 2003, it seems that incomes in the past few years have been declining as well (Benin, 2007). According to a study by Thurlow and Wobst (2004), under the current growth path, Zambia would need annual growth rates of around 7–9 percent to reach MDG 1. The type of sustainable, pro-poor growth needed is unlikely to occur without a focus on agriculture. In the past, agriculture was neglected in favor of the mining and manufacturing sectors, which fell into decline during

the 1990s during the structural adjustment period. In addition, high urban unemployment has caused migration from urban to rural areas, and the employment share for agriculture has increased to 55 percent of the population. The scenarios modeled in the study indicate that an agriculture-led development strategy would reduce poverty more than would depending on mining-led growth. Within agriculture, investment in staples would contribute more to pro-poor growth than would investment in cash crops alone. However, this investment would also require improved market access and infrastructure. Pro-poor spending was constrained during structural adjustment, and infrastructure and the social sectors of health and education have yet to recover.

KENYA

Kenya has not experienced the sustained higher positive growth trends seen in many other African countries since the beginning of the decade, although performance did begin to improve in 2005. The country is not on track to reach MDG 1. In fact, for Kenya to reach the MDG target by 2015, an annual growth rate of 10 percent would be needed. In addition, poverty and inequality appear to be increasing. Kenya has agreed to participate in CAADP and has signed the Maputo Declaration, which promises 10 percent of government spending to agriculture. But current spending patterns indicate that agriculture will be receiving only about 5 percent of annual spending over the next five years. Kenya's development strategy, the Economic Recovery Strategy (ERS), envisions industrial-led growth and attributes a secondary role to agriculture, predicting a static 3 percent annual agricultural growth rate. However, analysis suggests that a broad-based agriculture-led growth path would have a more positive effect on growth and poverty reduction. Agriculture accounts for 25 percent of GDP and two-thirds of rural GDP, meaning that it is the largest sector in the economy and the primary income source of rural inhabitants, who make up 85 percent of the population. Under the current growth patterns, rural poverty would decrease slightly by 2015, but urban poverty would increase. An agricultural-led strategy would result in a significant decrease in

poverty, from around 51.3 percent of the population in 2003 to 38.7 percent in 2015, while an industrial-led strategy would result in a 46 percent poverty rate in 2015. Of any one agricultural area, increasing spending on research and extension would have the most pro-poor and pro-growth outcome. However, combined investments in irrigation and research and extension to reach the 10 percent agricultural spending target, plus additional investments in roads and market reforms, would have the most impact on growth rates and poverty reduction and would achieve the 6 percent growth target. As noted earlier, 6 percent growth would not be enough to reach MDG 1, but it would reduce poverty significantly (Thurlow, Kiringai, and Gautam, 2007).

RWANDA

Rwanda's growth since 1994 has been considerable but appears to have begun slowing down in the past few years. Much of the agricultural growth has come from area expansion and recovery from the production drop that occurred in 1994, a pattern that is unlikely to continue given the already high population density and small landholdings. The national poverty rate is 60 percent, 90 percent of the population lives in rural areas, and the average amount of land per household is less than one hectare. Only a small percentage of rural households are involved in producing Rwanda's main exports of tea and coffee. The others depend on staple crops (root crops and bananas, in particular) and livestock. The country imports a large amount of food, especially rice and maize, and the government has set high targets to increase the production of cereal crops. A recent study (Diao et al., 2007) determined that growth in the staples subsector would be more pro-poor than would agricultural export-led growth. However, an agricultural growth rate of 9 percent, rather than 6 percent, would be needed to achieve MDG 1. Even to achieve a 6 percent growth rate, the government would need to increase its agricultural spending significantly, so to achieve 9 percent growth, the share of spending for agriculture would need to be 10.0–34.5 percent by 2015, depending on the efficiency of such spending. The study also highlighted the vulnerability of certain groups

such as female-headed rural households, the landless, and households with less than 0.3 hectare of land, who are less likely to benefit from any growth unless specifically targeted by policy measures.

3.3 Improve Implementation

AN IMPORTANT FIRST STEP ON THE POLICY FRONT has been the alignment and harmonization of national and sector strategies with the targets and goals of CAADP and the MDGs. Although this step focuses the attention of governments and donors on specific results, it is not enough in itself to ensure those results. The more difficult second step is the enactment and implementation of policy reforms that affect the institutions and processes of the agricultural sector. The capacity to prioritize policies and investments, allocate and utilize resources, implement strategies, and create an enabling environment for growth requires adequate institutions and good governance. Unfortunately, these are weak in most SSA countries due to human and physical capacity deficits. To be comprehensive, capacity development for improving the economic governance and efficiency of existing institutions must consider both supply- and demand-side limitations.¹

On the supply side, public service provision can be enhanced by building administrative capacity via civil service reforms, improving government procurement procedures, prioritizing public spending, and improving accounting and auditing systems to root out corruption. On the demand side, interventions should include increasing governments' accountability to citizens and strengthening other checks and balances on those wielding political power. As part of this effort, governments must empower the participation of citizens and the beneficiaries of publicly funded services, such as through greater decentralization and/or devolution of power to local communities if need be.² Additionally, identifying and focusing on those governance aspects that have been shown to be most critical in affecting development outcomes in each country, such as within public institutions and policy formulation processes at different levels of decision making, can go a long way to sustaining growth and development.

These supply- and demand-side considerations emphasize how one reinforces the other. For example, good institutions are bound to flourish when an economic envi-

¹ The following discussion on the supply and demand limitations for improving economic governance was borrowed from an IFPRI draft mimeo entitled "Investing in African Agriculture to Halve Poverty by 2015: What Do Country Level Differences Tell Us?" and contributed by Regina Birner.

² As a caveat, it is important to keep in mind that decentralization and devolution do not necessarily guarantee pro-poor development outcomes. Power may still be captured by a small group of local elites who do not share the interests of the poor. Therefore, there are likely to be different appropriate levels of decentralization.

ronment is not conducive to corruption and when there are appropriate checks and balances on political power (IMF, 2005). Similarly, without strong institutions in place, the absorptive capacity of countries to effectively and efficiently utilize and allocate increased aid resources will be limited. Under these circumstances, aid can potentially reach a saturation point beyond which additional aid results in negative outcomes. For example, it can potentially undermine the quality of the institutions that countries are trying to reform by encouraging rent seeking and corruption (Knack, 1999). However, if increased aid is also directed at improving the institutional and civil service environment, such as through improved accountability at all levels of government, the potential for such negative outcomes can be reduced.

Donors can also assist through improved donor coordination and coherence with domestic development priorities and interventions (policies and investments). With recipient countries retaining local ownership, aid can become more effective (Roland-Holst and Tarp, 2003). The recent Paris Declaration, aimed at achieving greater coordination and alignment among donors to assist with country-owned strategies and processes, is a move in this direction. When scaling up investments, well-coordinated donor investments can assist recipient countries with their sector-specific strategies, especially in areas that have traditionally been overlooked, such as public infrastructure goods (roads, energy, and communications). As the absorptive capacity of recipient countries improves, donors should also consider employing more innovative aid delivery mechanisms, such as setting up trust funds for countries to draw from, to ensure continued aid effectiveness (de Renzio, 2005).

The push for institutional and governance reforms in SSA has imposed challenges for many countries accustomed to “neopatrimonial” and dual governance structures inherited from both colonial and indigenous political systems. While African governments are often forced to respond to donor pressure to reconfigure public institutions in various ways that are responsive and accountable to citizens at the national or subnational level, this should not result in replacing well-established and working institutions

at the local or community level. What is more important to consider is whether any reconfiguration of public institutions, investments, and service provisions is having the desirable effect, that is, raising smallholder productivity and employment, expanding access to input and output markets, and ultimately reducing rural poverty and hunger. This concern means finding the right kinds of arrangements that not only work but are relevant to the local social and political-economy settings of decision making, as well as realistic given public sector budgetary constraints.

Finally, because the past lessons and experiences of countries vary widely, as do their resource bases and stages of development, an appropriate sequencing and scope for policy and institutional reforms will be unique to each country as well. What is far more critical for success is instilling local ownership in the design and implementation of reform efforts, even if it results in unorthodox and innovative types of reforms (Rodrick, 1997). Such innovative reform and local ownership has occurred in India and China, for example. Determining what kinds of institutional and policy reforms are critical in SSA will require a careful diagnosis of growth potential and constraints within each country.

3.4 Leverage Regional Potential and Spillovers

GREATER REGIONAL ECONOMIC INTEGRATION AND POLITICAL COORDINATION could significantly increase the potential for growth in Africa. A regional perspective can help countries solve shared problems and gain from economies of scale and growth spillovers. Emerging challenges to economic and agricultural growth such as global warming, water scarcity, rising energy costs, and avian influenza can be addressed more effectively through cooperation. As regionalization opens the door for many more countries to benefit, the ability to take full advantage of this potential will remain limited as long as political and economic instability exists in some countries (Radelet, 1997). Conflict can cause negative regional spillovers if the displacement of people across borders drains public resources in neighboring countries when they are forced to deal with the influx of refugees.

Given the high initial costs of investments in infrastructure and basic R&D, and the fact that many African countries are small and have limited financial resources and human capital, there is great potential for generating positive growth dynamics through greater regional cooperation. Growth spillovers can be quite significant. For example, Easterly and Levine (1997) estimated that a 1 percent increase in growth in one country can lead to as much as a 0.5 percent increase in neighboring countries' growth. Benefits are likely to be even larger when communication and transportation costs are low between neighboring countries. One case study found that a 50 percent increase in the productivity of the transportation sector in Mozambique could have the indirect effect of increasing the rate of economic growth in neighboring Malawi by as much as 1.8 percent (Diao and Yanoma, 2003). Potential spillovers can also be greater when countries share similar development challenges (e.g., agroclimatic and natural resource constraints) and experiences (social, political, and economic). In such settings, important economic gains can result from transferring knowledge and technologies between comparable agro-ecological zones in different countries. Abdulai, Diao, and Johnson (2005) have shown that the unique characteristics of agricultural R&D,

specifically the economies of scale inherent in many R&D investments, can lead to significant regional spillovers.

Given the diversity among and within regions, analysis of the available strategic options will be needed to maximize regional potential. The following case studies identify the opportunities available to each region.

SOUTHERN AFRICA

With the exception of Zimbabwe, growth in Southern Africa in recent years has been positive overall, although some countries are performing much better than others. Strong growth rates have been seen in Angola, Mozambique, and Tanzania. South Africa's growth rate has been hovering around 3–4 percent, but its huge share of regional GDP (around 70 percent) means that its economy is quite important as a driver of growth in the region. While the Southern Africa region has the highest per capita GDP in SSA, and the lowest agricultural share of GDP, it still has poverty rates that are comparable to those of the rest of SSA. Growth in countries that depend on mining, such as Botswana and Namibia, or oil, such as Angola, has not benefited the majority of the poor, as these sectors do not employ much of the population. A majority of the regional population lives in rural areas where agriculture is the main source of income. However, agricultural productivity has not improved, and the region has increased its food imports over the years, especially cereals. Livestock and roots and tubers have been more successful subsectors, although the supply has not kept up with the demand for meat products and milk. Despite greater attempts at regional integration through RECs such as SADC and COMESA, barriers to trade remain, especially poor transportation infrastructure, low productivity, and tariffs. For the lower-income countries in Southern Africa, the best opportunities to expand and benefit from regional trade lie in increasing productivity in the maize and livestock subsectors, given the high demand and potential for import substitution. Other trade possibilities include vegetables, oilseeds, and cotton (Nin Pratt and Diao, 2006).

WEST AFRICA

Recent growth trends in West Africa have seen great variation from country to country. Some countries, such as Ghana, Nigeria, and Senegal, have had consistently strong growth, while many others are recovering from or suffering from conflict and political instability, including Central African Republic, Chad, Côte d'Ivoire, Liberia, and Sierra Leone. Poverty rates remain high, and only one country, Ghana, is projected to reach MDG 1 by 2015. Outside the recovery growth, much of the growth comes from high prices for the predominant exports of the region: cocoa, cotton, and oil. Broad-based agricultural growth within the region would be pro-poor growth and would mitigate the dependence on global markets and help countries take advantage of regional trade potential. Agriculture is the primary income source for 70 percent of the population in West Africa, and it comprises about 30–40 percent of GDP. With low productivity and high demand for staple crops and livestock, most countries have become net food importers. However, increases in agricultural productivity would need to be accompanied by market and transportation development and would require additional spending on agriculture. Most West African countries are far from the goal of 10 percent agricultural spending, and those that do spend 10 percent already will require even more spending to sustain growth. Although the choice of subsectors in which to invest at the national level may depend on each country's agro-ecological and socioeconomic conditions, at the regional level, analysis suggests that the rice and livestock subsectors could play a significant role in regional growth and trade. Collaboration at the regional level in R&D for these subsectors could generate much higher returns and spillovers, but regional institutions such as the Economic Community of West African States (ECOWAS), the West African Economic and Monetary Union (UEMOA), and the West and Central African Council for Agricultural Research and Development (CORAF/WECARD) will need to be harmonized and strengthened to improve coordination and priority setting. In addition, these regional institutions could enhance their efficiency and relevance through a greater commitment to transparency and account-

ability, for example, by including producer groups such as the Network of Farmers' Organizations and Agricultural Producers of West Africa (ROPPA) and civil society organizations (IFPRI, 2006).

EASTERN AND CENTRAL AFRICA

Growth in Eastern and Central Africa (ECA) has also been uneven. Only Uganda has been achieving steady high growth and is also expected to reach MDG 1. Despite the commitments made to agriculture, little progress has been made in increasing agricultural productivity. In addition, food imports have grown considerably as poverty and hunger have increased across the region. Under a business-as-usual scenario, GDP growth is likely to remain low in the future, and poverty is expected to increase or decline only marginally in the region, except in Uganda. Trade liberalization and export-focused policies have not had the transformational effect that was hoped for, as the gains from cash cropping have accrued to a limited number of farmers. Cash crops should not be neglected, given their high value, but greater efforts to expand the production of and market access for staples and livestock domestically and regionally would not only improve growth but increase the number of poor benefiting from that growth. Within those subsectors, milk and cassava show great potential for growth, along with nontraditional crops such as oilseeds, fruits, and vegetables. As in the other regions, greater investment in R&D would have high rates of return and spillovers. However, investments should take into account the particular agro-ecological and climatic conditions, which can vary significantly within and among the ECA countries. For example, the priority crops in Burundi and Rwanda are bananas, potatoes, and sweet potatoes, while rice is more important in Madagascar. Within countries, areas with high agricultural potential, good market access, and high population density may be best for producing export commodities, while other areas might be better suited for growing cereals or livestock (Omamo et al., 2006).

4. Conclusion

There are clearly positive signs of sustained economic and agricultural growth appearing in many countries in SSA. In some of these countries, this growth is accompanied by reductions in poverty and hunger. African governments and their development partners are increasingly willing to commit to longer-term solutions to improve growth, reduce poverty, and increase food security. Agriculture has been a central focus of these commitments. It is too early to be certain whether the recent attention to the agricultural sector is paying off, but certain countries appear to be on a positive track.

Several areas of improvement should be considered to accelerate these positive trends. First, governments and development partners must honor their commitments and urgently expand investments in agriculture and rural development. In addition, broad-based agricultural sector growth should be encouraged to ensure that poverty and hunger are reduced. To improve the efficiency of any investments, implementation issues must also be addressed to reform the institutions and processes of the

agricultural sector. Finally, regional integration is critical, given its ability to generate positive spillovers, new market opportunities, and enhanced security.

The good news is that at high-level summits, leaders from African and development-partner countries have raised the level of dialogue on the importance of rural development and smallholder agriculture. If these commitments are followed through on, with policy shifts, a new phase of Africa's development through agriculture may be under way. If the dialogue is nothing but rhetoric, the promising trends may evaporate as they have in the past, and the necessary structural transformation of the economies and agricultural sectors in Africa will yet again be postponed.

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