### CHAPTER 12

# TRACKING KEY CAADP INDICATORS AND IMPLEMENTATION PROCESSES

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he Comprehensive Africa Agriculture Development Programme (CAADP) is Africa's policy framework for transforming the agriculture sector and achieving broad-based economic growth, poverty reduction, and food and nutrition security. It was officially adopted by the African Union (AU) heads of state and government in the 2003 Maputo Declaration on Agriculture and Food Security with two main targets: achieving a 6 percent annual agricultural growth rate at the national level and allocating 10 percent of national budgets to the agriculture sector. The commitment to CAADP was renewed at the AU Assembly in 2009. Again in 2014, the AU heads of state and government reaffirmed their commitment to CAADP by adopting the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. In the Malabo Declaration, they made seven broad commitments including upholding the CAADP principles and values; enhancing investment in agriculture; ending hunger and halving poverty by 2025; boosting intra-African agricultural trade; enhancing resilience to climate variability; and strengthening mutual accountability for actions and results by conducting a Biennial Review (BR) of progress made in achieving the commitments. This chapter discusses progress on key CAADP and BR indicators across different geographic and economic groupings in the continent, comparing trends since adoption of CAADP in 2003 (that is, from 2003 to 2017) with the pre-CAADP subperiod (1995 to 2003).

### Brief History of the Indicators Tracked by ReSAKSS

Since 2008, the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) has been tracking progress on core CAADP indicators through its flagship Annual Trends and Outlook Reports (ATORs) and website (www.resakss.org).<sup>1</sup> The indicators tracked and reported on by ReSAKSS

have changed over time in response to the evolution of CAADP and the commitments made by the AU heads of state and government. It started with 42 indicators, which were based on the first CAADP Monitoring and Evaluation (M&E) Framework, developed by ReSAKSS (Benin, Johnson, and Omilola 2010). These 42 indicators were organized under six categories derived from the CAADP M&E framework: (A) enabling environment—9 indicators; (B) implementation process—11 indicators; (C) agricultural spending—4 indicators; (D) agricultural productivity and growth—7 indicators; (E) agricultural trade—5 indicators; and (F) development outcomes—6 indicators. Table 12.1 provides an overview of the thematic indicators under the different monitoring frameworks.

With the development of the CAADP Results Framework (RF) by the AU for 2015-2025 (AUC and NPCA 2015), the indicators tracked and reported by ReSAKSS have been reorganized under the three levels of the CAADP RF. Level 1 includes broader development outcomes and impacts to which agriculture contributes, including wealth creation; food and nutrition security; economic opportunities, poverty alleviation, and shared prosperity; and resilience and sustainability. Level 2 includes the outputs from interventions intended to transform the agriculture sector and achieve inclusive growth: improved agricultural production and productivity; increased intra-African regional trade and functional markets; expanded local agro-industry and value-chain development, inclusive of women and youth; increased resilience of livelihoods and improved management of risks in agriculture; and improved management of natural resources for sustainable agriculture. Level 3 includes inputs and processes required to strengthen systemic capacity to deliver CAADP results and create an enabling environment in which agricultural transformation can take place: effective and inclusive policy processes; effective and accountable

<sup>1</sup> ReSAKSS was established in 2006 to provide data and knowledge products to facilitate CAADP benchmarking, review, dialogue, and mutual learning processes. ReSAKSS is facilitated by the International Food Policy Research Institute (IFPRI) in partnership with Africa-based CGIAR centers, the African Union Commission (AUC), the NEPAD Planning and Coordinating Agency (NPCA), and leading regional economic communities (RECs).

institutions that regularly assess the quality of implementation of policies and commitments; strengthened capacity for evidence-based planning, implementation, and review; improved multisectoral coordination, partnerships, and mutual accountability in sectors related to agriculture; increased public and private investments in agriculture; and increased capacity to generate, analyze, and use data, information, knowledge, and innovations. There are 38 indicators in the CAADP RF, 14 for level 1, 12 for level 2, and 12 for level 3 (see Table 12.1).

Although the CAADP RF is intended to help track progress in implementing the Malabo Declaration, the CAADP BR process initiated in 2015 has resulted in a new set of 43 indicators (AUC 2017) aimed at tracking the specific commitments in the Declaration through the Africa Agriculture Transformation Scorecard (AATS). The CAADP BR and AATS indicators are organized by the seven Malabo themes: 3 indicators on CAADP process, 6 on investment finance, 17 on ending hunger, 8 on halving poverty, 3 on boosting intra-African agricultural trade, 3 on enhancing resilience, and 3 on mutual accountability (Table 12.1).

As a result of the above changes, and to maintain historical trends, in key indicators for future evaluation studies on CAADP, ReSAKSS has been expanding its database to track the indicators in the CAADP RF and BR, and continues to support CAADP implementation processes. ReSAKSS is currently tracking 58 indicators, and they are available on the ReSAKSS website. These include 42 quantitative indicators on specific CAADP-related actions that have measurable targets and 16 qualitative indicators on the CAADP implementation processes. Trends in the indicators can be seen on the ReSAKSS website, organized under the three levels

# TABLE 12.1—NUMBER OF INDICATORS BY CAADP MONITORING FRAMEWORK

CAADP Monitoring Framework	Number of Indicators
CAADP M&E Framework (Benin, Johnson, and Omilola 2010)	42
Area A: Enabling environment	9
Area B: CAADP implementation process	11
Area C: Government agricultural spending	4
Area D: Agricultural productivity and growth	7
Area E: Agricultural trade	5
Area F: Development outcomes	6
CAADP Results Framework (AUC and NPCA 2015)	38
Level 1: Agriculture's contribution to growth and development	14
Level 2: Agricultural transformation and inclusive growth	12
Level 3: Systemic capacity to deliver results	12
CAADP Biennial Review and Africa Agriculture Transformation Scorecard (AUC 2017)	43
Theme 1: CAADP processes and values	3
Theme 2: Investment finance in agriculture	6
Theme 3: Ending hunger by 2025	17
Theme 4: Halving poverty by 2025	8
Theme 5: Boosting intra-African trade in agricultural commodities and services	3
Theme 6: Enhancing resilience to climate variability	3
Theme 7: Mutual accountability for results and actions	3
Source: Authors.	

of the CAADP RF and one additional category that includes "other" important indicators of interest to CAADP stakeholders. However, some of the indicators in the CAADP RF and the CAADP BR/AATS, especially those on access to finance, value-chain development, resilience, and some of those disaggregated for women and youth, are not yet included in the ReSAKSS database as the data are not yet available. These missing indicators will be added as data become available.

### Objectives of the Chapter

This chapter discusses progress on the 29 CAADP indicators for which cross-country data have been assembled so far—details of the indicators and aggregate statistics are available in the data tables in Annexes 1–3 of this report. In line with the social protection theme of the 2017–2018 ATOR, the chapter also discusses trends in government social protection expenditures. This is done along with a presentation of trends on the CAADP level 3 indicators that includes government spending on agriculture. Details on the indicators and on the aggregate statistics on government social protection expenditures are presented in the supplementary data tables in Annex 5 of this report along with 13 indicators in the "other" category that are relevant for monitoring progress on the CAADP implementation agenda.

## **Progress in CAADP Implementation Processes**

The first decade of CAADP (2003–2013) was largely characterized by an implementation process that provided countries and regions with a clear set of steps to embark on through the CAADP roundtable process. These steps included signing a CAADP Compact, developing national or regional agriculture investment plans (NAIPs or RAIPs), and holding a CAADP business meeting. With CAADP now in its second decade, countries and regions are updating or developing their NAIPs/RAIPs to ensure that they are compliant with the Malabo Declaration commitments. At the country level, the process starts with a Malabo domestication event, led by the African Union Commission (AUC), the NEPAD Planning and Coordinating Agency (NPCA), and regional economic communities (RECs), that convenes CAADP constituencies to discuss and agree on a country roadmap for a NAIP review and refresh process and the subsequent implementation process as well as roles, timelines, and coordination modalities. A NAIP provides detailed implementation plans for achieving CAADP/Malabo Declaration goals and targets. The CAADP BR is an important mechanism for tracking progress toward achieving Malabo commitments which are implemented through Malabo-compliant NAIPs. This section describes country and regional progress in the CAADP implementation process, including NAIP formulation, agriculture joint sector review (JSR) assessments, and the CAADP BR using qualitative and quantitative indicators (details reported in Table L3a in Annex 3d).

Beginning in 2016, the AUC, NPCA, and relevant RECs have organized Malabo domestication events in various countries to launch the Malabo-compliant NAIP process. Among the outputs of these events is a roadmap outlining each country's NAIP development process, including a plan for embedding the NAIP in the country's planning and budgeting processes to ensure it receives adequate financing for successful implementation. To date, domestication events have been held in 16 countries (Table L3(a)). Technical support from ReSAKSS and IFPRI leads to the production of a Malabo Status Assessment and Profile report, which evaluates the current situation in a country and implementation of the first-generation NAIP, and a Malabo Goals and Milestones Report that analyzes requirements for achieving Malabo targets. By August 2018, Malabo Status Assessments and Profiles had been completed for 21 countries; Malabo Goals and Milestone Reports had been completed for 16 countries-that is, all 15 member states of the Economic Community of West African States (ECOWAS) plus Kenya. A total of 19 countries had either drafted and/or reviewed and/or validated their Malabo-compliant NAIPs as of the end of August 2018 (Table L3(a)).

The Malabo Declaration calls for strengthening national and regional institutional capacities for knowledge and data generation and management to support evidence-based planning, implementation, and M&E.

Agricultural JSRs are one means of operationalizing mutual accountability. JSRs provide an inclusive, evidence-based platform for multiple stakeholders to jointly review progress; hold each other accountable for actions, results, and commitments; and, based on gaps identified, agree on future implementation actions. To strengthen mutual accountability, ReSAKSS, at the request of AUC and NPCA and in collaboration with Africa Lead, has to date initiated agricultural JSR assessments in 30 countries. These assessments evaluate the institutional and policy landscape as well as the quality of current agricultural review processes. Areas that need strengthening are identified in order to help countries develop JSR processes that are regular, comprehensive, and inclusive. Of the 30 countries where JSR assessments have been initiated, 7 were completed in 2014 and 12 were completed between 2015 and August 2018, bringing the total number of countries with completed assessments to 19 (Table L3(a)). At the regional level, in June 2016 ECOWAS became the first REC to hold a regional JSR.

The JSR assessments have revealed insufficiently inclusive JSRs or JSR-like processes; poor participation and weak capacity of non-state actors; weak M&E systems and capacities, especially at the district level; poor interministerial coordination and communication; and inadequate follow-up on and implementation of JSR actions in most of the countries. The experiences and lessons learned during the JSR assessments have been used to strengthen existing JSRs or JSR-like processes and to establish JSRs where they did not exist prior to the assessment, including in Burkina Faso and Senegal. In addition, JSRs now generally result in more evidence-based recommendations on how to improve the status quo, with some countries conducting independent special studies for the reviews. Furthermore, they are more inclusive of non-state actors, occur on a more regular basis, and are more comprehensive in terms of issues covered. In addition, there is better monitoring and follow-up on action plans, and countries are taking steps to strengthen their M&E systems and capacities (Benin et al. 2018).

The CAADP BR is another means of operationalizing mutual accountability by assessing agriculture sector performance at the country, regional, and continental levels as it relates to the achievement of the Malabo Declaration goals. Starting in 2016 and throughout 2017, countries and RECs embarked on preparations for the BR that included training on BR tools and guidelines, collecting and analyzing data, and drafting country and regional BR reports for the inaugural continental BR. By the end of 2017, 52 of the 55 AU member states had launched the BR process and a total of 47 countries had drafted and submitted their BR reports to their respective REC (AUC 2018).

The continental BR report, including the AATS, was adopted by African leaders at the January 2018 AU summit (AUC 2018). Of the 47 reporting countries, 20 obtained an overall agricultural transformation score above 3.94 out of 10, indicating that they are on track to achieve the Malabo commitments by 2025 (Figure 12.1 and Table L3(a)). Rwanda, Mali, and Morocco were respectively awarded the first, second, and third prizes during the summit for making the most overall progress on agricultural transformation. Regionally, however, only eastern Africa and southern Africa are on track to achieve the Malabo commitments with scores of 4.2 and 4.0, respectively. Africa as a whole, with a score of 3.6, is not on track to achieve the commitments.

According to BR report, Africa as a whole has made the most progress in two commitment areas: recommitting to the principles and values of the CAADP by having improved NAIPs, policies, and institutional arrangements to support CAADP/Malabo implementation; and establishing inclusive mechanisms and platforms for mutual accountability and peer review. With more than one-half (27) of the reporting countries not on track to meet the overall Malabo commitments, the BR report and scorecard highlight the challenges that urgently need to be addressed to drive agricultural transformation on the continent. For example, according to the BR report, the continent needs concerted effort to: (1) establish more inclusive public–private partnerships for agriculture commodity value chains, (2) create more job opportunities for youth in agricultural value chains, and (3) support the participation of women in agribusiness. In addition, progress

score for a country to be on track for implementing the Malabo Declaration, countries whose score (out of 10 ) appears in "green" are				<u>n.a</u>	2.1	4.3	4.4
<u>ON TRACK</u> , and countries whose score appears in "red" are <u>NOT ON</u> <u>TRACK</u> for the 2017 reporting exercise to the Jaunary 2018 AU Assembly.				Burundi	Burkina Faso	Cameroon	Cabo Verd
				4.7	4.2	2.1	4.6
entral African Rep.	Chad	Comoros	Congo	Côte d'Ivoire	DR Congo	Djibouti	Egypt
2.4	2.2	<u>n.a</u>	2.8	3.5	1.4	3.2	3.4
quatorial Guinea	Eritrea	Ethiopia	Gabon	Gambia	Ghana	Guinea	Guinea-Bissa
3.6	<u>n.a</u>	5.3	2.9	3.1	3.9	3.3	<u>n.a</u>
Kenya	Lesotho	Liberia	Libya	Madagascar	Malawi	Mali	Mauritania
4.8	3.7	0.9	<u>n.a</u>	3.1	4.9	5.6	4.8
Mauritius	Morocco	Mozambique	Namibia	Niger	Nigeria	Rwanda	Rep. A. Sahara
5.0	5.5	4.1	4.1	3.5	3.4	6.1	<u>n.a</u>
o Tomé & Príncipe	Senegal	Seychelles	Sierra Leone	Somalia	South Africa	South Sudan	Sudan
1.5	3.8	4.0	1.5	<u>n.a</u>	4.1	<u>n.a</u>	1.9
Swaziland	Tanzania	Togo	Tunisia	Uganda	Zambia	Zimbabwe	2017 Benchma
4.0	3.1	4.9	1.7	4.4	3.6	3.2	3.9

#### FIGURE 12.1—THE 2017 AFRICA AGRICULTURE TRANSFORMATION SCORECARD

Note: The exact benchmark used is 3.94, which explains why Ghana is not on track with a score of 3.90.

needs to be accelerated with respect to ending hunger, tripling intra-African agricultural trade, enhancing resilience to climate variability, and increasing investment finance for agriculture.

The BR process is proving to be a useful tool for rallying agriculture sector stakeholders and enhancing mutual accountability. The inaugural

BR process was hugely successful given the high level of reporting by countries, leadership from AUC and NPCA, coordination of the process by RECs, and the strong support of technical and development partners. The second BR report is scheduled for publication in January 2020, with the preparation process already underway.

# **Progress in CAADP Indicators**

This section discusses Africa's performance on the 29 of the 38 CAADP RF indicators for which data are available, that is 23 quantitative and all 6 qualitative indicators, organized by the three RF levels.<sup>2</sup> Data on the 29 indicators are available in Annexes 1–3. Unlike the qualitative indicators, which are presented primarily at the country level, progress in the quantitative indicators is presented at the aggregate level in six different breakdowns: (1) for Africa as a whole; (2) by AU's five geographic regions (central, eastern, northern, southern, and western); (3) by four economic categories (countries with less favorable agricultural conditions, countries with more favorable agricultural conditions, mineral-rich countries, and middle-income countries); (4) by the eight regional

economic communities (CEN-SAD, COMESA, EAC, ECCAS, ECOWAS, IGAD, SADC, and UMA)<sup>3</sup>; (5) by the period during which countries signed the CAADP compact (CC0, CC1, CC2, and CC3)<sup>4</sup>; and (6) by the level or stage of CAADP implementation reached by the end of 2016 (CL0,

<sup>2</sup> Several of the indicators are also part of the CAADP BR and AATS.

<sup>3</sup> CEN-SAD = Community of Sahel-Saharan States; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; ECCAS = Economic Community of Central African States; ECOWAS = Economic Community; UMA = Arab Maghreb Union.

<sup>4</sup> CC1 = group of countries that signed the compact in 2007–2009; CC2 = group of countries that signed the compact in 2010–2012; CC3 = group of countries that signed the compact in 2013-2015; CC0 = group of countries that have not yet signed a CAADP compact.

CL1, CL2, CL3 and CL4).<sup>5</sup> Annex 4 lists the countries in the different categories of CAADP compact signing or level of implementation reached. Progress is also reported over different subperiods, with achievement in post-CAADP subperiods—that is, annual average levels in 2003–2008 and 2008–2017—compared with achievement in the pre-CAADP or base subperiod of 1995–2003. The discussion here is largely confined to trends for Africa as a whole and for countries categorized by the year in which they signed a CAADP compact and by the stage of CAADP implementation reached. Presenting the trends by the different groups helps to identify how the implications for strengthening or maintaining desirable trends or for reversing undesirable trends may differ across parts of the continent, without inference to any causal relationships. For trends that seem abnormal, some explanations are provided based on existing knowledge. Unless otherwise stated, all monetary values have been converted into constant 2010 US dollar prices to enhance intertemporal and cross-country comparisons.

### CAADP RF Level 1 Indicators: Agriculture's Contribution to Economic Growth and Inclusive Development

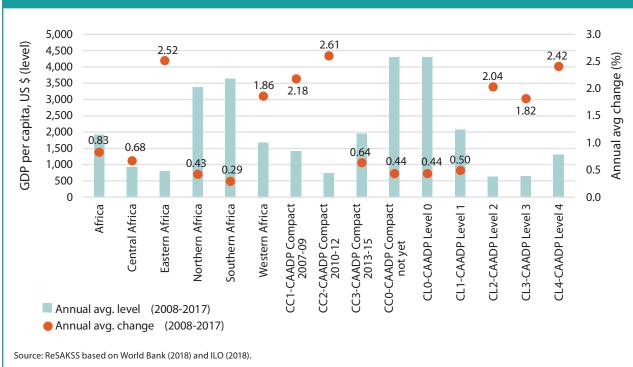
#### Wealth Creation

In 2017, growth in gross domestic product (GDP) for Africa as a whole was moderate at 2.6 percent, an improvement from the low growth of 1.4 percent in 2016. This improvement can be attributed to a rebound in oil and agricultural production, and a general improvement in the global economic environment (IMF 2017). Nonetheless, *GDP per capita growth* for 2008–2017 still showed a notable slowdown (largely due to the growth deceleration in 2015 and 2016), with average growth of 0.8 percent, compared to an average of 3.9 percent in 2003–2008 (Table L1.1.1). A similar trend is observed across most of the country classification categories (geographic regions, RECs, and CAADP groups) with the exception of countries with more favorable agriculture conditions, where GDP per capita rose from an average of 3.0 percent in 2003–2008 to 3.5 percent in 2008–2017. Although all CAADP groups experienced a decline in per capita GDP growth in 2008–2017 relative to previous periods, the groups of countries that have been implementing CAADP the longest (CC1 and CC2) or are most advanced in implementing CAADP (CL2, CL3, and CL4) recorded relatively higher growth rates in GDP per capita compared to other CAADP groups (see Figure 12.2 and Table L1.1.1).

Despite the slower rate of economic growth, Africa as a whole and all categories have experienced sustained increases in GDP per capita. Africa's GDP per capita increased from an annual average of US\$1,434 in 1995–2003 to US\$1,694 in 2003–2008, and reached US\$1,920 in 2008–2017 (Table L1.1.1). For this most recent period, 2008–2017, northern and southern Africa, middle-income countries, the Arab Maghreb Union (UMA), and countries that are yet to officially start implementing CAADP (CC0 and CL0) recorded the highest GDP per capita (above US\$3,000), while mineralrich countries had the lowest GDP per capita (US\$563).

Since the launch of CAADP in 2003, *household consumption expenditure per capita* has consistently increased for Africa as a whole and across all categories. However, for most categories, the average annual growth in household consumption expenditure per capita was slower in 2008–2017 than in 2003–2008. This includes for Africa as a whole, where it declined marginally from an average of 2.6 percent in 2003–2008 to 2.4 percent in 2008–2017 (Table L1.1.2). But central, northern, and western Africa regions showed slight improvements in household consumption expenditure growth in 2008–2017 compared to 2003–2008. The groups of

<sup>5</sup> CL0 =group of countries that have not started the CAADP process or are pre-compact; CL1 =group of countries that have signed a CAADP compact; CL2 = group of countries that have signed a compact and formulated a NAIP; CL3 = group of countries that have signed a compact, formulated a NAIP, and secured one external funding source; CL4 = group of countries that have signed a compact, formulated a NAIP, and secured more than one external funding source.



#### FIGURE 12.2—GDP PER CAPITA (CONSTANT 2010 US\$), 2008–2017

countries engaged in CAADP, and especially those that signed a CAADP compact earlier (CC1) and those that have advanced the most in CAADP implementation (CL4), registered higher growth in household consumption expenditure during the CAADP era (2003–2008 and 2008–2017) compared to groups of countries that have not joined or advanced in the CAADP process. Similar to the growth pattern observed with GDP per capita, Africa's household consumption expenditure per capita increased from US\$1,013 in 1995–2003 to US\$1,132 in 2003–2008, reaching US\$1,324 in 2008–2017. Here too, the highest consumption expenditure per capita (above US\$2,000 in 2017) was observed in the northern and southern Africa regions, middle-income countries, UMA, and non-CAADP countries (CL0 or CC0), most of which are middle-income countries.

#### Food and Nutrition Security

*Prevalence of undernourishment* measures the share of the population whose caloric intake is below the minimum energy requirement. During the post-CAADP periods or after 2003, the prevalence of undernourishment declined steadily for Africa as a whole and across the various categories. As Table L1.2.1 shows, for Africa, the prevalence decreased from 19.9 percent in 2003-2008 to 17.6 percent in 2008-2015. The rate of decline slowed, however, from an annual average of 3.3 percent in 2003-2008 to 0.6 percent in 2008-2015, and the number of undernourished people in Africa remains high, with about one in six undernourished in 2015 (Table L1.2.1). The northern Africa region, UMA, and non-CAADP countries (CCO or CL0) not only had the lowest prevalence rates at less

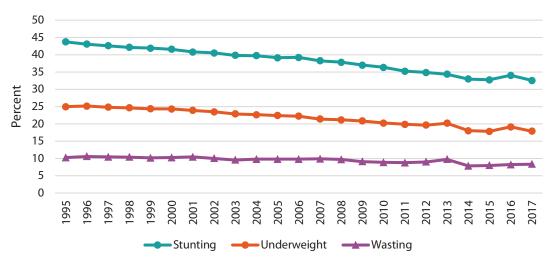
than 5 percent, but they also recorded more rapid rates of decline in undernourishment in 2008–2015 than in 2003–2008. Conversely, mineral-rich countries, middle-income countries, CEN-SAD, and the groups of countries that are further along with CAADP implementation (CL3) experienced increases in the prevalence of undernourishment in 2008–2015 over 2003– 2008. In middle-income countries, for example, while there was a decline of 5.2 percent in the share of the population that was undernourished between 2003 and 2008, this share increased by 1.5 percent between 2008 and 2015.

Looking at child undernutrition, Figure 12.3 and Tables L1.2.2A, L1.2.2B, and L1.2.2C reveal that Africa consistently reduced the prevalence of underweight, stunting, and wasting among children under the age of five years. However, the prevalence rates of underweight and stunting among children have remained rather high for Africa as a whole and for many categories.

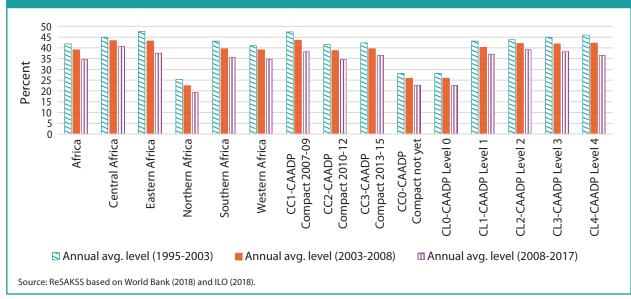
For Africa as a whole, the *prevalence of underweight* children under the age of five declined from an average level of 24.3 percent in 1995–2003 to 22.1 percent in 2003–2008 and to 19.5 percent in 2008–2017. Northern Africa, UMA, and the groups of countries that have not joined CAADP, the majority of which are in northern Africa, have the lowest prevalence rates and have experienced some of the fastest declines in underweight among children, particularly in the post-CAADP periods. Southern Africa, countries with more favorable agricultural conditions, and EAC also recorded relatively faster declines in the prevalence of underweight children, especially over the period from 2008 to 2017.

Despite the steady decline in the *prevalence of stunting*, an indicator of chronic malnutrition, among children under the age of five, the prevalence rate for Africa and other categories remains markedly high (Table L1.2.2B and Figure 12. 4). For Africa as a whole, the prevalence rate declined from 41.8 percent in 1995–2003 to 39.0 percent in 2008–2017 and to 34.8 percent in 2008–2017. As of 2017, still about one-third of African children under the age of five were stunted, indicating that a sizable proportion of African children suffer from chronic insufficient

# FIGURE 12.3—PREVALENCE OF STUNTING, UNDERWEIGHT, AND WASTING IN AFRICA (% OF CHILDREN UNDER 5 YEARS)



Source: ReSAKSS based on World Bank (2018) and ILO (2018).



# FIGURE 12.4—PREVALENCE OF STUNTING IN AFRICA BY GEOGRAPHIC REGIONS AND CAADP GROUPS (% OF CHILDREN UNDER 5 YEARS), 1995–2017

nutrient intake and recurrent diseases. The prevalence of stunting is highest in central Africa, countries with less favorable agriculture conditions, and mineral-rich countries, where stunting rates averaged more than 39 percent in 2008–2017. Countries in northern Africa, UMA, and those that had not embarked on the CAADP process (CCO and CLO) had lower but still high prevalence rates of above 15 percent during 2008–2017. Nonetheless, these countries experienced relatively faster rates of decline in the prevalence of stunted children compared to other categories.

The prevalence of wasting (low weight-for-height) in children under five, an indicator of acute malnutrition, is much lower in Africa and across all categories than are underweight and stunting. For Africa as a whole, child wasting declined marginally from 10.2 percent in 1995-2003 to 9.7 percent in 2003–2008 and to 8.7 percent in 2008–2017. While the prevalence of child wasting declined in all other classification categories, in recent years it has increased in northern Africa, UMA, and the group of countries that joined the CAADP process later (CC3) and those that have not progressed much in the implementation CAADP process (CL1). In 2017, child wasting remained above 10 percent in countries with less favorable agriculture conditions, the group of countries that signed the CAADP compact later (CC3), and the group that is still early in implementing CAADP (CL1). This shows that child wasting along with child stunting and underweight remain serious challenges that require more concerted measures, such as improving women's education and the quantity and quality of food through micronutrient supplements and biofortification, if countries are to meet the Malabo Declaration goals of ending hunger and reducing stunting and underweight to 10 and 5 percent, respectively, by 2025.

Africa's *dependence on cereal imports* has been increasing, reaching 26.5 percent in 2008–2012. This means that over a quarter of the continent's cereal demand was not met through domestic cereal production. The state of cereal import dependency differs across categories. For example, in 2012, the cereal import dependency ratio was above 40 percent in UMA

and ECCAS, northern Africa, and among the groups of countries that have not embarked on the CAADP process (CC0 and CL0) as well as those that have yet to advance in the CAADP process (CL1). At the same time, mineral-rich countries, southern Africa, SADC, and the group of countries that are further in the CAADP implementation process (CL3) not only had a lower cereal import dependency ratio but also experienced consistent declines in the ratio during both post-CAADP subperiods (2003-2008 and 2008–2012). Mineral-rich countries, especially, managed to reduce their cereal import dependency by more than half, from 23.0 percent in 2003to 8.9 percent in 2012. This strong performance was followed by countries that have progressed in the CAADP process (CL3), which reduced their imported cereal dependency from 15.0 percent in 2003 to 8.3 percent in 2012. While raising local cereal production and productivity is fundamental to a country's agricultural development for food security, the rationale for reducing dependency on cereal imports has to be evaluated in the context of the broader goal of boosting intra-African agricultural trade.

#### **Employment**

Africa's *employment rates*, expressed as a percentage of the labor force (all individuals aged 15 to 64 years, Table L1.3.1A) have remained moderately high and constant over time. For Africa as a whole, the rate averaged 90.7 percent in 1995–2003 and increased marginally to 91.7 percent in 2003–2008 and to 92.3 percent in 2008–2017. Employment rates expressed as a percentage of the working-age population (all individuals aged 15+ years, Table L1.3.1B) are lower but have also remained fairly constant, averaging 58.6 percent for Africa as a whole in 2003–2008 and 59.4 percent in 2008–2017. Considering both measures, the employment rate is relatively lower in northern and southern Africa regions, middle-income countries, UMA, and non-CAADP countries. Notably, the large discrepancy between the two indicators on employment in Africa reflects the continent's continuous struggle with underemployment, poor quality jobs, and high rates of

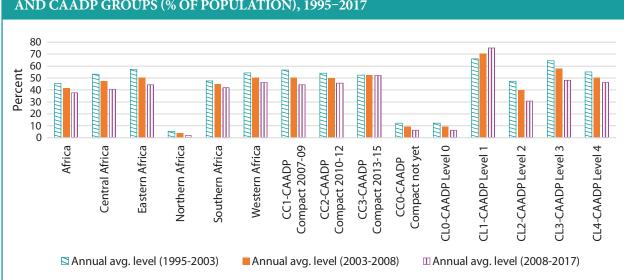
youth unemployment (AfDB et al. 2012). Therefore, investment in high labor absorption sectors such as agriculture should be part of job creation strategies in Africa.

#### **Poverty**

Africa has made good progress in reducing both the incidence and intensity of poverty, particularly during the post-CAADP periods. Measured by the *poverty headcount ratio at the international poverty line*, 38.1 percent of Africa's population lived below US\$1.90 a day in the 2008–2017 period. This is almost a 4-percentage-point reduction from 41.7 percent in 2003–2008. (Figure 12.5 and Table L1.3.4). The reduction in poverty occurred across all categories, with northern Africa and UMA experiencing the biggest

declines in poverty of greater than 11 percent between 2008 and 2017. Nonetheless, poverty remains relatively high in several groups despite recent improvements in per capita GDP growth—the poverty headcount was above 40 percent in 2008–2017 in all geographic regions except northern Africa, where it was just 2.3 percent.

For Africa as a whole, the *poverty gap*, which indicates the intensity of poverty by measuring the average shortfall from the poverty line of US\$1.90 a day, declined from 19.0 percent in 1995–2003 to 16.5 percent in 2003–2008 and to 14.2 percent in 2008–2017 (Table L1.3.3). A similar declining trend is observed across most of the other categories. For example, during the post-CAADP periods or after 2003, significant declines in the poverty gap are seen in northern Africa, UMA, and the group of countries that have advanced in the CAADP process (CL2)



# FIGURE 12.5—POVERTY HEADCOUNT RATIO AT US\$1.90 A DAY BY GEOGRAPHIC REGIONS AND CAADP GROUPS (% OF POPULATION), 1995–2017

Source: ReSAKSS based on World Bank (2018) and ILO (2018).

and those that are yet to join CAADP (CC0 and CL0). Nonetheless, in 2008–2017, the poverty gap remained highest in the group of countries that have not advanced in the CAADP process (CL1) at 36.6 percent and lowest in northern Africa at 0.3 percent.

Income inequality, measured by the *Gini index*, for all of Africa fell from an average of 44.1 in 1995–2003 to 37.4 in 2003–2008 and to 30.3 in 2008–2017 (Table L1.3.5). Reductions in income inequality were also achieved across all the other categories, with declines of greater than 6 percent in 2008–2017 occurring in central Africa, mineral-rich countries, ECCAS, and in countries that have not advanced much in the CAADP process (CL2). Notably, groups enjoying high levels of GDP per capita, such as northern Africa, middle-income countries, and the countries that have not joined CAADP process (CC0 or CL0), experienced the smallest reductions in the Gini index during the review period.

### CAADP RF Level 2 Indicators: Agricultural Transformation and Sustained Inclusive Agricultural Growth

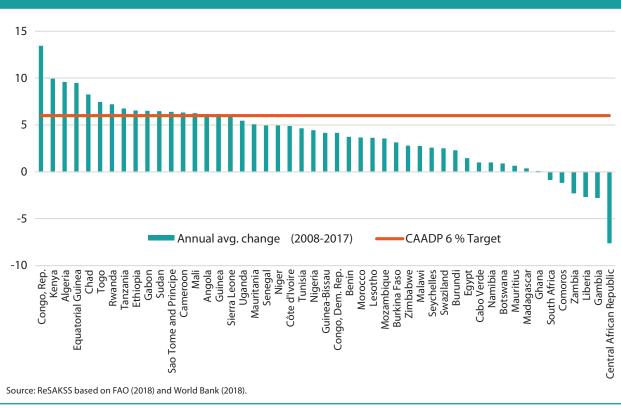
#### **Agricultural Production and Productivity**

For Africa as a whole, *agriculture value added* rose from an average of US\$7.2 billion per country per year in 1995–2003 to US\$9.0 billion in 2003–2008 and to US\$13.4 billion in 2008–2017 (Table L2.1.1). <sup>6</sup> In the most recent period, 2008–2017, agriculture value added increased for all categories. For Africa as a whole, agriculture value added grew at an annual average rate of 4.3 percent in 2008–2017, up slightly from 4.2 percent

in 2003–2008, but below the CAADP target of 6 percent. However, other categories, including northern Africa, countries with more favorable agriculture conditions, EAC, UMA, and the group of countries that signed a CAADP compact in 2010-2012, achieved an annual average growth in agriculture valued added of at least 6 percent in the more recent subperiod of 2008–2017. The groups of countries that signed onto the CAADP earlier (CC1 and CC2) and those that have progressed the furthest in the CAADP process (CL3 and CL4) registered higher agriculture value added growth rates during the post-CAADP periods compared to those that have not yet signed CAADP

compacts (CC0 and CL0). A total of 17 countries achieved the CAADP 6 percent target in 2008–2017 (Figure 12.6).

The agricultural production index (API), a measure of the relative level of agricultural production, has consistently increased for Africa as a whole and all the various categories. Table L2.1.2 shows that for Africa, API increased from 80.6 in 1995–2003 to 100.5 in 2003–2008 and 122.8 in 2008–2017. In 2008–2017, API grew at a relatively slower pace than in 2003–2008 for Africa and for most of the other categories, except in eastern Africa, IGAD, UMA, and the groups of countries that signed CAADP compacts later (CC3) and those that have not advanced in implementing CAADP (CL1).



#### FIGURE 12.6—AGRICULTURE VALUE ADDED, ANNUAL AVERAGE GROWTH (%), 2008-2017

<sup>6</sup> Monetary values are in constant 2010 US dollars unless stated otherwise.

Over the last 20 years, labor and land have become more productive in Africa as a whole and for many categories. As Table L2.1.3 shows for Africa as a whole, *labor productivity*, measured by agriculture value added per agricultural worker, increased from US\$1,011 in 1995-2003 to US\$1,137 in 2003-2008 and US\$1,378 in 2008-2017. This represents an increase in the annual average growth in labor productivity from an average of 1.4 percent per year in 1995-2003 to 1.6 percent in 2003-2008 and 2.5 percent in 2008-2017. Whereas labor productivity growth was negative in the pre-CAADP periods for several categories, it rebounded during the post-CAADP periods and was positive for all categories during 2008–2017, excepting the southern Africa region. Countries that joined the CAADP process earlier (CC1) and those that are further along with implementation (CL3 and CL4) registered slower growth rates in labor productivity in 2008-2017 than in 2003-2008. Labor productivity has remained relatively much higher in northern Africa, middle-income countries, UMA, and the group of countries that have not embarked on the CAADP process (CC0 and CL0), likely due to higher levels of mechanization.

For Africa as a whole, *land productivity*, measured by agriculture value added per hectare of arable land, increased from US\$165 in 1995–2003 to US\$205 in 2003–2008 and to US\$300 in 2008–2017 (Table L2.1.4). This represents an increase in the annual average growth in land productivity from 3.1 percent in 1995–2003 to 3.2 percent in 2003–2008 and to 5.3 percent in 2008–2017. With the exception of UMA, all other categories witnessed positive growth in land productivity during the entire CAADP era. This is a huge improvement from the pre-CAADP period of 1995–2003 when several categories had negative growth in land productivity. In 2008–2017, notably high land productivity growth rates of above 6 percent were recorded in eastern Africa, countries with more favorable agricultural conditions,

COMESA, EAC, IGAD, and in the groups of countries that joined CAADP in 2013–2015 (CC3) and those that have signed a compact and formulated a NAIP (CL2).

Yields of the top five agricultural commodities—cassava, yams, maize, meat, and cow milk <sup>7</sup>—show varied performance between the pre-CAADP subperiod (1995-2003) and the post-CAADP subperiods (2003-2008 and 2008–2017). For Africa as a whole, yields of the agricultural commodities, excluding *milk*, grew slowly in the pre-CAADP subperiod and moderately in 2003-2008, but decelerated in 2008-2016 (Table L2.1.5 A, L2.1.5 B, L2.1.5 C, L2.1.5 D, and L2.1.5 E). For example, *maize yields* grew at an average rate of 1.5 percent per year in 1995-2003, 2.4 percent in 2003-2008, and 0.2 percent in 2008–2016. Despite the slower growth in the later post-CAADP subperiod, average yields have risen over time. For example, meat yields rose from 141.7 kilograms (kg) per head in 1995-2003 to 152.8 kg per head in 2003-2008 and to 155.2 kg per head in 2008-2013. Yields of maize, meat, and milk are much higher in northern Africa and in the group of countries that have not yet embarked on the CAADP process (CC0 and CL0), including South Africa and countries in northern Africa, which have high levels of mechanization (Tables L2.1.5C, L2.1.5D, and L2.1.5E).

#### Intra-African Regional Trade and Market Performance

The signing of the African Continental Free Trade Area agreement by 44 AU member states in March 2018 marked an important milestone toward expanding intra-African trade and achieving the Malabo commitment to triple intra-African agricultural trade by 2025. For Africa as a whole, over the review period, *intra-African agricultural exports* nearly tripled from an average of US\$0.6 billion per country per year in 1995–2003 to US\$1.7 billion in 2008–2017 (TL2.2.1A).<sup>8</sup> Despite several categories experiencing

<sup>7</sup> These five were the commodities with the largest shares in total value of production for Africa as a whole.

<sup>8</sup> The value of intra-African agricultural exports and imports for Africa as a whole is expected to be equal. However, Tables TL2.2.1A and TL.2.2.1B show exports to be greater than imports, due to differences in commodities categorized as agricultural by different countries, year of shipment of exports and arrival of imports, treatment of the origin of export versus shipment, and valuation of exports and imports (for details see UNCTAD: http://unctadstat.unctad.org/EN/FAQ.html).

negative growth in exports in 1995–2003, growth rebounded during the post-CAADP periods. As a result, between 1995–2003 and 2008–2017, intra-African agricultural exports more than doubled in southern Africa, middle-income countries, and SADC, and grew almost six-fold in northern Africa. In addition, the groups of countries that joined CAADP early (CCI and CC2) and those that are further along in the implementation process (CL3 and CL4) experienced consistent increases in intra-African agricultural exports during the post-CAADP periods compared to countries that signed on to CAADP later (CC3) and those that have not advanced much in the process (CL1).

As Table L2.2.1B shows, *intra-African agricultural imports* also increased steadily for most categories and tripled in countries with less favorable agriculture conditions over the review period. In 2008–2017, intra-African agricultural imports grew by more than 6 percent in countries with less favorable agriculture conditions, middle-income countries, UMA, countries that have not joined CAADP (CC0 and CL0), and those that are further along in implementing CAADP (CL3). In terms of volume, intra-African agricultural imports are most concentrated in the southern Africa region, SADC, and the non-CAADP countries (CC0 and CL0) (Table L2.2.1B). Although intra-African trade has increased remarkably, it remains below its potential due to several factors including inadequate trade-related infrastructure, limited private sector participation in regional integration initiatives, and institutional weaknesses (Badiane, Odjo, and Collins 2018).

For Africa as a whole and the other categories, the volatility (variation) in domestic food prices over time, as measured by the *domestic food price volatility index*, has trended downward since the 2007 global food price crisis. Domestic food price volatility in Africa fell by an average of 11 percent per year in 2008–2012, compared to the average increase of 3.7 percent per year in 2003–2008 (Table L2.2.2). During 2008–2012, domestic food price volatility was relatively higher in the eastern and southern Africa regions, countries with more favorable agriculture conditions, and the groups of countries that joined CAADP earlier (CC2) and are further along in the CAADP process (CL3). Nonetheless, these groups also had faster rates of decline in volatility during this period. African countries need to maintain low domestic food price volatility in part by boosting domestic agricultural productivity and supply.

#### **Resilience of Livelihoods and Management of Risks**

The existence of food reserves and programs and early warning systems is a key indicator for assessing the resilience of livelihoods and production systems to climate variability and for the management of risks in the agriculture sector. As of August 2018, 41 countries had food reserves, local purchase for relief programs, early warning systems, and food feeding programs (Table L3(b)).

### CAADP RF Level 3 Indicators: Strengthening Systemic Capacity to Deliver Results

#### **Capacities for Policy Design and Implementation**

Progress in the implementation of actions aimed at strengthening systemic capacity for agriculture and food-security policy planning and implementation are presented in Table L3(b). As of August 2018, 13 countries had formulated new or revised NAIPs through an inclusive and participatory process; 26 had inclusive, institutionalized mechanisms for mutual accountability and peer review (mainly JSRs); 33 were implementing evidence-informed policies with relatively adequate human resources in place; 30 had functional multisectoral and multistakeholder coordination bodies—mainly agricultural sector working groups; and 21 had successfully undertaken agriculture-related public-private partnerships (PPPs) aimed at boosting specific agricultural value chains. Furthermore, SAKSS (Strategic Analysis and Knowledge Support System) platforms, which help countries to meet their specific data, analytical, and capacity needs, were established in 14 countries.

### Government Agriculture Expenditure

For Africa as a whole, government agri*culture expenditure* rose from an average of US\$0.7 billion per country per year in 1995–2003 to US\$1.2 billion in 2003–2008. before declining to US\$1.1 billion in 2008-2017 (Table L3.5.1). After increasing at over 10 percent in both 1995-2003 and 2003–2008, government agriculture expenditure in Africa experienced negative growth of 4.3 percent on average per year in 2008-2017. Government agriculture expenditure also declined in most categories in 2008–2017, including in western Africa, ECOWAS, and in the groups of countries that signed a CAADP compact earlier (CC1 and CL1) and those that have advanced in the CAADP process (CL4). In these catego-

20 18 16 14 12 10 8 6 4 2 Ethiopia Madagascar Senegal Rwanda Equatorial Guinea Congo, Dem. Rep. Zambia Guinea Uganda Tanzania Benin Liberia Togo Malawi Burkina Faso Zimbabwe Niger Mozambique Cabo Verde Tunisia Nigeria Lesotho Mauritius Sudar Cent. Af. Rep Burund Kenya Egyp. Mal Botswani Ghani Comoro sierra Leon Namibi Côte d'Ivoir Algeri Gambi Seychelle Djibout Swazilan Congo, Rei Angol South Afri Annual avg. level (2008-2017) CAADP 10 % target Source: ReSAKSS based on IFPRI (2015), World Bank (2018), and national sources.

ries, government agriculture expenditure fell by more than 10 percent per year on average in 2008–2017.

Africa as a whole and most categories have fallen short of meeting the CAADP and Malabo Declaration target of allocating 10 percent of government total expenditure to agriculture. The *share of government agriculture expenditure in government total expenditure* rose marginally from 3.3 percent in 1995–2003 to 3.5 percent in 2003–2008 and then fell to 3.0 percent in 2008–2017 (Table L3.5.2). Only the countries with less favorable agriculture conditions met the 10 percent target, with an average of 12.2 percent in 2003–2008, but this fell slightly to 9.3 percent in 2008–2017. Mineral-rich countries achieved an agriculture expenditure share of more than 8 percent in 2008–2017, while the groups of countries that signed on to CAADP earlier (CC2) and those that have progressed further in the CAADP process (CL4) achieved higher shares than the groups of countries that are not are not part of CAADP (CC0 and CL0). Figure 12.7 shows that only five countries—Burkina Faso, Ethiopia, Madagascar, Malawi, and Mali—achieved the CAADP 10 percent agriculture expenditure target in 2008–2017. Senegal came close with a share of 9.7 percent.

The overall *share of government agriculture expenditure in agriculture GDP* for Africa as a whole rose slightly from 5.7 percent in 1995–2003 to 6.3 percent in 2003–2008 and then decreased to 5.5 percent in 2008–2017 (Table L3.5.3). During the CAADP era, the northern and southern Africa regions, mineral-rich countries, SADC, UMA, and the non-CAADP countries had the highest shares, ranging from 9.8 percent to 17.3 percent,

# FIGURE 12.7—SHARE OF GOVERNMENT AGRICULTURE EXPENDITURE IN TOTAL EXPENDITURE (%), 2008–2017

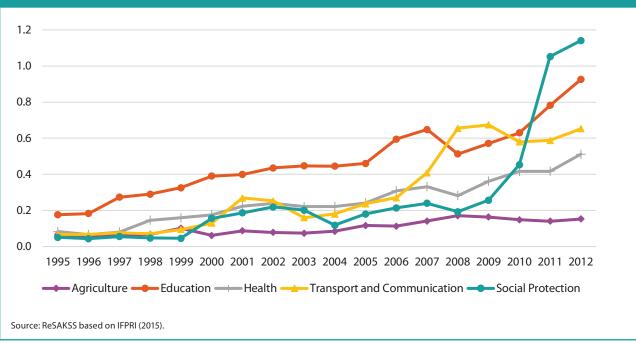
reflecting their larger agriculture expenditures relative to the size of the sector.

#### Government Social Protection Expenditures

In keeping with the theme of the 2017–2018 ATOR, this section reviews trends in government social protection expenditures in Africa using two key indicators: per capita government social protection expenditures and the share of social protection expenditures in total government expenditures. Social protection expenditures include spending on sickness and disability, old age, survivors, <sup>9</sup> family and children, unemployment, housing, social exclusion, research and development, and other related goods and services (IMF 2014).

The strong momentum to address high levels of poverty and growing vulnerability in Africa led governments to allocate more resources to social sectors, especially starting in the 1990s, with the development and implementation of poverty-reduction strategy papers. Today, a large share of government budgets goes to social sectors for social protection, health, and education at the expense of economic sectors such as agriculture (Figure 12.8). Notably, total government expenditures on social protection for Africa south of the Sahara rose much more sharply than expenditures on other sectors over the past decade, from an average of US\$51.3 million per country per year in 1995 to US\$1.1 billion in 2012 (Figure 12.8).<sup>10</sup> For

# FIGURE 12.8—GOVERNMENT SECTORAL EXPENDITURES FOR AFRICA SOUTH OF THE SAHARA (BILLION 2005 US\$)



Africa as a whole, the share of social protection expenditure in total government expenditure is also much higher than that for agriculture. It rose from an average of 5.2 percent in 1995–2003 to 6.4 percent in 2003–2008 and to 12.5 percent in 2008–2012 (Table O.6.1.A). At the regional level, in 2008–2012, the highest social protection expenditure shares were achieved in northern Africa (24.2 percent), while the lowest shares were witnessed in western Africa (3.9 percent).

In terms of levels, per capita social protection expenditures for Africa as a whole have more than tripled from an average of US\$12.9 in 1995–2003 to US\$49.3 in 2008–2012 (Table O.6.1B). Regionally, northern and southern

<sup>9</sup> Include survivors of a deceased person such as the person's spouse, ex-spouse, children, grandchildren, parents, or other relatives.

<sup>10</sup> Figures are in constant 2005 US dollars.

Africa had much higher levels on average, at US\$141.3 and US\$71.6 respectively, while western Africa had the lowest level of US\$4.4 (Table O.6.1B).

### Overall Conclusions and Implications

The trends in key CAADP indicators presented in this chapter show that Africa has made good progress since 2003. Broader development outcomes include rising GDP per capita and declining undernourishment, child malnutrition, and poverty. Agriculture value-added grew at a moderate rate of 4.3 percent in 2008–2017, although lower than the CAADP target of 6 percent. Agricultural exports nearly tripled from an average of US\$0.6 billion per country per year in 1995–2003 to US\$1.7 billion in 2008–2017. These achievements are commendable, despite government agriculture expenditure remaining far below the CAADP 10 percent target at 3 percent in 2008–2017. With a large and increasing share of government expenditure going to social sectors (social protection, health, and education), expenditures for economic sectors like agriculture, transport, and communications have tended to be squeezed.

There are substantial differences in the progress made across different parts of Africa. With respect to agriculture value added growth, for example, the groups of countries that signed onto the CAADP earlier or have progressed the furthest in the implementation process registered higher growth rates compared to those that have yet to start implementation. In addition, whereas a total of 17 countries achieved the CAADP 6 percent agricultural growth rate target in 2008–2017, only five countries (Burkina Faso, Ethiopia, Madagascar, Malawi, and Mali) managed to achieve the CAADP 10 percent agriculture expenditure target in the same period. While these differences reflect differences in input use, technologies, and capital intensities, among others, in agricultural production, they also indicate that blanket interventions for maintaining or increasing desirable trends, or for reversing undesirable ones, are unnecessary and inefficient.

An area that needs critical attention is the level of investments in the agriculture sector from both public and private sources. This is reflected in the CAADP 10 percent agriculture expenditure target, because government expenditure, or public spending in general, is seen as having a huge potential to reduce economic inefficiencies arising from market failures and to reduce inequality in the distribution of goods and services related to differences in initial allocation of resources across different groups and members of society. Since the agriculture and rural sectors tend to suffer the most from market failures and experience low provision of public goods and services, the potential of government agriculture spending to correct these problems is huge. In the same way, it will be important to better target the growing social sector expenditures, especially those that protect human capital and productive assets, so as to maximize their contribution to increasing productivity in agriculture and rural areas and to building stronger, longer-term income streams. Moreover, continued efforts to formulate and implement evidence-based NAIPs, reform trade policies, and invest in market access and port and road infrastructure will go a long way toward facilitating intra-African trade and fostering broad-based growth and the achievement of the Malabo Declaration commitments.