

## **ReSAKSS Working Paper No. 31**

July 2010

# **Monitoring and Assessing Targets of the Comprehensive Africa Agriculture Development Programme (CAADP) and the First Millennium Development Goal (MDG) in Africa**

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**Regional Strategic Analysis and Knowledge  
Support System  
(ReSAKSS)**

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## **About ReSAKSS**

The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) is an Africa-wide network of regional nodes supporting the Common Market of Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC), in collaboration with the International Food Policy Research Institute (IFPRI) and the Africa-based centers of the Consultative Group on International Agricultural Research (CGIAR), to facilitate the implementation of the AU/NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP) and other regional agricultural development initiatives in Africa.

The ReSAKSS nodes offer high-quality analyses to improve policymaking, track progress, document success, and derive lessons for the implementation of the CAADP agenda. ReSAKSS is jointly funded by the United States Agency for International Development (USAID), the UK Department for International Development (DFID), and the Swedish International Development Cooperation Agency (SIDA). The nodes are implemented by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Institute of Tropical Agriculture (IITA), the International Livestock Research Institute (ILRI) and the International Water Management Institute (IWMI), in collaboration with regional and national partners.

## **About the Working Paper series**

The goal of the ReSAKSS Working Paper series is to provide timely access to preliminary research and data analysis results that relate directly to strengthening ongoing discussions and critical commentaries on the future direction of African agriculture and rural development. The series undergoes a standard peer review process involving at least one reviewer from within the ReSAKSS network of partners and at least one external reviewer. It is expected that most of the working papers eventually will be published in some other form and that their content may be revised further.

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## Acknowledgements

We are grateful to Melissa Lambert for helping us refine the materials for this report. We also thank Marcia MacNeil, Linden McBride, Maurice Taondyande, Stella Massawe, Manson Nwafor, and Fred Kalibwani for their excellent research support. We gratefully acknowledge the comments of the participants at the CAADP Monitoring and Evaluation Validation Workshop held in March 2010 in Johannesburg, South Africa. Finally, we thank Ousmane Badiane for his guidance, comments and suggestions.

Omilola, B.; Yade, M.; Karugia, J.; and Chilonda, P. 2010. Monitoring and Assessing Targets of the Comprehensive Africa Agriculture Development Programme and the First Millennium Development Goal (MDG) in Africa. ReSAKSS Working Paper # 31. International Food Policy Research Institute (IFPRI).



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## INTRODUCTION

Historically, agriculture has been the backbone of many economies in Africa. In many African countries, promoting growth in agriculture is the most effective way to reduce poverty and promote overall economic growth (Diao et al. 2007). So, the agricultural sector remains a very important segment of African economies. It feeds the population, creates national wealth, provides jobs and incomes, and contributes to the region's exports.

In the last twenty years of the last century, most African countries were subjected to Structural Adjustment Programs (SAP) initiated by the Bretton Woods Institutions. In the agricultural sector, these policies were poorly coordinated with those initiated at the regional level. The Bretton Woods policies were characterized by the liberalization of domestic markets, imports and exports and the removal of subsidies for agricultural inputs and extension services. The Bretton Woods agricultural policy tools were essentially directed toward making production financially profitable without providing the support necessary for achieving policy goals such as food security, rural employment, and integration into the regional market. However, the situation varied across regions and countries and agriculture products. Some zones and products benefited from sustained incentives put in place by the Bretton Woods approach and reaped significant gains in productivity.

Recent global developments have, in many ways, been positive for African agriculture. In 2008, the World Bank published the World Development Report on agriculture, which was widely received as recognition of the sector's important role in development for many countries. The G8 Summit, held in July 2009 in Italy, reiterated the importance of agriculture to development. The summit also reiterated the critical need to increase financial and technical support to global agriculture and food security amid emerging challenges, such as the global economic crisis. Leaders at the summit issued an official statement on global food insecurity and pledged to mobilize US\$20 billion<sup>1</sup> to tackle the issue in the next three years. This pledge has begun to become reality as foundations such as the Gates Foundation and countries such as the United States make food security the top priorities of their project portfolios.

Several African countries are currently implementing poverty reduction and growth strategies. These focus on macroeconomic stability and the pursuit of pro-poor policies and involve increased public spending on agriculture. Dozens of African countries have pledged to implement the Comprehensive Africa Agriculture Development Programme (CAADP) of the New Partnership for Africa's Development (NEPAD) and the African Union (AU). This African-led plan aims to stimulate agriculture on the continent to achieve the first Millennium Development Goal (MDG1) of halving poverty and hunger by 2015. To do so, countries must pursue average annual agriculture growth of 6 percent at the national level, allocate 10 percent of their budgets to the agricultural sector, and improve overall policy efficiency through peer review and accountability. CAADP's main goal is to help African countries achieve more economic growth through agriculture-led development, which reduces poverty, eliminates hunger and food insecurity, and improves the citizens' nutrition. It also enables the expansion of exports.

In order to advance CAADP implementation in different regions of Africa, several Regional Economic Communities (RECs) have launched inclusive political and policy dialogues. For instance, the Economic Community of West African States (ECOWAS) launched the Agricultural Policy of the West African States (ECOWAP) as a way to implement CAADP. The general

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<sup>1</sup> All dollars are U.S. dollars unless otherwise indicated.



objective of the ECOWAP, which was adopted in 2005 by the various heads of state, is to “contribute in a sustainable manner to satisfying the food needs of the population, ensure economic and social development and poverty reduction in member states as well as to address inequalities between territories, areas, and countries.”

This paper comprehensively monitors and assesses progress of CAADP targets and tracks corresponding progress in key poverty and hunger indicators in Africa. In this regard, the report provides information on the CAADP agenda and the first Millennium Development Goal (MDG) in Africa by reviewing the progress of implementation and performance against a number of key benchmarks. The report is divided into seven sections. Following Section One, Section Two presents information on the CAADP implementation process and status in different African countries and regions. Section Three tracks the performance and trends of African countries with regard to their public spending commitments. The section also reviews resource allocation to the agricultural sector by African governments and their development partners and determines whether these amounts have been sufficient. Section Four focuses on the agricultural and economic performance indicators, including growth and agricultural productivity. Section Five reviews agricultural trade performance in Africa. Section Six reviews progress made at the regional and national levels toward the poverty reduction and hunger alleviation targets of the first Millennium Development Goal. Section Seven examines the links between agricultural investment, growth, and poverty in selected African countries. Section Eight concludes with policy recommendations.

## CAADP IMPLEMENTATION PROCESS

The Comprehensive Africa Agriculture Development Program (CAADP) is an Africa-wide framework for revitalizing agriculture and rural development. CAADP was formulated in 2003 under the auspices of the African Union Commission (AUC) and the New Partnership for Africa’s Development (NEPAD). It is based on the recognition that agriculture-led growth provides the best pathway for stimulating broad-based economic growth, increasing exports, eliminating hunger, and reducing poverty in Africa. The framework also aims to harmonize investment policies articulated by countries with those of the donor community. The difference between CAADP and past efforts at promoting agricultural development in Africa is that CAADP was conceived and is led by Africans; no previous initiative has enjoyed the level of political endorsement and continent-wide focus achieved by CAADP.<sup>2</sup>

CAADP’s importance can also be measured by its high-level endorsements from African and foreign government officials. For example, in September 2009, U.S. Secretary of State Hillary Rodham Clinton endorsed CAADP as a model for promoting agricultural development. To quote the U.K.-based Institute of Development Studies: “CAADP does not tackle many new issues, but provides the first comprehensive effort to address them as an integrated process. This framework, with common objectives and targets, should enable lessons to be shared and successes to be scaled up more effectively than before.” CAADP’s coordinating role, the institute went on to say, “will help to ensure coherence and coordinated action on important regional policies such as trade, food safety standards and the control of trans-boundary pests and diseases.”

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<sup>2</sup> Borrowed from CAADP Brochure, “Introducing CAADP: Partnership in Support of CAADP.”

## Background of CAADP

In 2003 at an African Union Summit held in Maputo, Mozambique, CAADP was formally endorsed by African heads of state, thereby signifying Africa's commitment to taking charge of its development agenda. The CAADP framework promotes inclusiveness by engaging a broad spectrum of participants from both public and private sectors, including farmers' organizations and fosters public-private partnerships. Moreover, the framework embodies core NEPAD principles of improved governance through accountability, transparency, peer review, dialogue, and benchmarking, all of which are central to improving planning and implementation as well as monitoring and evaluation (M&E) of sector performance. CAADP is not a 'one size fits all' plan but rather a strategic agenda that lays out a wide range of overarching actions, principals, and targets along which countries and sub-regions can align their individual agricultural development and poverty reduction strategies to fit local realities.

In addition to countries' commitment to allocate 10 percent of their national budgets to agriculture, other important CAADP guiding principles and targets include: i) adopting agriculture-led growth as the main strategy for achieving the first Millennium Development Goal of halving the proportion of people living on less than a dollar a day and the proportion of hungry people by 2015; ii) accelerating agricultural productivity growth to achieve a 6 percent annual agricultural growth rate at the national level; and iii) exploiting regional complementarities and spillovers and enhancing cooperation to boost exports and growth. To help realize these targets and principles, a set of specific actions and investment areas were identified under four mutually reinforcing Pillar frameworks. These Pillars represent interventions needed to invigorate agricultural growth and address challenges faced by the sector. They are:

- Pillar 1: Extending the area under sustainable land management and reliable water control systems;
- Pillar 2: Improving rural infrastructure and trade-related capacities for market access;
- Pillar 3: Increasing food supply, reducing hunger, and improving responses to food emergency crises; and
- Pillar 4: Improving agriculture research, technology dissemination and adoption.

Furthermore, three requirements that cut across the four Pillars and need to be addressed when implementing CAADP were identified. They include the need for: increasing human and institutional capacity in the agricultural sector; providing information and knowledge systems to guide the implementation process; and aligning the Poverty Reduction Strategy Paper (PRSP) process with the CAADP process and its goals and targets.

Under the leadership of NEPAD, AUC, and two leading Regional Economic Communities (RECs): the Common Market for Eastern and Southern Africa (COMESA) and the Economic Community of West African States (ECOWAS), more than two dozen countries have been actively refining sector policies, developing programs, and establishing the necessary partnerships to successfully implement CAADP. The NEPAD Secretariat based in Midrand, South Africa, provides overall facilitation of the implementation process, while COMESA and ECOWAS provide coordination support in their respective regions. Actual field level implementation is directed by individual countries and led by their government representatives and key stakeholders. As facilitator, the NEPAD Secretariat solicits political buy-in at the highest level and mobilizes the financial resources and technical expertise—at the international, regional, and national levels—needed to advance the implementation process. Following the endorsement of CAADP by African leaders, the Secretariat working with RECs, country governments, G8 partners and other stakeholders (farmers' organizations and the agribusiness

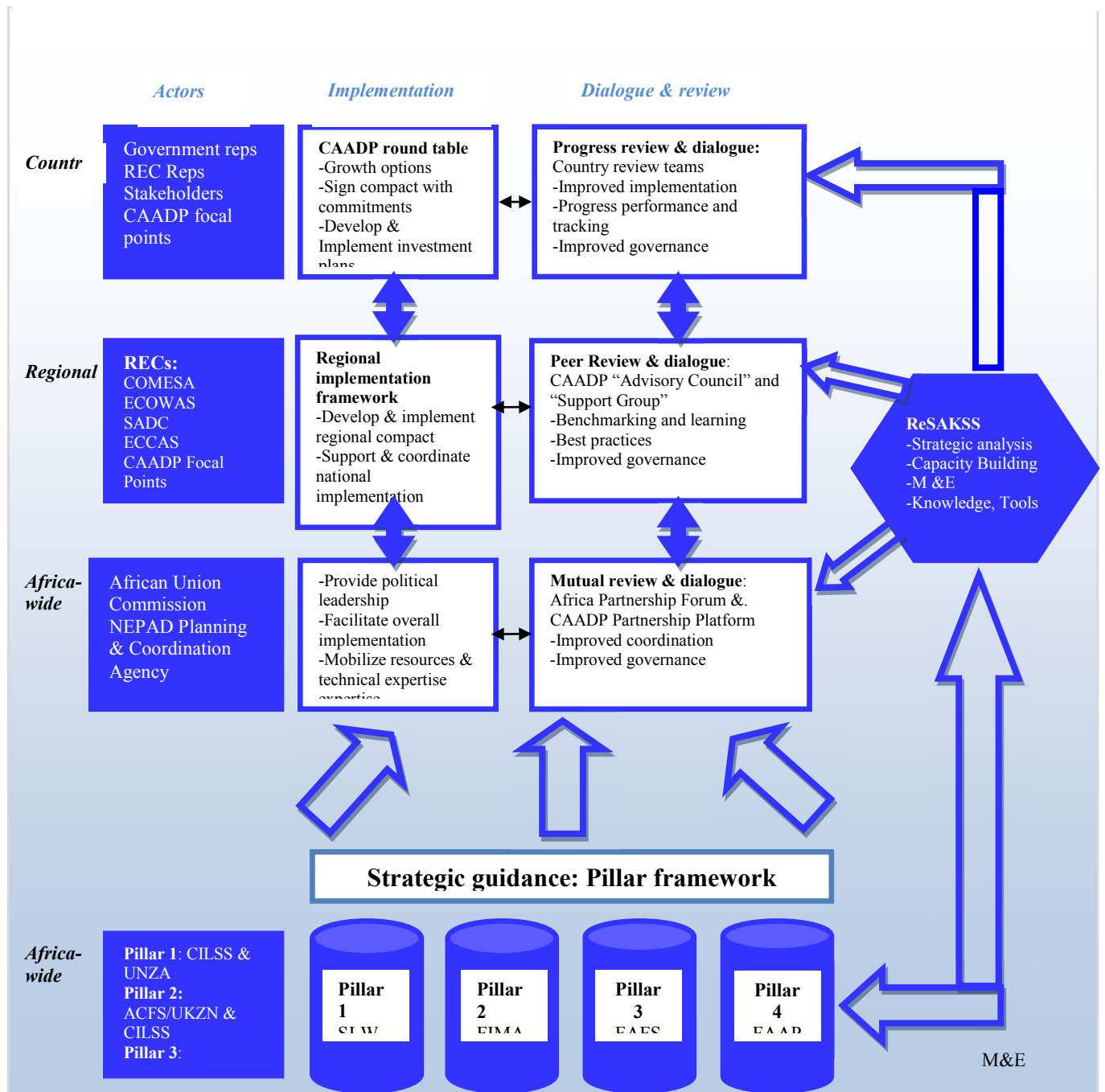
sector) held various planning meetings to review lessons and successes in agriculture inside and outside of Africa. The Secretariat developed medium and long term action plans and principles to guide the implementation of CAADP. These early meetings and activities helped to raise the credibility and profile of CAADP among key stakeholders. In addition, they helped to quell skepticism over whether CAADP was a continental top-down strategy and solidified its reputation as a framework for improved planning and implementation at the regional and country levels. The engagement of a multitude of stakeholders allowed RECs and their member countries to take ownership of the process very early on.

#### Implementation of the CAADP Agenda

##### *Key Actors and Processes*

CAADP implementation takes place on several fronts—Africa-wide (continental), regional, and country levels—and involves various actors: Stakeholders, donors, national governments, RECs, and the private sector including farmers and civil society organizations (CSOs) (Figure 1).

**Figure 1. The CAADP process and key actors**



CAADP: Comprehensive Africa Agriculture Development Program; NEPAD: New Partnership for Africa's Development; RECs: Regional Economic Communities; M&E: Monitoring and Evaluation; CMAWCA: Conference of Ministers of Agriculture of West and Central Africa; CILSS: Permanent Inter-State Committee for Drought Control in the Sahel; ACFS/UKZN: African Center for Food Security at the University of KwaZulu Natal; UNZA: University of Zambia; FARA: Forum for Agricultural Research in Africa; SLWM: Sustainable Land and Water Management; FIMA: Framework for the Improvement of Rural Infrastructure and Trade-Related Capacities for Market Access; FAFS: Framework for African Food Security; FAAP: Framework for African Agricultural Productivity; ECOWAS: Economic Community of West African States; COMESA: Common Market for East and Southern Africa (COMESA); SADC: Southern African Development Community; ECCAS: Economic Community of Central African States; and ReSAKSS: Regional Strategic Analysis and Knowledge Support System.

## Supporting evidence and outcome-based policy planning and implementation in Africa

In 2006, the International Food Policy Research Institute (IFPRI) launched a capacity- building and technical assistance project to support the NEPAD Secretariat and leading African regional economic communities (RECs). The project aims to help accelerate evidence- and outcome-based planning and implementation of the CAADP agenda at the country and regional levels. The support focused on four key areas:

1. Systematic evaluation of national agricultural development policies and programs to examine the extent to which countries are on track to meet the aforementioned targets;
2. Strategic analysis of long-term growth and investment options for poverty reduction to guide future program planning and implementation. This was done to enable individual countries to meet these targets;
3. Identification of strategic challenges and opportunities under CAADP Pillar 2 and Pillar 3, in collaboration with CMAWCA and UKZN, respectively. Identification of best practices also took place to address the challenges and opportunities countries face in designing and implementing agricultural policies and investment programs; and
4. Establishment and operation, in collaboration with ILRI, ICRISAT, IWMI, and IITA, of Regional Strategic Analysis and Knowledge Support Systems (ReSAKSS) as well as provision of policy relevant analyses, data, and tools. This was done to facilitate CAADP peer review, benchmarking, and mutual learning.

The project was funded by the Department for International Development (DFID), Swedish International Development Agency (SIDA), and the United States Agency for International Development (USAID). According to an external review commissioned by the donors in August 2009, the greatest success IFPRI achieved was its contribution to raising the profile of African agriculture, by its effective engagement of stakeholders at all levels. Evidence of the improved image of Africa's agriculture included improved funding for agriculture at the country level. It also included the establishment of new, special funds to finance agriculture such as the Multi-Donor Trust Fund at the World Bank.

Major outputs of IFPRI's support include:

1. Production of country background papers and brochures and briefs. These examine agricultural growth and investment trends and options for poverty reduction as well as required actions to turn these options into reality. The brochures and briefs have been used in 16 country CAADP Roundtable meetings at which CAADP Compacts were signed by national governments and local and international development partners. The countries include: Benin, Burundi, Cape Verde, Ethiopia, Ghana, Niger, Nigeria, Mali, Senegal, the Gambia, Liberia, Rwanda, Sierra Leone, and Togo. In particular, the brochures deal with: (i) the review of ongoing agricultural development efforts; (ii) past performance and outlook for agricultural growth and poverty reduction; (iii) strategic options and sources for growth and poverty reduction; (iv) long term funding needs for growth and poverty reduction; and (v) strategic analysis and knowledge support systems to guide CAADP implementation at the national level.

2. Establishment of ReSAKSS nodes in East, West, and Southern Africa and the operation of an interactive website (<http://www.resakss.org/>) to support CAADP peer review, mutual learning, and benchmarking across countries. The website allows users to track national and regional performance across two dozen indicators including progress towards meeting MDG1 and CAADP growth and budget targets. The website contains up-to-date information on each country's status in the CAADP implementation process as well as ReSAKSS publications covering agricultural growth and investment trends and options for different African countries and regions.
3. Development of a Monitoring and Evaluation (M&E) framework by ReSAKSS nodes in collaboration with IFPRI, to monitor CAADP implementation and assess impact and returns to CAADP investments. The framework was officially validated by AUC/NEPAD and other critical stakeholders in early March 2010 and will be fully operationalized during a planned second phase of the project.
4. Elaboration of CAADP Pillars 2 and 3 framework documents, brochures, and implementation guides for countries. The Pillar framework documents and brochures are guiding countries in the design and implementation of policies and investment programs.
5. Development of high quality databases, advanced policy modeling tools, and detailed baselines which are now available to policy makers as well as researchers and analysts in various countries that have launched the CAADP process.

#### The CAADP Roundtable Process

At the national level, CAADP implementation involves ensuring that agricultural and budgetary policies and resources as well as development assistance are aligned with CAADP objectives. It covers

1. taking stock of national efforts and policies (including the PRSP process) in the agricultural sector to identify gaps and alignment needed to achieve the CAADP objectives;
2. ii) working with national, regional, and international centers of expertise to examine agricultural development trends and strategic options to further boost agricultural growth, raise investments in the sector, and accelerate the pace of poverty reduction;
3. iii) organizing country Roundtable meetings to reach agreement on priorities, commitments, and partnerships and alliances to scale up implementation and maximize chances for successful outcomes;
4. iv) developing country CAADP Compacts—frameworks outlining policies, actions and investments needed to successfully implement CAADP; and
5. v) establishing country SAKSS programs to provide policy relevant knowledge, data and tools to inform the implementation process as well as its monitoring and evaluation.

The Roundtable meeting constitutes a critical step in the implementation of the CAADP agenda. It provides the opportunity for the leadership of the AU, NEPAD, RECs, national governments at the ministerial level, and key regional and national stakeholders such as the private sector and farmer organizations to: (i) take stock of ongoing agricultural investments, policies, and institutional capacities in a given country and (ii) plan for their alignment so as to meet the growth, budgetary, and poverty reduction targets of CAADP. The Roundtable creates the necessary foundation for effective collective action in every country.

A compact outlines the commitments in terms of sector policy and strategy, budgetary allocations, investment priorities, and development assistance that are needed to successfully scale up implementation of CAADP at the national level. It is signed by all relevant stakeholders, from the AUC and NEPAD, via RECs to national governments and other stakeholder groups,

including the private sector, farmer organizations, and civil society organizations. The ultimate purpose of the compacts is to:

- i. increase the effectiveness of planning and execution of government efforts as well as the effectiveness of the external assistance delivered to the agricultural sector and thereby
- ii. provide a solid framework upon which government actions, external assistance, and private sector operations can be scaled up to help meet the short- and long-term investment needs in the sector.

As a result, the CAADP process is expected to improve coordination mechanisms among partners around agreed-upon agricultural goals. Moreover, inclusiveness and transparency are also reinforced through the peer review mechanisms underlined in the compact.

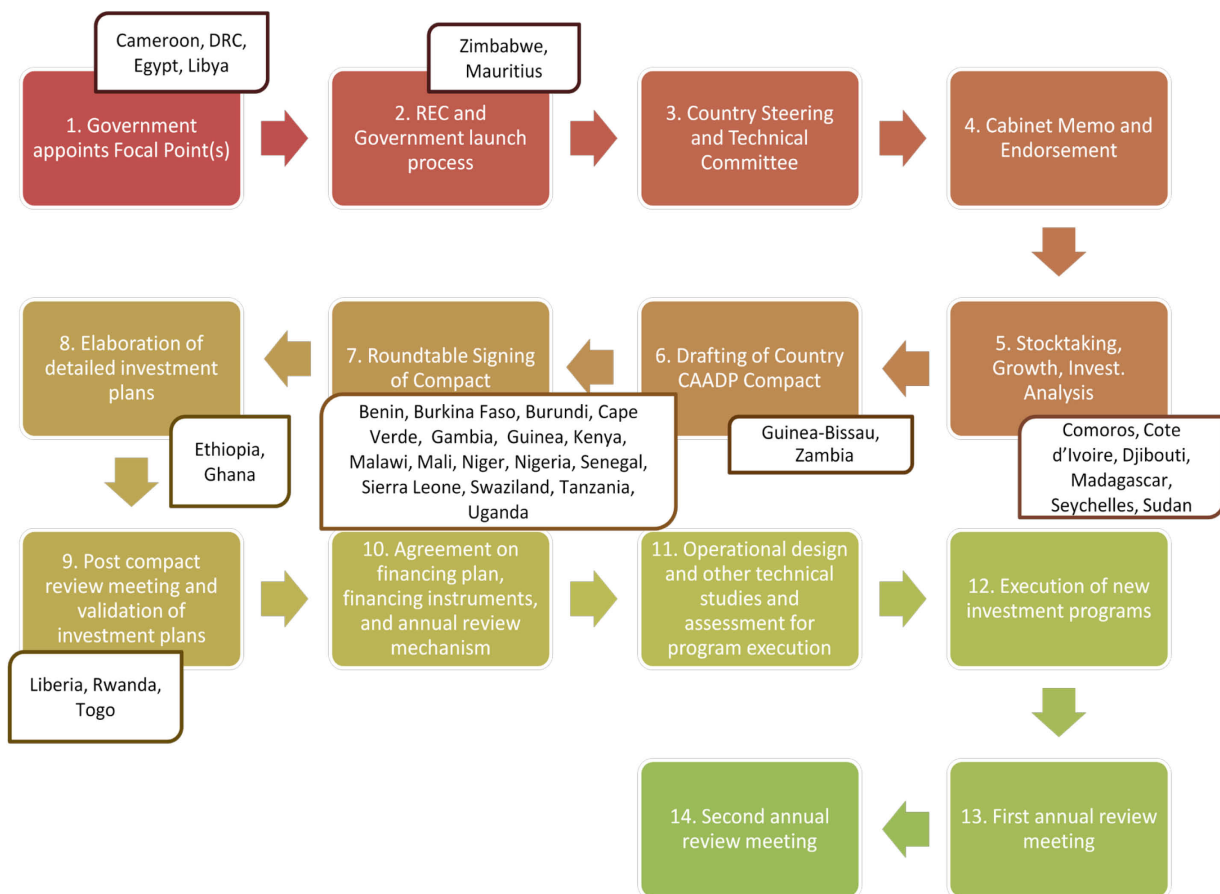
For each country, the end of the Roundtable process signifies the beginning of the execution of a national CAADP Compact. At this point, the country synthesizes the key investment and strategic areas outlined in the Compact and estimates their costs to further elaborate the investments necessary to carry out the targeted interventions. These investment plans are outlined during stakeholder discussion, and then validated at a post-Compact meeting. Countries are also expected to establish SAKSS nodes or information technology (IT)-based platforms and related forums to facilitate well-informed and inclusive dialogue and review as part of the broader implementation process of CAADP.

#### Progress toward the CAADP Roundtables and Compact signing

Since CAADP's ratification in 2003, numerous countries have begun the implementation process and 21 have signed their CAADP Compacts and are now moving on to the post-compact stages (Figure 2). The 21 countries are Benin, Burkina Faso, Burundi, Cape Verde, Ethiopia, The Gambia, Ghana, Guinea, Kenya, Liberia, Malawi, Mali, Niger, Nigeria, Rwanda, Sierra Leone, Senegal, Swaziland, Tanzania, Togo, and Uganda. Of these 21, 12 reached this stage in 2009. Three countries—Liberia, Rwanda, and Togo—have held their post-Compact meetings.

Figure 2. The Country CAADP Process and Country Status, July 2010.

## The National CAADP Roundtable Process & Country Status



Source: ReSAKSS 2010 and <http://www.nepad.caadp.net> 2009.

### Regional and country-level CAADP support and progress

#### Common Market of Eastern and Southern Africa (COMESA)

The COMESA region has made progress toward CAADP implementation, with many countries holding Roundtables and signing their CAADP Compacts. Many other countries recently launched the process and are making progress toward the Roundtable. COMESA is in the process of preparing its regional compact, which is expected to be completed in 2010 and presented to COMESA ministers of agriculture. The regional compact aims to add value to national compact programs and advance regional economic integration. It will be shared and supported by regional institutions and partners.

#### Angola

Angola has not launched the CAADP process.



### *Burundi*

Burundi held its Roundtable and signed the CAADP Compact on August 24–25, 2009.<sup>3</sup>

### *Comoros*

Comoros has appointed a focal point and key stakeholders have made a commitment to adopt the CAADP agenda. The country has also increased public awareness of CAADP and is taking stock and analyzing growth options.

### *Democratic Republic of Congo (DRC)*

The DRC has appointed a focal point and key stakeholders are discussing the CAADP agenda.

### *Djibouti*

Djibouti has appointed a focal point and key stakeholders have made a commitment to adopt the CAADP agenda. The country has also increased public awareness of CAADP and is currently taking stock and analyzing growth options.

### *Egypt*

Egypt has appointed a focal point.

### *Ethiopia*

Ethiopia held its Roundtable and signed the CAADP Compact on September 27-28, 2009. The stocktaking and analytical work was completed in early 2009 and validated at a workshop prior to the Roundtable. As a follow-up to the CAADP Compact, Ethiopia is preparing the Policy and Investment Framework (PIF) and it should be completed in 2010.

### *Kenya*

Kenya held its Roundtable on October 13-14, 2009 and signed the CAADP Compact on July 24, 2010. The country has also completed its growth options analysis, which was published as an IFPRI working paper in 2009.

### *Libya*

Libya has not launched the CAADP process.

### *Madagascar*

Madagascar is taking stock and analyzing growth options.

### *Malawi*

Malawi held its Roundtable and signed the CAADP compact on April 19, 2010.

### *Mauritius*

Mauritius is still in the early stages of the CAADP process. It has appointed a focal point and garnered support for the CAADP agenda from key stakeholders.

### *Rwanda*

Rwanda held its Roundtable and signed the CAADP Compact in March, 2007. The country then held its post-Compact review meeting (in December 2009), which began the specification and validation of the investment plans. Rwanda's long- and medium-term strategies—the Vision

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<sup>3</sup> Burundi's signed compact: <http://www.resakss.org/index.php?pdf=42900>.

2020 and the Economic Development and Poverty Reduction Strategy (EDPRS)—acknowledge the important role agriculture plays in development and thus promote it as the building block of the national economy. To guide the implementation of the CAADP principles, the Strategic Plan for the Transformation of Agriculture (PSTA), for which an investment plan has been developed, is the medium term strategy for the sector. In addition, since the Compact, Rwanda became one of the first five countries to complete the Africa Joint Peer Review Mechanism (APRM) and undertook steps to address weaknesses uncovered in the country's Public Expenditure and Financial Accountability (PEFA) assessment. A sector-wide Monitoring & Evaluation Management Information System (M&E MIS) has been developed and is already being applied to all agencies and projects within the agriculture sector. A country SAKSS coordinator has also been appointed to follow up the country's post-compact phase and Country Investment Plan (CIP).

### *Seychelles*

Seychelles is currently taking stock and analyzing its growth options. The program was fully launched in October 2007, but it wasn't until the first quarter of 2009 that all the national consultants were on board. During the stocktaking analysis work, the team realized that Seychelles did not have a comprehensive policy on food and nutrition. In December, 2009, the country began working with the lead technical agency for Pillar 3, the University of KwaZulu Natal - African Centre for Food Security, to develop such a policy.

### *Sudan*

Sudan is currently still taking stock of national efforts and priorities and analyzing growth options.

### *Swaziland*

Swaziland held its Roundtable and signed the CAADP Compact on March 3-4, 2010.

### *Uganda*

Uganda held its Roundtable and signed the CAADP Compact on March 30-31, 2010.

### *Zambia*

Zambia is currently preparing for its Roundtable and the signing of its CAADP Compact. The country held a validation workshop of its stocktaking and analytical work, but needs to review the national consensus on priority drivers of growth and the required levels of investment.

### *Zimbabwe*

Zimbabwe is in the early stages of the process. The country has appointed a focal point.

Southern African Development Community (SADC)\*

\*Most countries shown in COMESA section above.

### *Botswana*

Botswana has not yet launched the CAADP process.

### *Lesotho*

Lesotho is still in the early stages of the CAADP process and is working to appoint a focal point.

### *Mozambique*

Mozambique is still in the early stages of the CAADP process and is working to appoint a focal point.

### *Namibia*

Namibia is still in the early stages of the CAADP process and is working to appoint a focal point.

### *South Africa*

South Africa has not yet launched the CAADP process.

### *Tanzania*

Tanzania held its Roundtable and signed the CAADP Compact on July 6-8, 2010.

### Economic Community of West African States (ECOWAS)

The Economic Community of West African States (ECOWAS) is mandated to support and coordinate implementation of CAADP. To this end, ECOWAS and the NEPAD Secretariat developed a joint ECOWAP/CAADP action plan for 2005 through 2010 to develop the agricultural sector.

In this context, the ECOWAS Commission helped to formulate quality programs and foster dialogue among actors in each country. It also helped to organize national roundtables for the adoption of the proposals. As mentioned previously, this is achieved by the signing of CAADP Compacts, which are a mutual commitment between the national government and the various national, regional, and international agencies and organizations aimed at achieving the CAADP goals. This stage was reached by 12 of the 15 ECOWAS countries between July 2009 and April 2010: Benin, Cape Verde, the Gambia, Ghana, Guinea, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.

At the regional level, the ECOWAS commission organized the International Conference on Financing Regional Agricultural Policy (ECOWAP/CAADP) in West Africa in November 2009. Three mobilizing and federating regional programs “aimed at providing solutions to the main obstacles to agricultural growth by simultaneously dealing with the production objectives, the trade objectives, and the environment in the agricultural sector and the objectives relating to access to food” were adopted.<sup>4</sup>

During the same period, the ECOWAS Commission for Agriculture, Environment and Water Resources (CAERE) organized a meeting in Lomé, Togo aimed at implementing the conclusions of the Abuja International Conference. The ECOWAS Commission distributed its operation plan as well as a mechanism for building dialogue among all stakeholders. The mechanism also was meant to enhance the monitoring and evaluation of the ECOWAP/CAADP process at national and regional levels.

Subsequently, a Ministerial Technical Committee Meeting on Agriculture, Environment and Water Resources of the ECOWAS Commission was held on April 2, 2010 in Cotonou, Republic of Benin, in order to adopt a common approach to developing agricultural investment plans within the framework of the NAIPs and RAIPs adopted at national and regional roundtables.

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4 Cf. “Presentation of the mobilizing and federating programs” presented at the ECOWAS International Conference in November 2009 in Abuja.

The region also signed a regional CAADP Compact on November 11 and 12, 2009, which laid out the past achievements and future responsibilities of key players who shape the region's agricultural policy.

### *Benin*

Benin held its Roundtable and signed the CAADP Compact on October 15 and 16, 2009.<sup>5</sup> The stocktaking and growth options exercises were also completed in 2009, and have been published in French in the form of four briefs and five brochures.<sup>6</sup>

### *Burkina Faso*

Burkina Faso held its Roundtable and signed the CAADP Compact on July 22, 2010. The country's stocktaking growth options analysis findings have been published in French as seven briefs and five brochures.

### *Cameroon*

The government of Cameroon has appointed a focal point for CAADP.

### *Cape Verde*

Cape Verde held its Roundtable and signed the CAADP Compact on December 10 and 11, 2009.<sup>7</sup> The country's stocktaking and growth options analysis findings have been published in French as five briefs and five brochures.

### *Côte d'Ivoire*

Côte d'Ivoire is currently preparing for its Roundtable. It is almost finished taking stock and analyzing growth options.

### *The Gambia*

The Gambia held its Roundtable and signed its compact on October 27 and 28, 2009. The country has also completed its stocktaking exercises and defined its growth options. The Gambia has also published several briefs and brochures which review past agricultural policies and performance and highlight prospective outcomes. The brochures also outlined strategic options for combating hunger and poverty and improving food security along with investment options to do so. The briefs focus more on the activities associated with the CAADP Pillars such as the improvement of water management and management of other shared resources. They also discuss (1) the development of agricultural chains and market promotion, (2) the prevention and management of food crises and other natural disasters, 3) sustainable farm management and 4) the building of institutional capacity for program implementation.

### *Ghana*

Ghana held its Roundtable and signed its CAADP Compact on October 27 and 28, 2009.<sup>8</sup> The Compact specifies key commitments for the agriculture sector from government and donors based on the country's Food and Agriculture Sector Development Policy (FASDEP).<sup>9</sup> The country's stocktaking analysis and growth options have been finalized and much of the analysis has been published as four briefs and four brochures. These results were used as inputs for the

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<sup>5</sup> Benin's signed compact (in French) is at <http://resakss.files.wordpress.com/2010/03/pacte-ecowap-benin.pdf>.

<sup>6</sup> All country briefs and brochures are available for download on the ReSAKSS website <http://www.resakss.org> under *Publications>CAADP Implementation Documents*.

<sup>7</sup> Cape Verde's signed compact (in Portuguese) is at : <http://www.resakss.org/index.php?pdf=42917>.

<sup>8</sup> Ghana's signed compact: <http://www.resakss.org/index.php?pdf=42918>.

<sup>9</sup> From "CAADP Roundtable Process: Summary of Progress on CAADP Roundtables and Implementation". NEPAD, unpublished. January 2010.

country's six-year National Agriculture Investment Plan (NAIP). Together the FASDEP and NAIP provide a framework to guide investments and interventions in the agriculture sector. The FASDEP and NAIP also provide details for implementing specific policies. Since the Compact's signing, the government and stakeholders have started to establish a team to oversee the nationwide implementation of the priority actions laid out in the FASDEP and NAIP.

### *Guinea*

Guinea held its Roundtable and signed its CAADP Compact on April 6 and 7, 2010. The country has completed its stocktaking analysis, which resulted in the publication of five briefs and five brochures.

### *Guinea Bissau*

Guinea Bissau is currently preparing for its Roundtable, although a date has not yet been set. The country is also finalizing its stocktaking analysis and growth options.

### *Liberia*

Liberia held its Roundtable and signed its CAADP Compact on October 5 and 6, 2009.<sup>10</sup> The country's compact established "priority drivers" of growth and investment based upon the stocktaking exercises and growth options analysis. These options and Pillar-specific investment areas are highlighted in the country's five brochures and four briefs. The country has already established an initial set of core investment areas, which will soon be delegated at an upcoming meeting with donors.

### *Mali*

Mali held its Roundtable and signed its CAADP Compact on October 12 and 13, 2009.<sup>11</sup> The country has completed its stocktaking analysis, which resulted in publication of six briefs and five brochures.

### *Niger*

Niger held its Roundtable and signed its CAADP Compact on September 29 and 30, 2009.<sup>12</sup> The country has completed its stocktaking analysis, which resulted in publication of three briefs and five brochures.

### *Nigeria*

Nigeria held its Roundtable and signed its CAADP Compact on October 12 and 13, 2009.<sup>13</sup> The country has finalized its growth options analysis.

### *Senegal*

Senegal held its Roundtable and signed its CAADP Compact on February 9 and 10, 2010. The country has finished its stocktaking and growth options analyses. Strategic options and Pillar priority areas have been published as seven briefs and five brochures.

### *Sierra Leone*

Sierra Leone held its Roundtable and signed its CAADP Compact on September 17 and 18, 2009.<sup>14</sup> The country has identified priority areas of investment and published five brochures and

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<sup>10</sup> Liberia's signed compact: <http://www.resakss.org/index.php?pdf=42904>.

<sup>11</sup> Mali's signed compact: <http://www.resakss.org/index.php?pdf=42919>.

<sup>12</sup> Niger's signed compact: <http://www.resakss.org/index.php?pdf=42903>.

<sup>13</sup> Nigeria's signed compact: <http://www.resakss.org/index.php?pdf=42905>.

four briefs. These priority investment programs will be reviewed by stakeholders and then presented to the cabinet for endorsement.

### *Togo*

Togo held its Roundtable and signed its CAADP Compact on July 29 and 30, 2009.<sup>15</sup> The country has identified strategic areas for investment and published these in six briefs and five brochures. The investment plans were reviewed by stakeholders and validated at the post-compact meeting on February 4, 2010.

## TRACKING COMMITMENTS AND SPENDING

From the 1990s to the early 2000s, both donor and government allocations to agriculture were low. In some countries, this remains true today. However, there is generally renewed interest in allocating more resources to the sector, particularly to meet the CAADP 10 percent budgetary allocation target. This section discusses recent trends in agricultural funding in Africa and the efficiency of resource use.

### Tracking public agriculture expenditure as a share of total expenditure

Since 1980, agricultural spending as a share of total spending in Africa has ranged from 4 to 6 percent on aggregate (Johnson et al. 2008). Thus, the African continent did not meet the CAADP 10 percent budgetary allocation target by 2008. Despite a 75 percent increase in the share of agricultural spending from 2000 to 2005, the target remains unmet because of the low initial base prior to 2000. Only eight countries—Burkina Faso, Ethiopia, Mali, Malawi, Ghana, Niger, Senegal, and Zimbabwe—reached or surpassed the 10 percent mark (see Table 1 and Figure 3). Nine of the reporting countries reached expenditure shares between 5 and 10 percent; whereas 28 countries devoted less than 5 percent of their total budgets to agriculture

Table 1. Level of government agriculture expenditure as a share of total government expenditure, 2008 (unless otherwise noted)

<b>At least 10 percent</b>	<b>5 percent to less than 10 percent</b>	<b>Less than 5 percent</b>
Burkina Faso	Chad <sup>2</sup>	Angola <sup>2</sup>
Ethiopia <sup>1</sup>	Gambia <sup>2</sup>	Benin
Ghana <sup>3</sup>	Mauritania <sup>3</sup>	Botswana <sup>2</sup>
Guinea	Namibia <sup>2</sup>	Burundi <sup>2</sup>
Malawi <sup>2</sup>	Sao Tome and Principe <sup>2</sup>	Cameroon <sup>3</sup>
Mali	Sudan <sup>2</sup>	Central African Republic <sup>2</sup>
Niger	Togo	Comoros <sup>4</sup>
Senegal <sup>2</sup>	Tunisia <sup>3</sup>	Congo, Dem. Republic <sup>2</sup>
	Zimbabwe <sup>2</sup>	Congo, Republic <sup>3</sup>
		Côte d'Ivoire <sup>2</sup>
		Djibouti <sup>2</sup>
		Egypt <sup>3</sup>
		Guinea Bissau <sup>2</sup>
		Kenya <sup>1</sup>
		Lesotho <sup>2</sup>
		Liberia <sup>1</sup>

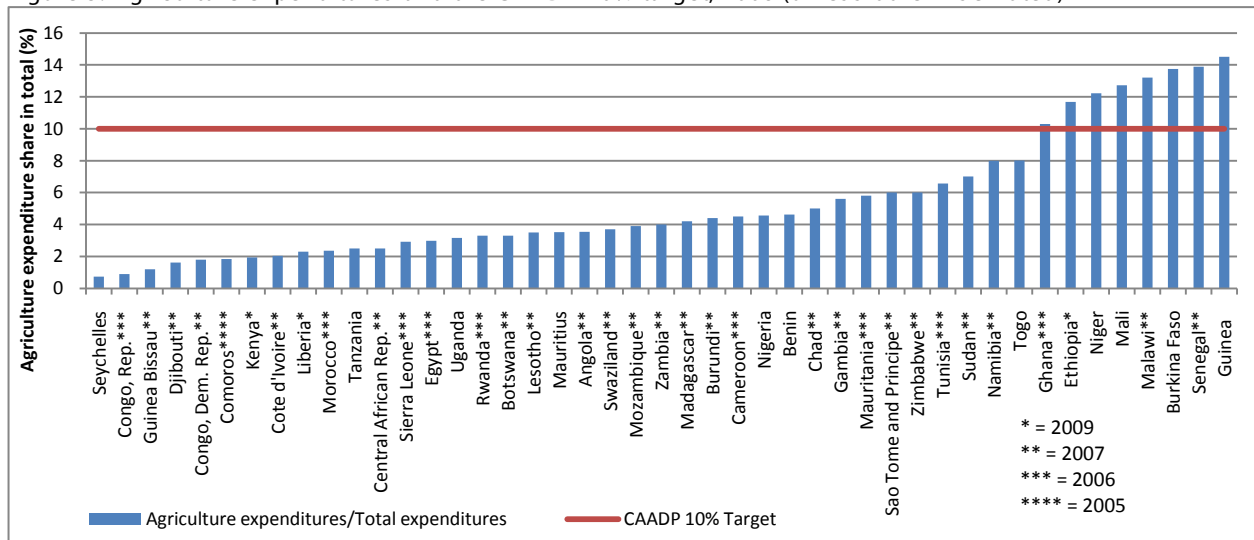
<sup>14</sup> Sierra Leone's signed compact: <http://www.resakss.org/index.php?pdf=42901>.

<sup>15</sup> Togo's signed compact: <http://www.resakss.org/index.php?pdf=42899>.

Madagascar<sup>2</sup>  
 Mauritius  
 Morocco<sup>3</sup>  
 Mozambique<sup>2</sup>  
 Nigeria  
 Rwanda<sup>3</sup>  
 Seychelles  
 Sierra Leone<sup>3</sup>  
 Swaziland<sup>2</sup>  
 Tanzania  
 Uganda  
 Zambia<sup>2</sup>

Sources: Based on ReSAKSS data collected from various national government sources and IMF 2009.  
 Notes: 1. Estimate for 2009; 2. 2007; 3. 2006; 4. 2005; 5. 2004

Figure 3. Agriculture expenditures and the CAADP 10% target, 2008 (unless otherwise noted)



Sources: Based on ReSAKSS data collected from various national government sources and IMF 2009.

### Tracking public agriculture expenditure as a share of agriculture GDP

An alternative measure for the priority given to agriculture is the ratio of agricultural expenditures to agricultural GDP. This measure of government spending on agriculture explicitly weighs the size of the sector in the overall economy when comparing across countries. For example, a 10 percent agriculture expenditure may translate into only a 5 percent share of agricultural GDP for countries in which the sector is large and, therefore, important to the national economy. In other cases, 10 percent agriculture expenditure may translate into a 15 percent share of agricultural GDP in countries where the agricultural sector plays a smaller role in the national economy. Botswana, for example, has barely spent 5 percent of total expenditures on the sector since 1980, yet this spending represents more than 60 percent of the country's agricultural GDP (see Figure 3 and Figure 4).

**Table 2. Level of agricultural investment as a share of agricultural GDP, 2006 (unless otherwise noted)**

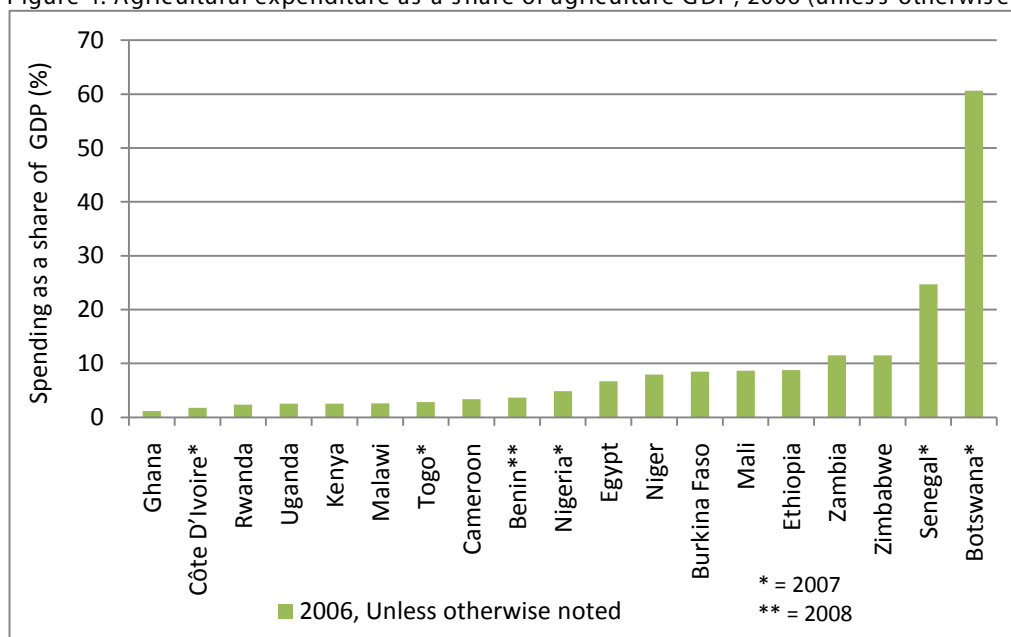
At least 10 percent	5 percent to less than 10 percent	Less than 5 percent
Botswana <sup>1</sup>	Burkina Faso	Benin <sup>2</sup>
Zambia	Egypt	Cameroon
Zimbabwe	Ethiopia	Côte d'Ivoire <sup>1</sup>
	Mali	Ghana
	Niger	Kenya
		Malawi
		Nigeria <sup>1</sup>
		Rwanda
		Togo <sup>1</sup>
		Uganda

Sources: Based on ReSAKSS data collected from various national government sources and IMF 2009.  
Notes: 1. 2007; 2. 2008.

The ratio of agricultural expenditures to agricultural GDP is low in Africa when compared with Asia. On aggregate, Africa spent between 5 and 7 percent as a share of agricultural GDP, whereas Asia spent between 8 and 10 percent. With the exception of Botswana, Zambia, and Zimbabwe, African countries have spent less than 10 percent of their agricultural GDPs on agriculture in recent decades. Yet, country-level data show that the range among countries can be considerable. For example, Botswana had the highest ratio in 2005 at 60 percent, while Côte d'Ivoire and Ghana spent less than 2 percent in the same year.

The inability of African countries to substantially raise the level of their agricultural investments may have serious implications for poverty reduction and food security. Recent estimates indicate that in order to achieve MDG1, the continent will need to boost agricultural spending by US\$13.6 billion 2007 annually from 2008 to 2015, with a cumulative total of US\$95.7 billion (Fan, Johnson, Saurkar, and Makombe 2008).<sup>16</sup> This suggests that the continent will need to increase its agricultural spending by at least 20 percent per year.

**Figure 4. Agricultural expenditure as a share of agriculture GDP, 2006 (unless otherwise noted)**



Sources: Based on ReSAKSS data collected from various national government sources and IMF 2009.

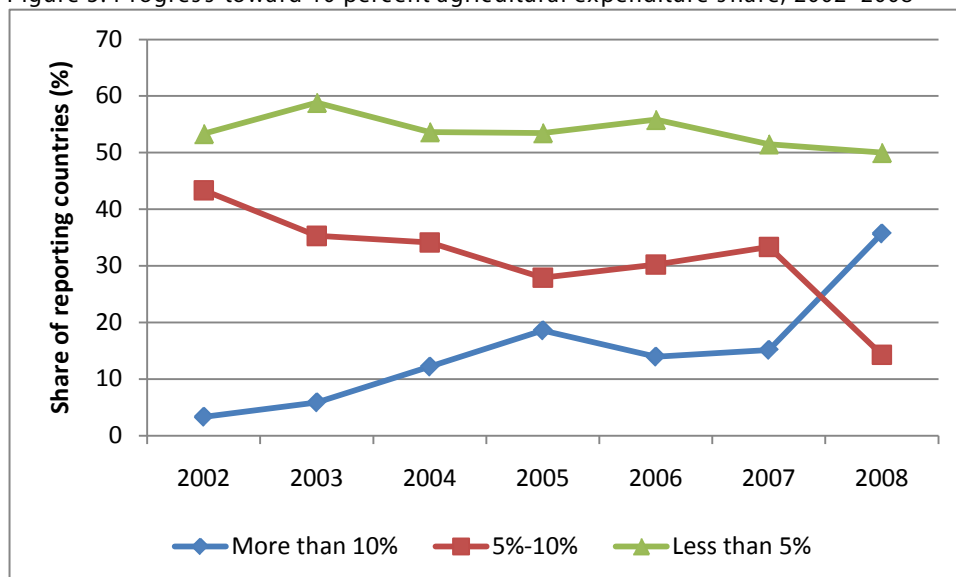
<sup>16</sup> This total excludes Zimbabwe as an outlier and is based on a sample of 30 Sub-Saharan African countries.



### Evolution of government agricultural expenditure levels

Since the 2003 Maputo Declaration, many African governments have increased their budgetary allocations to the agriculture sector. In 2003, only 5.9 percent of African countries were spending at least 10 percent of their total budget allocations on agriculture. This figure increased to 15.2 percent in 2007, and 35.7 percent in 2008 (Figure 5). Many of the countries that have increased their spending allocations since 2003 have progressed from the range of 5- to-10 percent spending to greater-than-10 percent spending. In addition, a number of countries have increased their allocations from less than 5 percent to between 5 and 10 percent, including the Gambia, Sao Tome and Principe, and Togo. This upward trend may indicate that some countries are responding to the Maputo Declaration. Nevertheless, the majority of African countries have generally stayed in the same budgetary allocation grouping, especially those countries with initially low spending rates.

Figure 5. Progress toward 10 percent agricultural expenditure share, 2002–2008



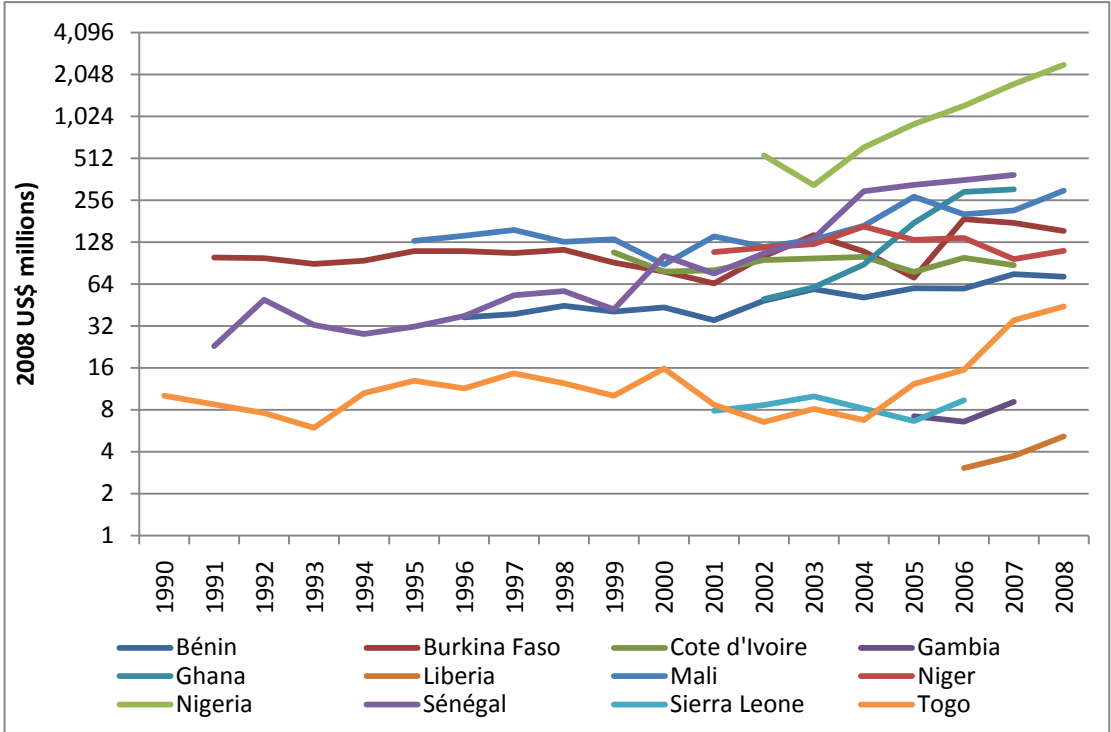
Sources: Based on ReSAKSS data collected from various national government sources and IMF 2009.

### West Africa

After stagnating in the 1990s, in recent years actual public expenditure on agriculture increased significantly in most countries in the West African region (Figure 6). The highest increases were recorded in Ghana, Nigeria and Senegal. Public agriculture expenditure increased six fold in Ghana between 2002 and 2007, which equaled an annual average increase of 41 percent. From 2002 to 2008, the level of public spending on agriculture increased more than four fold in Nigeria for an average annual increase of 30 percent. Over the same period, levels tripled in Senegal for an annual average increase of 27 percent. Benin and Niger have also increased public agricultural resources by an average of 6 percent between 2000 and 2008 and between 2001 and 2006, respectively. After an erratic evolution around an average of \$130 million from 1995 to 2003, agriculture expenditures in Mali rose significantly to an average of \$248 million from 2005 to 2008.

Burkina Faso, Côte d'Ivoire, Togo and Sierra Leone are characterized by an erratic evolution of their agricultural expenditures without real increase. Political crises and post-conflict situations could be the cause of this pattern in Côte d'Ivoire, Togo and Sierra Leone. In Burkina Faso, the pattern is likely due to the country's high dependence on development assistance for agricultural investment, which results in low control of resources earmarked for agriculture.

Figure 6. Evolution of public agricultural expenditure in West Africa, 1990 to 2008



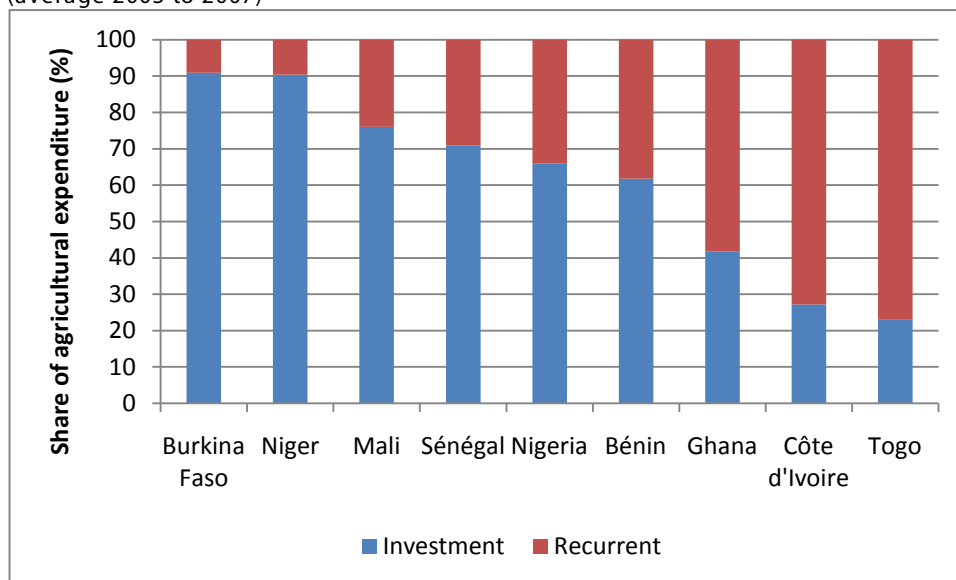
Source: ReSAKSS 2010 data collection from various national government sources.

Disaggregation of agricultural expenditures in West Africa

*Agricultural spending by economic use and source of funding*

Two trends are emerging in the West African region regarding the distribution of agricultural expenditures. First, in the Sahelian countries the majority of agriculture expenditures are directed toward investment, while in the coastal countries a large share of agriculture expenditures is devoted to recurrent expenses. The investment share in agriculture expenditures exceeds 75 percent in the Sahelian countries while it is below 50 percent in some coastal countries (Figure 7). From 2003 to 2007, 91 percent of agriculture expenditures in Burkina Faso were devoted to investments, 90 percent in Niger, 76 percent in Mali, and 71 percent in Senegal, compared to just 66 percent in Nigeria, 62 percent in Benin, 42 percent in Ghana, 27 percent in Côte d'Ivoire, and 23 percent in Togo. For countries where information is available for 2008, this investment share declined from the average level seen from 2003 to 2007 for most countries. The exception was Togo, where this investment share grew from 23 percent to 82 percent. Investment shares of agriculture spending decreased by 8 percentage points in Nigeria (from 66 to 58 percent), by 6 points in Benin (from 62 to 56 percent) and by 4 points in Burkina Faso (from 91 to 87 percent).

Figure 7. Breakdown of agricultural expenditure by economic use in selected West African countries (average 2003 to 2007)

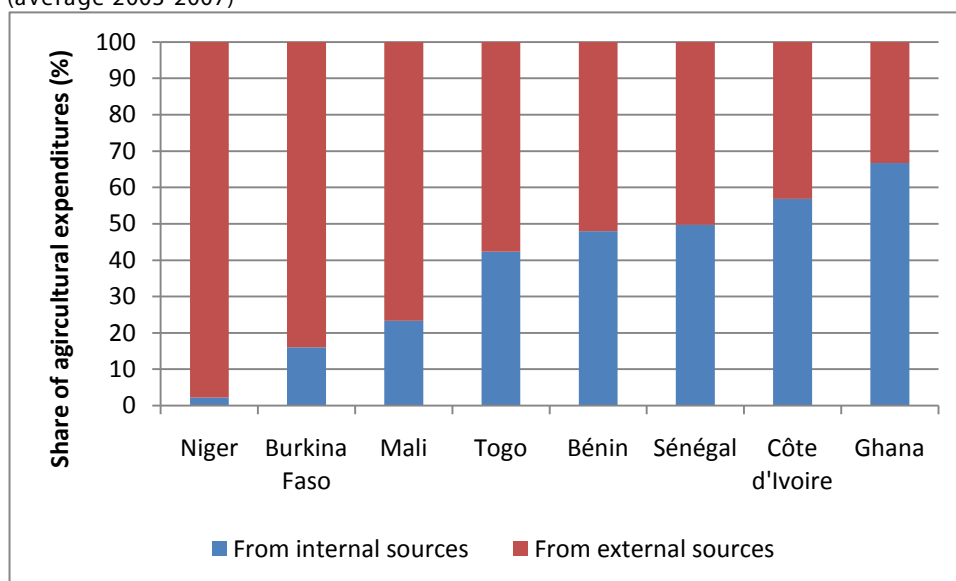


Source : ReSAKSS 2010 data collection from various national government sources.

The second trend in the West Africa region has to do with the source of agriculture expenditures. In the Sahelian countries where expenditures are largely spent on investments, agriculture spending is predominantly financed by official development assistance (ODA). With the exception of Senegal, internal sources accounted for less than 25 percent of agriculture funding from 2003 to 2007 (23 percent in Mali, 16 percent in Burkina Faso, and 2 percent in Niger) (Figure 8). In contrast, the share of internal resources in agricultural investment was much higher in the coastal countries, reaching 67 percent in Ghana, 57 percent in Côte d'Ivoire, 48 percent in Benin, and 42 percent in Togo over the same period.

A negative correlation exists between the share of agricultural expenditure devoted to investments and the share of agricultural investments financed from internal sources. Thus, in this region, agriculture investment spending is more often financed through external sources rather than through domestic ones. This is the result of structural adjustment programs that have resulted in the dismantling of systems for public support to agriculture. Given the limited budgetary resources available for important development priorities, it is essential that countries substantially increase their support to agriculture. They can do this by developing endogenous initiatives to mobilize internal resources instead of relying mainly on overseas development assistance (ODA). The CAADP implementation process provides an opportunity for countries to reflect on such initiatives.

Figure 8. Breakdown of agricultural expenditure by source of funding in selected West African countries (average 2003-2007)



Source : ReSAKSS 2010 data collection from various national government sources.

### *Agricultural spending by subsector*

The distribution of the agricultural expenditure by subsector shows that most countries favor spending on the crop production subsector over the livestock or fisheries and forestry subsectors (Table 2). From 2003 to 2007, the share of agriculture expenditure devoted to crop production ranged from 38 percent in Benin and Côte d'Ivoire to 91 percent in Mali. The share of spending on livestock ranged from 5 percent in Burkina Faso, Mali, and Niger to 25 percent in Côte d'Ivoire. Meanwhile, the share of spending on fisheries and forestry varied from 1 percent in Togo to 44 percent in Niger.<sup>17</sup>

The share of agriculture expenditures devoted to crop production in some coastal countries does not correspond with the subsector's contribution to agriculture GDP. For example, from 2003 to 2007 crop production contributed 69 and 88 percent in Benin and Côte d'Ivoire, respectively; yet these countries devoted only 38 percent of their agriculture budgets to the subsector. In contrast, crop production is relatively well funded in the Sahelian countries with a share in agricultural expenditure greater than or equal to its contribution to agricultural value added.

Despite the growth potential of livestock in the Sahel, the share of agricultural public resources devoted to this subsector is only 5 percent in Burkina Faso, Mali, and Niger, and 9 percent in Senegal. The subsector contributes around 30 percent to the agricultural value added in several countries and plays a crucial role for food security. The income generated by the livestock subsector allows households to have access to food during the lean season and in situations of food shortage. Given the significant contribution of the livestock subsector to agricultural GDP despite the current low investment in the subsector, livestock production is a highly productive activity and the increased public support for the sector could significantly reduce the region's dependence on meat and dairy imports while increasing household incomes.

<sup>17</sup> This high share of forestry and fisheries in the agricultural expenditure in Niger is due to the counting of investments for the conservation and acquisition of lands in this subsector which was to be indicated normally under the crop production subsector.

Table 2. Disaggregation of agricultural expenditure by subsector in selected West African countries (average 2003 to 2007)

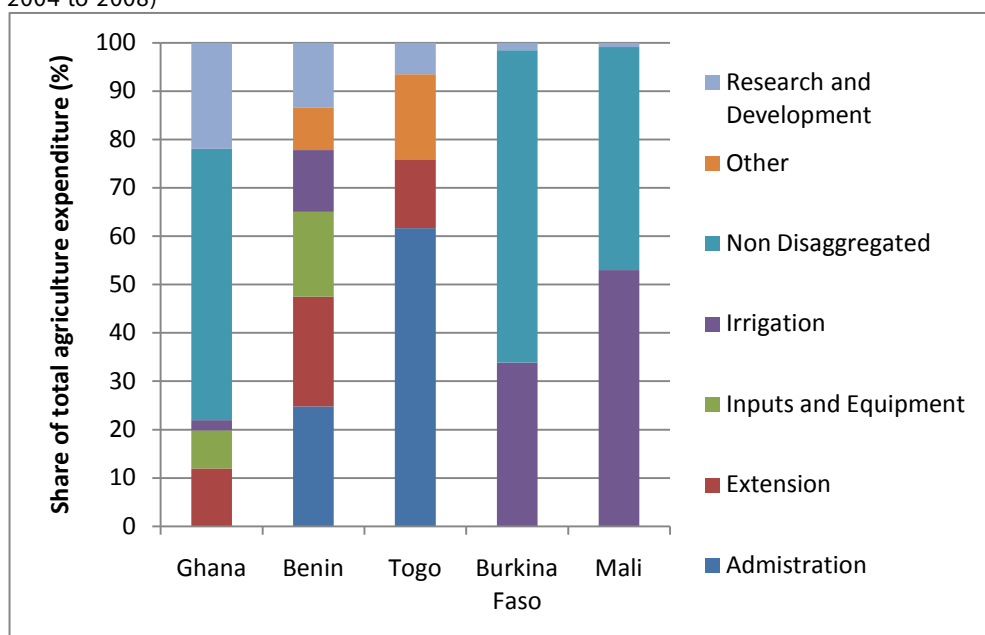
	Crop Production		Livestock		Fisheries and Forestry	
	Percent agricultural expenditure	Percent agricultural GDP	Percent agricultural expenditure	Percent agricultural GDP	Percent agricultural expenditure	Percent agricultural GDP
Bénin	38	69	20	18	42	12
Burkina Faso	76	56	5	38	19	6
Côte d'Ivoire	38	88	25	8	36	4
Ghana*	89	72	-	5	11	23
Mali	91	58	5	26	5	16
Niger	52	58	5	30	44	12
Sénégal	51	51	9	30	40	19
Togo	92	73	6	17	1	10

Source: ReSAKSS 2010 data collection from various national government sources.  
 \* Crop production and livestock expenditure are constructed by ReSAKSS for Ghana.

### *Agricultural spending by function*

Some countries in the West Africa region were able to disaggregate partially or totally the agricultural expenditure by function (Figure 9). It is important to emphasize that the monitoring systems for agricultural expenditures in most of the countries do not enable their capture in a disaggregated way. Activities to build these countries' capacity to monitor agricultural expenditures are indispensable. The indicators that will be analyzed subsequently were calculated for the period from 2004 to 2008.

Figure 9. Disaggregation of agricultural expenditure by function in selected West African countries (average 2004 to 2008)



Source: ReSAKSS data collection from various national government sources.

Of the countries reporting data by function, Burkina Faso and Mali spent the highest share on the development of irrigation (34 and 53 percent, respectively). This investment strategy is a way for these countries to reduce their vulnerability to drought. Other countries, such as Ghana (2.1 percent) and Togo (<1 percent), however, devote a much smaller share of their budgets to irrigation.

Given the low agricultural productivity in Sub-Saharan Africa, research and development as well as extension deserve more attention and funding in order to increase yields. With an average share of 22 percent, Ghana allocates a relatively large share to agricultural research compared to countries such as Benin (13.5 percent) and Togo (6.5 percent). The share of research in the agricultural expenditure is marginal in Burkina Faso and Mali, with only 1.6 and 1 percent, respectively.

Apart from expenditures for general administration, extension is the function of support to agriculture and is best funded in Benin and Togo. This function area received 23 and 14 percent of these countries' agricultural expenditures, respectively.

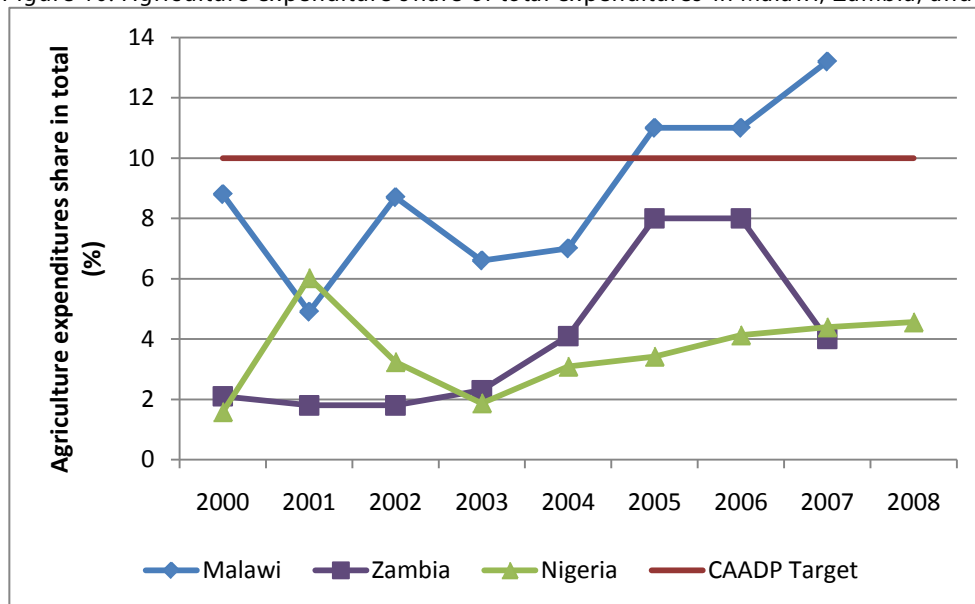
The resources allocated to inputs and equipment in the form of subsidy or credit account for 8 percent in Ghana, 17.5 percent in Benin and virtually nil in Togo. Agricultural investments are relatively low in Togo. More than half of the agricultural public resources are allocated for general administration.

#### Resource efficiency

As governments increase their budgetary allocations to agriculture, it is worth examining the quality of this spending. How are governments allocating these funds? Are these funds coming from government sources or from donors? Is spending diverging from allocations? To better understand the causes of poor agricultural investment ratios in Africa, we draw on three case studies from Malawi, Zambia, and Nigeria (Govereh et al. 2009; Mogues et al. 2008; and Njiwa et al. 2008).

Agricultural spending has been increasing in all three countries since 2000, with Malawi surpassing the CAADP's 10 percent target in recent years (Figure 10).

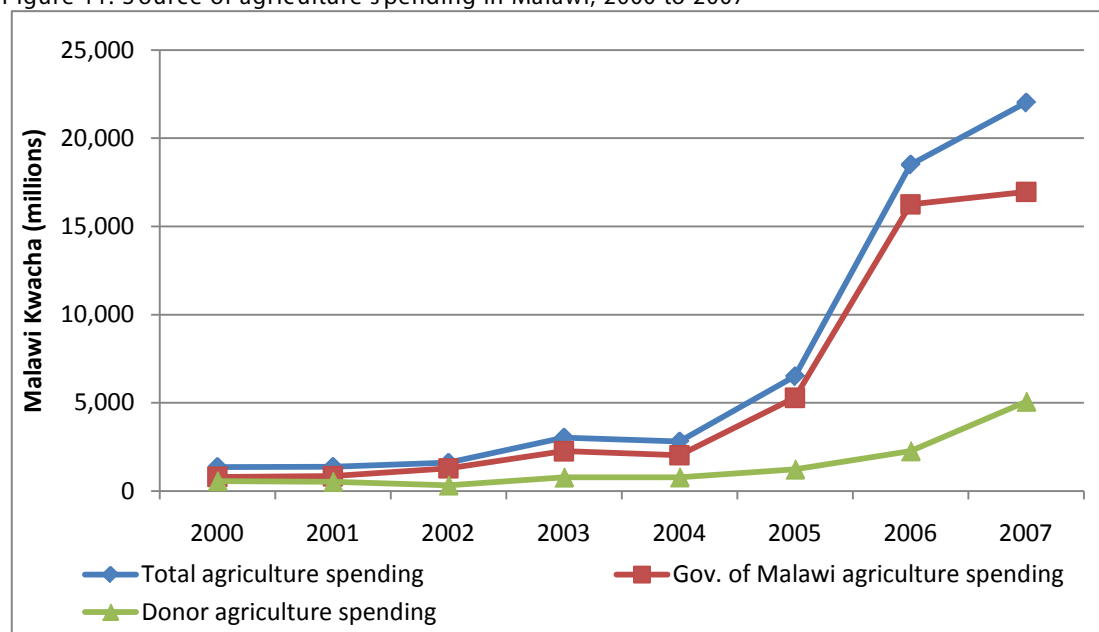
Figure 10. Agriculture expenditure share of total expenditures in Malawi, Zambia, and Nigeria, 2000 to 2008



Sources: Based on ReSAKSS data collected from various national government sources and IMF 2009.

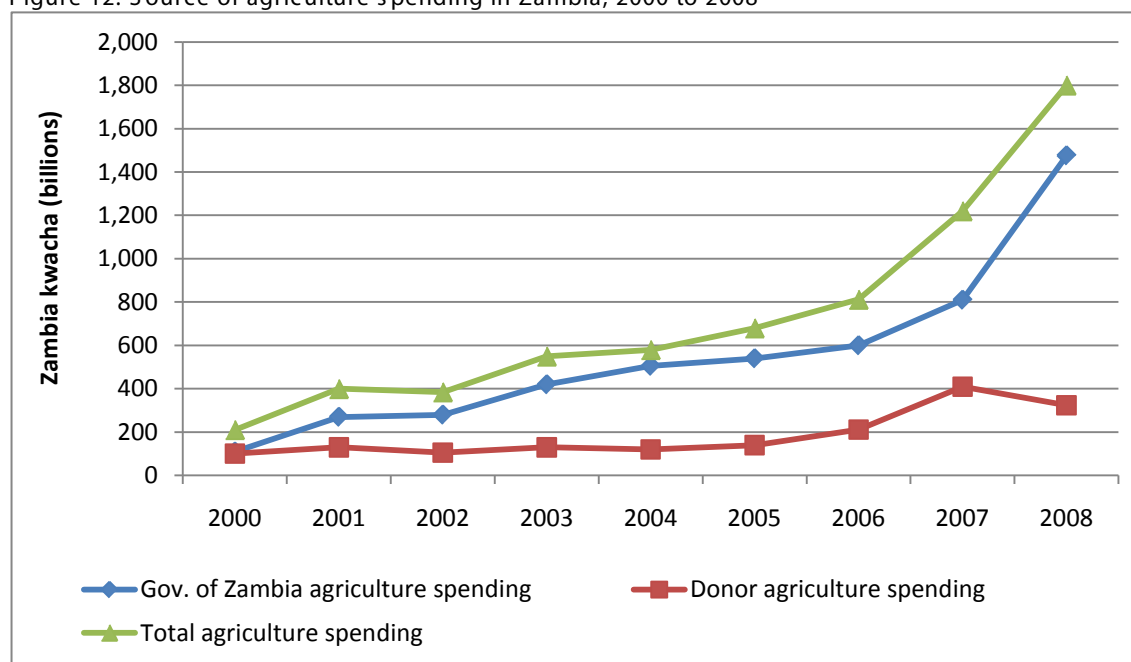
In Malawi and Zambia, the majority of the increase in agriculture spending has come from government sources as opposed to donors (Figure 11 and Figure 12). In Zambia, the donor share of government spending on agriculture declined from 48 percent in 2000 to 18 percent in 2008. Likewise, in Malawi, the donor share declined from 41 percent in 2000 to 23 percent in 2007, with a low of 12 percent in 2006. Although this is a positive development for sustainability and independence from aid, donors and development partners still need to increase their support for agriculture.

Figure 11. Source of agriculture spending in Malawi, 2000 to 2007



Source: Njiwa et al. 2008.

Figure 12. Source of agriculture spending in Zambia, 2000 to 2008



Source: Govereh et al. 2009.

The overwhelming trend for these four countries (Ghana, Malawi, Nigeria, and Zambia) is that they are all investing primarily in one particular program. For instance, Ghana has focused on one particular crop (cocoa), whereas Nigeria, Malawi, and Zambia have invested most heavily in input support (Table 3). Yet input support is a short-run distributive program; although it will have short-term productivity gains, it will not have the longer term results that agricultural research or irrigation investments would have.<sup>18</sup> A single subsector-dominant investment strategy is unlikely to yield desirable outcomes on its own. This pattern raises concerns about the sustainability and balance of agriculture spending (Benin, Thurlow, Diao, Kalinda and Kalinda 2008; Benin, Thurlow, Diao, McCool and Simtowe 2008).

Table 3. Composition of agriculture spending in selected countries (percentages)

	Ghana (2000–2005)	Malawi (2000–2007)	Nigeria (2001–2005)	Zambia (2000–2008)
Price support				20.2
Inputs			43.5	39.7
Food security		50.5	22.0	
Livestock			2.7	3.3
Fishery		3.2		1.1
Crops, livestock, and fishery (aggregate)	23.7			
Forestry	3.5	7.3		4.1
Cocoa	62.2			
Research and extension	10.6	13.0		21.7

Sources: Benin, Thurlow, Diao, Kalinda and Kalinda 2008; Benin, Thurlow, Diao, McCool and Simtowe 2008; Moguees et al. 2008; Njiwa et al. 2008; Govereh et al. 2009.

<sup>18</sup> See, for example, Thirtle, Lin, and Piesse 2003 and Fan, Xhang, and Rao 2004.

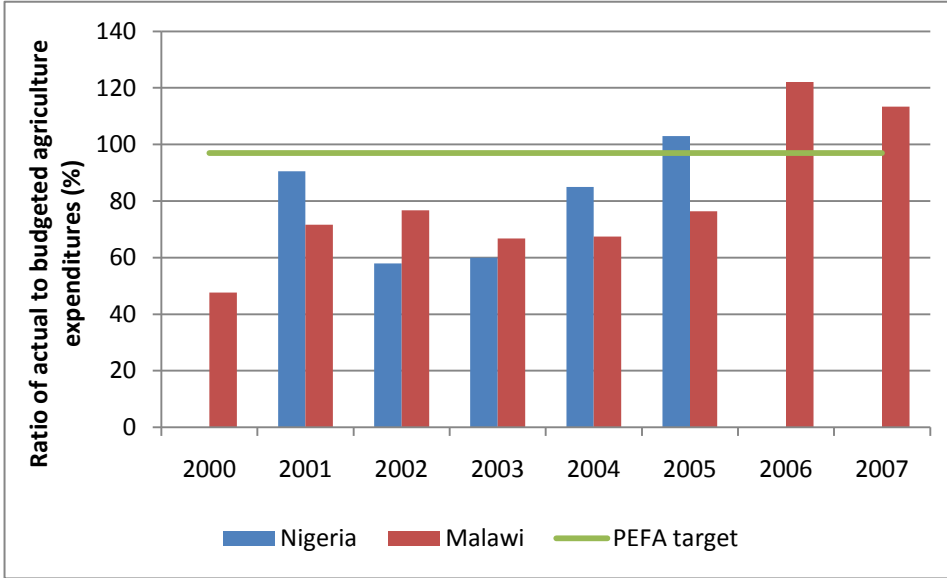


The ratio of actual spending to budgeted spending, or the investment gap ratio, is a measure of how efficiently resources are being used. The Public Expenditure and Financial Accountability (PEFA) best-practice standard is a maximum of a 3 percent discrepancy between budgeted and actual expenditures, which is equal to a ratio of 97 percent (Mogues et al. 2008). If a country's ratio exceeds 97 percent, it suggests that the government is underutilizing approved funds, which could be a symptom of capacity problems. If the ratio is greater than 100 percent, it is indicative of government overspending.

Inefficient budget execution may negatively affect policy planning, design, and implementation and can make it difficult to attain goals and expected outcomes for projects and policies. One result of this inefficiency is that programs may have to change or end midstream if promised funding does not materialize. Extreme investment ratios also erode the credibility of a government's claim that approved projects will actually be financed.

Figure 13 shows the investment gap ratios of Nigeria and Malawi for the past several years as compared to the PEFA standard ratio. From 2000 to 2004/5, both countries had poor budget execution, within a range of 48 to 85 percent. This means that up to 52 percent of budgeted resources for agriculture were not being spent. In contrast, in recent years, both countries have overspent the budgeted amount.

Figure 13. Investment gap ratios in Nigeria and Malawi, 2000 to 2007



Sources: Mogues et al. 2008; Njiwa et al. 2008; Govereh et al. 2009.  
 Note: The PEFA target is considered the threshold below which the investment gap ratio indicates underutilization of funds. It is set at 97 percent.

In Nigeria and Malawi, the gap between budgeted agriculture spending and actual spending has largely been driven by deviations in capital outlays rather than by recurrent spending. Malawi in recent years, however, has enjoyed a more stable development budget but has also been greatly overspending on the recurrent. Malawi's recent overspending is largely due to overruns in the costs of the subsidy programs. Recurrent spending consists more of salaries and staff expenses, which means that once they are set, they do not usually change yearly. Projects, on the other hand, can be negotiated and can change frequently, making it hard to budget line items from year to year. This leads, in turn, to the under- execution of budgets. Another reason

for poor budget execution is that budgets are based on the demands of constituencies, whereas fiscally-restrained finance ministries often pare down implementation.

#### Development assistance to agriculture

From 1980 to 2006, development assistance to all developing countries grew at an annual average rate of 5 percent. Total aid in these developing countries grew from US\$7 billion in 1980 to US\$27 billion in 2006.

Notwithstanding the increase in *total* aid to developing countries since 1980, *agricultural* aid to these countries fell dramatically in the 1990s. According to the FAO (2008b), from 1990 to 1999, total lending to agriculture worldwide from external sources fell by 50 percent. Across the African continent donor spending for agriculture as a share of total donor spending saw a consistent decline from an average of 15 percent between 1980 and 1995 to 12 percent between 2000 and 2002. In 2006, the ratio had declined to about 4 percent. Total overseas development assistance (ODA) for agriculture in Sub-Saharan Africa has hovered at \$1 billion a year since the 1990s. In comparison, the share of ODA spent on aid for emergencies has doubled and, in actual dollars, has more than quadrupled during the same period.

All of the SSA countries in Table 4 spent less than 10 percent of their aid budgets on agriculture. Botswana and Nigeria spent less than 1 percent of all aid received on agriculture. However, Burkina Faso spent 8 percent of its total aid on agriculture. The remaining countries spent between 3 and 6 percent of their aid budgets on agriculture. Thus, agriculture has not figured prominently on the agendas of many donors. This may not result from any conscious decision on the donors' part but rather from pressure to broaden aid agendas.

In addition, ODA for agriculture in some countries (such as Mozambique and Tanzania) greatly overshadows the amount spent by the government itself. These contributions risk "crowding out" domestic agriculture investments by reducing a government's political incentive to increase its share.

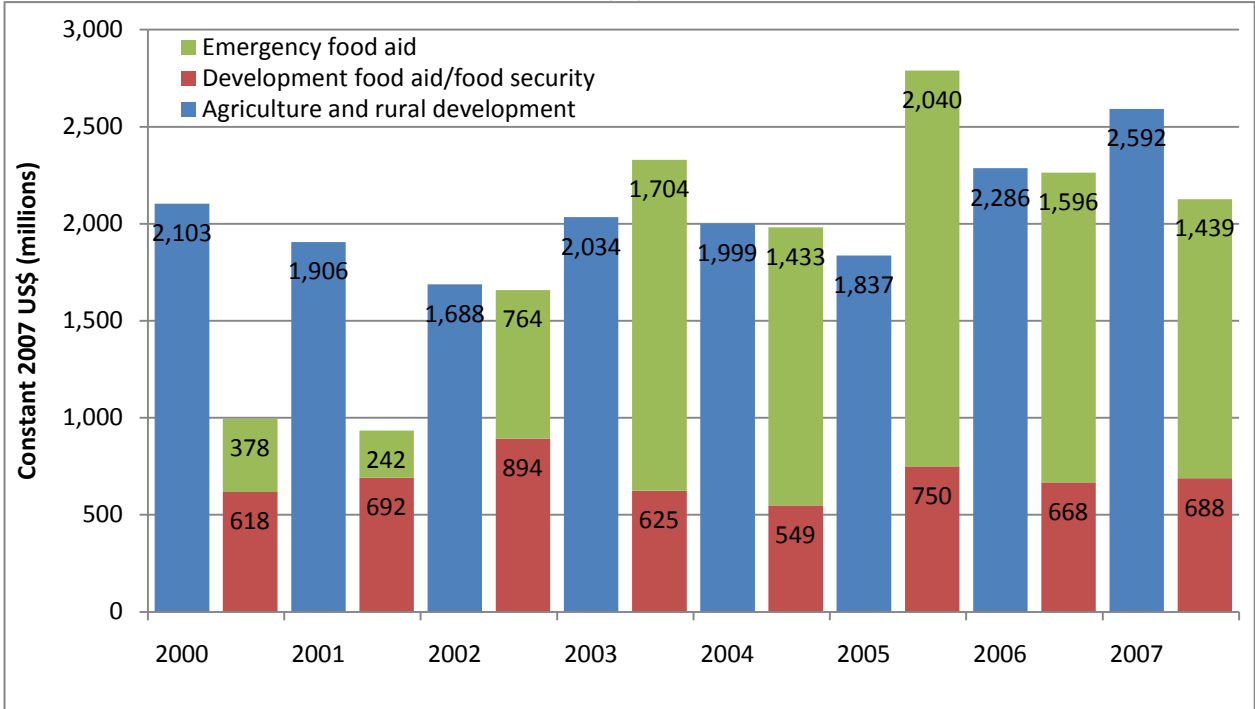
Table 4. Agricultural aid to Africa, 2002 to 2008

	Aid to agriculture (2007 constant dollars, million)							Agricultural aid as a percentage of total aid						
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008
Botswana	0.3	0.4	0.5	0.6	0.6	8.0	—	0.5	0.6	1.0	0.8	0.8	9.0	—
Burkina Faso	22.0	35.4	33.7	35.6	44.5	58.5	7.7	3.2	4.5	4.6	4.4	5.2	2.6	0.8
Cameroon	13.1	13.5	12.6	13.7	23.1	52.7	—	1.4	1.1	0.9	1.2	3.1	1.5	—
Côte d'Ivoire	13.3	5.0	3.3	2.4	15.3	5.3	—	2.5	0.2	0.6	0.6	5.8	1.4	—
Egypt	25.1	31.1	23.0	56.2	71.5	45.4	—	1.1	1.5	1.3	2.6	4.1	2.9	—
Ethiopia	29.4	41.1	21.0	31.3	38.1	46.0	0.2	1.7	2.1	1.0	1.4	1.7	0.7	0.0
Ghana	14.4	17.9	25.5	41.1	38.7	51.1	0.0	1.2	1.5	1.9	1.6	2.1	0.8	0.0
Kenya	21.8	22.3	23.6	19.1	43.9	52.2	7.1	2.4	2.9	2.7	2.1	4.4	4.5	0.5
Malawi	10.1	21.0	14.9	38.1	26.9	47.2	—	1.4	3.5	2.1	5.7	3.6	1.5	—
Mali	31.2	23.0	41.9	40.5	31.6	63.3	6.9	4.6	2.8	5.2	4.7	3.5	2.2	0.6
Morocco	12.7	12.4	13.0	16.2	21.6	26.6	—	1.1	1.2	1.3	1.4	1.7	1.8	—
Nigeria	3.5	5.5	3.5	7.9	6.7	7.4	—	1.1	1.2	0.8	1.1	0.1	0.1	—
Togo	2.3	3.3	2.3	2.2	1.2	1.3	0.3	1.7	3.1	2.5	2.2	1.1	1.2	0.2
Tunisia	16.0	16.6	14.2	13.0	15.0	11.4	—	1.8	2.5	2.3	2.2	2.5	1.6	—
Uganda	11.7	18.7	33.4	38.1	56.6	57.0	7.2	0.8	1.5	2.4	2.4	3.9	1.1	0.4
Zambia	21.2	16.3	13.7	29.9	37.0	39.8	3.1	1.7	1.1	1.0	1.8	1.7	0.8	0.3

Source: Organization for Economic Cooperation and Development (OECD) 2009; statistical portal accessed on November 5, 2009. Amounts based on gross disbursements.

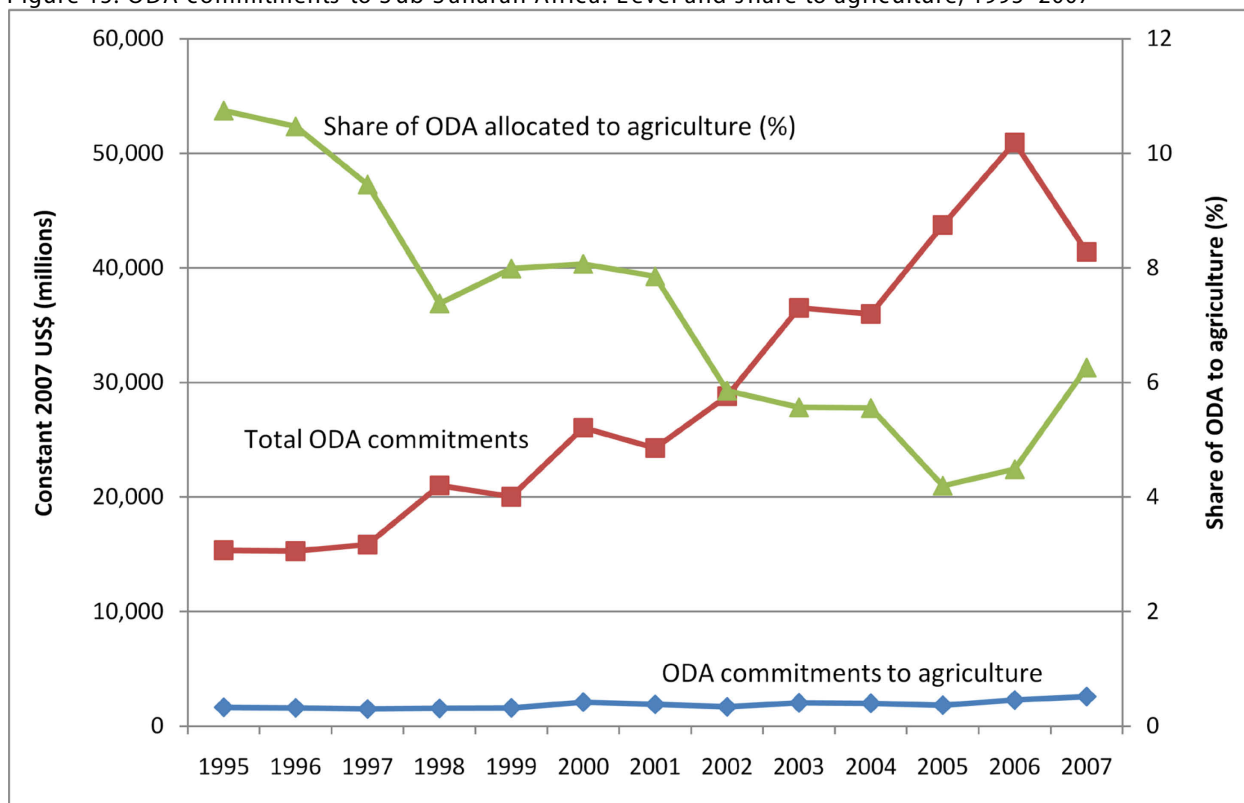
Africa is now facing the same type of long-term food deficit problem that India faced in the early 1960s. As a result of inadequate investment in the African agriculture sector, the continent's overall agricultural productivity has fallen since the mid-1980s, leaving it vulnerable to frequent food crises and dependent on emergency food aid and food imports. In response to these food crises, governments and donors have devoted more resources to emergency aid than to long-term agricultural development, which further undermines the ability of countries to generate economic and agricultural growth. Although investment in agriculture has increased in recent years, a large and increasing share is still devoted to short-term food aid interventions (Figure 14 and Figure 15). Consequently, poverty and hunger persist and threaten the likelihood of some countries reaching the MDGs.

Figure 14. ODA commitments to African agriculture by type, 2000 to 2007



Source: Organization for Economic Cooperation and Development (OECD) 2009.

Figure 15. ODA commitments to Sub-Saharan Africa: Level and share to agriculture, 1995–2007



Source: OECD 2009. Based on ODA commitments in 2007.

In response to the 2003 Maputo Declaration, many African governments and their development partners are increasing the *quantity* of their agricultural spending. Donor spending has increased slightly, but not at the same rate as government spending. Although this is good for national independence, it calls for development partners to step up to their commitments. Without question, African governments and donors should increase their investments in development factors such as human capital, technology, and institutional innovations to increase farm production and accelerate agricultural growth.

Simply increasing agricultural spending is only part of the picture, however. Rural poverty reduction cannot be achieved without agricultural growth, but neither is it likely to be achieved by investing in the agricultural sector alone. Setting the right priorities for public spending is equally important. Investment strategies must be unique to each country's specific needs. Moreover, the *quality* of agricultural spending is also important. As this section has shown, although the investment gap ratio has been declining, more effort is still required to improve program effectiveness. Based on a number of country case studies, government expenditures have focused largely on inputs such as fertilizer and seeds at the cost of investments that will help productivity over the long term. Such investments include agriculture research and development, irrigation, and rural infrastructure. Even more important, many countries need to improve the execution of their budgets in order to avoid negative impacts on policy planning, design, and implementation, and to enable attainment of the development goals enshrined in the CAADP country compacts.

## AGRICULTURAL PERFORMANCE

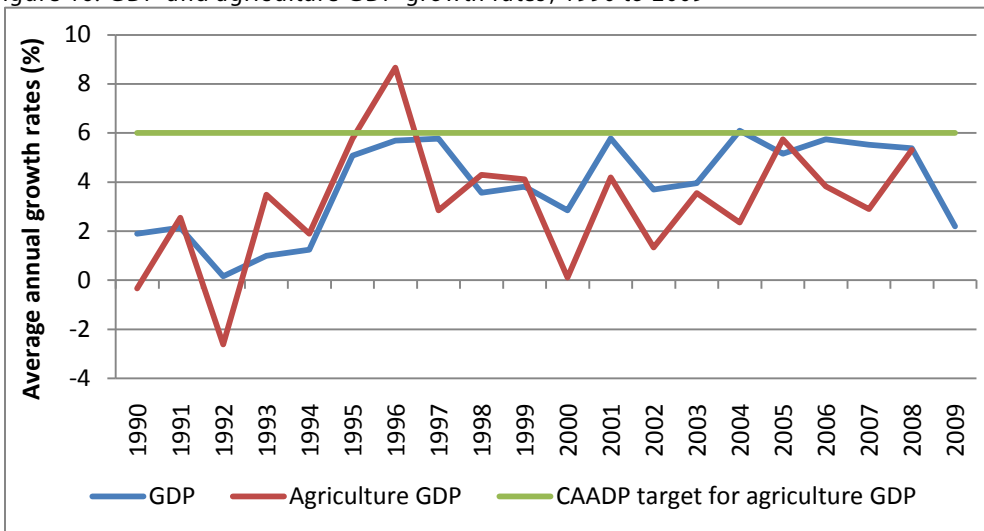
### Agriculture sector growth

The underlying logic behind many efforts to increase expenditures on agriculture is that these resources will improve performance of the sector and ultimately, reduce poverty and hunger. This section will show that, in fact, agriculture’s performance on the African continent has been positive and improving in recent years, though direct attribution to increased investment as the main cause is still tenuous. Yet it is still difficult to estimate the full impact of the recent food price and financial crises on agricultural performance. Therefore, more detailed attention to the sector and more resources are needed to overcome the potential setbacks and achieve the CAADP targets and MDGs.

### *Africa-wide performance*

Over the past two decades, annual growth in agricultural GDP and overall GDP increased substantially at the continental level (Figure 16). Although agricultural performance varies within and across African countries, recent trends also indicate an increase in agricultural GDP growth at the regional level. Sub-Saharan Africa’s agriculture GDP growth rate increased from an annual average of 3.0 percent in the 1990s and 2000s to 5.3 percent in 2008 (Table 5). Each of the SSA regions saw an increase in their agricultural growth rates from approximately 3 percent in the 1990s to 2008 levels of 4-5 percent in East and Central Africa and 7.1 percent in Southern Africa. Despite these trends, it is not possible at this time to predict the impact the food crisis of late 2007 and early 2008 and the subsequent global recession will have had on agricultural growth rates for 2009.

Figure 16. GDP and agriculture GDP growth rates, 1990 to 2009



Source: World Bank 2009.

Note: 2009 GDP estimates are from International Monetary Fund (IMF) 2009.

Table 5. Agricultural performance, 1990 to 2007

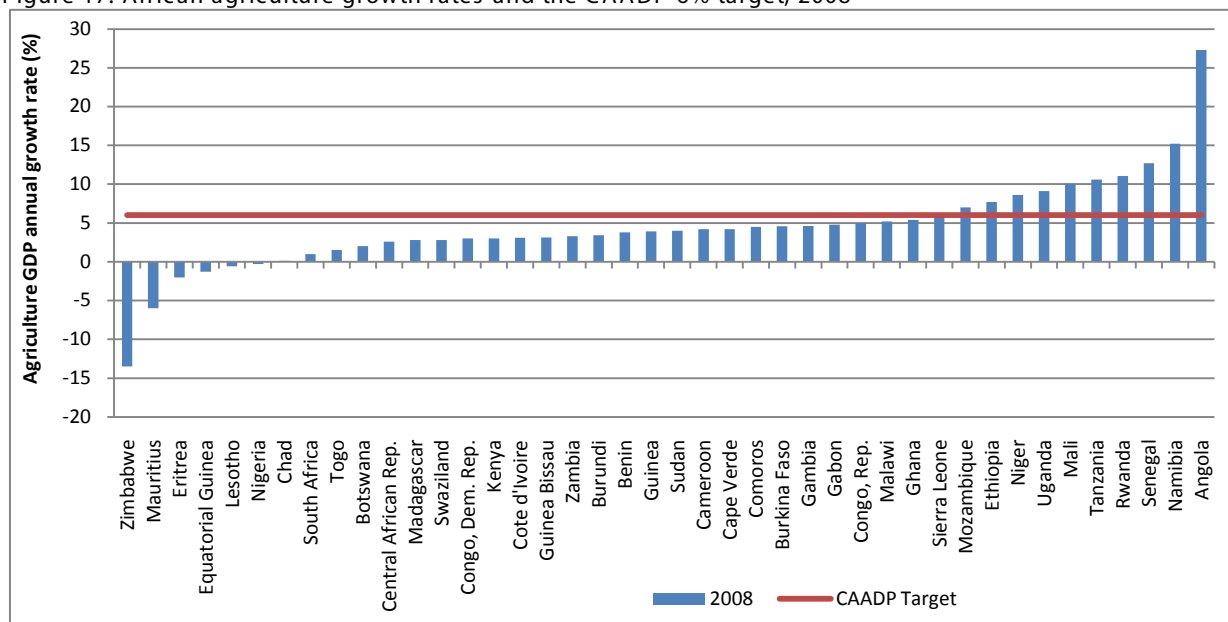
	Annual Agricultural GDP Growth (%)					
	1990-1999	2000-2005	2006	2007	2008	
East Africa	Burundi	-0.4	-2.5	10.9	2.5	3.4
	Comoros	2.5	4.6	-10.3	3.0	4.5
	Congo, Dem. Rep.	2.1	-1.7	2.5	3.0	3.0
	Eritrea	10.1	5.4	8.8	1.3	-2.0
	Ethiopia	2.8	5.1	10.9	9.4	7.7
	Kenya	2.1	3.0	4.4	2.3	3.0
	Madagascar	1.9	1.8	2.1	2.2	2.8
	Rwanda	3.3	5.1	11.0	-3.0	11.1
	Sudan	4.8	1.8	4.4	3.1	4.0
	Tanzania	3.5	4.8	3.8	4.0	10.6
	Uganda	3.7	2.9	0.9	-0.3	9.1
Southern Africa	Angola	-1.3	13.8	9.8	21.6	27.3
	Botswana	-0.7	-1.1	-0.4	1.8	2.0
	Lesotho	1.5	-4.7	14.9	-8.6	-0.6
	Malawi	9.7	-1.5	11.9	5.9	5.2
	Mozambique	4.6	4.3	10.9	6.6	7.0
	Namibia	4.8	3.7	-0.7	-1.4	41.0
	South Africa	0.8	2.1	-7.9	0.9	1.0
	Swaziland	0.5	1.2	-2.2	2.7	2.8
	Zambia	5.1	1.0	2.2	7.2	3.3
	Zimbabwe	4.9	-6.2	-2.0	-6.3	-13.5
	West Africa	Benin	5.3	4.9	5.6	4.2
Burkina Faso		6.0	6.0	2.7	-4.3	4.6
Cameroon		4.3	3.8	3.0	3.9	4.2
Cape Verde		1.2	0.9	3.7	5.2	4.2
Central African Republic		3.1	1.5	3.1	3.3	2.6
Chad		5.6	3.3	3.2	0.1	0.1
Congo, Rep.		0.3	6.1	8.2	-1.7	5.0
Côte d'Ivoire		3.0	2.7	1.3	1.8	3.1
Equatorial Guinea		6.1	2.1	3.7	10.0	-1.3
Gabon		1.7	1.6	2.1	5.3	4.8
Gambia, The		3.3	4.7	1.0	2.0	4.6
Ghana		2.9	3.3	1.2	0.2	5.4
Guinea		4.5	3.6	4.2	5.0	3.9
Guinea-Bissau		3.9	3.9	5.5	7.0	3.2
Mali		2.9	3.0	5.7	2.4	10.0
Mauritania		0.8	-2.8	11.7	1.9	3.8
Niger		3.3	3.2	8.1	4.0	8.6
Nigeria		3.6	13.7	7.4	7.4	-0.3

	Annual Agricultural GDP Growth (%)				
	1990-1999	2000-2005	2006	2007	2008
<b>Senegal</b>	1.8	2.5	-7.5	-5.3	12.7
<b>Sierra Leone</b>	-3.4	8.3	4.3	5.7	5.9
<b>Togo</b>	3.8	1.6	-3.5	5.8	1.5
<b>East Africa</b>	3.4	2.3	4.4	3.6	4.8
<b>Southern Africa</b>	2.9	1.3	3.5	3.0	7.1
<b>West Africa</b>	3.0	3.7	3.6	3.0	4.3
<b>SSA</b>	3.1	2.9	3.8	2.9	5.3

Sources: ReSAKSS calculations based on World Bank 2009.

The regional and subcontinental figures discussed above mask the diverse agricultural performance that exists across countries in Africa. Figure 17 shows that in 2008, 10 countries—Angola, Ethiopia, Mali, Mozambique, Namibia, Niger, Rwanda, Senegal, Tanzania, and Uganda—met the CAADP 6 percent agricultural growth target. Nineteen other countries attained moderate agricultural GDP growth rates of between 3 and 6 percent. In the same year, eight countries experienced negative growth in their agriculture sectors.

Figure 17. African agriculture growth rates and the CAADP 6% target, 2008



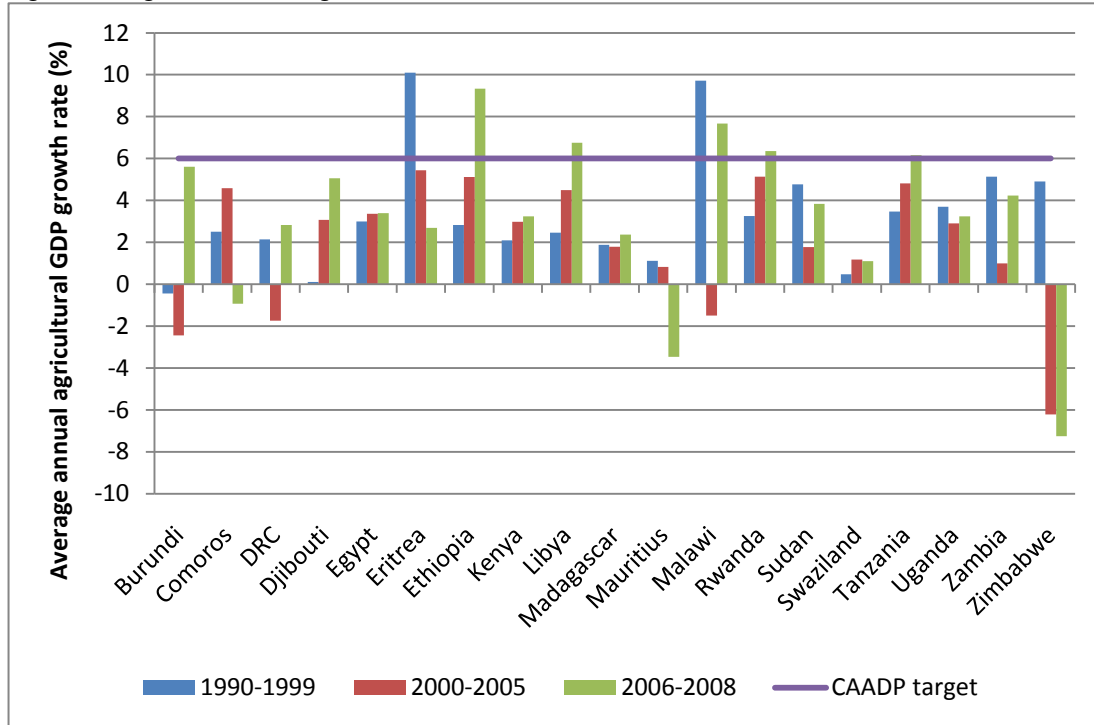
Source: ReSAKSS calculations based on World Bank 2009.

### Eastern and Southern Africa

Performance of the agricultural sector in this region presents a mixed picture (Figure 18). Comparing growth rates from 2002 to 2004 and 2005 to 2007, we note an improvement in all countries except the Comoros, Eritrea, Mauritius, and Zimbabwe, the last two of which have had negative growth in all years. Consecutive droughts and political instability have contributed a great deal to the poor performance in Eritrea, while political instability is the major cause in Zimbabwe.



Figure 18. Agriculture GDP growth rates in selected eastern and Southern African countries, 1990 to 2008

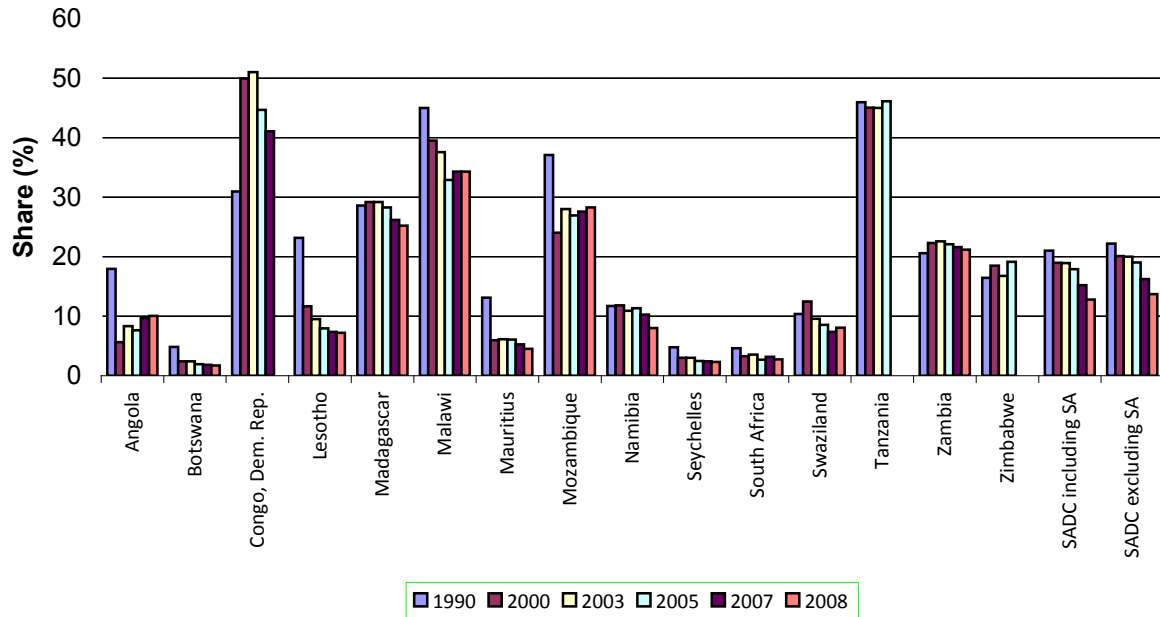


Source: World Bank 2009; United Nations 2009.

### Southern Africa

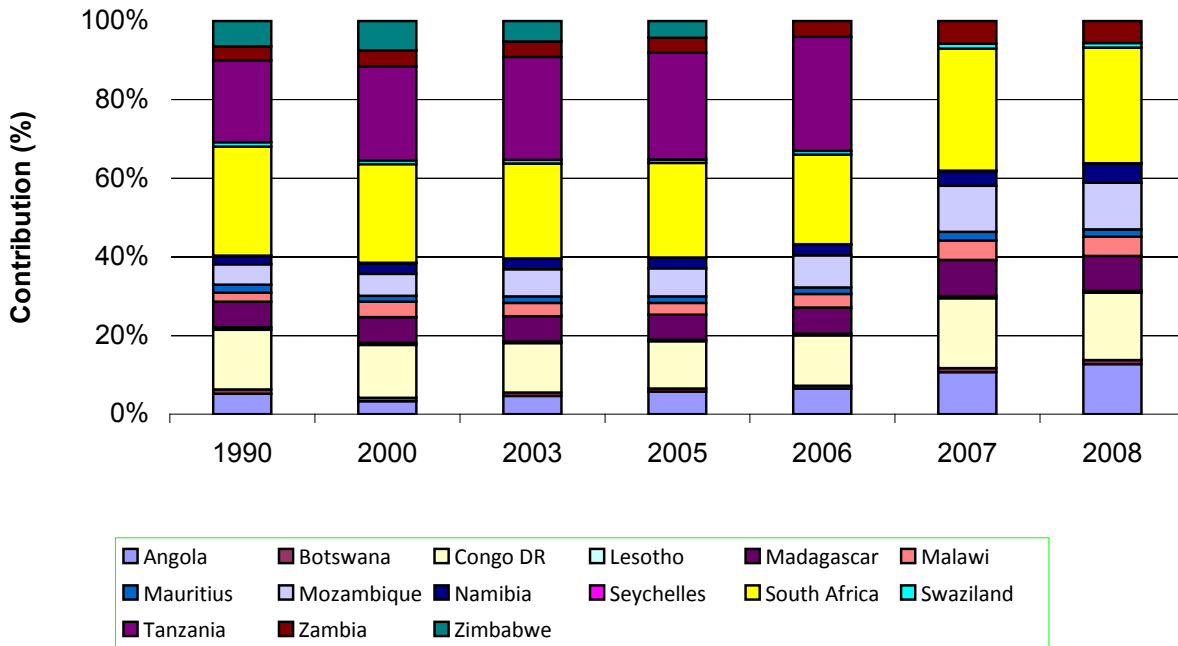
Agriculture accounts for more than 20 percent of national GDP in six SADC countries - DRC, Madagascar, Malawi, Mozambique, Tanzania and Zambia (Figure 19)—an indicator of the relative importance of the agricultural sector in the economies of the low-income countries of Southern Africa. The average share of agriculture in regional GDP, excluding South Africa, is 13.7 percent. This contribution drops to 12.8 percent when South Africa is included. The six SADC countries in which agriculture accounts for more than 20 percent of GDP together produce 76 percent of the region’s agricultural value added. Tanzania has the region’s largest agricultural sector, having overtaken South Africa between 2000 and 2008 (Figure 20). Agriculture in South Africa is small relative to other sectors, but it is still larger than the rest of the SADC countries.

Figure 19. Agricultural share in GDP, selected Southern African countries, 1990 to 2008



Source: World Bank 2009.

Figure 20. Country contributions to regional agricultural GDP, Southern Africa, 1990 to 2008

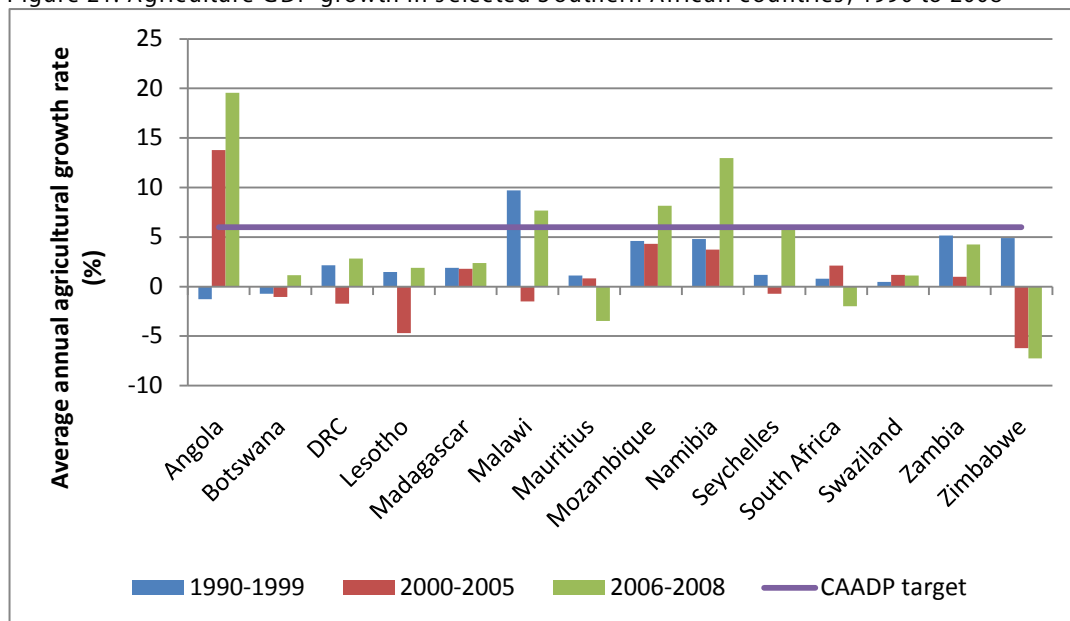


Source: World Bank 2009.

With the four exceptions that tend to pull up the regional average (Angola, Malawi, Mozambique and Namibia), SADC’s agricultural sector has performed poorly in the recent past (2005–2008) (Figure 21). It is worth noting, though, that Angola and Mozambique are starting from a very low

base and that Malawi has been implementing a very rigorous agricultural subsidy which probably explains its remarkable performance. From 2006 to 2008, agriculture in Mauritius, South Africa, and Zimbabwe registered negative growth. Botswana registered negative growth previously (2000 to 2005) but reversed the trend in 2006 to 2008, albeit only to relatively low levels.

Figure 21. Agriculture GDP growth in selected Southern African countries, 1990 to 2008

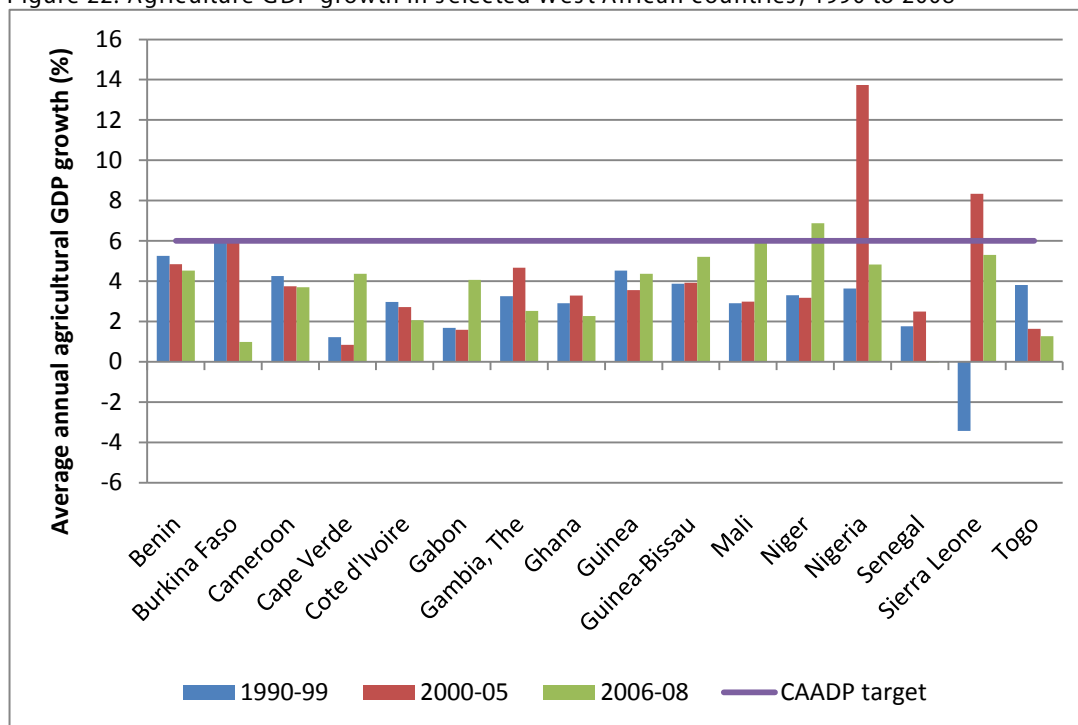


Source: World Bank 2009.

### West Africa

Agricultural growth in West Africa was 4.3 percent in 2008 against an average of 3.7 percent during the early 2000s and 3.0 percent in the 1990s. Measures to improve food supply following the high food prices crisis partly explain the performance achieved in 2008. In addition, producers have increased their cultivated acreage to take advantage of rising prices. Four countries in the region also surpassed the CAADP target of 6 percent in 2008. These include Liberia (18.7 percent), Mali (10 percent), Niger (8.6 percent), and Senegal (12.7 percent). All four countries had much lower average agriculture growth rates in the early 2000s (Figure 22).

Figure 22. Agriculture GDP growth in selected West African countries, 1990 to 2008



Source: World Bank 2009.

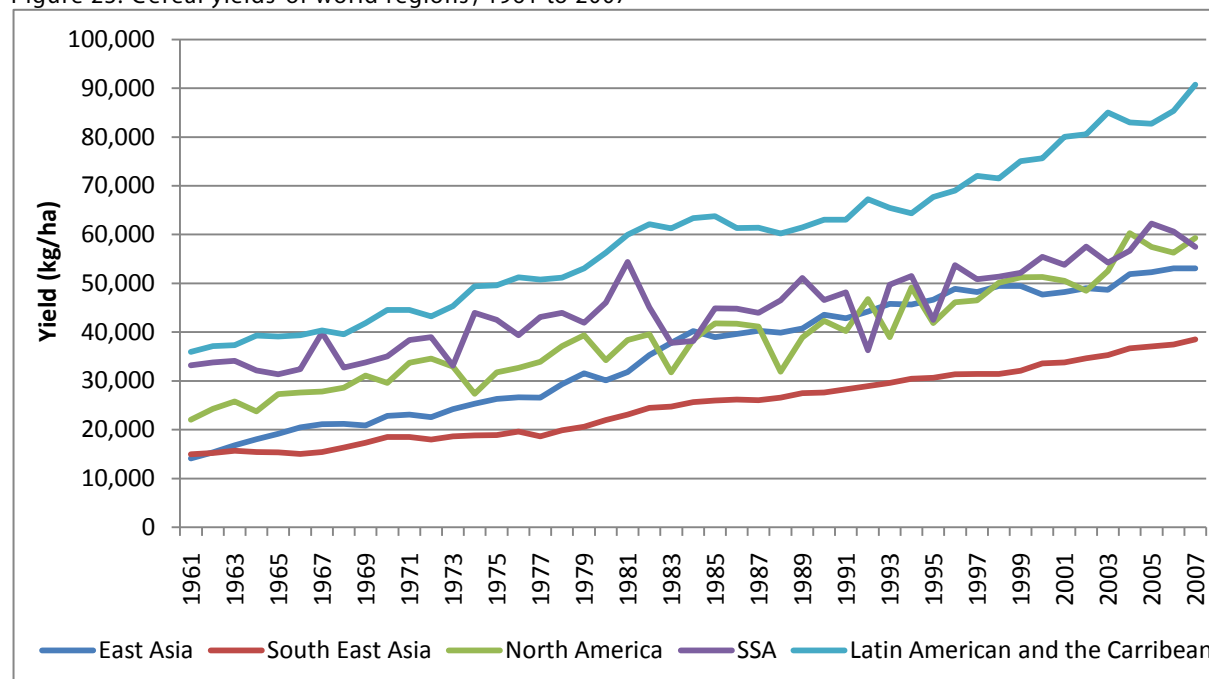
Nine other West African countries' agricultural GDP grew at rates between 2 and 6 percent in 2008. The weak performance in these countries is due to agriculture's susceptibility to climatic factors (particularly the Sahel region), low use of inputs (improved seeds and fertilizers), and weak extension services. In addition, the export sectors experienced various difficulties after liberalization and were affected by the global market fluctuations.

Rising urban demand for agricultural food products constitutes an opportunity for agriculture, but one which can be captured only if supply can adjust to meet the needs and preferences of the urban population. Development of the processing sector is essential if farmers are to capture this market.

#### Agricultural Production and Productivity

Future growth in African agriculture will largely depend on the continent's ability to increase agricultural production and productivity. Higher agricultural production can improve food security and dampen the effects on domestic markets of high international food prices. Due to increasingly limited land resources, however, increasing production largely depends on increasing agricultural productivity. Cereal yields in Sub-Saharan Africa have improved over time, but they are still below what is needed to feed a growing population (Figure 23). Using a region-wide multimarket model, a recent IFPRI study projects that doubling the productivity of food staples in Africa by 2015 has the potential to raise average GDP growth to 5.5 percent per year, to lift more than 70 million people out of poverty, and to turn Africa from a food-deficit region to a surplus region with 20 to 40 percent lower food prices (Diao, Fan, Headey, Johnson, Nin Pratt and Yu 2008).

Figure 23. Cereal yields of world regions, 1961 to 2007

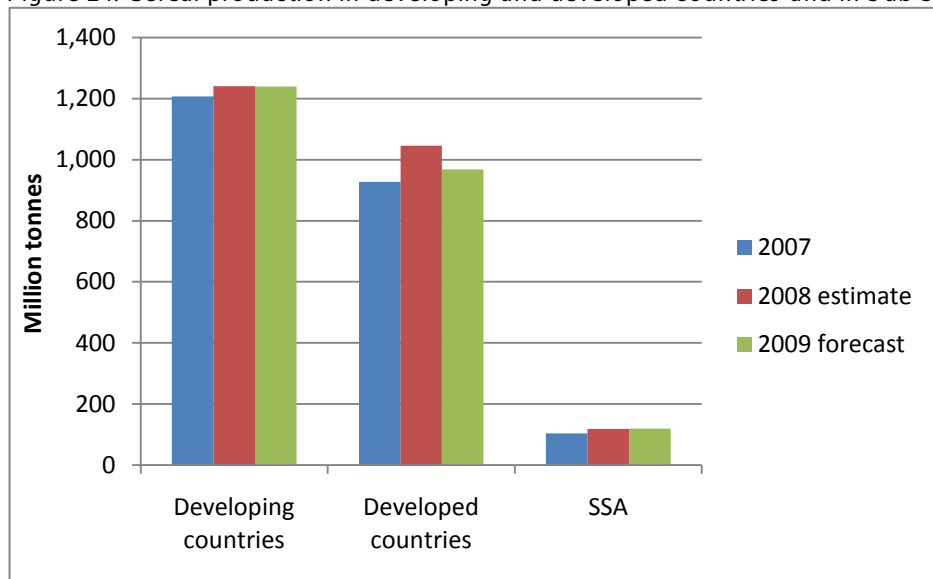


Source: FAO 2009c.

The recent food price crisis is a potential opportunity that could promote a supply response in agriculture. Indeed, as a result of higher food prices, world cereal output actually increased by 7 percent between 2007 and 2008 (FAO 2009b). This supply response, however, was mostly concentrated in developed countries; among developing countries, it was seen in Brazil, China, and India (FAO 2009e). In Sub-Saharan Africa, FAO projections indicate that cereal production increased by 14.5 percent from 2007 to 2008 (Figure 24). Within Sub-Saharan Africa, this increase was concentrated in Southern and West Africa, with minimal supply response occurring in East and Central Africa (Figure 25). However, Sub-Saharan Africa has such a low level of output compared to other world regions that this increase still does not put it at the same production level as the world's major cereal producers.

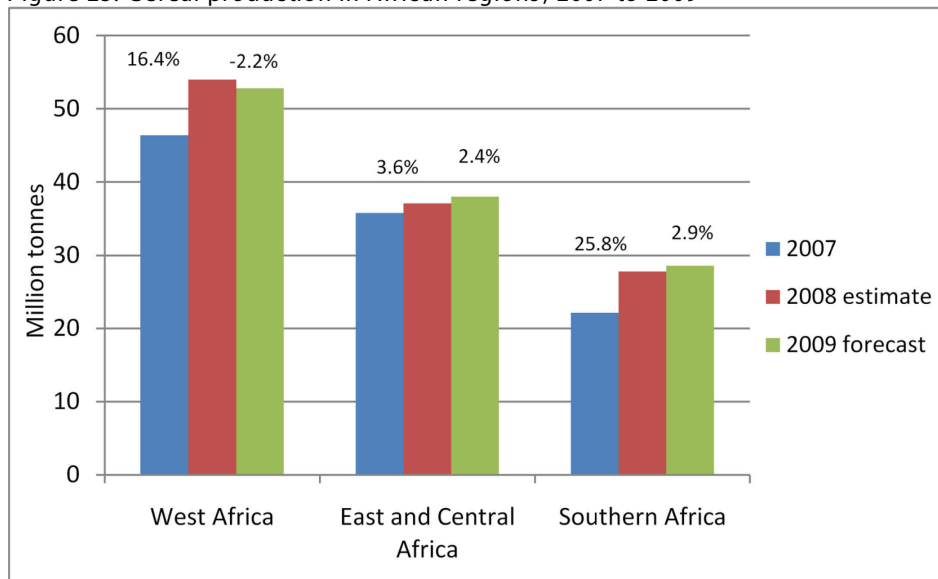
Global cereal output figures are expected to show a decline for 2009 as a result of falling world food prices, yet in Sub-Saharan Africa they are expected to increase by 0.4 percent (FAO 2009e). In part, this difference may have been because of the lag in high food price transmission from the international markets to the domestic markets in many African countries. In 2009, cereal production was projected to continue increasing, albeit at a slower rate in Southern Africa and East and Central Africa. Yet production was also predicted to decline in 2009 for West Africa by approximately 2 percent.

Figure 24. Cereal production in developing and developed countries and in Sub-Saharan Africa, 2007 to 2009



Source: FAO 2009e.

Figure 25. Cereal production in African regions, 2007 to 2009



Source: FAO 2009b.

### *Eastern and Southern Africa*

The crop subsector contributes the most to agricultural growth in most Eastern and Southern Africa (ESA) countries. For example, in Tanzania, the crop subsector contributes nearly 70 percent to the overall economy.

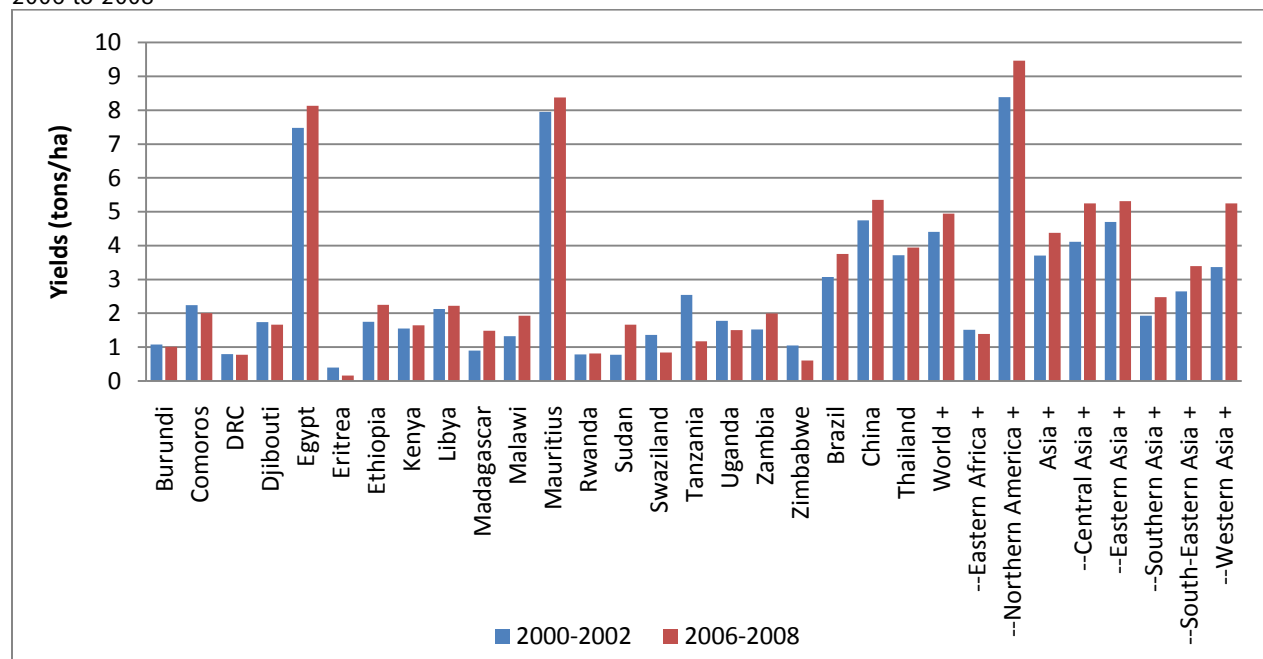
**Table 6. Contribution of different agricultural subsectors in Tanzania**

Country	Ag. Subsector	% Contribution
Tanzania ( 2009)	Crop agriculture	69.99
	Cereals	26.12
	Root crops	10.28
	Pulses & oil seeds	8.51
	Horticulture	16.32
	Export crops	8.76
	Livestock	17.39
	Other agriculture	12.62
	Total	100

Source: Pauw and Thurlow 2010.

Apart from Egypt and Mauritius, maize yields in a majority of countries in the COMESA region are very low and in most cases have been below 2 tons per hectare for many years. In comparison to what has been achieved elsewhere, it is clear that yields in this region are lower than the world average and also lower than the yields in other countries (such as Brazil and China) (Figure 26).

Figure 26. Maize yields in selected eastern and Southern Africa countries, averages for 2000 to 2002 and 2006 to 2008



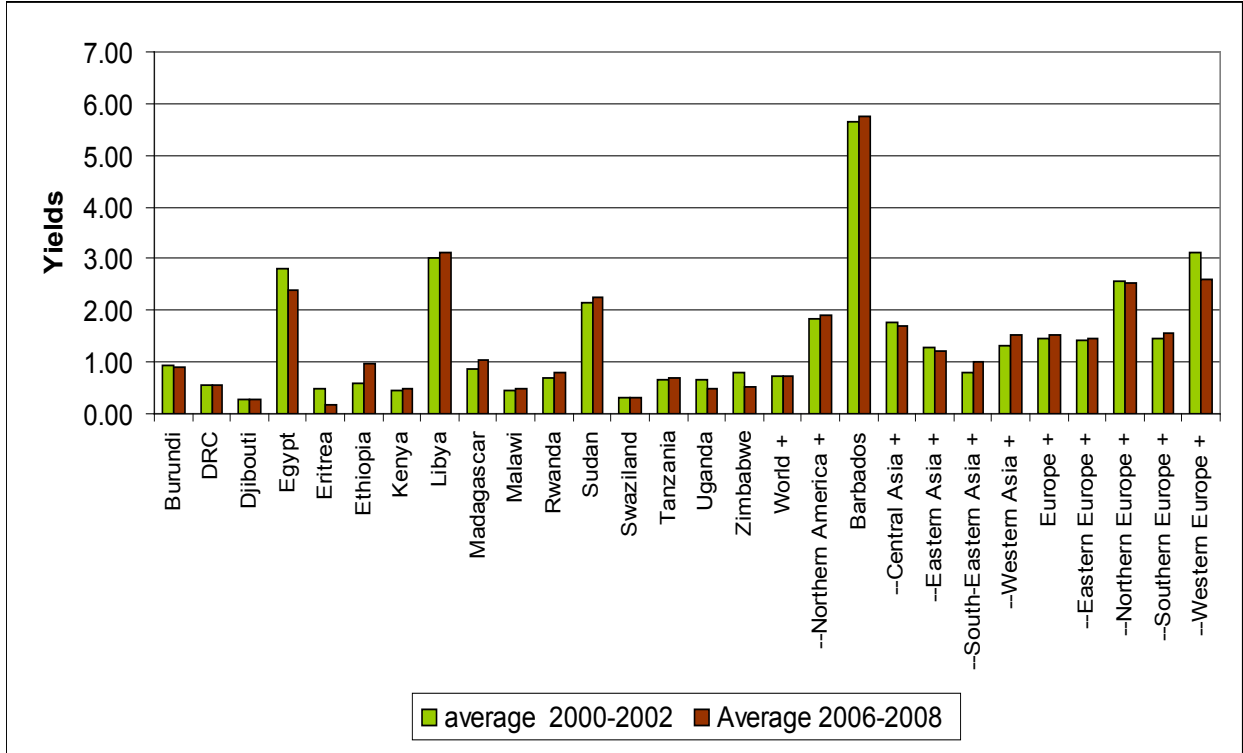
Source: FAO 2009c.

Despite the fact that maize is the key staple crop in the region, yields are now actually lower than they were at the beginning of the decade. Comparison of the maize yield figures for the

years 2000 to 2002 to those of 2006 to 2008 indicate that maize yields declined in several countries. Countries that registered a decline include Eritrea (59 percent), Tanzania (54 percent), Zimbabwe (42 percent), Swaziland (38 percent), Uganda (16 percent), Comoros (11 percent), Burundi (6 percent), Djibouti (4 percent) and the Democratic Republic of Congo (2 percent). However, there are some countries that managed to have impressive maize productivity increases in the same period. Countries with maize yield increases were Sudan (115 percent), Madagascar (65 percent), Malawi (46 percent), Ethiopia (29 percent), Egypt (9 percent), Kenya (6 percent), Mauritius (5 percent), Libya (4 percent) and Rwanda (4 percent).

As is the case for maize, productivity for beans is also low in a number of countries in the region when compared to that of other world regions, such as Asia, Europe, or North America (Figure 27). Egypt, Libya, and Sudan are the only countries in the region with bean yields above 2 tons per hectare.

Figure 27. Dry bean yields in selected Eastern and Southern African countries, averages for 2000 to 2002 and 2006 to 2008



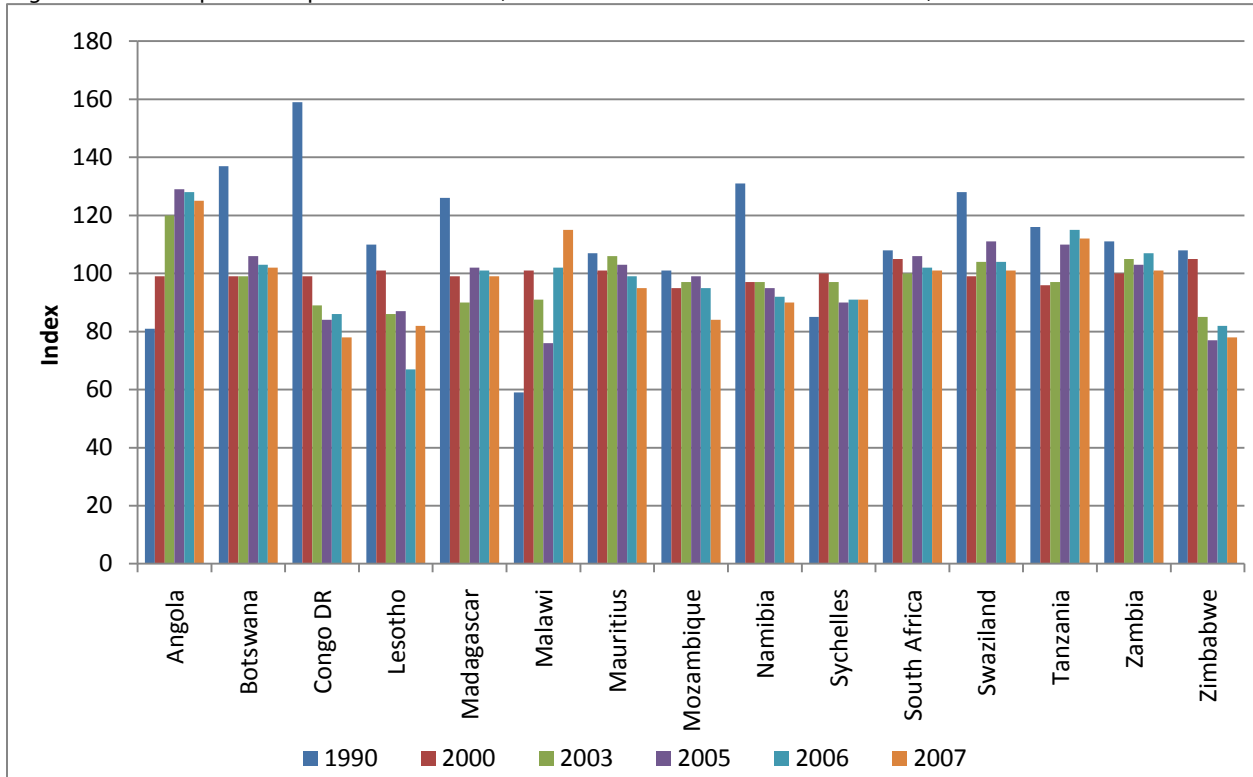
Source: FAO 2009c.

*Southern Africa*

The poor aggregate performance of this region’s agricultural sector derives from sluggish growth in agricultural productivity. This is largely a result of insufficient investment in agriculture, poor access to agricultural inputs (especially fertilizers and improved seeds), poor access to markets, and low levels of technology development and use. Other factors that explain the low productivity include adverse climate conditions and HIV/AIDS, each of which threaten the livelihoods of farming households. Since 1990, per capita food production has trended upward in only two countries, Angola and Malawi (Figure 28).



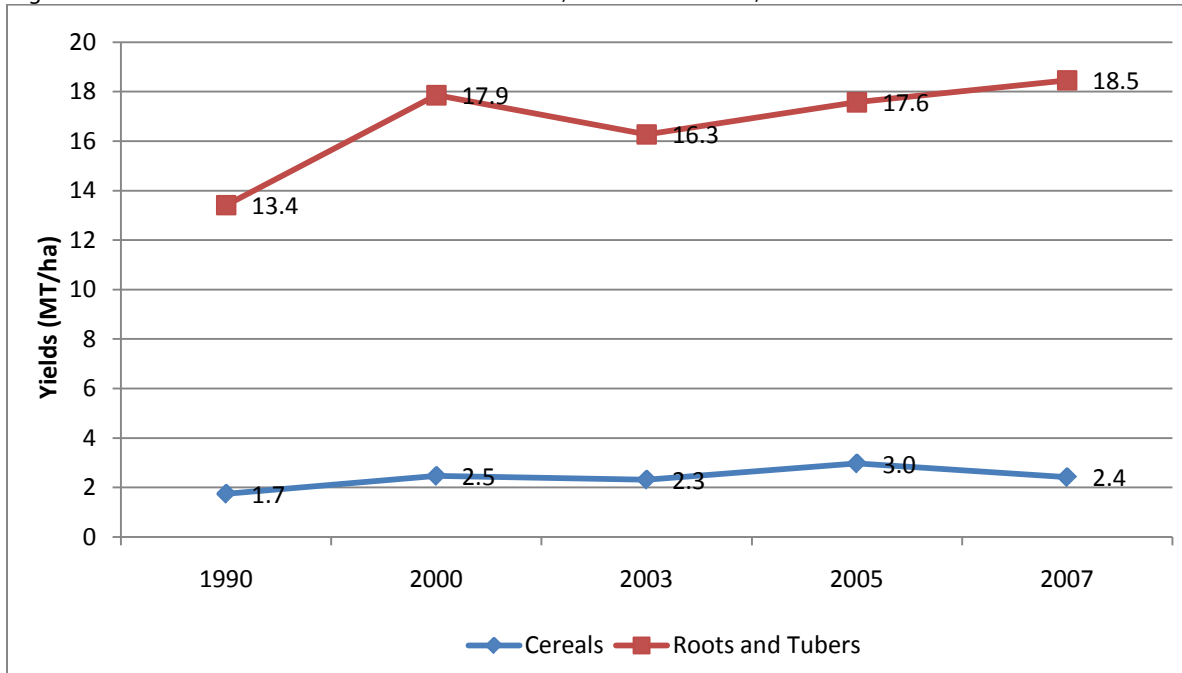
Figure 28. Per capita food production index, selected Southern African countries, 1990 to 2007



Source: FAO 2009c.

Since 2000, cereal yields have been on the decline in the region, averaging between 2.3 and 3 metric tons per hectare (mt/ha) (Figure 29). Furthermore, despite a steady rise in region-wide yield of roots and tubers in the late 1990s (reaching 13.4 mt/ha compared to the average of 8 mt/ha in Africa), the yields only increased up to 2000 then started declining until 2003, when they picked up again, surpassing the 2000 peak in 2007 (Figure 29).

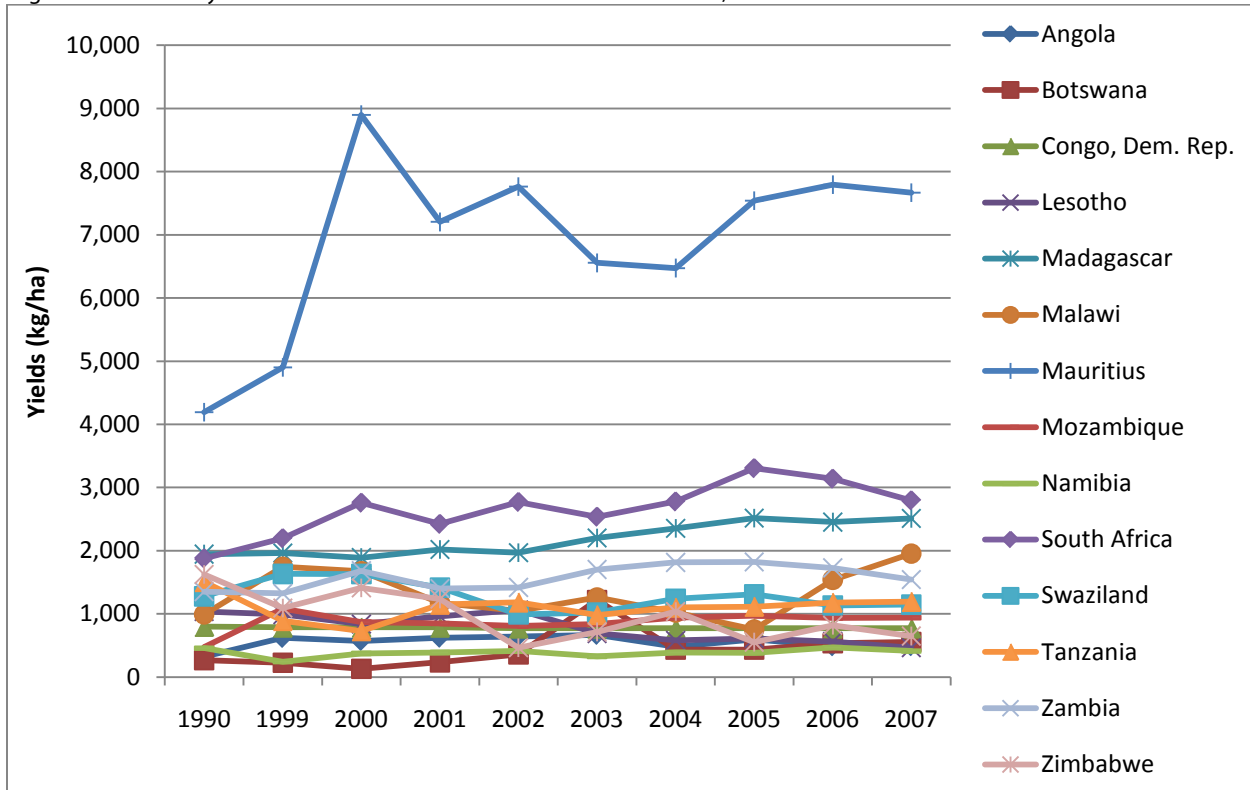
Figure 29. Yields of cereals and roots and tubers, Southern Africa, 1990 to 2007



Source: FAO 2009c.

Only Mauritius and South Africa registered considerable cereal yield increases of 50 percent and more between 1999 and 2007. Cereal yields in Malawi fell by almost a similar amount until 2006. They started to increase again in 2007 (Figure 30).

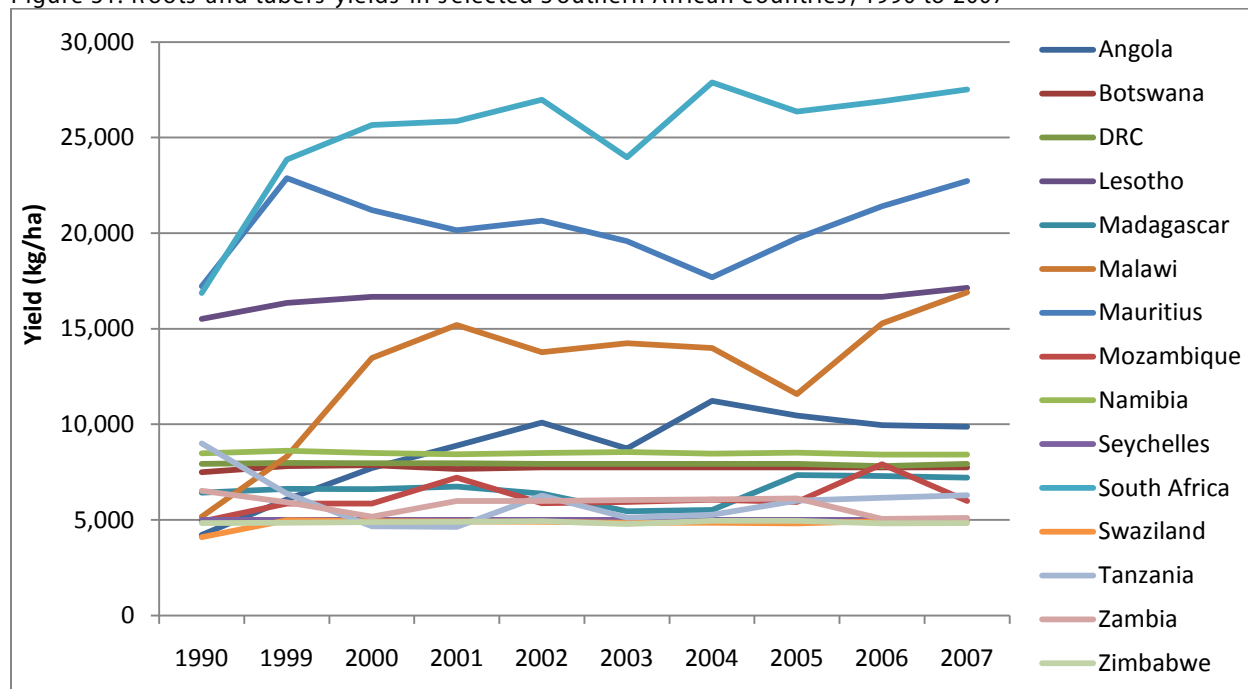
Figure 30. Cereal yields in selected Southern African countries, 1990 to 2007



Sources: World Bank 2009.

For roots and tubers (Figure 31), only Seychelles recorded a constant yield—from 5,000 kilograms per hectare (kg/ha) in 1999 to more than 5000 kg/ha in 2007. Yields of roots and tubers doubled in Malawi between 1999 and 2007. Mauritius registered a major decline in yields in roots and tubers between 1999 and 2004 but recovered sharply in 2005 to 2007.

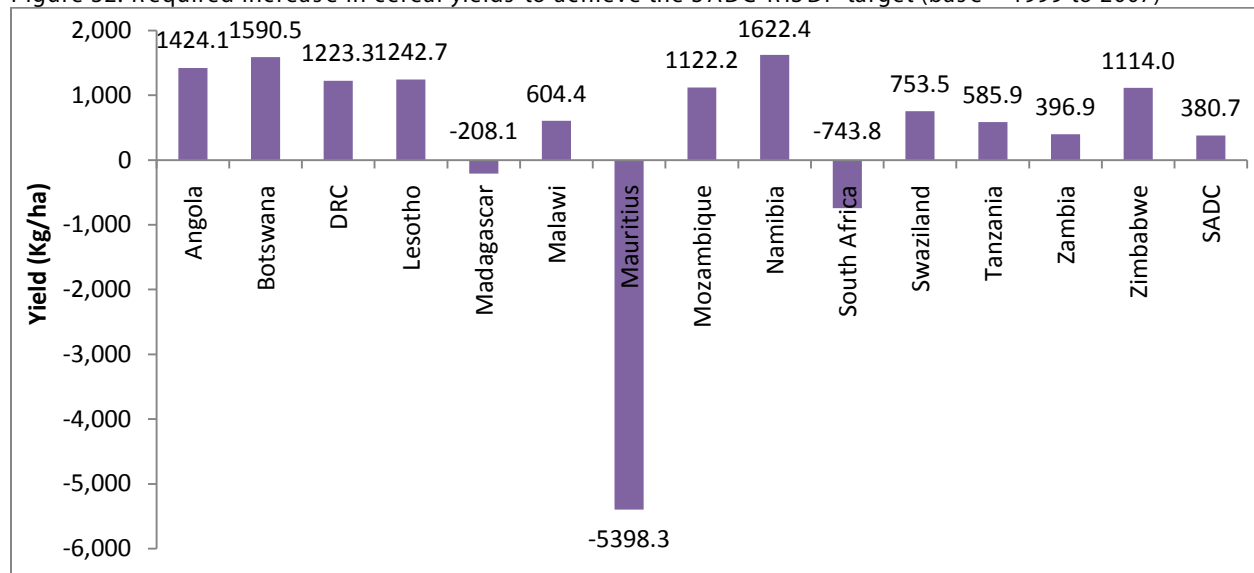
Figure 31. Roots and tubers yields in selected Southern African countries, 1990 to 2007



Source: FAO 2009c.

The SADC RISDP target to increase cereal yields from an average of 1,392 to 2,000 kilograms per hectare has been attained by only Madagascar, Mauritius, and South Africa (Figure 32). Seven countries must increase average yields by over 1,000 kilograms per hectare. Three countries must increase yields by over 700 kilograms per hectare. The region as a whole needs to increase its cereal yield by over 400 kilograms per hectare.

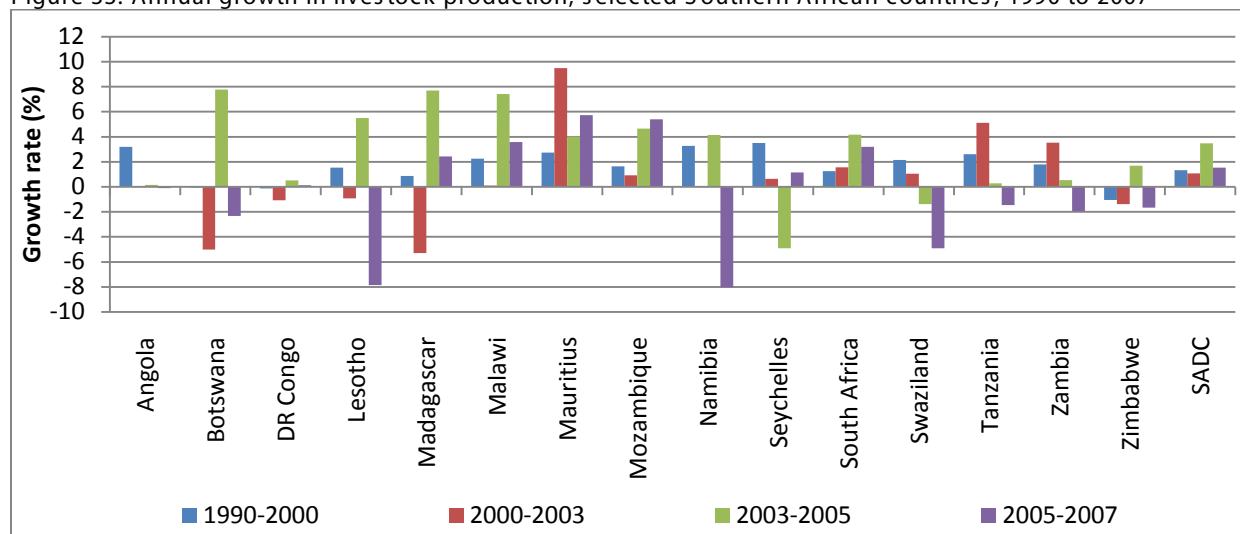
Figure 32. Required increase in cereal yields to achieve the SADC-RISDP target (base = 1999 to 2007)



Sources: World Bank 2009.

With the exception of Mauritius, Malawi, Mozambique, and South Africa, the region's livestock sector has contracted in recent years (Figure 33). Between 2000 and 2007, Namibia, Lesotho and Swaziland, in particular, suffered large declines. Livestock production in the SADC region as whole grew by barely 2 percent over this period.

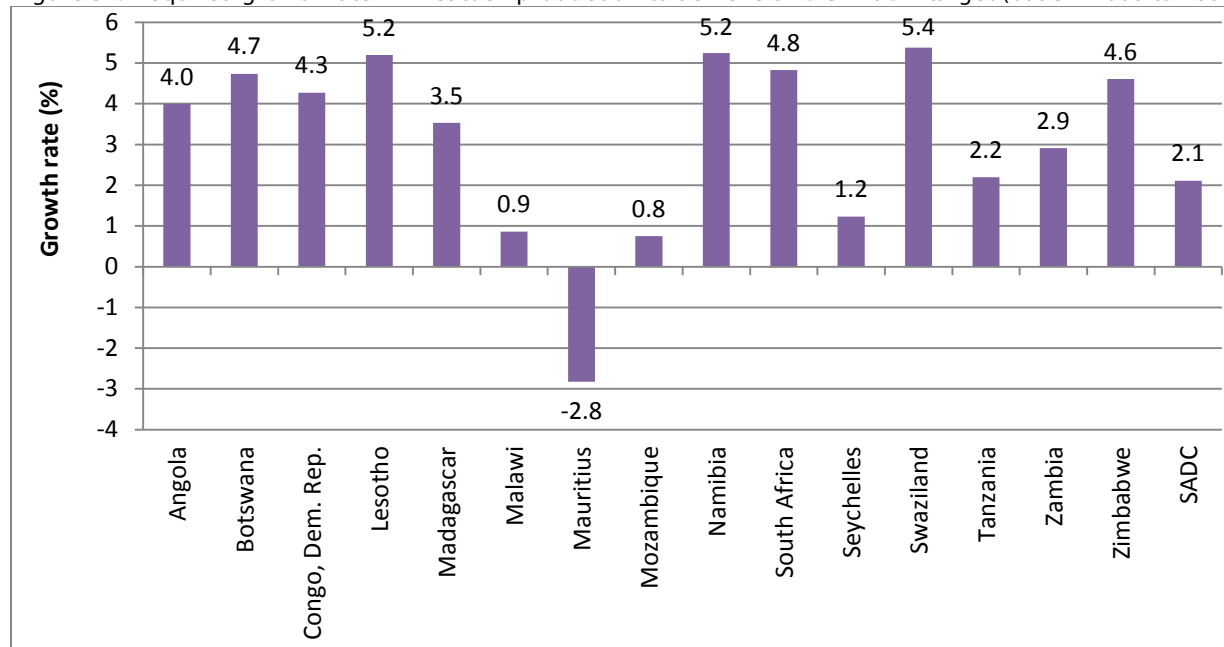
Figure 33. Annual growth in livestock production, selected Southern African countries, 1990 to 2007



Source: FAO 2009c.

The RISDP target to increase livestock production by at least 4 percent annually has been achieved only by Mauritius (Figure 34). For the rest of Southern Africa to reach this target, most countries will have to increase their production growth rate by 2-5 percent.

Figure 34. Required growth rate in livestock production to achieve SADC-RISDP target (base = 2000 to 2007)



Source: ReSAKSS calculations.

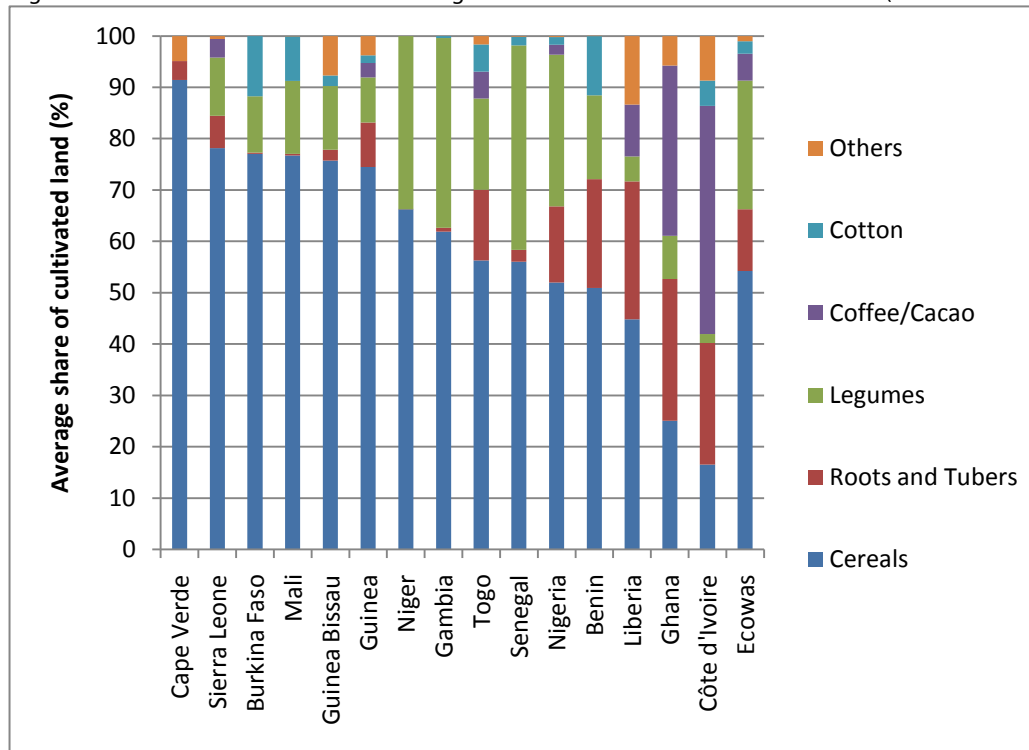
## West Africa

This section highlights West Africa's agriculture performance in 3 subsectors: crops, livestock, and the combined fishery and forestry subsector. Each of these subsectors plays an important role in the region's food supply, employment, and agricultural development.

West Africa's ecosystems range from coastal wetlands (1500-3000 mm), the dry and arid northern areas of the Sahel (250-500 mm), and desert (100-250 mm), to the Sudano-Sahelian central areas (500-1000 mm) and semi-humid Sudanian zone (1000-1500 mm). This ecosystem diversity allows West African to support a variety of agricultural and food products (Figure 35). Products vary according to agroclimatic conditions. Within the crop production subsector, cereal crops (maize, millet, sorghum, *fonio*, rice and wheat) represent 54 percent of cultivated land; roots and tubers (cassava, yams, sweet potato and cocoyam) represent 12 percent of cultivated land; and legumes (groundnuts, dry cowpea, soybeans and sesame) total 25 percent. Aside from these food crops, export crops<sup>19</sup> account for 7 percent of total cultivated acreage. These include coffee/cocoa (5 percent) and cotton (2 percent).

In the fishery sector, capture fishery remains the most dominant activity and is carried out on inland and marine waterways. While marine fishery employs modern techniques, inland fisheries employ traditional techniques. Fish farming is still marginal in the region. Forestry practices are not well developed and mainly exploit natural resources available in the region's forests.

Figure 35. Structure of cultivated acreage in selected West African countries (2005 to 2008)



Source: ReSAKSS data collected from various national government sources.

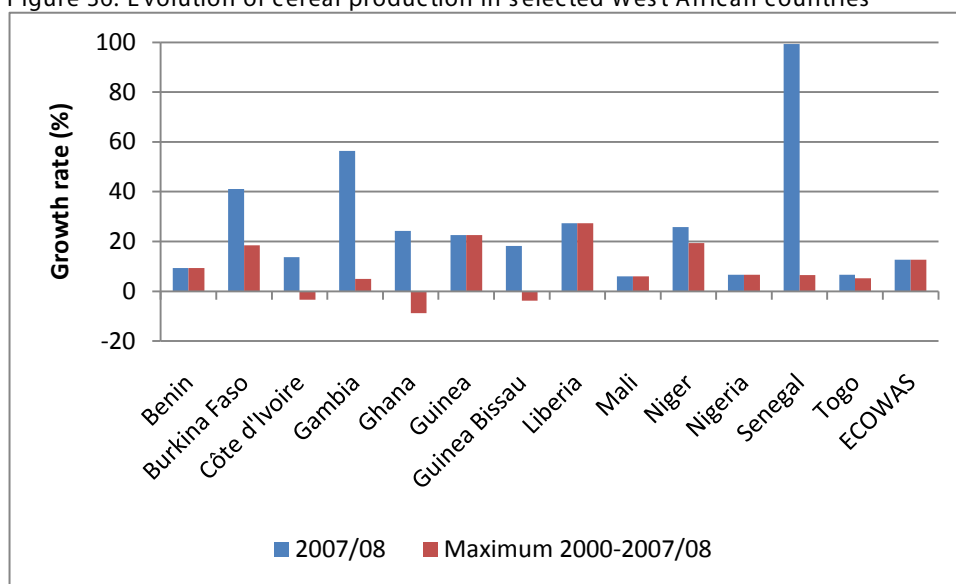
<sup>19</sup> Groundnuts are already counted in food crops as legumes crops, although they are also an export crop.

The staple foods in West Africa include grains, consumed throughout the region, and roots and tubers, found in coastal wetlands. In addition to these basic products, legumes such as groundnuts and cowpeas are also consumed for their lipids and proteins respectively.

Cereal production experienced a decline of nearly 2.0 percent in most West African countries in 2007, with the exception of Benin, Mali, and Nigeria. In 2008, production of cereals rose by 12.6 percent (Figure 36). This increase is greater than the annual average increase of 5.2 percent observed from 2000 to 2007. This improvement in grain supply in 2008 was due to countries' efforts to mitigate and capitalize on the soaring food prices via stimulus packages and the cultivation of additional land. In addition, producers benefited from good rainfall in 2008, which contributed significantly to yields.

Countries that experienced the largest increases in yield from 2007 to 2008 are Senegal (where production doubled), Burkina Faso (44.1 percent), Niger (25.8 percent), Ghana (24.2 percent), and Benin (9.4 percent). However, the reported growth rate in Senegal is amplified by the bad production in the previous year; cereal production in Senegal increased only 6.6 percent from its 2005 peak. A similar scenario influenced Burkina Faso's high increase; the increase is limited to 18.0 percent when the 2008 output is compared to its 2006 peak.

Figure 36. Evolution of cereal production in selected West African countries



Source: ReSAKSS data collected from various national government sources.

Note: The maximum growth rate between 2000 and 2007/08 is the growth rate between the year with the maximum production between 2000 and 2007 and the production in year 2008.

At the regional level, maize production, which constitutes about one-third of cereal production, grew by 14 percent against 12 percent for millet and sorghum.<sup>20</sup> It should be noted that the region is generally self-sufficient in these cereals. Rice supply, which was structurally below demand with a self-sufficiency ratio of 35 percent over the 2000 to 2007 period, grew by 14 percent at the regional level over the same period. Although this increase in rice production at

<sup>20</sup> These two crops constitute more than half of the total grain production.

the regional level remains low compared to consumption demand, some countries made significant progress in 2008. Compared to its maximum level reached in the 2000 to 2007 period, rice supply increased by 72 percent in Burkina Faso, 46 percent in Senegal, 45 percent in Benin, and 27 percent in Liberia. Nigeria, Ghana, and Guinea registered the lowest increases while rice supply fell in Côte d'Ivoire and Niger.

Compared to the average for the 2000 to 2007 period, the 2008 output-per-hectare of maize increased by 17 percent in Nigeria,<sup>21</sup> 16 percent in Ghana, 6 percent in Burkina Faso, and 5 percent in Mali. However, it decreased 12 percent in Côte d'Ivoire, 6 percent in Benin and 1 percent in Togo. Rice recorded the largest performance increase among cereal crops in 2008. Indeed, efforts by countries to increase rice supply in response to its rising price on the international market have resulted in an increase in productivity compared to the 2000-to-2007 level. With the exception of Côte d'Ivoire, where rice yield decreased by 8.6 percent, rice yields increased in the range of 8 percent in Togo to 34 percent in Benin. Rice production rose by 25 percent in Burkina Faso and Senegal, 20 percent in Nigeria, 16 percent in Ghana, 13 percent in Mali and 11 percent in Guinea.

In 2008, millet and sorghum yields increased by as little as 3 percent in Burkina Faso, to as much as 29 percent in Niger from the 2000-to-2007 average yield levels among major millet and sorghum producing countries of the region.<sup>22</sup>

In 2008, roots and tubers production rose by 8.9 percent in West Africa against an average of 5 percent from 2003 to 2007. When Nigeria (which alone accounts for more than half of regional production) is excluded, this figure increases to 11.6 percent. The three countries in the region that contribute the most to the regional output of roots and tubers—Nigeria, Ghana, and Côte d'Ivoire—enjoyed production increases of 7.7, 5.8 and 8.0 percent respectively. The highest increases were registered in Benin (54.2 percent), Burkina Faso (42.8 percent), and Senegal (198.7 percent).<sup>23</sup>

Two roots and tubers in particular—cassava and yams—saw a production increase of 9.7 and 8.5 percent, respectively. The increased production of these crops is due not to increased yields, but to an extension of cultivated land in the major cassava and yam-producing countries.<sup>24</sup>

Several factors may explain the increase in land devoted to these two crops. It is likely that soaring food prices, which degraded the purchasing power of farmer households, motivated these farmers to cultivate more land as a hedge against their difficulties in buying food. Further, the transmission of higher prices from the world market to the local produce as well as increased demand for local (as opposed to increasingly more expensive imported) products are among the factors that explain this increase in local production.

Due to their protein and lipid content, legumes also play an important role in West African food and nutrition security. They help to diversify agricultural production and provide substantial income to rural households in most countries. One quarter of the total cultivated area in the

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<sup>21</sup> Because of inconsistency of data on area cultivated, the yield analysis in Nigeria is for the 2005-2008 period, only.

<sup>22</sup> These countries are Burkina Faso, Ghana, Mali, Niger, Nigeria, Senegal and Togo.

<sup>23</sup> It is important to note that Burkina Faso and Senegal are Sahelian countries where production of tubers remains marginal. The high increase in supply in these countries reflects their diversification efforts. The 50.0 percent increase in roots and tubers supply in Benin is relative because it only grew by 15 percent from its 2002 level.

<sup>24</sup> Note that the exceptions to declining yields were cassava in Ghana, Nigeria and Togo and yams in Benin and Ghana.



region is dedicated to legumes. Cowpea and groundnuts are the major legume crops, covering 63 and 25 percent of the total area cultivated with legumes, respectively.

Legume production increased to 7.3 million tons in 2008 from 6.2 million tons in 2007, representing a one-year increase of 17.1 percent. This increase of so much more than the 9.5 percent average observed from 2003 to 2007 is due to increased cowpea and groundnut production of 19.4 and 17 percent, respectively.

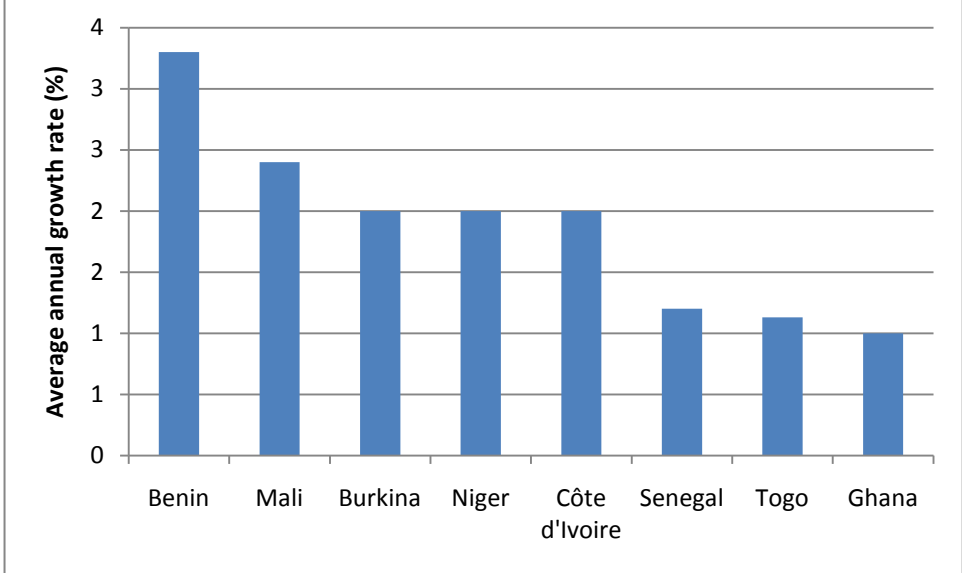
However, this sharp 2008 increase in the supply of legumes is relative in some countries if one compares the 2008 level to the maximum reached during the 2000-2007 period (as opposed to comparing it with the *average rate* between 2003-2007, as seen in the previous paragraph). Indeed, comparing the Burkina Faso 2008 growth rate with the country's period max reduces the 85 percent increase seen in 2007-2008 to 15 percent. The same trend is observed in Senegal, where it was 5 percent against 130 percent.

Livestock also plays an important role in West Africa. Regionally, it contributes 10 percent to agricultural value added. In the Sahelian countries, this contribution is even higher at 25 percent. The subsector also serves as a lever of regional integration because of the trade opportunities between the coastal and Sahelian countries of West Africa.

Livestock production has not grown by as much as vegetable production, whether measured in terms of livestock or dairy and meat production, during the last twenty years. The subsector was marked by the drought-induced losses of the early 70s and 80s. Part of the decimated cattle population has been replaced by sheep and goats, livestock whose productivity is lower.

With the exception of Senegal, where the annual growth rate is 1.2 percent, the region's Sahelian countries are experiencing livestock growth of around 2 percent (Figure 37). The situation is heterogeneous for coastal countries. Benin recorded the highest annual growth of 3.3 percent, followed by Côte d'Ivoire with 2 percent. As for Togo and Ghana, cattle performance is relatively low with only 1.1 and 1.0 percent growth rates, respectively.

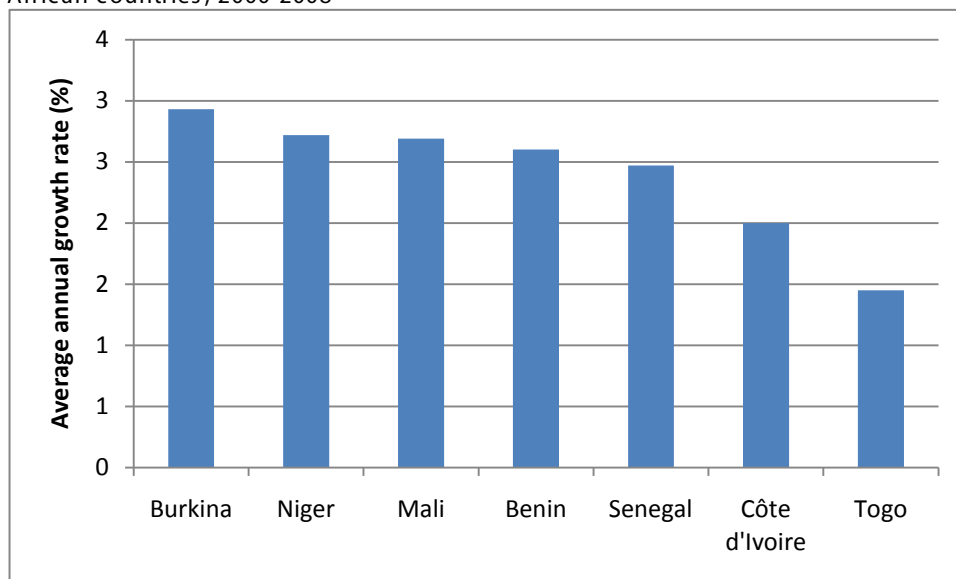
Figure 37. Average annual growth rates of cattle in selected West African countries, 2000-2008



Source: ReSAKSS data collected from various national government sources.

Production trends of small ruminants, such as sheep and goats, are slightly higher than those of cattle in all countries of the Sahel and in Togo (Figure 38). In Côte d'Ivoire, both species grew at the same annual rate of 2 percent. The growth rate for all the countries varies between 1.5 percent for Togo and 2.9 percent in Burkina Faso.

Figure 38. Average annual growth rates of small ruminant production (sheep and goats) in selected West African countries, 2000-2008



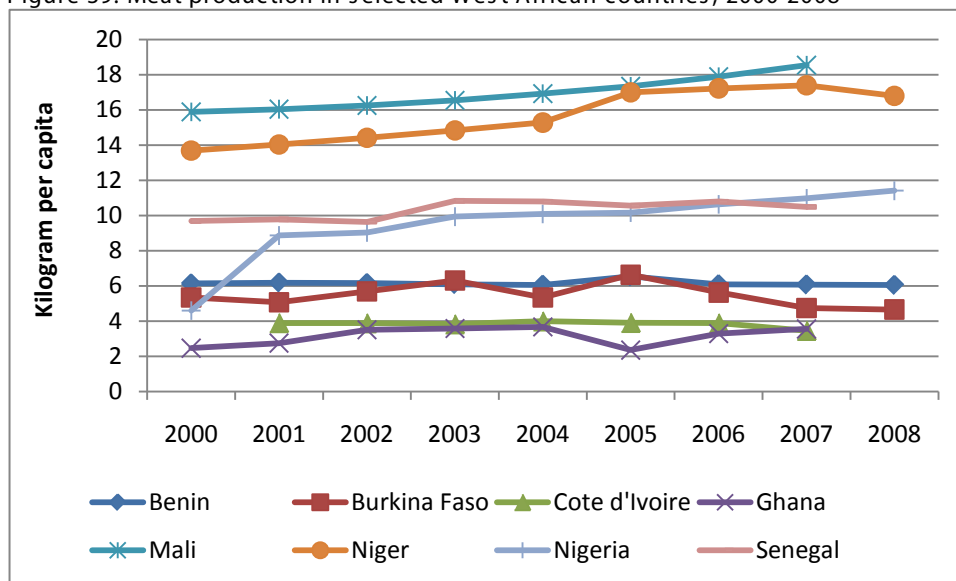
Source: ReSAKSS data collected from various national government sources.

Production trends of meat and milk are not well documented in the region. The total meat production is estimated by applying a constant ratio of exploitation, which is the ratio of the number of slaughtered cattle to total number of cattle. This poses some issues since livestock production is influenced by market conditions. Concerning the evaluation of milk production, it is primarily based on zootechnical parameters. For better planning and monitoring of this subsector, the countries of the region must develop robust statistical methods. Given the poor nature of the statistical systems of the subsector, the following analysis only gives orders of magnitude of livestock production.

In 2007, per capita production of meat was estimated at 3.5 kilograms (kg) in Ghana and Côte d'Ivoire, 4.7 kg in Burkina Faso,<sup>25</sup> 6.0 kg in Benin, 11.0 kg in Nigeria and Senegal, 17.4 kg in Niger, and 18.5 kg in Mali (Figure 39). With an average consumption of 12 kg per head per year in Benin and Côte d'Ivoire, and 10 kg in Ghana, the deficit is met by imports. These imports come partly from countries of the Sahel region in the form of live animals but they are competing with cheap imported meat from European countries, Brazil and the United States. Meat imports from outside West Africa average around 300,000 tons per year. This loss of market share by the Sahelian countries, even with their high potential for livestock farming, is explained by several factors. These are the low productivity of the Sahelian animals; inadequate infrastructure for processing and transporting meat from one country to another; lack of financial instruments facilitating intra-regional trade; and, in particular, by informal trade barriers.

<sup>25</sup> This low figure for Burkina Faso compared to similar countries like Mali and Niger highlights the poorness of the estimates.

Figure 39. Meat production in selected West African countries, 2000-2008



Source: ReSAKSS data collected from various national government sources.

Milk production remains inadequate in the region despite the production potential in the Sahelian countries, in terms of volume produced as well as in terms of the collection by processing units. Except for a few modern processing units, the dairy industry in these countries is mainly composed of semi-craft units located in periurban areas producing products whose quality and type (liquid milk mainly) does not face competition from imported products. Also, these units are mainly using imported milk powder for their production. Imports of dairy products from outside the ECOWAS Region were 600,000 tons in 2007 valued at US\$1.35 billion.

It is certain that without increased regional supply, imports will increase with rapid urbanization. Therefore, there is a need to increase investment in the region to improve livestock productivity and also develop the processing channel. In addition, a minimum protection of the local meat and milk industry for a limited time may be necessary for its development.

Although it has a low macroeconomic weight in the region (1.5 percent of GDP and 5 percent of agriculture value added) fishing is a lever for reducing poverty in West Africa. It is a source of income diversification for the rural populace and contributes to improved food security given the rich protein content of fish.

Fish production trends have been heterogeneous across countries of the region (Table 7). Countries that registered remarkable growth in production are Sierra Leone, with a doubling of production between 2002 and 2005, followed by Togo, where it has increased at an average of 5.1 percent per year. In Burkina Faso and Côte d'Ivoire, production has increased nearly as fast as population growth at 2.8 percent per year. With a rich fishing coast, Senegal is one of the main sea fishing countries in West Africa. Average fish production per capita in Senegal is 43 kg and the highest in the region. It should be noted that fish exports in 2007 amounted to 148 billion CFA franc in Senegal and contributed 21 percent to export earnings.

Table 7. Fish production trends in selected West African countries, various periods

Countries	AGR*	Quantity of fish per capita (in Kg)			Period
		Min	Mean	Max	
Benin	-1.20%	3.7	5.4	7.1	1995-2008
Burkina Faso	2.80%	0.6	0.7	0.7	1998-2008
Côte d'Ivoire	2.80%	7.7	8.0	8.5	2001-2005
Ghana	-2.40%	0.2	0.2	0.2	2000-2007
Mali	-3.00%	5.5	9.4	15.5	1993-2005
Senegal	1.10%	34.1	43.0	51.6	1994-2007
Sierra Leone	28.40%	11.3	16.0	21.9	2002-2005
Togo	5.10%	2.8	4.0	5.3	1990-2007

Source: ReSAKSS data collected from various national government sources.

Note: AGR\* = Annual Growth Rate

Among the remaining countries, namely Benin, Ghana and Mali, production has declined. This may be indicative of a decline in fisheries in these countries. Apart from Senegal,<sup>26</sup> the quantity of fish produced per capita remains low in most of the countries. It is less than one kilogram in Burkina Faso and Ghana.

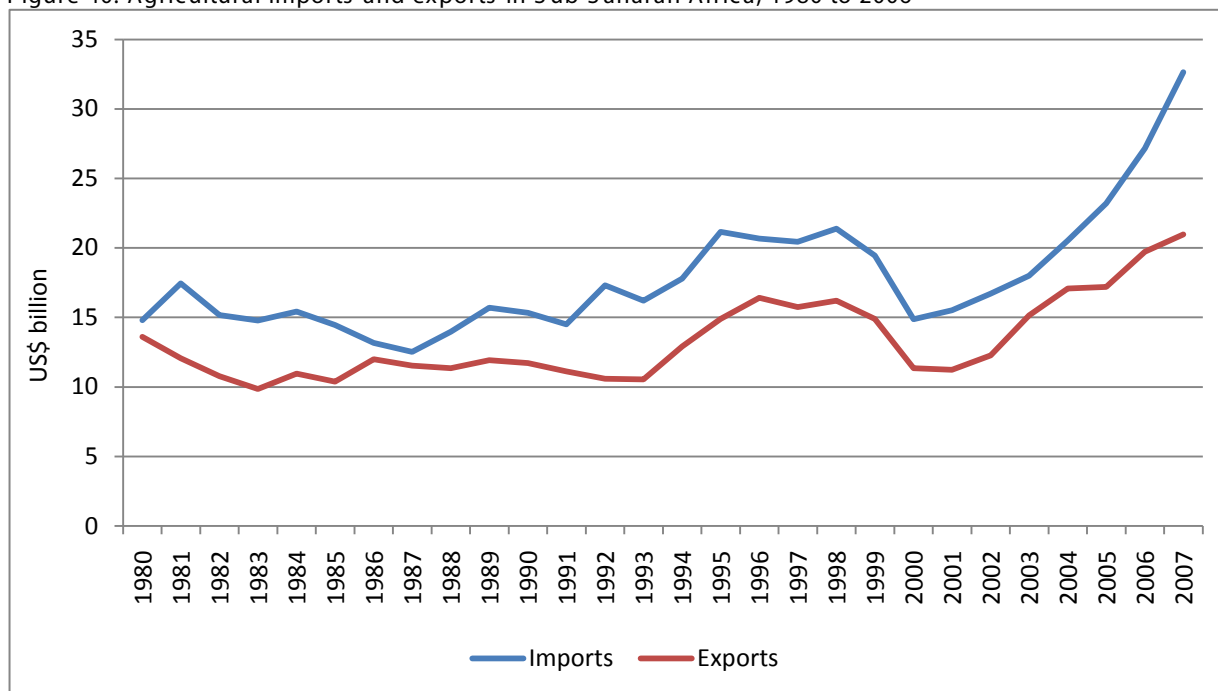
Excluding Senegal, all countries in the region are net importers of fish. In 2007, imports from outside the ECOWAS Region reached nearly 1.5 million tons, worth US\$1.65 billion. Yet the water resources of the region offer enormous potential for increasing fish production. To reverse this trend toward fish imports, each country should undertake comprehensive programs to increase fish production through fish farming, the stocking of inland waters and the empowerment of local communities in managing these resources.

## AGRICULTURAL TRADE PERFORMANCE

Sub-Saharan Africa has been a net food importer since the 1980s (Figure 40). In 2007, the value of the region's trade deficit started to increase as a result of higher food prices. A widening food supply-demand gap and rising food import bills have caused serious setbacks in agricultural production and trade. This gap has also eroded the competitiveness of domestically-produced agricultural goods in comparison with low-priced imported goods, leading to a reduction overall in African agricultural activities. While recent years have witnessed dramatic rise in attention on African agriculture because of its immediate and long-term implications for development, increasing agricultural production and productivity will not instigate growth and poverty reduction if farmers do not also have access to domestic, regional, and international markets for trade. Access to these markets is still severely limited in Sub-Saharan Africa due to high transportation and market transaction costs.

<sup>26</sup> One should consider that this analysis excludes Guinea whose data were not available. But it is likely that apart from Senegal, Guinea has the highest per capita production and demand coverage in the region.

Figure 40. Agricultural imports and exports in Sub-Saharan Africa, 1980 to 2006



Source: FAO 2009c.

#### Eastern and Southern Africa

Table 8 illustrates the trends in the trade of agricultural raw materials within the COMESA region. Based on Table 8, both the imports and exports of agricultural raw materials in the region have increased in nominal value over time. However, net agricultural exports have been declining since 2004. This implies that, over time, the region has been exporting relatively fewer agricultural products compared to non-agricultural products. Even the cases where agricultural exports increased since 2000, those exports rose at a slower rate than non-agricultural exports. Similarly, the share of agricultural imports in total imports decreased between 2000 and 2008; this also implies that, when the imports of agricultural products to the COMESA region have risen, they have also risen at a slower rate than the regional imports of non-agricultural products.

Table 8. Agricultural trade in the COMESA region, 2000 to 2008

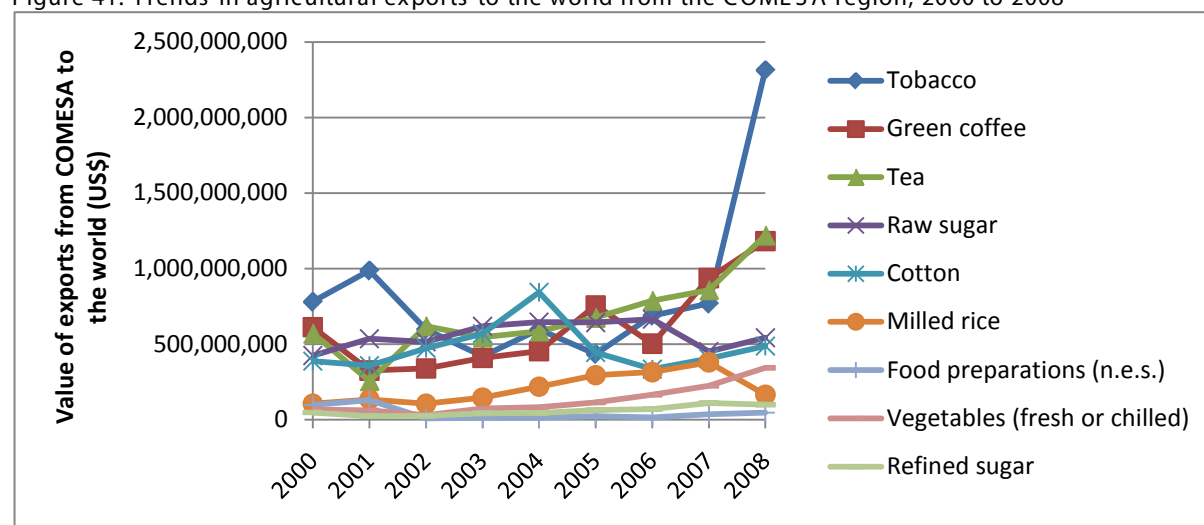
Year	Agricultural exports (US\$)	Agricultural imports (US\$)	Net exports (US\$)	Share of ag. Exports in total exports (%)	Share of ag. Imports in total imports (%)
2000	945,426,069	1,007,971,576	-62,545,507	6.77	3.37
2001	892,311,614	912,441,887	-20,130,273	6.88	3.18
2002	1,085,743,413	897,860,082	187,883,331	3.13	1.97
2003	1,424,042,407	951,961,782	472,080,625	3.08	2.17
2004	1,745,443,839	1,067,728,616	677,715,222	3.06	2.15
2005	1,521,101,002	1,401,474,548	119,626,453	2.02	2.06
2006	1,528,029,010	1,675,221,277	-147,192,267	1.54	2.16
2007	2,056,217,333	1,933,331,954	122,885,379	1.96	2.01
2008	2,451,807,257	2,804,033,755	-352,226,499	1.58	1.85

Source: COMESA 2010.

In 2000, the top 10 agricultural exports from the COMESA region to the world, in order of importance, were: unmanufactured tobacco, green coffee, tea, raw sugar, cotton lint, sesame seed, milled rice, food preparations, fresh vegetables, and refined sugar. The top 10 agricultural imports from the world to the COMESA region were: wheat, maize, wheat flour, unmanufactured tobacco, palm oil, meat, cake of soybeans, milled rice, cattle, and tea.

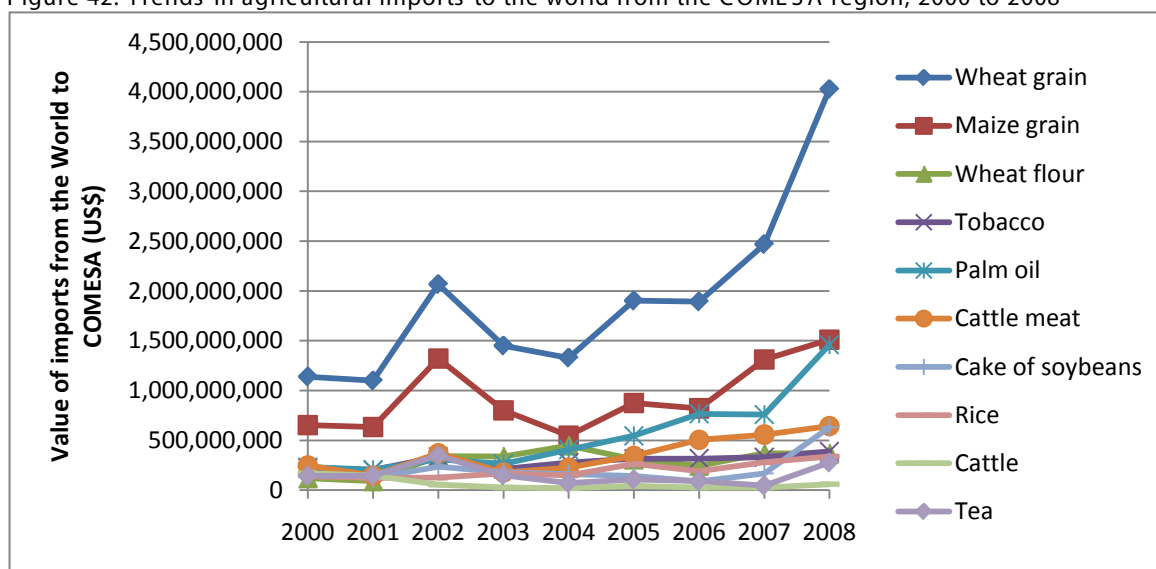
Figure 41 and Figure 42 illustrate the trends in the value of the main agricultural commodities traded to and from the COMESA region from 2000 to 2008. The value of regional exports of tobacco, green coffee, tea, and vegetables (fresh and chilled) increased slightly over the eight year period, while the value of imports of wheat, maize, and palm oil increased significantly.

Figure 41. Trends in agricultural exports to the world from the COMESA region, 2000 to 2008



Source: COMESA 2010.

Figure 42. Trends in agricultural imports to the world from the COMESA region, 2000 to 2008



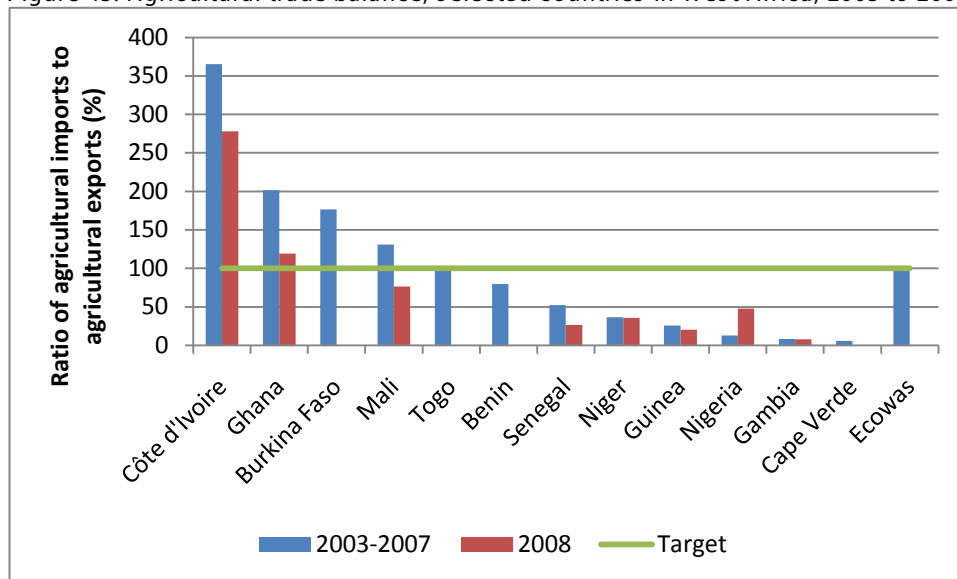
Source: COMESA 2010.

### West Africa

Agricultural trade plays an important role in West Africa. At the regional level, agricultural exports accounted for 54 percent of total non-oil exports between 2000 and 2007 and were an important source of cash income for farm households.<sup>27</sup> In Benin, Burkina Faso, and the Gambia, agricultural exports accounted for 88.2 percent, 88.4 percent and 77.8 percent of total exports, respectively, between 2000 and 2005. Export crops contribute to the modernization of the farms in several ways, such as by increasing the availability of extension services and credit for inputs and equipment. In addition, roads, market infrastructure, telecommunications and social services often develop in rural areas along with increased production of export crops. For countries with low or no mineral and fossil resources, agricultural exports can contribute to macroeconomic stability. They serve as a major source of foreign exchange and can help to correct balance of payments issues. In addition, given the narrow tax base of West African countries, agricultural exports constitute a significant source of government revenue and thus contribute to the sustainability of public debt.

<sup>27</sup> Due to lack of fully disaggregated data on intraregional trade, exports of the region are obtained by the sum of exports by country regardless of their destination within or outside the region. This also applies to imports. This will overestimate the regional imports and exports.

Figure 43. Agricultural trade balance, selected countries in West Africa, 2003 to 2008



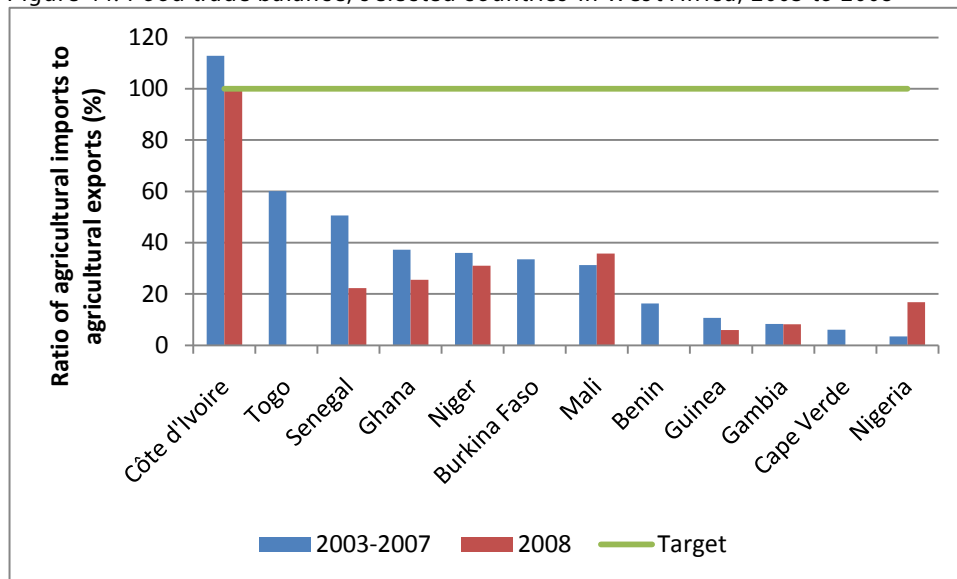
Source: ReSAKSS data collected from various national government sources.

However, only a third of the countries of the region are able to cover their agricultural imports with their agricultural exports (Figure 43). This includes Côte d'Ivoire, Ghana, Burkina Faso, Mali, and Togo, where the ratio of imports covered by agricultural exports, also known as the coverage rate, were 365 percent, 202 percent, 177 percent, 131 percent, and 102 percent, respectively, from 2003 to 2007.

Despite the increase in the value of agricultural exports in 2008 in Côte d'Ivoire, Ghana, and Mali, there was a decline in coverage rates in these countries due to the higher cost of imported foodstuffs from the international market during the soaring food prices crisis. If we refer only to food trade, we find that food trade balance is negative in all countries except for Côte d'Ivoire (Figure 44). The coverage rate of food imports by food exports is below 50 percent in all other countries except Togo and Senegal, where it reached 60 and 51 percent between 2003 and 2007. In 2008 the rate deteriorated in most countries because of the rising prices of basic food commodities on the international market.



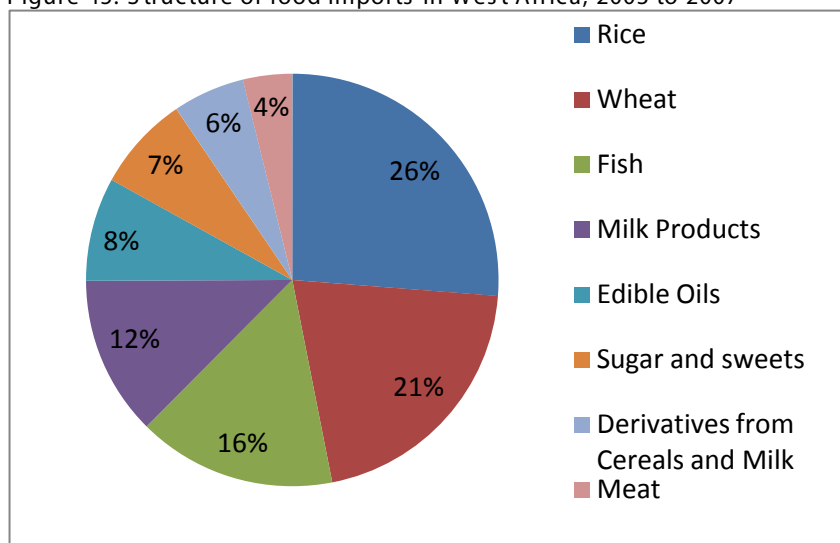
Figure 44. Food trade balance, selected countries in West Africa, 2003 to 2008



Source: ReSAKSS data collected from various national government sources.

This food trade balance situation is the result of the structural deficit in the region for rice, wheat, fish and processed food. Indeed, in 2007, imports of rice, wheat, and fish in the region reached US\$6 billion. From 2003 to 2007 they represented 63 percent of the region's food imports (Figure 45). In addition, weak processing, despite the existence of significant potential, induced imports of processed products of approximately US\$4-to-5 billion per year. Imports of dairy products, edible oils, sugar and sweets, and cereal-derived products accounted for 12 percent, 8 percent, 7 percent, and 6 percent, respectively, of food imports from 2003 to 2007.

Figure 45. Structure of food imports in West Africa, 2003 to 2007



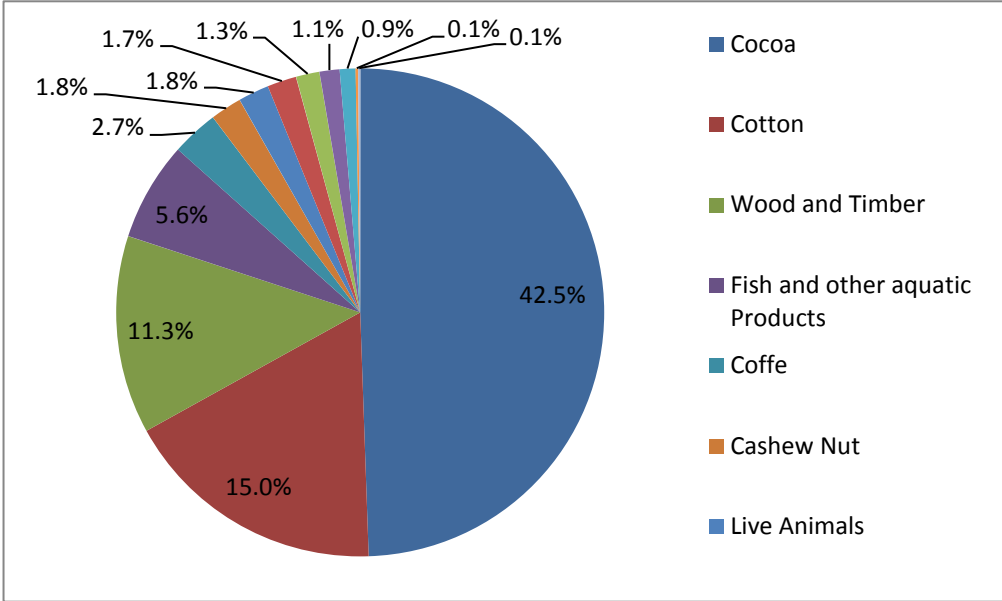
Source: ReSAKSS data collected from various national government sources.

*Structure of West Africa’s agricultural exports*

Agricultural exports in West Africa are primarily composed of cocoa, cotton, timber, fish, and coffee (Figure 46). West Africa is the world’s largest exporter of cocoa and second-largest exporter of cotton (after the United States). From 2000 to 2005, these products represented 77 percent of total agricultural exports, with cocoa dominating at 42.5 percent. Cotton, timber, fish, and coffee contributed 15 percent, 11.3 percent, 5.6 percent, and 2.7 percent, respectively. Other exports include cashew nuts (1.8 percent); live animals (1.8 percent) traded regionally only; bananas (1.7 percent) exported to the European Union by Côte d’Ivoire and Ghana; tobacco and its derivatives; and finally palm oil and peanut oil, representing about 1 percent of total trade each.

These exports are mainly from the crop production sub sector which constitutes 77 percent of total agricultural exports, followed by forestry (11 percent), fishing (9 percent), and livestock (3 percent).

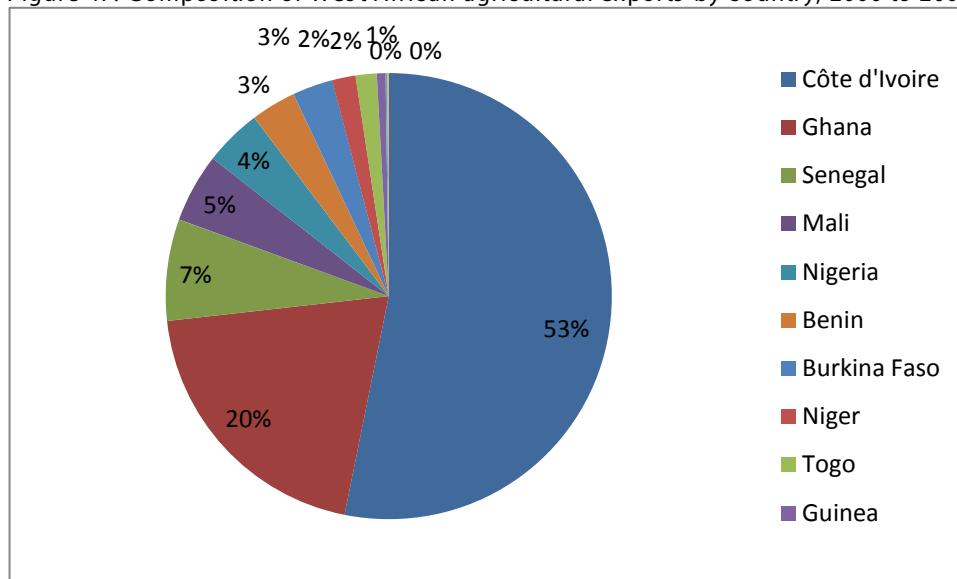
Figure 46. Composition of West Africa agricultural exports by product, 2000 to 2005



Source: ReSAKSS data collected from various national government sources.

Côte d’Ivoire and Ghana export the highest share of agricultural products within the region, at 53.2 and 20.0 percent, respectively (Figure 47). These two countries are also major cocoa exporters. Senegal, which relies mostly on fish exports to the European Union (EU), constitutes about 7.4 percent of the regional total. The main cotton producers in the region —Mali, Burkina Faso, and Benin—account for 5.0 percent, 3.0 percent, and 3.3 percent, respectively, of the total agricultural exports of the region. Nigeria, with its exports of cocoa, ranks fifth with 4 percent.

Figure 47. Composition of West African agricultural exports by country, 2000 to 2007



Source: ReSAKSS data collected from various national government sources.

The agricultural export trade is characterized by low diversity in most West African countries. With the exception of Côte d'Ivoire, Ghana, and Senegal, two to three products, and in some cases a single product, comprise up to 80 percent of total agricultural exports. This causes these countries to become dependent on these products for export revenue, which makes them vulnerable to fluctuations in international prices.

#### *Performance of West Africa's agricultural exports*

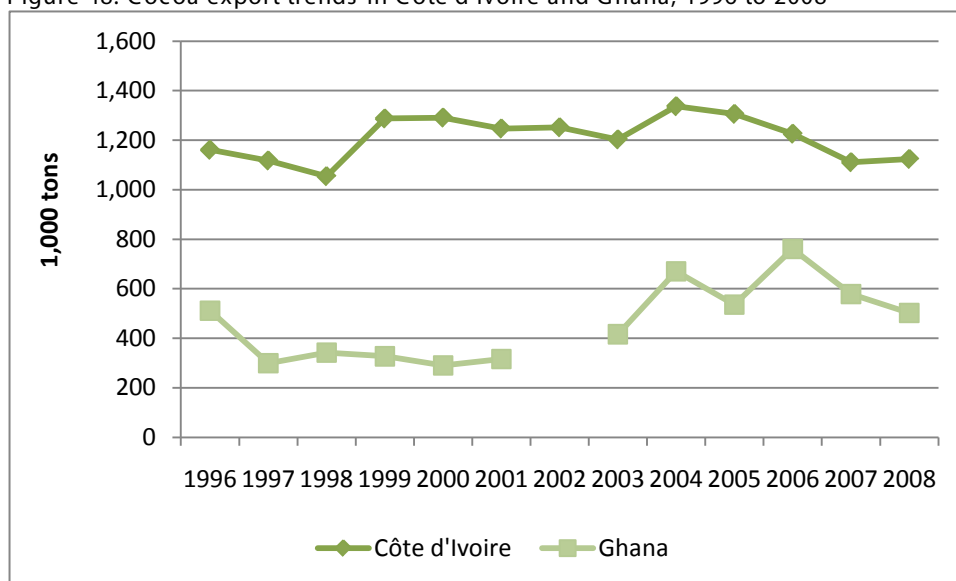
International conditions have strongly influenced West Africa's recent agricultural export performance. In addition, the limited success of the liberalization of these sectors in some countries has adversely affected their performance.

#### Cocoa

While international cocoa prices experienced an average increase of 10 percent during the past 10 years, exports from Côte d'Ivoire, the world's largest cocoa producer, have been on a downward trend (Figure 48). Total volumes have fluctuated over this period, from a volume of 1.3 million tons in 2000 to 1.1 million tons in 2008. This negative performance is partly explained by the sociopolitical crisis that began in September 2002. It can also be explained by the limited success of the sector's liberalization in the late 1990s. Another factor was the removal of the public cocoa marketing board, whose job was to regulate marketing and ensure a minimum guaranteed price to producers. This exposed producers to international market fluctuations and competition from a very small number of international companies now operating in the Ivorian market. In addition, several intermediate structures designed to promote the interests of producers have actually led to lower producer prices due to the high level of fees collected by these structures.

In contrast, liberalization of the cocoa sector in Ghana has helped the country to almost double its cocoa exports. In fact, these exports increased from 370,000 tons on average from 1996 to 1999 to 614,000 tons from 2006 to 2008 (Figure 48). However, after reaching a peak of 760,000 tons in 2006, cocoa exports declined by 24 percent in 2007 and 13 percent in 2008.

Figure 48. Cocoa export trends in Côte d'Ivoire and Ghana, 1996 to 2008



Source: ReSAKSS data collected from various national government sources.

### Cotton

West African cotton exports experienced a boom in the late 1990s due to rising world prices in dollars and the 1994 devaluation of the CFA franc among West African Economic and Monetary Union (WAEMU) member countries. Following this boom, however, cotton production experienced a decline among the major cotton-producing countries. For example, in 2008, cotton exports were 200,000 tons in Mali, down from 620,000 tons in 2003 (Figure 49). Several factors explain this negative performance. Indeed, producer subsidies in the U.S. and productivity gains in major producing countries like Brazil and India, boosted supply and resulted in decreasing world market prices.<sup>28</sup> Temporary increases of the dollar price of cotton were canceled out by the appreciation, in recent years, of the CFA franc against the dollar.<sup>29</sup> Other reasons for the crop's decline are higher input prices and slow productivity growth due to declining soil fertility. These factors decreased the sector's financial profitability.

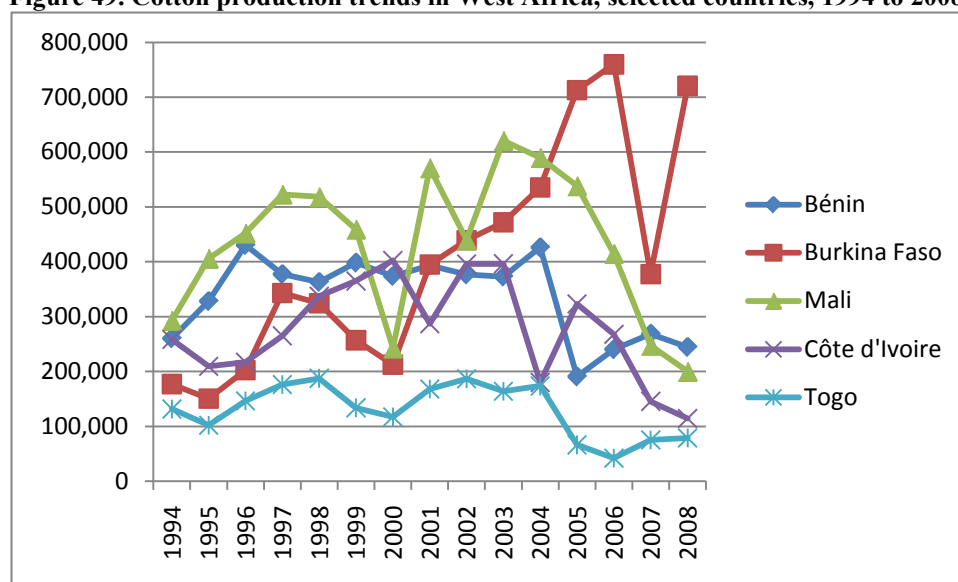
In Benin and Côte d'Ivoire, countries which followed the advice of international organizations and fully liberalized their cotton sectors, the displacement of government structures by professional organizations and the private sector have resulted in severe dysfunction, including the supply of low-quality inputs and the nonpayment of producers.

Unlike in Benin, Mali, and Côte d'Ivoire, cotton production in Burkina Faso experienced an average increase of 18.5 percent from 2000 to 2006. It declined by 50 percent in 2007 due to poor rainfall conditions and the financial difficulties of the main cotton company, *Sofitex*, which resulted in nonpayment to producers. The recapitalization of *Sofitex* by the government helped to boost production in 2008 so that it reached its 2005-to-2006 levels. This improvement in the face of declining world prices (in dollars and in the CFA franc) can be explained by the provision of public support to the subsector and by the producers' willingness to increase the volume of production.

<sup>28</sup> The United States of America is the leading exporter of cotton in the world.

<sup>29</sup> The CFA franc is tied to the Euro and therefore follows the appreciation of the Euro vis-a-vis the US Dollar.

**Figure 49. Cotton production trends in West Africa, selected countries, 1994 to 2008**



Source: ReSAKSS data collected from various national government sources.

## POVERTY, HUNGER AND FOOD AND NUTRITION SECURITY

### Progress toward meeting MDG1 in Africa

The continent is not on track to achieving the first MDG of halving hunger and poverty by 2015. According to ReSAKSS estimates, which project current hunger and poverty rates based on a “business-as-usual” scenario, the current child malnutrition rate stands at 29.3 percent for Sub-Saharan Africa (Table 9).<sup>30</sup> This rate is an increase from the last measured rate of 27.0 percent in 2008 and is likely to be an overly optimistic estimate, because it does not take into account the recent food and financial crises. According to the United Nations, the decline in hunger in Sub-Saharan Africa since 1990 reversed in 2008, largely due to the increase in food prices (United Nations 2009a).

Table 9. Child malnutrition rates (weight-for-age) and 2009 MDG1 benchmarks

Country	Year	Most recent malnutrition rates (various years)	ReSAKSS forecasted rate for 2009	2009 Benchmark	On track to halve hunger by 2015?
Algeria	2006	3.7	2.5	5.8	Yes
Angola	2001	30.5	20.1	27.8	Yes
Benin	2006	22.6	20.6	20.6	Yes
Botswana	2000	12.5	2.2	14.9	Yes
Burkina Faso	2006	37.4	38.5	19.6	No
Burundi	2005	39.2	34.5	35.3	Yes
C. African Rep.	2006	28.5	38.2	16.6	No
Cameroon	2004	19.3	20.4	8.2	No

<sup>30</sup> ReSAKSS estimates for poverty rates are calculated using data from the World Bank (2009) and the United Nations (2009a). ReSAKSS calculates the average annual rate of change between years for which data is available and uses this rate to project the current rate (assuming this rate of change stayed the same). This projection is referred to as a “business-as-usual” scenario.

Country	Year	Most recent malnutrition rates (various years)	ReSAKSS forecasted rate for 2009	2009 Benchmark	On track to halve hunger by 2015?
Chad	2004	36.7	35.2	25.4	No
Comoros	2004	24.9	27.4	11.2	No
Congo, D.R.	2007	31.4	30.9	22.1	No
Congo, R.	2005	14.4	14.7	8.2	No
Côte d'Ivoire	2006	20.2	19.3	15.5	No
Djibouti	2006	28.9	30	14.2	No
Egypt	2008	7.5	7.4	6.4	No
Eritrea	2002	39.6	38.5	25.7	No
Ethiopia	2005	38.4	35.6	30.4	No
Gambia	2006	20.3	18.5	18.5	Yes
Ghana	2008	13.9	13	18.7	Yes
Guinea	2005	25.8	27.5	12	No
Guinea Bissau	2006	19.4	16	21.3	Yes
Kenya	2003	19.9	18.5	14.3	No
Lesotho	2005	16.6	17.9	9.7	No
Liberia	2007	23.8	23.2	18.2	No
Madagascar	2004	41.9	43.1	24	No
Malawi	2006	20.5	19.1	17.5	No
Mali	2006	31.7	29.2	27.9	No
Mauritania	2007	29.8	27.6	30.2	Yes
Morocco	2004	10.2	10.7	5.5	No
Mozambique	2003	23.7	21.2	18	No
Namibia	2007	17.5	16.3	17	Yes
Niger	2006	44.4	44.8	26.3	No
Nigeria	2003	28.7	25.5	22.1	No
Rwanda	2005	22.5	20.4	18.7	No
Sao Tome and Principe	2006	9.2	7.4	11.8	Yes
Senegal	2005	17.3	16	13.8	No
Sierra Leone	2005	30.4	33	12.9	No
Somalia	2006	35.6	41.5	2.7	No
South Africa	2003	11.5	13.3	4.8	No
SSA	2008	27	29.3	19.9	No
Sudan	2006	31	30.2	21.8	No
Tanzania	2005	21.8	19.6	18.5	No
Togo	2006	26	28.1	9.2	No
Uganda	2006	20.4	19	17.2	No
Zambia	2007	19.3	18.7	15.3	No
Zimbabwe	2006	14	17	9.4	No

Source: World Bank 2009 and UN 2009a.

Note: Current rates are ReSAKSS estimates based on "business as usual." The "2009 benchmark rate" refers to the rate the country would have to achieve for 2009 if it were on track to halve child malnutrition by 2015.

Likewise, ReSAKSS estimates of poverty indicate that the continent as a whole is also not on track to halving poverty by 2015 (Table 10). The continent's projected poverty rate for 2009 stood at 38.6 percent, which was 9 percentage points above the rate the continent should have reached in 2009 in order to be on track to achieving the 2015 target of 29.0 percent. This figure was based on a "business-as-usual" scenario, and thus it does not allow for the effects of sudden shocks, such as the global economic crisis, which has likely increased poverty drastically. According to the United Nations (2009a), the number of people living in extreme poverty worldwide in 2009 was expected to be 55- million-to-90 million more than anticipated before the current economic crisis; a large share of that population—approximately 16 million—was in Sub-Saharan Africa.

Table 10. Poverty rates by country and 2009 MDG1 benchmarks

Country	Most recent poverty rate	Year	ReSAKSS estimated rate for 2009	2009 MDG Benchmark	On track to halve poverty by 2015?
Algeria	-	-	-	4.2	-
Angola	54.3	2000	-	-	-
Benin	47.3	2003	35.3	14.5	No
Botswana	-	-	-	19.3	-
Burkina Faso	56.5	2003	46.7	48.2	Yes
Burundi	81.3	2006	80.7	52.5	No
Cameroon	32.8	2001	2.9	45.8	Yes
Cape Verde	20.6	2001	-	-	-
Central African Republic	62.4	2003	50.2	55.1	Yes
Chad	61.9	2003	-	-	Yes
Comoros	46.1	2004	-	-	-
Congo, Dem. Rep.	59.2	2006	-	-	-
Congo, Rep.	54.1	2005	-	-	-
Côte d'Ivoire	24.1	1998	27.6	9.9	No
Djibouti	18.8	2002	35.1	3	No
Egypt, Arab Rep.	2	2000	1.8	1.8	Yes
Ethiopia	39	2005	30.4	44.2	Yes
Gabon	4.8	2005	-	-	-
Gambia	61.3	2003	59.8	40	No
Ghana	30	2006	25.5	33.6	Yes
Guinea	70.1	2003	58.9	58.6	Yes
Guinea-Bissau	48.8	2002	53.6	25.2	No
Kenya	19.6	1997	13.9	25.6	Yes
Lesotho	43.4	2003	35.6	37.4	Yes
Liberia	84	2007	-	-	-
Madagascar	76.3	2001	66.2	45.7	No
Malawi	73.9	2004	66.2	59.1	No
Mali	51.4	2006	42.7	60.6	Yes

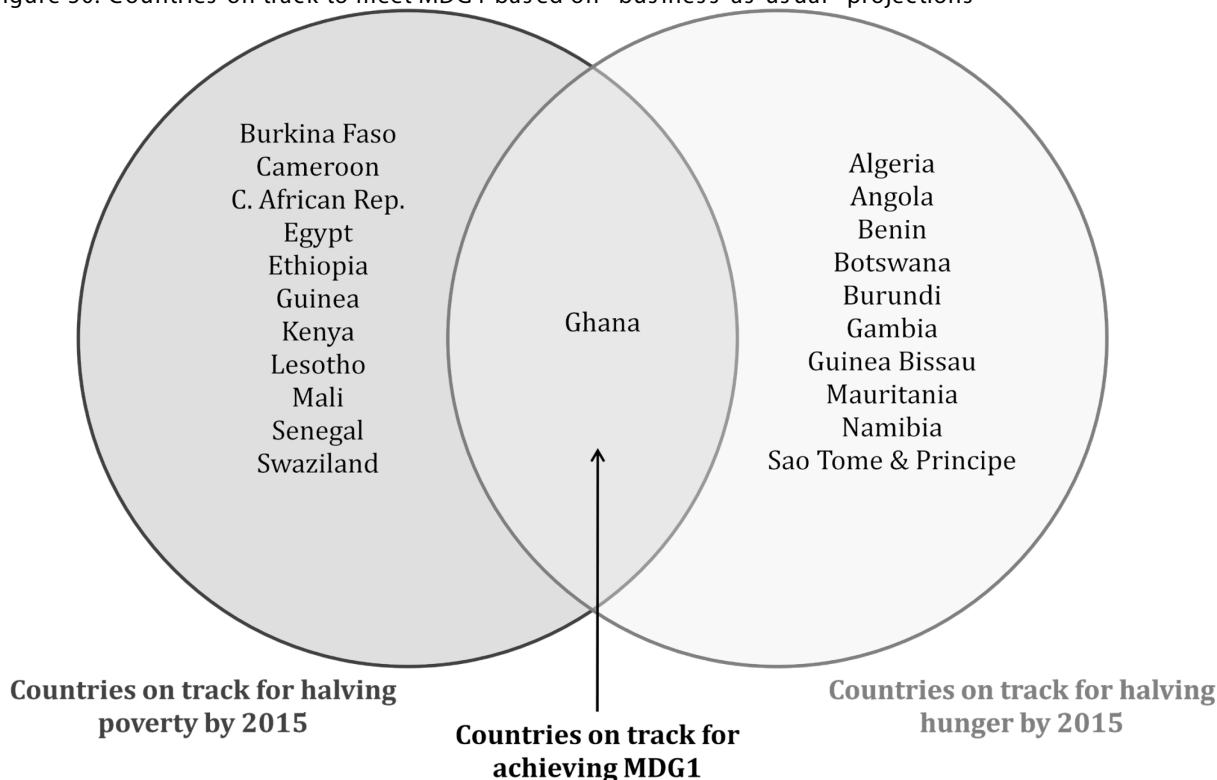
Country	Most recent poverty rate	Year	ReSAKSS estimated rate for 2009	2009 MDG Benchmark	On track to halve poverty by 2015?
Mauritania	21.2	2000	38	32.3	No
Morocco	6.2	2001	2.5	1.5	No
Mozambique	74.7	2003	68.1	55.2	No
Niger	65.9	2005	63.8	45.8	No
Nigeria	64.4	2004	93.7	27.9	No
Rwanda	60.3	2000	72	29.3	No
Senegal	44.2	2001	25.3	27.2	Yes
Sierra Leone	53.4	2003	49.1	38.9	No
South Africa	10.7	2001	28.6	14.6	No
Swaziland	62.8	2001	41.7	56.9	Yes
Tanzania	35.7	2001	33.4	42.5	Yes
Togo	38.7	2006	-	-	-
Tunisia	2.6	2000	8.2	3.7	No
Uganda	60.5	1999	45.8	45.2	No
Zambia	62.1	1996	64.9	38.9	No
Zimbabwe	34.9	1996	58.6	14.9	No
SSA	41.1	2004	38.6	29	No

Source: World Bank 2009. Note: 2009 poverty rates are ReSAKSS estimates based on “business-as-usual” scenarios. The “2009 Benchmark rate” refers to the rate the country would have to achieve for 2009 if it were on track to halve child malnutrition by 2015.

This SSA continental picture masks the varied performance of different countries in meeting the MDG1 targets. Figure 50 indicates that several countries are on track to achieve either the hunger or the poverty target of MDG1. Thirteen countries are on track to halve poverty by 2015 while eleven are on track to achieve the hunger goal. However, only one country—Ghana—is on track to achieve both components of MDG1.



Figure 50. Countries on track to meet MDG1 based on “business-as-usual” projections



Source: ReSAKSS based on World Bank 2009.

## Disaggregated hunger rates by region

### *Eastern and Southern Africa*

#### Prevalence of stunting and wasting<sup>31</sup>

Stunting (low height for age) is highly prevalent in the region. More than a third of children under the age of five are stunted in Burundi, Madagascar, Ethiopia, Comoros, DRC, Malawi, Rwanda, Zambia, Eritrea, Kenya, and Tanzania (Table 12). A number of public health nutrition experts prefer to use this indicator to measure progress against malnutrition because it is considered a more conceptually valid indicator of longer-term deprivation of basic human needs (Population Reference Bureau, 2008). Stunted children have retarded physical growth, which could lead to negative implications for their development and their school and work performance (Population

<sup>31</sup> The indicators of nutritional status of children used in this are the height-for-age (H/A), weight-for-height (W/H), and weight-for-age (W/A) anthropometric indicators of nutritional status for under-five children. H/A is an indicator of a child's long-term or chronic nutritional status. It reflects linear growth achieved before and after birth of children, with its deficits indicating long-term or chronic, cumulative effects of inadequate nutrition, health, or both. Low H/A, which is called “stunting,” refers to a situation in which children are shorter than expected for their age and gender group in the reference population due to past chronic nutritional deficiency. W/A is an anthropometric indicator that measures body mass in relation to age. Low W/A, which is called “underweight,” represents a deficit in W/A, that is, a situation wherein children weigh less than expected considering their age. W/H is an anthropometric indicator that measures body mass in relation to body length and describes a recent and acute process that has produced a substantial weight loss, usually as a consequence of an acute or recent shortage of food, a recent severe disease within a short time span, or both. Low W/H, which is called “wasting,” refers to a situation where in a child has failed to achieve adequate weight for his or her height.

Reference Bureau, 2008). Indeed, the development implications of a high prevalence of stunted children in the region could be significant, especially in the countries where approximately half of the under-five children are stunted. Within the region, wasting is highest in Djibouti, followed by Sudan, Mauritius, Madagascar, Eritrea and Ethiopia.

Table 11. Stunting and wasting prevalence, selected eastern and Southern African countries

Country name	Latest Survey Year	Stunting		Wasting		Age class (in month)
		Moderate less than -2 s.d	Severe less than -3 s.d	Moderate less than -2 s.d	Severe less than -3 s.d	
Burundi	2005	53	26	7	-	0-59
Comoros	2004	44	-	8	-	0-59
DRC	2007	40	20	9	2	0-59
Djibouti	2007	22	6	17	2	0-59
Egypt	2008	25	11	7	2	0-59
Eritrea	2002	38	16	13	2	0-59
Ethiopia	2005	47	24	11	2	0-59
Kenya	2005-2006	35	15	6	1	0-59
Libya	1995	15	5	3	0	0-59
Madagascar	2003-04	48	23	13	3	0-59
Malawi	2006	46	21	4	1	0-59
Mauritius	1995	10	3	14	4	0-59
Rwanda	2005	45	19	4	1	0-59
Sudan	2006	33	15	15	4	0-59
Swaziland	2006-07	24	-	2	-	0-59
Uganda	2006	32	12	5	1	0-59
Tanzania	2004-05	38	13	3	0	0-59
Zambia	2007	39	16	5	1	0-59
Zimbabwe	2005-06	29	11	6	1	0-59

Source: FAO 2010. Note: s.d. indicates a "standard deviation" below the norm

### Dietary diversity scores

Dietary diversity score is an indicator of the micronutrient adequacy of the diet of a population. The indicator is used as a measure of food security.

Related to the dietary diversity score is the dietary diversification index monitored by FAO. Table 13 shows the diet diversification index indicating the share in total consumption (percent) of energy, protein and fat in the ESA countries in two periods (1995–97 and 2003–2005). Between the two periods, Burundi, DRC, and Djibouti registered a reduction in the shares of all three components. However, there is a tentative indication that food security increased in the region over these periods due to the fact that there are more instances of increase than decrease in energy, protein, and fat. Overall, each indicator experienced a net increase.

Table 12. Diet diversification index, selected Eastern and Southern African countries, 1995 to 1997 and 2003 to 2005

Country	1995-97			2003-05			Change		
	Energy	Protein	Fat	Energy	Protein	Fat	Energy	Protein	Fat
Burundi	53	74	70	47	68	65	-6	-6	-5
Comoros	42	56	93	47	61	95	5	5	2
DRC	24	47	86	23	45	85	-1	-2	-1
Djibouti	50	42	95	47	38	94	-3	-4	-1
Egypt	31	33	73	33	38	73	2	5	0
Eritrea	23	32	69	29	31	84	6	-1	15
Ethiopia	19	32	70	20	32	71	1	0	1
Kenya	43	50	79	43	49	80	0	-1	1
Libya	52	49	95	54	53	95	2	4	0
Madagascar	25	40	83	21	33	78	-4	-7	-5
Malawi	26	28	50	26	31	55	0	3	5
Mauritius	53	56	96	51	58	95	-2	2	-1
Rwanda	56	66	77	44	59	80	-12	-7	3
Seychelles	59	67	94	57	68	93	-2	1	-1
Sudan	42	47	81	49	55	84	7	8	3
Swaziland	41	43	78	48	54	80	7	11	2
Uganda	59	67	92	56	69	93	-3	2	1
Tanzania	30	42	80	29	38	81	-1	-4	1
Zambia	21	26	53	24	30	66	3	4	13
Zimbabwe	37	29	76	42	36	80	5	7	4
Total with increase							11	11	12
Total with reduction							9	8	6
Net increase/decrease							4	20	37

Source: FAO

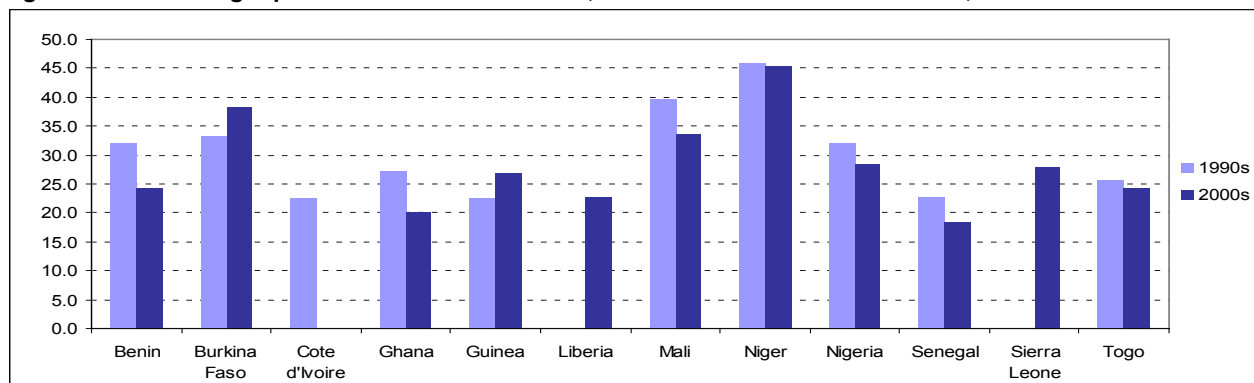
## *West Africa*

### Child underweight prevalence by location and sex

In West Africa, the prevalence of underweight children has typically been higher among males and in rural areas. In the 1990s the average prevalence among male children was 31.3 percent while females had an average of 30.1 percent (Figure 51 and Figure 52).<sup>32</sup> In the 2000s the prevalence decreased to 28.8 percent for males and to 26.6 percent for females.

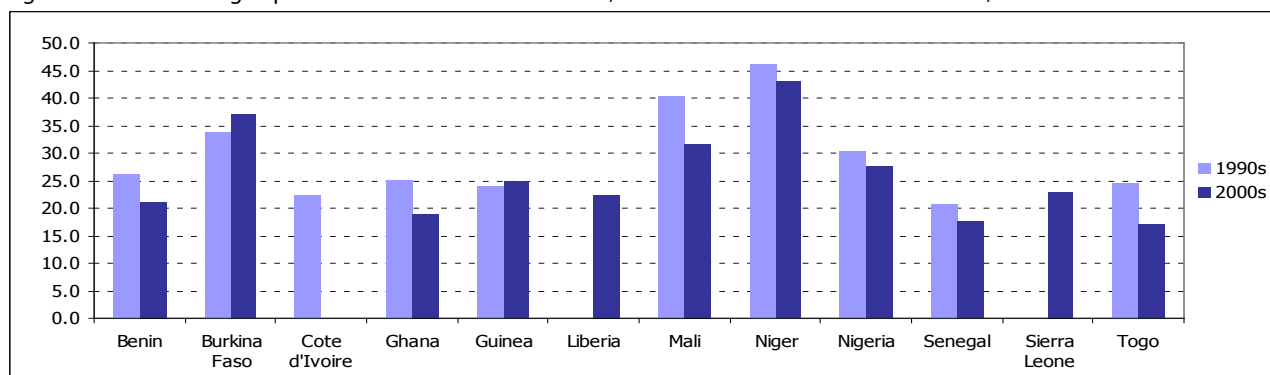
<sup>32</sup> Based on 9 countries reporting data for male, female, urban and rural indicators in both decades.

**Figure 51. Underweight prevalence in male children, selected West African countries, 1990s and 2000s**



Source: DHS 2010; ReSAKSS data collected from various national government sources.

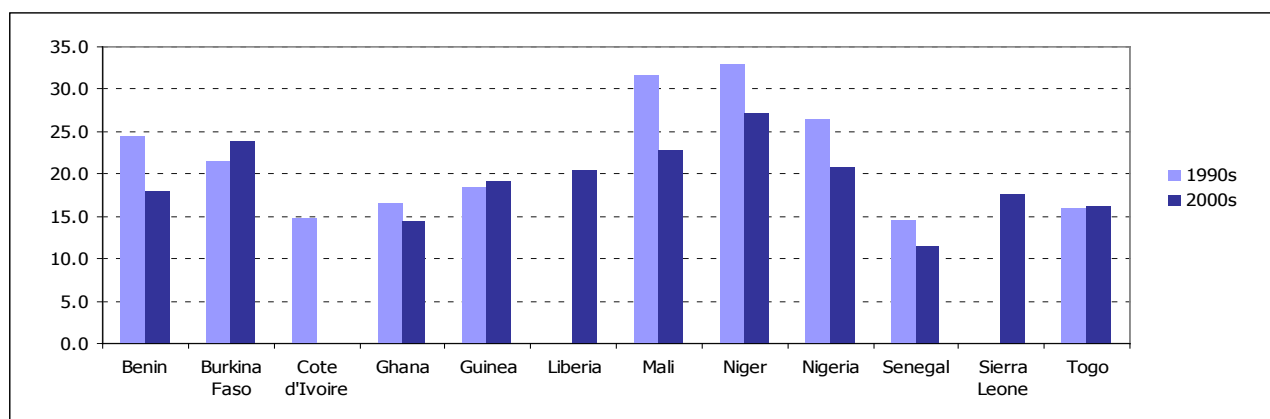
**Figure 52. Underweight prevalence in female children, selected West African countries, 1990s and 2000s**



Source: DHS 2010; ReSAKSS data collected from various national government sources.

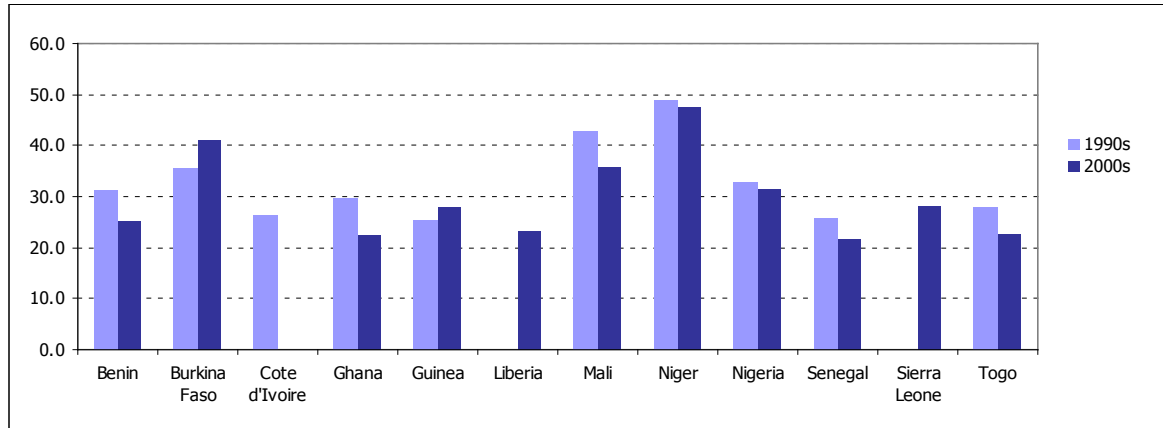
In the 1990s, the average prevalence of underweight children was 22.5 percent in urban areas and 33.3 percent in rural areas (Figure 53 and Figure 54). In the 2000s the average urban prevalence fell by 14 percent to 19.3 percent while the rural incidence fell by 8 percent to 30.6 percent. Although the prevalence decreased in both areas by the 2000s, the gap between the average urban and rural areas widened by 4.6 percent.

**Figure 53. Underweight prevalence of children in urban areas, selected West African countries, 1990s and 2000s**



Source: DHS 2010; ReSAKSS data collected from various national government sources.

Figure 54. Underweight prevalence of children in rural areas, selected West African countries, 1990s and 2000s

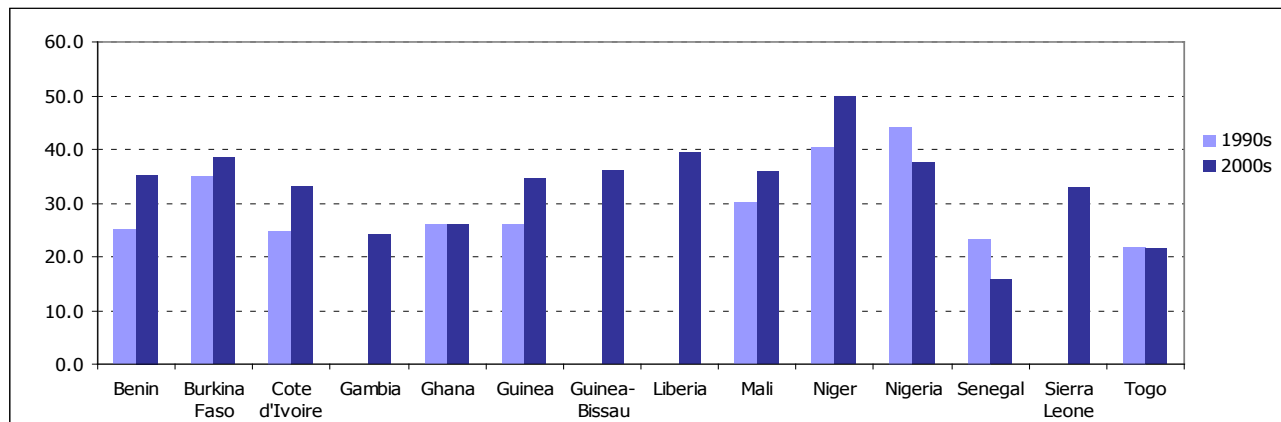


Source: DHS 2010; ReSAKSS data collected from various national government sources.

### Prevalence of stunting by location and sex

The prevalence of stunting appears to have increased in the 2000s compared to the 1990s in West Africa (Figure 55). The average regional prevalence increased from 29.6 percent in the 1990s to 32.8 percent in the 2000s. Seven countries—Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Mali and Niger—recorded an increase in prevalence.<sup>33</sup> While for Ghana the increase was a negligible 0.6 percent, Benin recorded the highest increase, of 41.0 percent, from the 1990s average to the 2000s average. Nigeria, Senegal, and Togo recorded decreases of 15.0 percent, 32.0 percent, and 0.7 percent, respectively. In the Gambia, Guinea-Bissau, and Sierra Leone (which had data for one year only) the most recently-reported prevalence was 24.0 percent, 36.1 percent and 32.7 percent, respectively. In Liberia, available records indicate that the prevalence declined from 45.3 percent in 2000 to 33.5 percent in 2007. In the 1990s, the average national prevalence ranged from 21.7 percent (Togo) to 44.1 percent (Nigeria) while in the 2000s it ranged from 15.9 percent (Senegal) to 49.9 percent (Niger).

Figure 55. Prevalence of stunting, selected West African countries, 1990s and 2000s

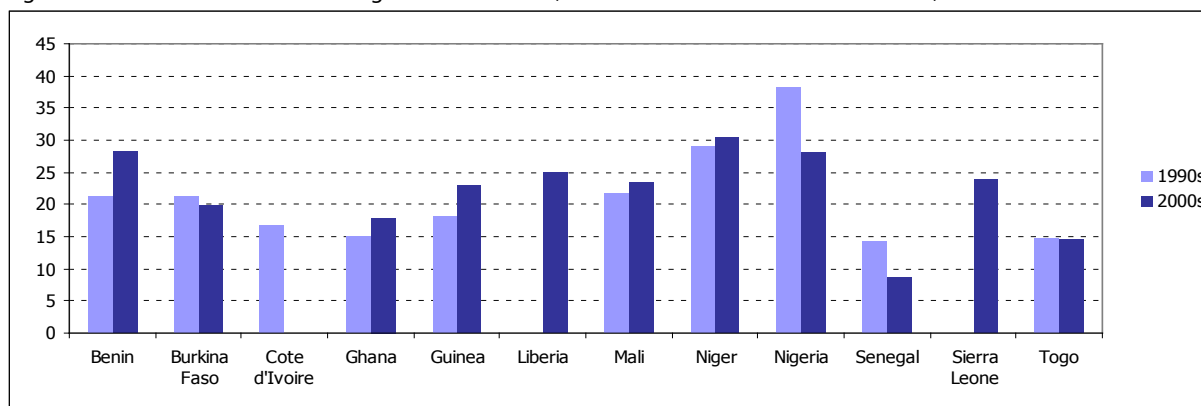


Source: DHS 2010; ReSAKSS data collected from various national government sources.

<sup>33</sup> Based on 10 countries with records of prevalence in both decades.

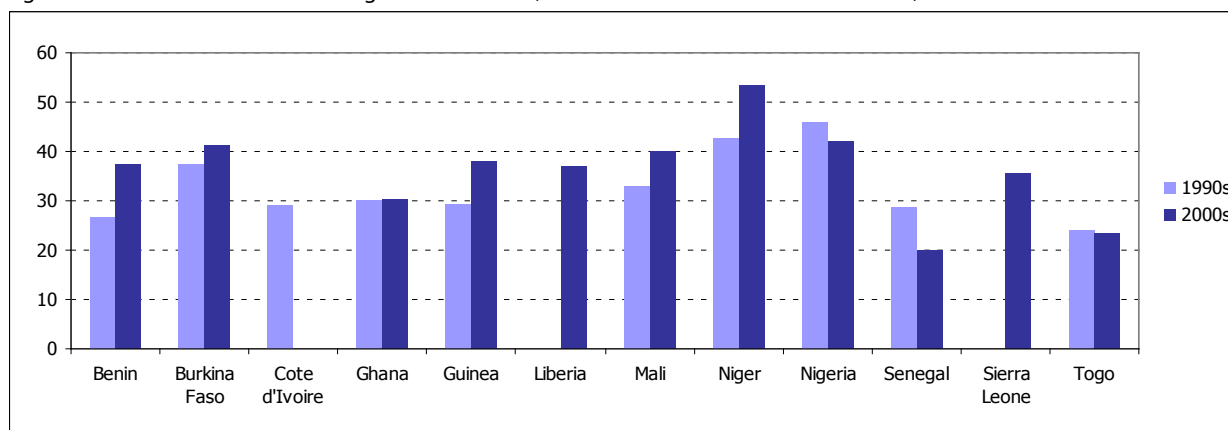
As observed with underweight prevalence, stunting is typically more prevalent in rural areas and among male children. In the 1990s, the average prevalence in the urban areas was 21.5 percent while that of the rural areas was 33.1 percent (Figure 56 and Figure 57).<sup>34</sup> The prevalence in the rural areas was 11.6 percentage points higher than in the urban areas. By the 2000s the gap increased to 14.6 points with urban and rural areas experiencing an average prevalence of 21.6 percent and 36.2 percent, respectively. While the growth in the urban areas was negligible at a value of 0.4 percent, the growth in the rural areas was much higher at a value of 9.4 percent. The prevalence of stunting in urban areas in the 2000s ranged from 8.6 percent (Senegal) to 30.6 percent (Niger). In the rural areas it ranged from 19.9 percent (Senegal) to 53.3 percent (Niger).

Figure 56. Prevalence of stunting in urban areas, selected West African countries, 1990s and 2000s



Source: DHS 2010; ReSAKSS data collected from various national government sources.

Figure 57. Prevalence of stunting in rural areas, selected West African countries, 1990s and 2000s



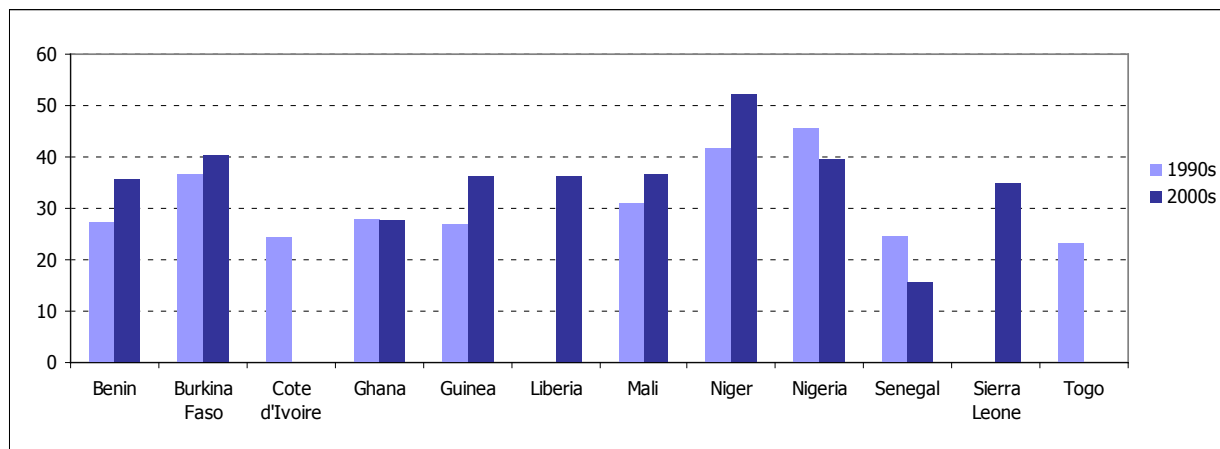
Source: DHS 2010; ReSAKSS data collected from various national government sources.

The average prevalence of stunting among male and female children was 32.7 percent and 29.7 percent, respectively (Figure 58 and Figure 59). By the 2000s, the gap of the averages narrowed imperceptibly as both prevalences rose, with males at 35.5 percent and females at 32.6 percent. The increase among male and female children in the 2000s was fairly even with growth rates of 8.6 percent and 9.9 percent, respectively. The prevalence of stunting among

<sup>34</sup> Based on 9 countries which had records of prevalence in both decades.

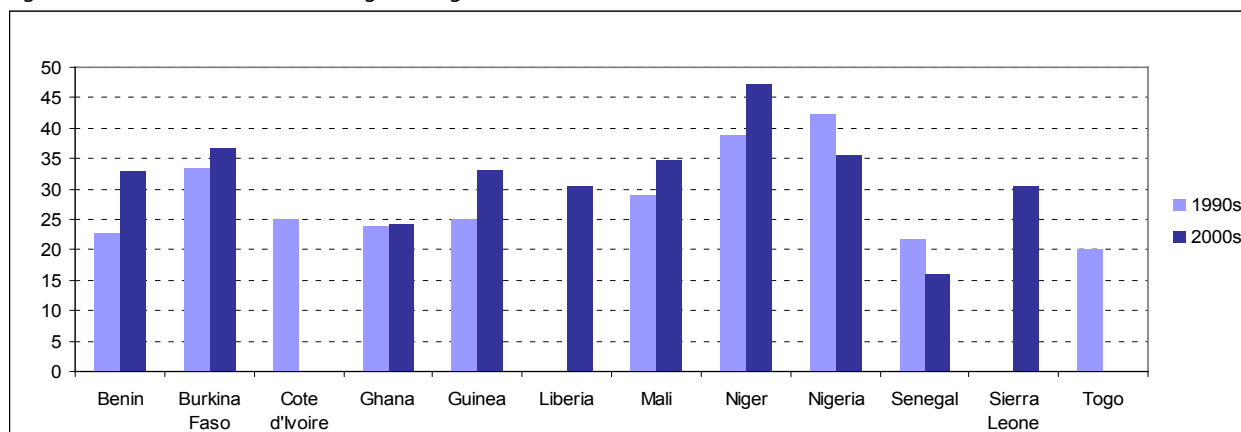
male children in the 2000s ranged from 15.7 percent (Senegal) to 52.2 percent (Niger) while that of female children ranged from 16.1 percent (Senegal) to 47.4 percent (Niger).

Figure 58. Prevalence of stunting among male children, selected West African countries, 1990s and 2000s



Source: DHS 2010; ReSAKSS data collected from various national government sources.

Figure 59. Prevalence of stunting among female children, selected West Africa countries, 1990s and 2000s



Source: DHS 2010; ReSAKSS data collected from various national government sources.

### The Global Hunger Index (GHI)

The Global Hunger Index is an average of three hunger indicators: the percentage of the population that is undernourished, the prevalence of underweight children under 5 years of age, and the under-5 mortality rate. Countries are ranked from 0 to 100 by the composite of these indicators, with 0 representing no hunger and 100 representing extreme hunger. Within these numerical rankings, countries are further categorized by the severity of hunger as follows:

GHI Ranking Categories

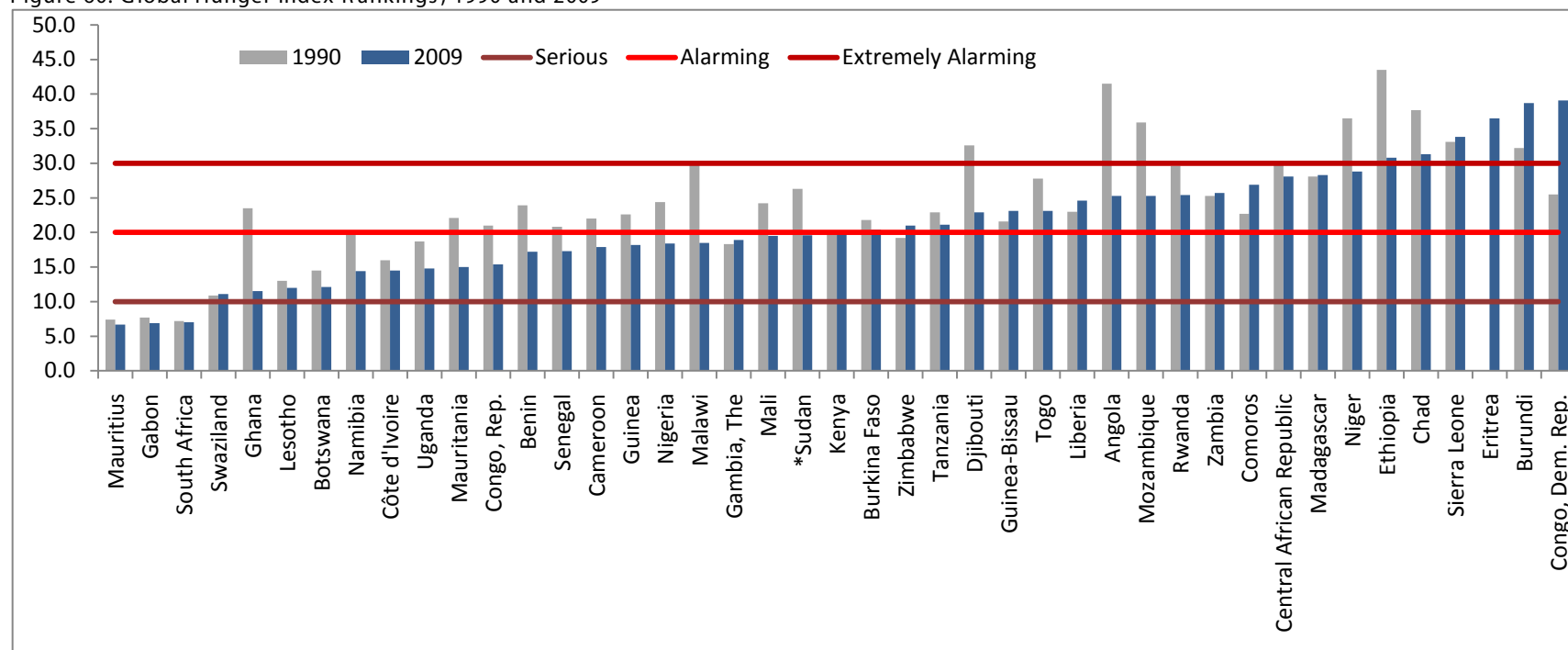
<b>Low</b>	<b>≤4.9</b>
<b>Moderate</b>	<b>5.0-9.9</b>
<b>Serious</b>	<b>10.0-19.9</b>
<b>Alarming</b>	<b>20.0-29.9</b>
<b>Extremely Alarming</b>	<b>≥30</b>

Source: GHI, 2009

Countries falling into the Low category are not included in the GHI ranking or in the graph below.

The 1990 and 2009 GHI for SSA countries are shown in Figure 60. The total SSA GHI has fallen from 25.4 in 1990 to 22.1 in 2009. Many countries have succeeded in reducing hunger over this period. Specifically, five have gone from Extremely Alarming to Alarming—these include Niger, Central African Republic, Mozambique, Angola, and Djibouti—and eleven have fallen from Alarming to Serious. Malawi experienced the most significant reduction in GHI categorization, moving from Extremely Alarming to Serious. However, the largest percent decrease in GHI was in Tunisia, where a 62.7 percent decrease was observed. Several other North African countries also experienced a decrease in GHI since 1990, to the extent that they now rank in the Low category and have therefore been excluded from the 2009 rankings. These include Algeria, Egypt, and Libya.

Figure 60. Global Hunger Index Rankings, 1990 and 2009<sup>35</sup>



\* Indicates that the data for this country are unreliable

Source: GHI 2009

<sup>35</sup> The 2009 GHI uses data from 2002-2007; the 1990 GHI uses data from 1988-1992

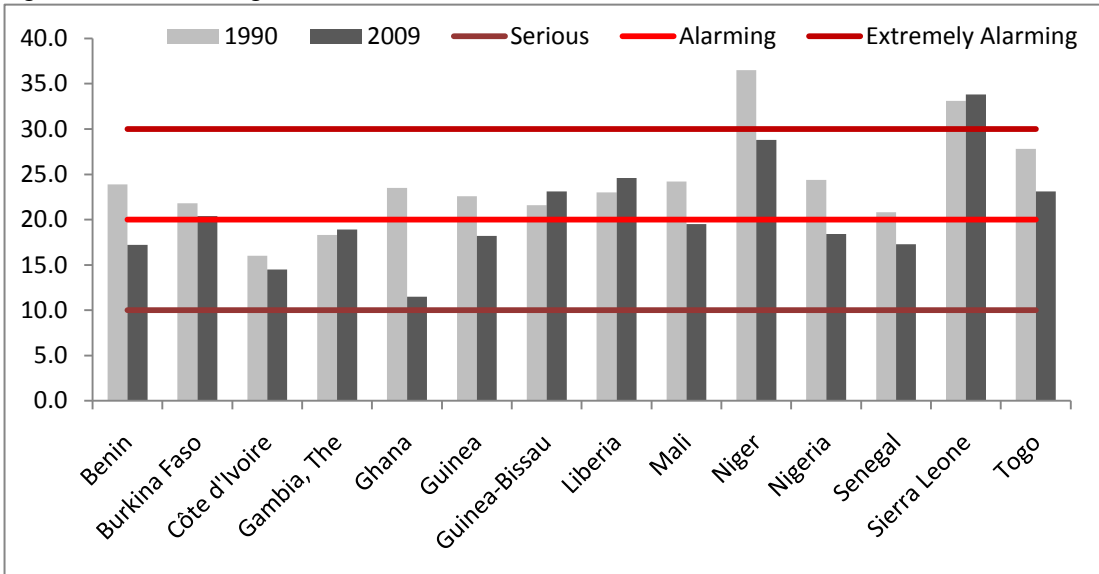


While the overall trend in SSA reflects a decrease in hunger, several countries experienced significant increases in GHI over the same period. The most extreme case is the Democratic Republic of the Congo, which experienced a 53.3 percent increase in GHI, the largest increase worldwide (GHI 2009). Other significant increases include Burundi (20.2 percent), Comoros (18.5 percent), Zimbabwe (9.4 percent), and Liberia (7 percent).

**Economic Community of West African States (ECOWAS)**

Since 1990, ten ECOWAS countries have succeeded in reducing hunger, as indicated by the GHI, for a total average decrease in this region of 13.9 percent (see Figure 61). The greatest reduction in hunger was realized by Ghana, at 51 percent. Despite this progress, all ECOWAS countries remain above the Serious hunger level, five remain above Alarming, and one, Sierra Leone, remains above Extremely Alarming.

Figure 61. Global Hunger Index, ECOWAS <sup>36</sup> 1990 and 2009



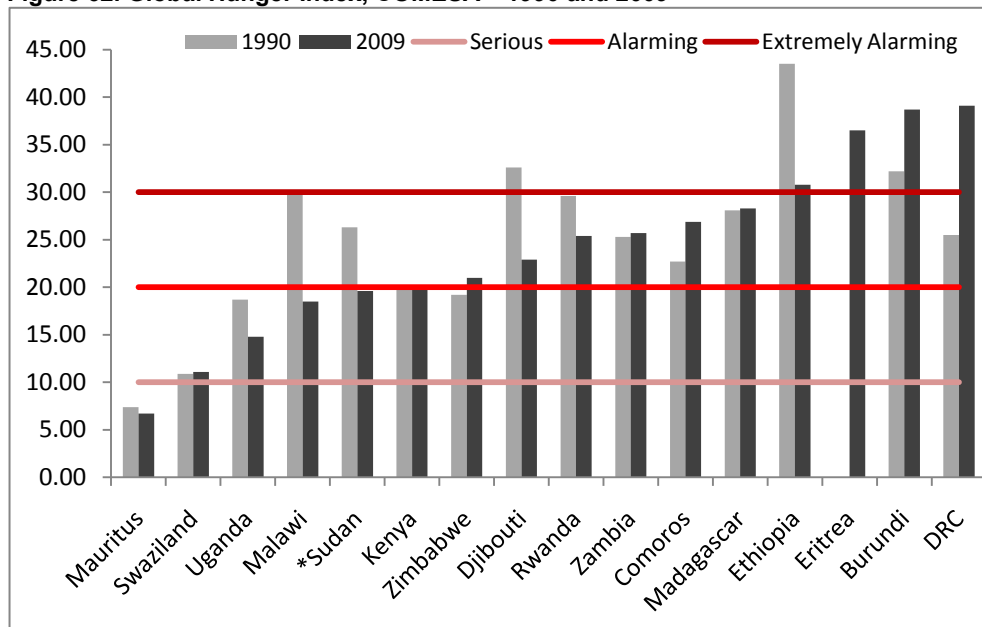
Source: GHI, 2009

**Common Market for Eastern and Southern Africa (COMESA)**

According to the GHI, the COMESA region has not fared as well as ECOWAS in hunger reduction since 1990; the region realized only a total average decrease of 4 percent (Figure 62). Malawi, Djibouti, and Ethiopia saw significant decreases of 38.5, 30, and 29 percent, respectively. However, GHI in the DRC, Burundi, and Comoros increased by 53, 20, and 18.5 percent, respectively. The remaining increases in GHI in this region were relatively minor—around 1 to 2 percent. However, all COMESA countries but Mauritius lie above the Serious level and more than two-thirds of the countries in this region lie above the Alarming level.

<sup>36</sup> GHI data for Cape Verde were not available.

**Figure 62. Global Hunger Index, COMESA<sup>37</sup> 1990 and 2009**



Source: GHI, 2009

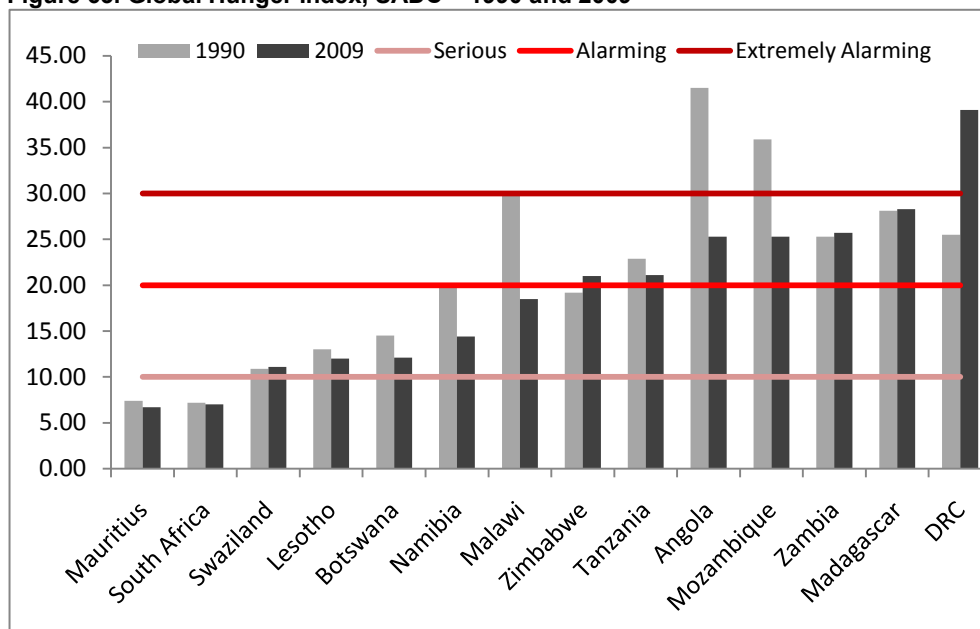
\* Indicates that the data for this country are unreliable

### **Southern African Development Community (SADC)**

The SADC region experienced an average decrease in hunger of 8 percent since 1990 (Figure 63). The largest decreases were observed in Angola (39 percent), Malawi (38.5 percent), Mozambique (29.5 percent), and Namibia (27 percent). After the DRC, the largest increase in GHI was in Zimbabwe at 9.4 percent. Eliminating the DRC from the totaled average would increase regional hunger reduction to 12.7 percent, placing SADC just behind the ECOWAS region in terms of hunger reduction achieved since 1990. However, half of the SADC member countries' GHIs remain above the alarming level.

<sup>37</sup> 1990 GHI data for Eritrea were not available.

**Figure 63. Global Hunger Index, SADC<sup>38</sup> 1990 and 2009**



Source: GHI, 2009

Therefore, according to the GHI, COMESA and SADC regions trail ECOWAS in terms of progress towards hunger reduction. However, most SSA countries' GHIs still lie above the serious level and many are still in the alarming range.

#### Disaggregated poverty rates by region

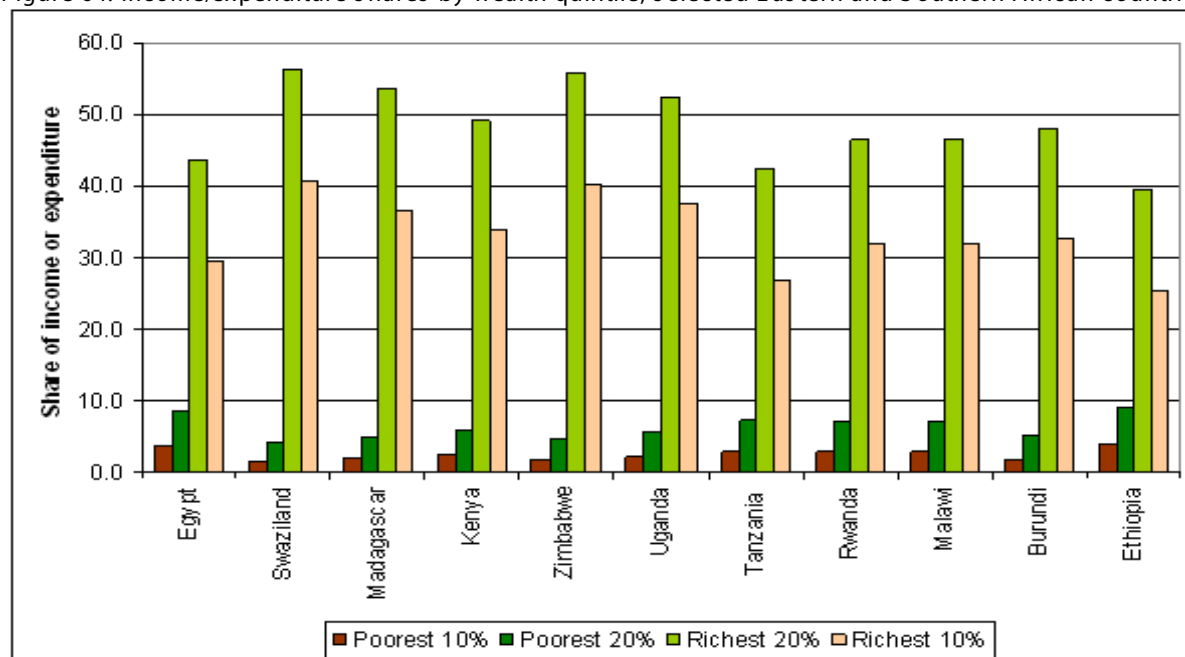
##### *Eastern and Southern Africa*

##### Income inequality

It is useful to consider income distribution, as this is an important dimension of poverty in Eastern and Southern African countries. The indicator considered here is the percentage share of income or expenditure that accrues to subgroups of the population indicated by quintiles. This indicator can serve as a proxy indicator for levels of economic equality within a country as it looks at the poorest quintile's share in national income or consumption. Inequality in the distribution of income is reflected in the disproportionate share of income or consumption accruing to the highest or lowest portions of the population as ranked by income or consumption levels. The portions ranked lowest by personal income receive the smallest shares of total income. Data on the distribution of income or consumption come from nationally representative household surveys. When the original data from the household surveys are available, they can be used to directly calculate the income or consumption shares by quintile. Otherwise, shares have been estimated from the best available grouped data (UNDP, 2007). Based on the available data for this indicator (Figure 64), it is evident that there is a high level of inequality in most countries in Eastern and Southern Africa. A large share of total income (more than 40 percent in all countries) is held by the richest 20 percent of the population. This indicates the need for measures to address inequality in income distribution in the region so as to ensure that the growth gains are also enjoyed by the poor and vulnerable populations.

<sup>38</sup> 1990 GHI data for Eritrea were not available.

Figure 64. Income/expenditure shares by wealth quintile, selected Eastern and Southern African countries



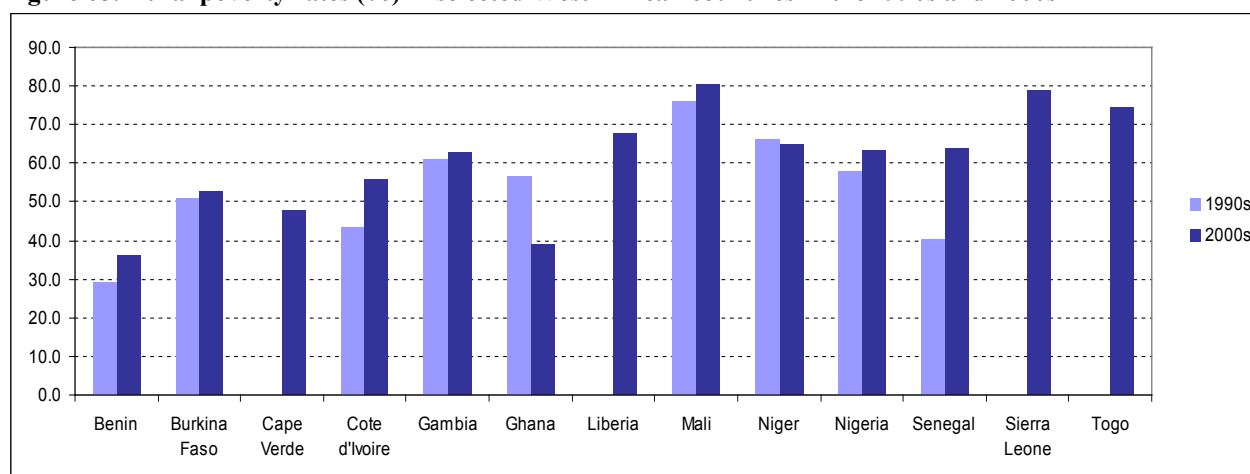
Source: ReSAKSS data collected from various national government sources.

## West Africa

### Urban and rural poverty

The incidence of rural poverty increased in the 2000s compared to the 1990s in Benin, Burkina Faso, Côte d'Ivoire, the Gambia, Mali, Nigeria, and Senegal (Figure 65). Only Ghana and Niger experienced a decline in the rural poverty rate in the 2000s compared to the 1990s. In Côte d'Ivoire the rural poverty rate decreased from 51 percent in 2002 to 44.3 percent in 2007. In Liberia, Sierra Leone and Togo, data available for one year only in the 2000s indicates that the urban poverty rates ranged from 67.7 percent in Liberia in 2007 to 79 percent in Sierra Leone in 2004.

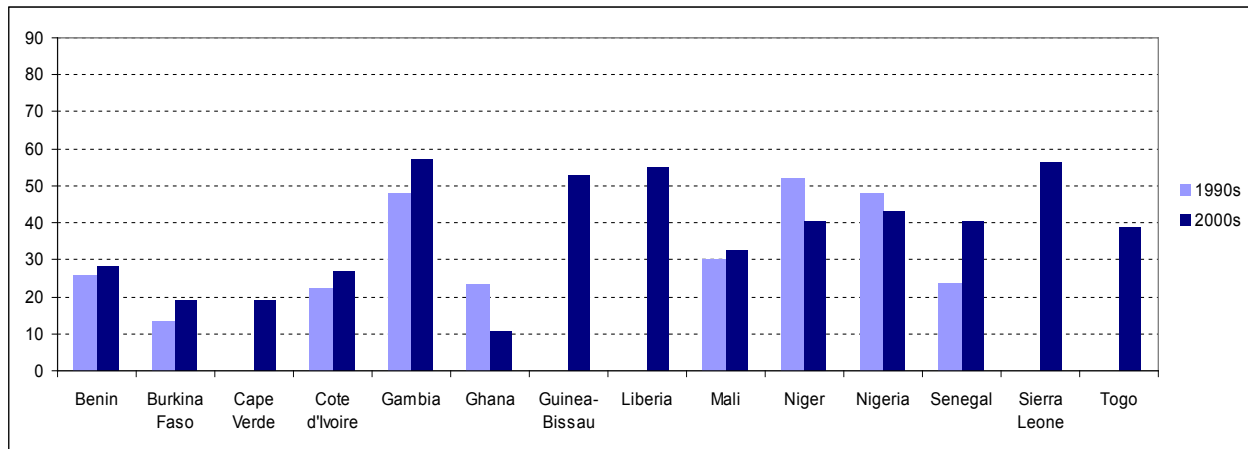
Figure 65. Rural poverty rates (%) in selected West African countries in the 1990s and 2000s



Source: ReSAKSS data collected from various national government sources.

The incidence of urban poverty increased in the 2000s compared to the 1990s in six countries: Benin, Burkina Faso, Côte d'Ivoire, the Gambia, Mali, and Senegal (Figure 66). It decreased in Ghana, Niger and Nigeria. In Cape Verde, it decreased from 25 percent in 2002 to 13.2 percent in 2007. In Guinea-Bissau, Liberia, Sierra Leone, and Togo data for the 2000s is available for one year only and indicate that the urban poverty rates ranged from 38.8 percent in Togo in 2006 to 56.4 percent in Sierra Leone in 2004.

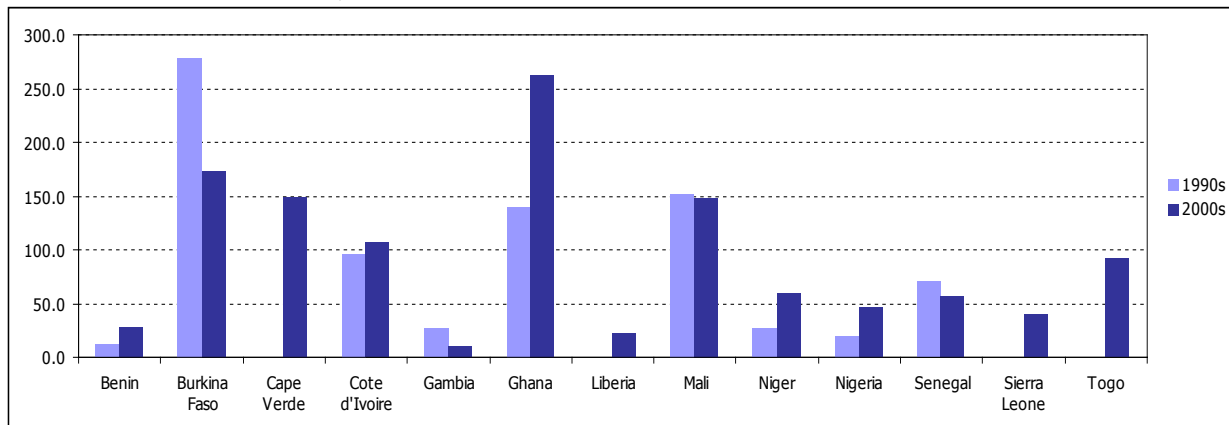
Figure 66. Urban poverty rates (%) in selected West African countries in the 1990s and 2000s



Source: ReSAKSS data collected from various national government sources.

Out of nine countries with data available on rural and urban poverty in both the 1990s and 2000s, we note that the rural-urban poverty gap increased in five and decreased in four (Figure 67). Benin, Côte d'Ivoire, Ghana, Niger, and Nigeria experienced increases in the rural-urban poverty gap. In the 1990s the average gap in Benin, for example, was 12.4 percent, which means that over the 10-year period, rural poverty was higher than urban poverty by an average of 12.4 percent. By the 2000s, the gap had increased to 27.6 percent. A bigger problem arises from the magnitude of the increase: apart from Côte d'Ivoire, the other countries that experienced increased gaps approximately doubled these gaps. This may be evidence of increasing inequality between rural and urban areas.

Figure 67. Rural-urban poverty gaps (%) in selected West African countries in the 1990s and 2000s



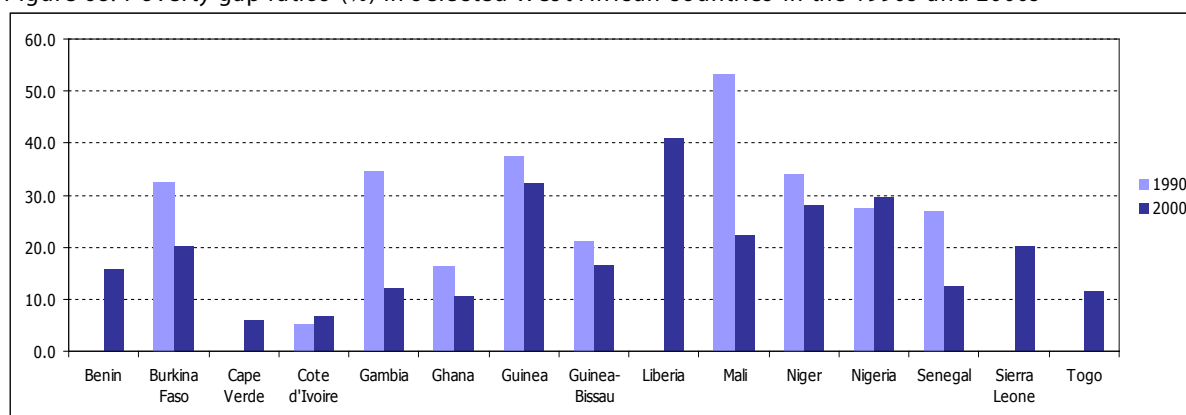
Source: ReSAKSS data collected from various national government sources.

Burkina Faso, the Gambia, Mali, and Senegal were able to narrow their rural-urban poverty gaps in the 2000s. For example, Burkina Faso was able to reduce its gap from 279 percent in the 1990s to 173 percent in the 2000s.

### Poverty gap<sup>39</sup>

From 1990 to 2007 poverty gap ratios in West Africa, based on the US\$1/day poverty line, ranged from 4 percent (Côte d'Ivoire in 1993) to 63.3 percent (Guinea in 1991). The poverty gap ratio decreased in eight countries and increased in two countries from the 1990s to the 2000s (Figure 68). It decreased in Burkina Faso, the Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, and Senegal. This indicates that the monetary requirements for pulling people out of poverty in the eight countries decreased in the last two decades. The two countries that experienced increases were Côte d'Ivoire and Nigeria. The remaining five countries (Benin, Cape Verde, Liberia, Sierra Leone, and Togo) had data for one year with their poverty gap ratios ranging from 5.9 percent (Cape Verde in 2001) to 40.8 percent (Liberia in 2007). The average poverty gap fell from 28.9 percent in the 1990s to 19 percent in the 2000s.<sup>40</sup>

Figure 68. Poverty gap ratios (%) in selected West African countries in the 1990s and 2000s



Source: ReSAKSS data collected from various national government sources.

### Income inequality

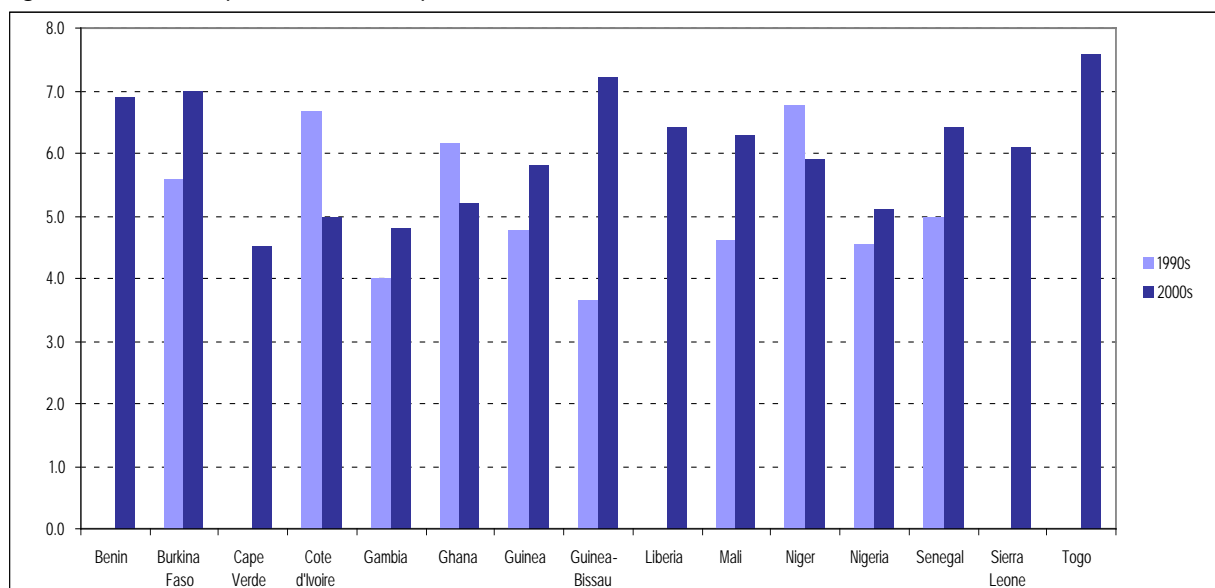
The share of the poorest quintile in national consumption in West Africa appears to have increased in the 2000s as compared to the 1990s (Figure 69). In the 1990s, this share ranged from 2.1 percent (Guinea-Bissau in 1991) to 7.5 percent (Niger in 1992). In the 2000s it ranged from 4.5 percent (Cape Verde in 2001) to 7.6 percent (Togo in 2006). The average share increased from 5.2 percent in the 1990s to 5.9 percent in the 2000s.<sup>41</sup> Seven countries – Burkina Faso, the Gambia, Guinea, Guinea-Bissau, Mali, Nigeria, and Senegal – recorded improvements in this share while three countries – Côte d'Ivoire, Ghana and Niger – recorded reductions in this share.

<sup>39</sup> "Poverty gap is the mean shortfall of the total population from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. The indicator is often described as measuring the per capita amount of resources needed to eliminate poverty, or reduce the poor's shortfall from the poverty line to zero, through perfectly targeted cash transfers." (mdgs.un.org)

<sup>40</sup> Based on the ten countries for which data is recorded in both decades.

<sup>41</sup> Based on the ten countries for which data is recorded in both decades.

Figure 69. Poorest quintiles' consumption shares in selected West African countries in the 1990s and 2000s



Source: ReSAKSS data collected from various national government sources.

## INVESTMENT-GROWTH-POVERTY LINKAGES

ReSAKSS helped facilitate a number of country studies in Africa. These studies provide evidence that increasing agricultural growth to achieve CAADP's 6 percent agricultural growth target can ameliorate poverty and have significant beneficial effects food security and overall economic growth, even for countries already on track to meet the first MDG target and for those for which the target is unattainable.<sup>42</sup>

Table 14 briefly displays the results of these ReSAKSS country studies. Most countries will need to increase agricultural growth beyond 6 percent in order to halve poverty by 2015. The annual growth rate of agricultural expenditures required to merely achieve a 6 percent annual agricultural growth rate is quite significant. Therefore, most of these countries will need to dramatically increase their investment allocations to agriculture if they plan to achieve the CAADP growth rate or MDG goals. The studies also found that focusing on staple crops, especially cereals, as well as some export crops, can have a much greater effect on both growth and poverty reduction.

<sup>42</sup> See, for instance, Benin, Thurlow, Diao, Kalinda and Kalinda 2008 or Thurlow 2008.

Table 13. Results of CAADP and MDG scenarios<sup>43</sup>

Country	On track to halve poverty by 2015?	Will CAADP 6% Ag growth put country on track to halve poverty by 2015?	Annual agricultural growth rate required to halve poverty by 2015	Annual growth rate of public agricultural spending to achieve CAADP 6% agriculture growth	
				Optimistic estimate	Conservative estimate
Ghana	Yes	N/A but will put Ghana on track to middle-income country status.	Current average is 4.2%		
Malawi	No	No	6.90%	19.30%	26.30%
Mozambique	No	Yes	6%		
Rwanda	No	No	9%	15.20%	30.30%
Uganda	No	Will lead to higher poverty reduction and reverse trend of increasing absolute number of people in poverty.	Current average is 2.7%	25.30%	30.00%
Zambia	No	No	9.20%	7.20%	26.50%

Sources: Breisinger, Diao, Thurlow, and Al-Hassan 2008; Benin, Thurlow, Diao, Kalinda and Kalinda 2008; Benin, Thurlow, Diao, Kebba and Owfona 2008; Benin, Thurlow, Diao, McCool and Simtowe 2008; Diao, Fan, Kanyarukiga and Yu . 2008.

### Malawi, Rwanda, and Zambia

Three countries in the Common Market for Eastern and Southern Africa (COMESA) region—Malawi, Rwanda and Zambia—demonstrate the significant benefits that achieving the CAADP's target agricultural growth rate can bring, even when these targets do not translate into poverty reduction in line with MDG1.

For example, achieving the 6 percent target will substantially reduce the number of people living below the poverty line in each of these countries by 2015. In Zambia, national poverty would fall from 68 to 52 percent by 2015, whereas in Malawi it would fall from 47 to 35 percent. Even more impressive poverty reduction would occur in Rwanda where national poverty would fall from 59 percent to 42 percent by 2015. These results will be feasible if the countries realize reasonably ambitious improvements in crop yields and subsector growth.

These benefits would result even though all three countries will fall short of achieving the MDG1 target of halving poverty by 2015 and will actually witness an increase in the absolute number of poor people. In all three cases, the 6 percent agricultural growth target is insufficient to elicit the scale of poverty reduction necessary to meet MDG1. To do so, the sector would need to grow by approximately 9 percent per year in Rwanda and Zambia and by 6.9 percent per year in Malawi.

<sup>43</sup> Note: The studies that inform this table and the discussion below were undertaken before the most recent (2009) data on CAADP and MDG targets were released; therefore, some countries that are now on track for some targets are listed here as not being on track (for example, Rwanda). Despite these year to year changes, however, the findings presented here are still highly relevant to the discussion of the value of the CAADP targets.



## Mozambique

Like Rwanda, Malawi, and Zambia, Mozambique's current growth path does not put it on track to achieve MDG1. However, achieving the CAADP 6 percent agricultural growth rate target will allow Mozambique to reach the MDG1 goal of halving poverty by 2015. Reaching this target is feasible, as Mozambique already has strong agricultural performance and therefore will require less additional growth in crop production. In fact, with the right investments, Mozambique could surpass the CAADP target and reach an average agricultural growth rate of 6.6 percent from 2006 to 2015. This growth would increase overall GDP growth from 6.3 to 7.0 percent per year, would reduce national poverty to 32.6 percent by 2015, and would also lift an additional 1 million people above the poverty line by 2015. Under the CAADP scenario, Mozambique would meet MDG1 sometime in 2014.

## Ghana and Uganda

Achieving an accelerated agricultural growth of 6 percent per year would have a significant impact on poverty reduction in both Ghana and Uganda. In Uganda, the poverty rate would be halved sometime before 2015; however, due to an increasing population, there will actually be a larger absolute number of people in poverty. Accelerating agricultural growth would reverse this trend and lift an additional 2.9 million Ugandans above the poverty line. Ghana is already on track to achieve MDG1, even though it is not currently achieving the CAADP target of 6 percent annual agricultural growth. Meeting that 6 percent agricultural growth target would put Ghana on track to become a middle-income country by 2015 and would also reduce the number of people in poverty. Therefore, even for a country set to meet MDG1, CAADP can further facilitate income growth and poverty reduction.

## CONCLUSION

This paper has comprehensively monitored and assessed progress of the Comprehensive Africa Agriculture Development Programme (CAADP) targets and tracked corresponding progress in key poverty and hunger indicators in Africa. In this regard, the paper has provided information on the CAADP agenda and the first Millennium Development Goal (MDG) in Africa. The paper has shown that many African governments now allocate more resources to agriculture. At the continental level, the share of agricultural expenditure in governments' total expenditures increased by 75 percent between 2000 and 2005, with eight African countries allocating at least 10 percent of their budgets to the sector. Economic growth also increased in Sub-Saharan Africa, from an annual average of approximately 3 percent in the 1990s and early 2000s to nearly 5 percent from 2005 to 2008. In addition, agricultural growth has spread to more countries. Between 2001 and 2003, only five countries—Angola, Mali, Mozambique, Namibia, and Sudan—had achieved agricultural growth rates at or above 6 percent. By 2005, the number had grown to nine countries: Angola, Burkina Faso, Republic of the Congo, Eritrea, Ethiopia, The Gambia, Guinea-Bissau, Nigeria, and Senegal. Seven countries met the 6 percent agricultural growth rate in 2007 and 10 countries met it in 2008. In addition, actual cereal output recently increased, partly in response to higher food prices.

Yet these positive signs have been coupled with the fact that the continent as a whole is not on track to achieving the first MDG of halving hunger and poverty by 2015. The continent's projected poverty rate for 2009 stood at 38.6 percent, which was 9 percentage points above the rate the continent should have reached in 2009 in order to be on track to achieving the 2015 target of 29.0 percent. This figure was based on a "business-as-usual" scenario, and thus it does not allow for the effects of sudden shocks, such as the global food and economic crises,

which have likely increased poverty and hunger drastically. Due to the recent unprecedented global food and economic crises, millions of people in Africa have been pushed back into extreme poverty and hunger, making progress towards achieving the first Millennium Development Goal (MDG) ever more urgent and difficult. For instance, the food crisis, which propelled international food prices to triple their 2003 levels, peaked in mid-2008. Prices fell dramatically in the latter half of that year as the international recession set in. These back-to-back crises have given poor farmers in Africa less access to resources, credit, and social protection. In addition, the crisis is estimated to have pushed 27 million more Africans into poverty (UNECA/AUC 2010). Some African countries were hit particularly hard by the 2007 and 2008 high food price crisis. Nevertheless, several African governments and institutions responded appropriately with action plans for producing food and fighting hunger.

The national and regional responses to the crisis in Africa can be categorized into three approaches: (i) acceleration of sustainable food production to minimize dependence on imports and reduce poverty in rural environments; (ii) implementation of policies to ensure secure and stable markets and adapt products to demand (processed and standardized products); (iii) establishment of appropriate safety nets in the rural and urban areas to provide food and nutritional security to vulnerable populations.

Successful development of Africa's agricultural sector will require the implementation of a strategy that embraces the modernization of the sector and enhances the private sector's capacity and incentives to engage where it can perform. African governments need to work with international private companies and domestic private investors along with local and international Non-Governmental Organizations (NGOs), foundations, and national and regional agricultural research organizations to scale up and expand public-private alliances in the sector. Both the public and private sectors also need to develop alliances that mobilize the capacities and resources of universities and think-tanks to support advanced training for African scientists, policy makers, and business leaders. Increasing regional agricultural trade in Africa is important in order to improve the operation of key trade and transport corridors, improve market structures, expand financial services, and facilitate the free flow of inputs from surplus to deficit areas. Long distances and poor roads, combined with man-made impediments such as export restrictions, cumbersome customs procedures, and unpredictable government marketing operations need to be dismantled.

The rapidly changing landscape in Africa presents both exciting opportunities and new pressures for development through good, accountable governance and trust-based public-private partnerships. It is important to improve the transparency and accountability of public governance on the one hand and good corporate governance and corporate social responsibility on the other. It is also crucial to strengthen the capacity to prioritize policies and investments, allocate and utilize resources, implement strategies, and create an enabling environment for growth and poverty reduction. Promotion of inclusive, sustainable engagement of business players and the private sector in effective linkages, broader partnerships, and local ownership in the design and implementation of reform efforts are essential for achieving the first MDG in Africa.

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## ANNEX 1: PUBLIC AGRICULTURE EXPENDITURE AS A SHARE OF TOTAL PUBLIC EXPENDITURE, 1990-2009

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Angola															2.2	6.5	5.3	3.6		
Benin											10.8	9.5	8.0	8.4	8.4	7.3	7.9	6.3	4.6	
Botswana	6.5	4.9	5.6	6.1	6.2	6.0	8.9	5.2	4.9	4.3	4.2	4.2	4.4	3.9	2.80	2.70	3.20	3.30		
Burkina Faso	5.8	4.5	5.0	5.1	3.7	4.1	4.5	4.7	5.3	5.1	6.6	6.5	7.4	32.7	20.5	12.1	20.4	15.8	13.8	
Burundi																3.6	6.1	4.4		
Cameroon	4.1	3.6	5.0	5.1	5.1	4.2	2.8	2.5	2.9	2.8	2.8	3.1	3.3	3.5	3.8	4.3	4.5			
Central African Rep.													6.6	4.1	4.1	2.6	2.4	2.5		
Chad														6.0	5.0	15.0	8.0	5.0		
Comoros																1.84				
Congo, Dem. Rep.													0.8	1.9	0.8	0.7	1.05	1.8		
Congo, Rep.														1.0	1.1	1.0	0.9			
Côte d'Ivoire	3.0	3.3	3.4	2.7	6.4	3.5	3.5	2.7	4.8	1.6	0.8	0.9	4.5	2.7	2.9	2.0	2.4	2.0		
Djibouti													0.6	0.7	2.1	2.0	2.7	1.61		
Egypt	5.4	4.7	4.1	4.7	4.9	5.0	5.1	5.9	6.2	6.3	6.8	6.8	5.6	5.1	4.5	4.2	3.0			
Ethiopia	6.9	6.9	12.4	12.1	10.7	9.1	8.9	8.1	8.1	11.5	10.4	4.0	5.6	8.4	13.6	16.5	17.5		11.69	
Gabon																				
Gambia																5.1	4.4	5.6		
Ghana	41.0	36.4	39.7	35.0	12.1	5.1	7.4	15.6	14.1	14.8	3.2	4.7	3.9	5.0	6.7	5.8	10.3			
Guinea															21.4	10.5	12.7	9.3	14.5	
Guinea Bissau															1.8	1.2	1.5	1.2		
Kenya	6.0	7.3	6.6	9.7	10.6	5.5	5.8	4.6	5.1	7.2	6.8	6.6	5.4	4.1	5.1	6.6	5.9	4.4	4.8	1.93
Lesotho													5.7	3.8	4.80	5.00	4.00	3.50		
Liberia																	4.0	5.5	8.6	2.3
Madagascar															8.0	7.9	8.0	4.20		

Malawi	11.1	15.3	9.0	10.6	4.6	11.1	7.3	5.9	7.6	12.5	8.8	4.9	8.7	6.6	7.0	11.0	11.00	13.20		
Mali	13.1	14.4	13.6	12.9	13.4	14.9	6.5	6.8	5.7	14.0	7.6	10.7	7.8	8.1	9.5	14.3	9.7	11.0	12.7	
Mauritania													7.9	5.3	6.5	6.0	5.8			
Mauritius															4.0	2.9	2.6		3.52	
Morocco	5.0	5.1	5.0	5.3	5.1	4.2	4.0	4.4	4.4	3.6	3.5	3.4	3.6	3.2	2.7	2.3	2.4			
Mozambique															6.2	4.4	3.4	3.9		
Namibia													4.3	4.1	7.30	6.90	8.20	8.00		
Niger												21.8	22.1	21.8	25.4	20.4	15.1	15.4	12.2	
Nigeria	2.9	1.9	1.1	2.2	4.5	3.2	4.7	5.7	1.7	1.4	1.6	6.0	3.2	1.9	3.1	3.4	4.1	4.4	4.6	
Rwanda												6.2	8.6	3.9	4.0	3.4	3.3			
Sao Tome and Principe														5.0	3.0	4.0	4.0	6.0		
Senegal			6.0	6.2	4.6	5.2	5.0	6.8	6.6	4.6	10.6	5.6	4.7	4.1	4.0	4.1	4.1	13.9		
Seychelles															0.9	1.0	0.9	1.1	0.74	
Sierra Leone														3.1	3.0	2.3	2.9			
Sudan													1.7	3.1	5.4			7.02		
Swaziland													4	3.3	4.97	6.00	4.70	3.71		
Tanzania													4.5	6.8	5.70	4.71	5.78	5.78	2.49	
Togo	12.0	9.6	7.7	5.1	4.7	4.9	4.5	5.5	3.5	3.5	5.6	3.5	2.3	2.6	1.9	3.5	3.4	8.0	8.0	
Tunisia	8.5	7.5	7.8	7.9	8.2	8.3	8.0	7.4	7.4	7.7	9.3	9.9	9.5	8.9	7.6	6.6	6.6			
Uganda	2.2	3.4	2.6	2.1	2.4	2.9	2.0	1.6	1.1	1.6	2.6	1.6	2.6	2.3	2.1	2.0	3.0	3.0	3.16	
Zambia	5.6	1.4	1.6	2.2	3.2	2.5	2.7	4.1	4.4	4.7	2.1	1.8	1.8	2.3	4.1	8.0	8.0	4.0		
Zimbabwe	11.04	10.67	10.12	8.97	3.82	4.18	2.41	2.58	1.82	2.04	1.76	2.92	8.26	9.02	11.90	10.00	6.20	6.00		

Sources: ReSAKSS from various national government sources; IMF 2009.



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