CHAPTER 13

Tracking Key CAADP Indicators and Implementation Processes

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The Comprehensive Africa Agriculture Development Programme (CAADP) is a continentwide framework for accelerating broad-based economic growth and progress toward poverty reduction and food and nutrition security through an agriculture-led growth strategy. 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. 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.

The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) tracks progress on core CAADP indicators and Malabo Declaration goals and targets through its flagship Annual Trends and Outlook Reports (ATORs) and website (www.resakss.org).[1] It does so using indicators outlined in the CAADP Results Framework (RF) for 2015–2025 organized on three levels (AUC and NPCA 2015). Level 1 includes broader development outcomes and impacts to which agriculture contributes, including wealth creation; food and nutrition security; enhanced 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 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 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 (Table 13.1).

TABLE 13.1—NUMBER OF INDICATORS IN THE CAADP RESULTS FRAMEWORK AND BIENNIAL REVIEW

CAADP Results Framework	Number of indicators
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
Total number of indicators	**38**
CAADP Biennial Review and Africa Agriculture Transformation Scorecard	**Number of indicators**
Theme 1: CAADP processes and values	3
Theme 2: Investment finance in agriculture	6
Theme 3: Ending hunger by 2025[a]	21
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
Total number of indicators	**47**

Source: Authors.
[a] Four new indicators, which are all part of commitment 3 to end hunger by 2025, were added to the CAADP BR in 2018.

1 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 African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD), and leading regional economic communities (RECs).

Trends in the indicators can be seen on the ReSAKSS website, organized under the three levels of the CAADP RF and one additional category that includes "other" important indicators of interest to CAADP stakeholders. Details of the "other" indicators and aggregate statistics are available in the supplementary data tables in Annex 7 of this report. Although the CAADP RF is intended to help track progress in implementing the Malabo Declaration, the CAADP Biennial Review (BR) process, initiated in 2015, has introduced 47 indicators aimed at monitoring the specific commitments in the Declaration using the Africa Agriculture Transformation Scorecard (AATS) (Table 13.1). However, some of the indicators in the CAADP RF and the CAADP BR/AATS are not included in the ReSAKSS database as the data are not yet available. These include several on access to finance, on value chain development, on resilience, and age- and sex-disaggregated indicators for men and women across the life cycle. These will be added as the data become available.

Objectives of the Chapter

This chapter discusses progress on 29 of the 38 CAADP RF indicators for which cross-country data are available—details of the indicators and aggregate statistics are available in the data tables in Annexes 1–3 of this report (Table 13.2). The progress is discussed across different geographic and economic groupings in the

TABLE 13.2—CAADP RESULTS FRAMEWORK INDICATORS DISCUSSED

No	LEVEL 1:	Agriculture's Contribution to Economic Growth and Inclusive Development
1	**L1.1.1**	GDP per capita (constant 2010 US$)
2	**L1.1.2**	Household final consumption expenditure per capita (constant 2010 US$)
3	**L1.2.1**	Prevalence of undernourishment (% of population)
4	**L1.2.2a**	Prevalence of underweight, weight for age (% of children under 5)
5	**L1.2.2b**	Prevalence of stunting, height for age (% of children under 5)
6	**L1.2.2c**	Prevalence of wasting, weight for height (% of children under 5)
7	**L1.2.3**	Cereal import dependency index
8	**L1.3.1**	Employment rate
9	**L1.3.3**	Poverty gap at $1.90 a day (2011 PPP)
10	**L1.3.4**	Extreme poverty headcount ratio at $1.90 a day (2011 PPP), % of population
11	**L1.3.5**	Gini coefficient
No	**LEVEL 2**	**Agricultural Transformation and Sustained Inclusive Agricultural Growth**
12	**L2.1.1**	Agriculture value added (million, constant 2010 US$)
13	**L2.1.2**	Agriculture Production Index (2004-2006 = 100)
14	**L2.1.3**	Agriculture value added per agricultural worker (constant 2010 US$)
15	**L2.1.4**	Agriculture value added per hectare of agricultural land (constant 2010 US$)
16	**L2.1.5**	Yield for the five most important agricultural commodities
17	**L2.2.1**	Value of intra-African agricultural trade (constant 2010 US$, million)
18	**L2.2.2**	Domestic food price volatility (index)
19	**L2.4.2**	Existence of food reserves, local purchases for relief programs, early warning systems and school feeding programs
No	**LEVEL 3**	**Strengthening Systemic Capacity to Deliver Results**
20	**L3.1.1**	Existence of a new NAIP/NAFSIP developed through an inclusive and participatory process
21	**L3.2.1**	Existence of inclusive institutionalized mechanisms for mutual accountability and peer review
22	**L3.3.1**	Existence of and quality in the implementation of evidence-informed policies and corresponding human resources
23	**L3.4.1**	Existence of a functional multisectoral and multistakeholder coordination body
24	**L3.4.2**	Cumulative number of agriculture-related public-private partnerships (PPPs) that are successfully undertaken
25	**L3.4.3**	Cumulative value of investments in the PPPs
26	**L3.5.1**	Government agriculture expenditure (billion, constant 2010 US$)
27	**L3.5.2**	Government agriculture expenditure (% of total government expenditure)
28	**L3.5.3**	Government agriculture expenditure (% of agriculture value added)
29	**L3.6.2**	Existence of an operational country SAKSS

Source: AUC and NPCA (2015).

continent, comparing trends in the RF indicators since the adoption of CAADP in 2003 (that is, from 2003 to 2018) with the pre-CAADP subperiod (from 1995 to 2003). In keeping with the gender equality theme of the 2019 ATOR, the chapter also discusses trends in sex-disaggregated data on child malnutrition (stunting, underweight, and wasting). [2] Sex-disaggregated data on other indicators are not available. The chapter, starting with the next section, also discusses progress in the CAADP implementation process itself in terms of country and regional progress in developing evidence-based, Malabo compliant national agriculture investment plans (NAIPs) and operationalizing CAADP mutual accountability processes to support agriculture sector review and dialogue.

Progress in CAADP Implementation Processes

Following the adoption of the Malabo Declaration in 2014, countries and regions had to develop second-generation national or regional agriculture investment plans that reflect detailed implementation plans on how the commitments and goals in the declaration would be achieved. At the country level, the process starts with a Malabo NAIP domestication event—led by the African Union Commission (AUC), the African Union Development Agency–New Partnership for Africa's Development (AUDA-NEPAD), and regional economic communities (RECs)—that convenes national CAADP constituencies to discuss and agree on a country roadmap to review and revise the NAIP. The roadmap specifies roles, timelines, and coordination modalities needed to generate a NAIP that receives broad support from national stakeholders. To date, domestication events have been held in 25 countries (Table L3(a) in Annex 3d).

For each country, analysis is done by ReSAKSS in collaboration with the International Food Policy Research Institution (IFPRI) to generate three key Malabo products: (1) the Malabo Status Assessment and Profile report, which reviews changes in each country since the last NAIP and evaluates the country's current situation with respect to the Malabo thematic areas, thus providing a baseline for measuring future progress toward targets; (2) the Malabo Goals and Milestones report, which lays out the intermediate targets for a county to achieve the Malabo commitments on agricultural growth and poverty reduction; and (3) the Policy and Program Opportunities report, which identifies specific country-level actions to achieve the Malabo targets in each thematic area, policy and institutional opportunities, and existing best practices that each country could customize in light of its own agricultural development challenges and opportunities. By the end of September 2019, Status Assessment and Profile reports had been completed for 29 countries, and Malabo Goals and Milestones reports had been completed for 22 countries (Table L3(a)). All 15 Economic Community of West African States (ECOWAS) countries had their Status Assessment and Profile reports and Malabo Goals and Milestones reports completed, as had 7 Southern and Central African countries—Angola, Eswatini, Gabon, Kenya, Lesotho, Malawi, and Namibia. A total of 19 countries had either drafted, reviewed, and/or validated their Malabo-compliant NAIPs by the end of September 2019, while NAIPs were still under development (in progress) in another 12 countries (Table L3(a)).

The Malabo Declaration calls for improved multi-institutional platforms for peer review, mutual learning, and mutual accountability as well as a biennial agricultural review process that tracks and reports on progress toward achieving commitments in the Declaration and laid out in NAIPs (AUC 2014). Agricultural joint sector reviews (JSRs) are one way of operationalizing mutual accountability at regional and country levels. Well-functioning 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, the ReSAKSS team, at the request of AUC and AUDA-NEPAD, has to date initiated or completed agricultural JSR assessments in 31 countries. These assessments evaluate the institutional and policy landscape as well as the quality of current agricultural review processes. Areas in these review processes that need strengthening are identified in order to help countries develop JSRs that are regular, comprehensive, and inclusive. Of the 31 countries in which JSR assessments have been initiated since 2014, 21 have been completed (Table L3(a)). At the regional level, in June 2016, ECOWAS became the first REC to hold a regional JSR following a regional JSR assessment conducted by ReSAKSS in 2015; and the East African Community (EAC) is expected to be the second, after ReSAKSS completed its JSR assessment in July 2019. As of September 2019, 28 countries had inclusive, institutionalized mechanisms for mutual accountability and peer review, mainly JSRs (see Annex 3d, Table L3 (b)). Over time, using outcomes of the JSR assessments, the JSRs have become more inclusive of nonstate actors, more

2 Sex-disaggregated data are not yet available for most of the CAADP RF indicators tracked by ReSAKSS.

comprehensive in coverage, and have better monitoring and follow-up of actions, which has led to improvements in policy review and dialogue.

The CAADP Biennial Review (BR) is another important mechanism for tracking continental progress toward achieving Malabo commitments through NAIPs. The inaugural (2017) BR report, which included the Africa Agricultural Transformation Scorecard (AATS), was launched on January 29, 2018, during the 30th Ordinary Session of the Assembly of Heads of State and Government of the African Union, held in Addis Ababa, Ethiopia. The report launch marked an important milestone in promoting mutual accountability at the highest political level. Out of the 47 reporting countries, 20 obtained an overall agricultural transformation score that was sufficient to indicate that they are on track to achieve the Malabo commitments by 2025 (Table L3(a)).

The second BR (2019) process was launched at the country level following BR continental training workshops held in March and April 2019. The 2019 BR features the eBiennial Review (eBR), an interactive web-based data platform developed by IFPRI/ReSAKSS at the request of AUC and AUDA-NEPAD, to facilitate BR data collection, access, management, and reporting at country, regional, and continental levels. Similar to the inaugural BR process, each country organized a multistakeholder workshop to review and validate the report and data before its submission to the respective REC. With the support of technical partners, including ReSAKSS and the RECs, by the end of September 2019, 49 countries had drafted, validated, and submitted reports under the second BR round to their respective REC (Table L3(a)). The continental report from this second BR round, including the AATS, was finalized in September 2019 in preparation for its review by AUC's Specialized Technical Committee on Agriculture in October 2019. The report and scorecard are expected to be presented at the AU heads of state and government summit in January 2020.

Progress in CAADP Indicators

This section discusses Africa's performance on 29 of the 38 CAADP RF indicators for which data are available—21 quantitative and all 8 qualitative indicators, organized by the three RF levels.[3] Data on the 29 indicators are presented in Table 13.2 and 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 five economic categories (countries with less favorable agricultural conditions, countries with more favorable agricultural conditions, mineral-rich countries, lower-middle-income countries, and upper-middle-income countries); (4) by the eight RECs (CEN-SAD, COMESA, EAC, ECCAS, ECOWAS, IGAD, SADC, and UMA);[4] (5) by the period during which countries signed the CAADP compact (CC0, CC1, CC2, and CC3);[5] (6) by the level or stage of CAADP implementation reached by the end of 2016 (CL0, CL1, CL2, CL3, and CL4);[6] and (7) by the distribution of countries in formulating first- and second-generation NAIPs (N00, N10, and N11).[7] Annex 4 lists countries in the various geographic, economic, and REC categories; Annex 5 lists the countries in the different categories of CAADP compact signing or level of implementation reached; and Annex 6 lists countries by NAIP formulation category. Progress is also reported over different subperiods, with achievement in post-CAADP subperiods—that is, annual average levels over the periods 2003 to 2008, 2008 to 2014, and 2014 to 2018—compared with achievement in the pre-CAADP subperiod of 1995 to 2003.[8] The discussion

3 Several of the indicators are also part of the CAADP BR and AATS.

4 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 of West African States; IGAD = Intergovernmental Authority for Development; SADC = Southern African Development Community; UMA = Arab Maghreb Union.

5 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.

6 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.

7 N00= group of countries that have neither a first-generation NAIP (NAIP1.0) nor second-generation NAIP (NAIP2.0); N10= group of countries that have NAIP1.0 but do not have NAIP2.0; N11= group of countries that have both NAIP1.0 and NAIP2.0.

8 Considering CAADP was launched in 2003, renewed in 2008, and renewed again 2014 with the Malabo Declaration, the years 2003, 2008, and 2014 represent important milestones. Therefore, the post-CAADP subperiods for reporting on progress use overlapping years to mark these milestones that usually occurred during the middle of the year in June, that is, 2003-2008, 2008-2014, and 2014-2018.

of trends and changes in CAADP indicators pertains to country categories or groupings as a whole and not individual countries within the categories, for example it relates to Africa as a whole, Central Africa as a group, ECOWAS as a group, and groups of countries categorized by their stage of CAADP implementation and NAIP formulation experience. Presenting the trends by different groups helps to determine how the implications for strengthening or maintaining desirable outcomes or for reversing undesirable outcomes may differ across the continent, without inference of causality. Unless otherwise stated, all monetary values have been converted into constant 2010 US dollar prices for intertemporal and cross-country or cross-category comparisons.

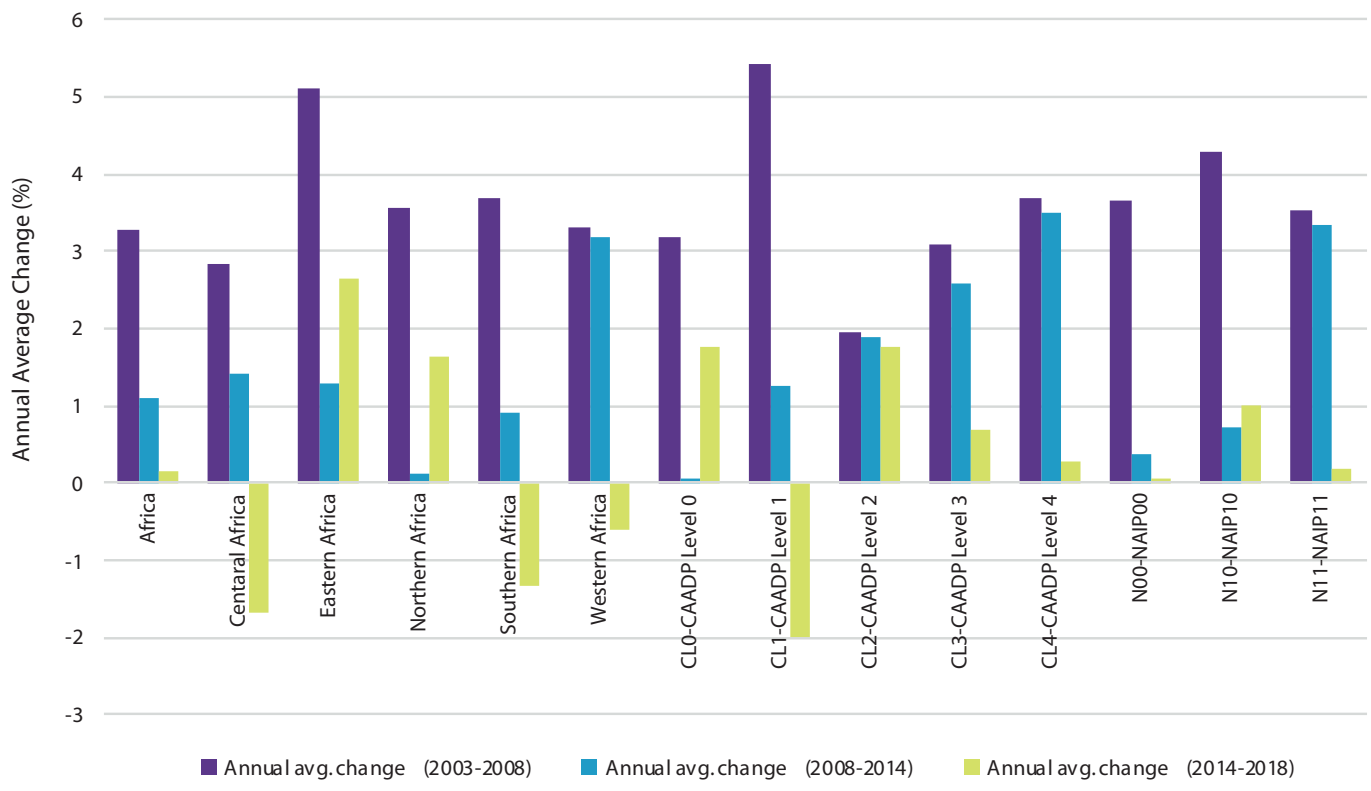
Despite the slowing growth rate, GDP per capita in terms of annual average level has continued to show sustained increases for Africa as a whole and for all country categories, except in mineral-rich and upper-middle-income countries. For example, Africa's average GDP per capita increased from US$1,483 in 1995–2003 to US$1,722 in 2003–2008 and reached US$1,984 in 2014–2018. While GDP per capita for most categories was below US$1,000 in the most recent period of 2014–2018, upper-middle-income countries and the Arab Maghreb Union (UMA), which includes the group of countries that are yet to embark on the CAADP process (CC0 and CL0), saw GDP per capita levels of above US$4,000 in 2014–2018.

CAADP Results Framework Level 1 Indicators: Agriculture's Contribution to Economic Growth and Inclusive Development

Wealth Creation

For Africa as a whole and all other categories, *GDP per capita* growth has slowed since 2008 compared with the growth registered between 2003 and 2008. In particular, annual growth in Africa's GDP per capita decelerated from 3.3 percent in 2003–2008 to 1.1 percent in 2008–2014, and further slowed to 0.2 percent in 2014–2018 (Table L1.1.1). The observed growth slowdown can be attributed to lower commodity prices and weaker global growth in recent years, particularly in 2016. While several categories experienced negative GDP per capita growth in 2014–2018, higher growth of more than 2.5 percent is observed in Eastern Africa over this most recent period (Table L1.1.1 and Figure 13.1).

FIGURE 13.1—GDP PER CAPITA (CONSTANT 2010 US$), ANNUAL AVERAGE PERCENT CHANGE, 2003–2018



Source: ReSAKSS based on World Bank (2019) and ILO (2019).

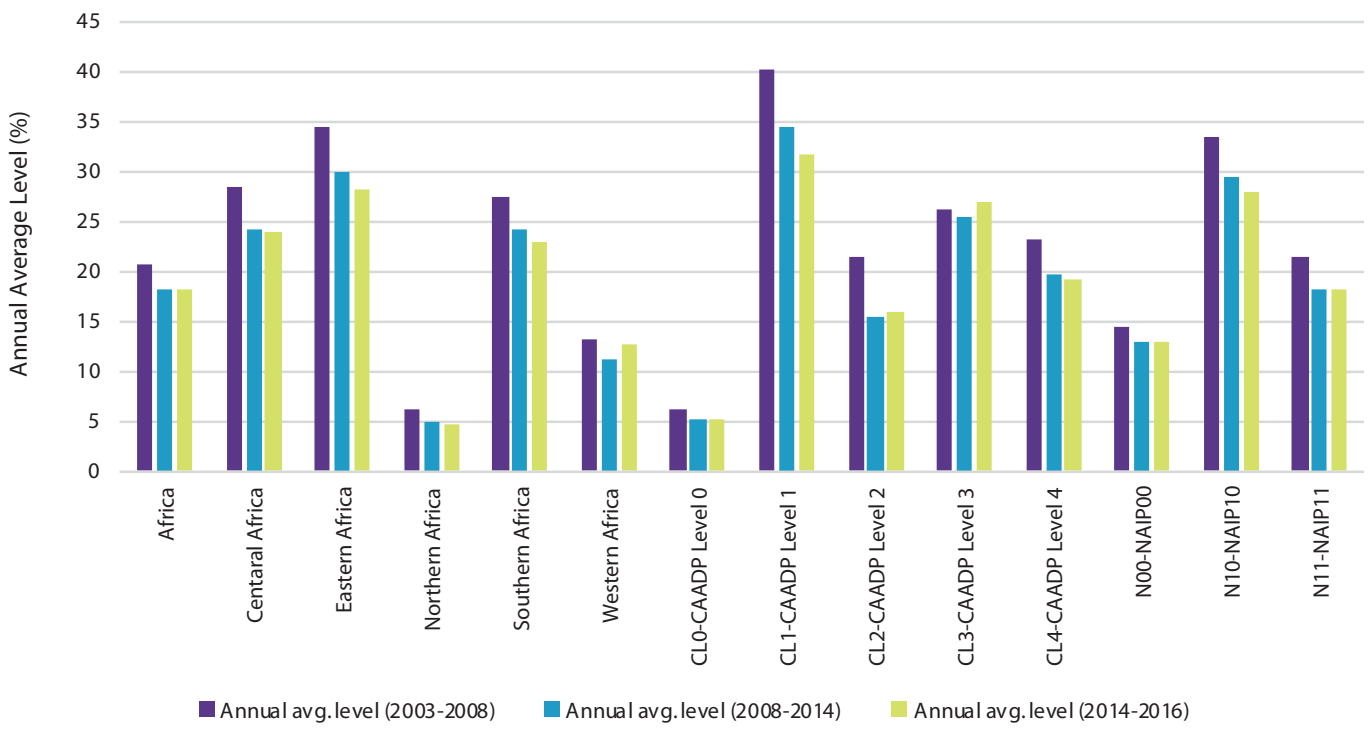
Household consumption expenditure per capita is another measure of household standards of living. The trends in this measure in recent years generally resemble those of GDP per capita. Household consumption expenditure per capita has consistently increased over the past two decades for Africa as a whole and across all country categories, particularly during the post-CAADP period of 2003–2014 (Table L1.1.2). For most country categories, the average annual growth in household consumption expenditure per capita was slower over the 2014–2018 period compared with 2008–2014. Nonetheless, Africa's household consumption expenditure per capita increased from an annual average level of US$1,107 in 2003–2008 to $1,270 in 2008–2014 and further up to US$1,426 in 2014–2018. Higher growth rates in household consumption per capita were recorded in Western Africa, lower-middle-income countries, ECOWAS member countries as a whole, and the groups of countries that joined CAADP early (CC1), that are most advanced in implementing CAADP (CL4), and that have developed both a first- and a second-generation NAIP (N11).

Food and Nutrition Security

The *prevalence of undernourishment* measures the proportion of the population whose caloric intake is below the minimum energy requirement. For Africa as a whole, the prevalence of undernourishment declined slowly from an annual average of 20.6 percent in 2003–2008 to 18.2 percent in 2008–2014 and remained at 18.2 percent in the more recent period of 2014–2016, the latest period for which data are available (Table L1.2.1 and Figure 13.2). A slower rate of decline in the prevalence of undernourishment in 2014–2016 is also observed across all country categories. Moreover, some categories even recorded increased levels in undernourishment in 2014–2016 compared with 2008–2014, including in Western Africa, mineral-rich countries, CEN-SAD, ECOWAS, and the groups of countries that have been implementing CAADP for longer (CC2) and that are further along in the implementation process (CL3). As pointed out by Benin (2016), this could be explained by the inadequacy of early agriculture investment plans to address undernourishment.

Throughout the review period (1995–2018), Africa as a whole and most country categories have consistently experienced a decline in the prevalence of child malnutrition—that is, stunting (low height-for-age), underweight (low weight-for-age), and wasting (low weight-for-height)—among children under the

FIGURE 13.2—PREVALENCE OF UNDERNOURISHMENT (% OF POPULATION), 2003-2016



Source: ReSAKSS based on World Bank (2019) and ILO (2019).

TABLE 13.3—SEVERITY OF MALNUTRITION BY PREVALENCE RANGES

Indicator	Prevalence cut-off values	
Stunting	< 20%	Low prevalence
	20-29%	Medium prevalence
	30-39%	High prevalence
	=> 40%	Very high prevalence
Underweight	< 10%	Low prevalence
	10-19%	Medium prevalence
	20-29%	High prevalence
	=> 30%	Very high prevalence
Wasting	< 5%	Low prevalence
	5-9%	Medium prevalence
	10-14%	High prevalence
	=>15%	Very high prevalence

Source: WHO (2019).

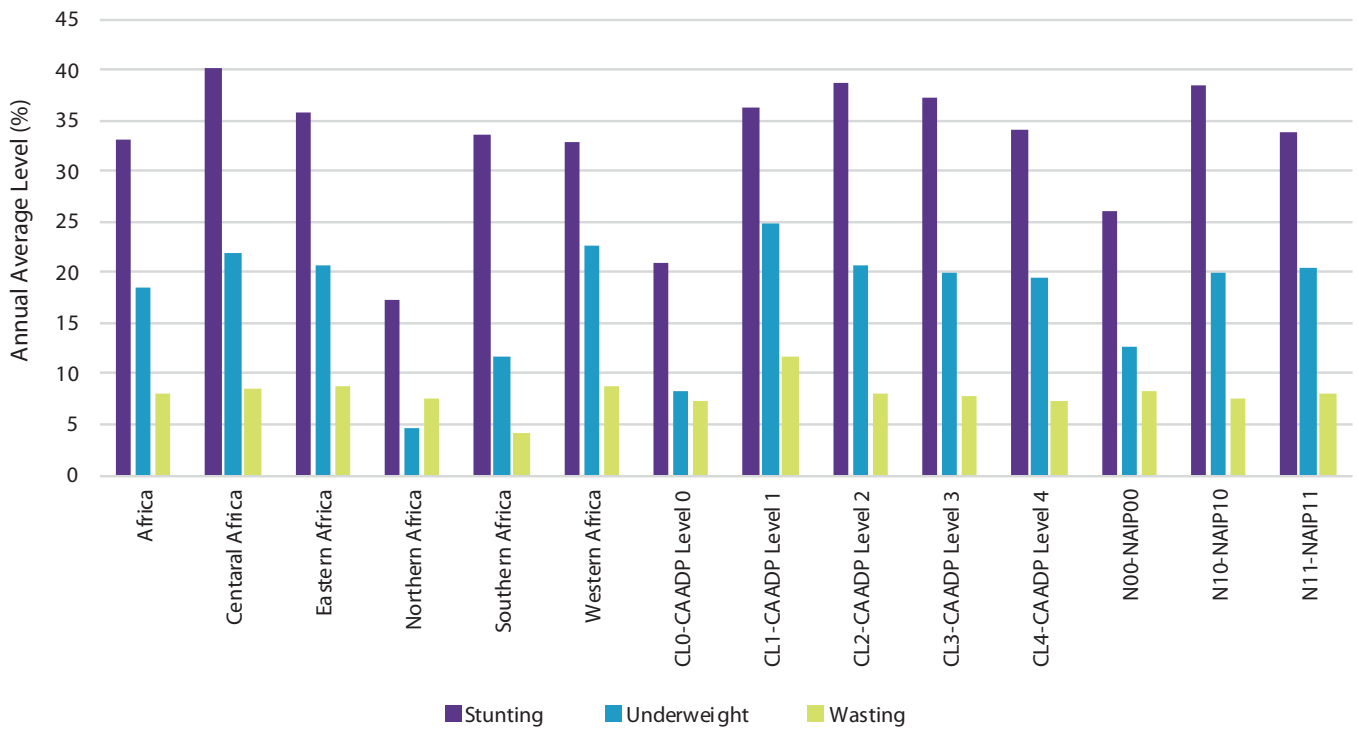
age of five years (Tables L1.2.2A to L1.2.2C). Despite this aggregate improvement in child nutritional status, using the World Health Organization's (WHO) malnutrition prevalence ranges (Table 13.3), the prevalence rates for child stunting, underweight, and wasting are considered high (and even very high in the case of stunting) for Africa as a whole and for many categories of countries.

Stunting is the most common measure of chronic malnutrition. Although Africa as a whole and most categories of countries have managed to reduce the *prevalence of stunting* over time, rates remain distinctly high with one out of every three children under five years of age being stunted in their growth (Table L1.2.2B and Figure 13.3). The prevalence of stunting for Africa declined from 41.8 percent in 1995–2003 to 35.8 percent in 2008–2018, and to 33.0 percent in 2014–2018. The prevalence of stunting in 2014–2018 remained very high, that is, above 40 percent, in Central Africa, in countries with less favorable agricultural conditions, and in mineral-rich countries. During the same period, stunting rates were lowest in UMA and in Northern Africa at 13.1 percent and 17.4 percent, respectively. Between 1995–2003 and 2014–2018, the largest reductions in stunting, by more than 10 percentage points, occurred in Eastern Africa, in countries with more favorable agricultural conditions, in COMESA and IGAD, and in the groups of countries that joined CAADP early (CC1), are furthest along in CAADP implementation (CL4), and that have formulated both NAIP1 and NAIP2 (N11). This suggests that adopting CAADP early and engaging in its implementation may play a role in helping to reduce the prevalence of child stunting.

For Africa as a whole, the *prevalence of underweight* children under the age of five has moved from high prevalence in the pre-CAADP period to medium prevalence in the post-CAADP period. Specifically, the prevalence declined from an annual average of 24.3 percent in 1995–2003 to 20.2 percent in 2008–2014 and further to 18.0 percent in 2014–2018 (Table L1.2.2A). However, several country categories, including Central, Eastern, and Western Africa, those with less favorable agricultural conditions, mineral-rich countries, the groups of countries that signed a CAADP compact in 2007–2009 (CC1) and in 2013–2015 (CC3), and those that are not advanced in CAADP implementation (CL2), have underweight prevalence rates of at least 20 percent in 2014–2018 (Figure 13.3). Meanwhile, Northern Africa, upper-middle-income countries, and the UMA group of countries have underweight prevalence rates of less than 5 percent in 2014–2018.

An indicator of acute malnutrition, the *prevalence of wasting* for Africa as a whole in children under five years of age declined from a high annual average rate of 10 percent in 1995–2003 to a medium rate of 8.7 percent in 2008–2014, with a further small decline to 8.0 percent in 2014–2018 (Table L1.2.2C). Similar reductions are observed in most of the country categories over the entire review period. Between 1995–2003 and 2014–2018, the highest reductions are witnessed in Western Africa, in countries with less favorable agricultural conditions, in mineral-rich countries, in ECOWAS, and in the group of countries that are implementing CAADP (CL2). However, for several categories of countries, the prevalence of wasting has increased over time, including in Northern Africa and in the groups of countries that joined CAADP later (CC3), have not yet joined (CC0 and CL0), are not advanced in CAADP implementation (CL1), or have not yet embarked on NAIP formulation. Ongoing conflict in some Northern Africa countries is reported to have negatively impacted the nutritional status of children (UNICEF 2019). Using available sex-disaggregated data on child malnutrition, average prevalence rates of stunting, underweight, and wasting for Africa as a whole have been on a declining trend for both boys and girls under the age of five years (Figure 13.4). Over the review period (1997–2018), the prevalence rates of stunting, underweight, and wasting are higher among boys than girls.

FIGURE 13.3—PREVALENCE OF STUNTING, UNDERWEIGHT, AND WASTING (% OF CHILDREN UNDER 5), 2014–2018

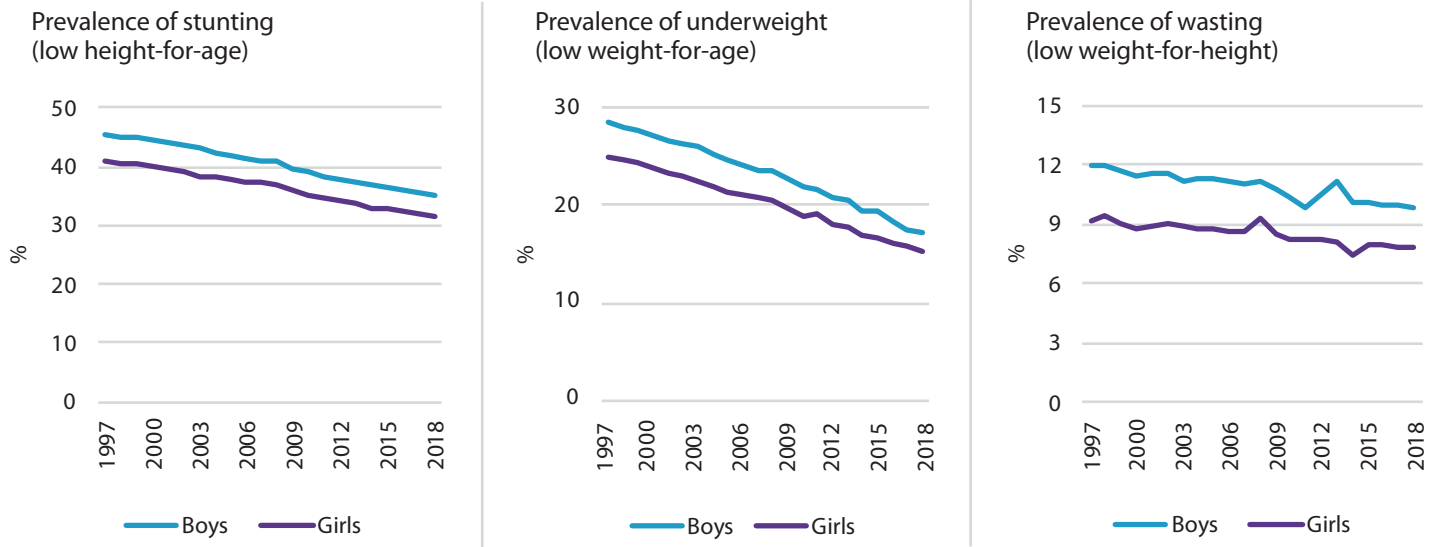


Source: ReSAKSS based on World Bank (2019) and ILO (2019).

This is consistent with findings of studies by Gebre et al. (2019) and Ettyang and Sawe (2016). During the most recent period of 2008–2018, for Africa as a whole, prevalence rates of stunting averaged 35.9 percent among boys and 32.4 percent among girls, while prevalence rates of wasting averaged 10.1 percent among boys and 7.8 percent among girls (Tables L1.2.2.B-1 and L1.2.2.C-1).

Africa's dependence on cereal imports averaged 26.4 percent of total cereal supply in 2008–2012, based on the latest available data. This implies that Africa was able to meet about three-fourths of its cereal demand through domestic production. Cereal import dependency ratios of above 40 percent in 2012 are observed in Northern Africa, in ECCAS and UMA, and in non-CAADP countries (CC0 and CL0) (Table L1.2.3). Import dependency also increased further in some of these categories including Northern Africa, UMA, and non-CAADP countries (CC0 and CL0). At the same time, lower cereal import dependency ratios are witnessed in Southern Africa, mineral-rich countries, upper-middle-income countries, SADC, and the groups of countries that are further along in implementing CAADP or have only formulated a first-generation NAIP (N10). Countries in these categories experienced consistent declines in their cereal import dependency between 2003 and 2012.

FIGURE 13.4—SEX-DISAGGREGATED PREVALENCE OF CHILD MALNUTRITION, PERCENT OF CHILDREN UNDER FIVE YEARS



Source: ReSAKSS based on World Bank (2019) and ILO (2019).

Employment

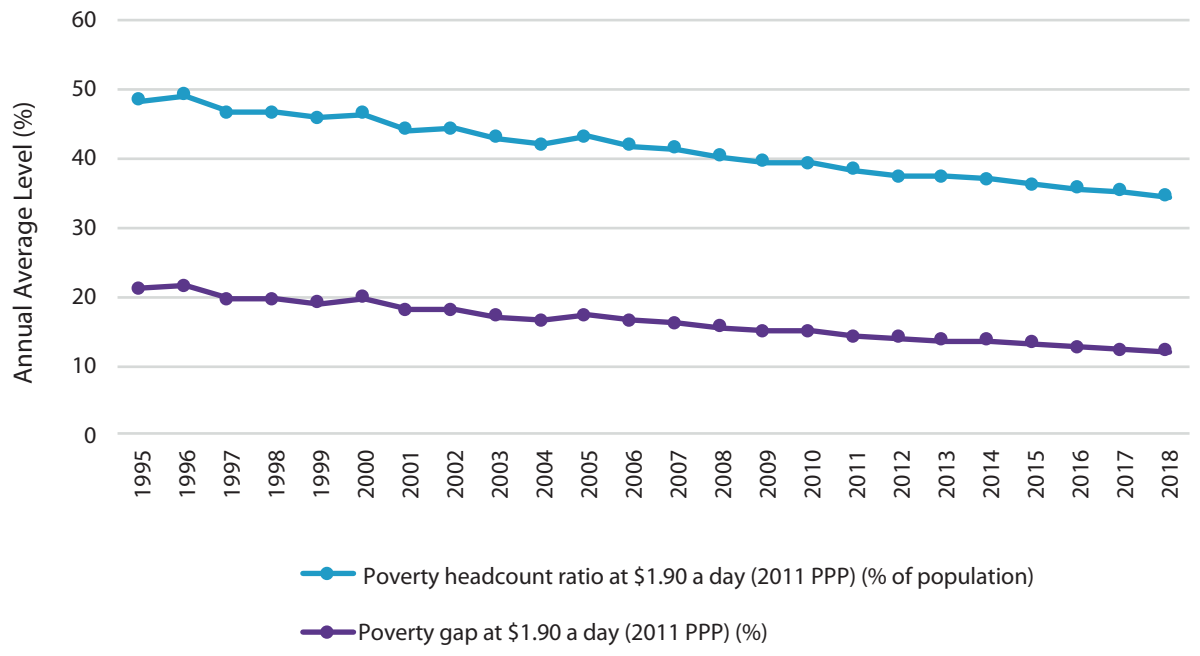
For Africa as a whole and most country categories, *employment rates*, expressed as a percentage of the labor force (all individuals aged 15 to 64 years, Table L1.3.1A), have remained moderately high over time. Africa's average employment rate increased slightly from 91.3 percent in 1995–2003 to 93.1 percent in 2014–2018. Employment rates expressed as a percentage of the labor force (all individuals aged 15+ years, Table L1.3.1B) are lower but have also remained fairly constant, averaging 58.7 percent for Africa as a whole in 1995–2003 and 59.0 percent in 2014–2018. For both measures of employment, rates are relatively lower in the Northern and Southern Africa, in upper-middle-income countries, and in UMA and non-CAADP countries. However, Africa has the highest rate of vulnerable employment in the world at 66 percent or close to 300 million people (ILO 2018).[9] The high employment rates mask high rates of underemployment, especially among youth, as well as informal and poor-quality jobs. The lack of age- and sex-disaggregated data on employment makes it difficult to formulate employment policies that recognize the different needs and vulnerabilities of women and men throughout the life cycle, as highlighted by Heckert et al. (Chapter 7 of this report).

Poverty

Africa has managed to consistently reduce poverty over the past two decades as measured by both the incidence (headcount ratio) and the intensity of poverty (poverty gap) (Figure 13.5). The proportion of Africa's population living below the poverty line (US$1.90 a day), measured by the *poverty headcount ratio*,

9 ILO (2018) defines vulnerable employment as the share of own-account workers and contributing family workers in total employment. This is often informal work arrangements characterized by inadequate earnings, low productivity, and difficult work conditions that undermine the rights of workers.

FIGURE 13.5—POVERTY GAP AND POVERTY HEADCOUNT RATIO IN AFRICA (%, AT US $ 1.90 A DAY)



Source: ReSAKSS based on World Bank (2019) and ILO (2019).

declined by 6 percentage points from 41.8 percent in 2003–2008 to 35.6 percent in 2014–2018 (Table L1.3.4 and Figure 13.5).

Over the same period, reductions of 10 percentage points or more were observed in Eastern Africa, in countries with less favorable agricultural conditions, in mineral-rich countries, the IGAD group of countries, and the group of countries that are further along in CAADP implementation (CL3). However, despite declines overall in Africa on average, the poverty headcount ratio in 2014–2018 remains markedly high in most categories of countries at above 30 percent.

For Africa as a whole, the *poverty gap*, measured as the mean shortfall from the poverty line of US$1.90 a day, declined from 16.5 percent in 2003–2008 to 14.4 percent in 2008–2014 and down to 12.7 percent in 2014–2018 (Table L1.3.3 and Figure 13.5). During the post-CAADP period since 2003, the poverty gap has declined for Africa as a whole and for most categories of countries. Mineral-rich countries registered the highest reductions in the poverty gap, with a decline of 23.1 percent in 2014–2018. Northern Africa, upper-middle-income countries, and non-CAADP countries (CC0 and CL0) also experienced reductions in the poverty gap of more than 10 percent in 2014–2018.

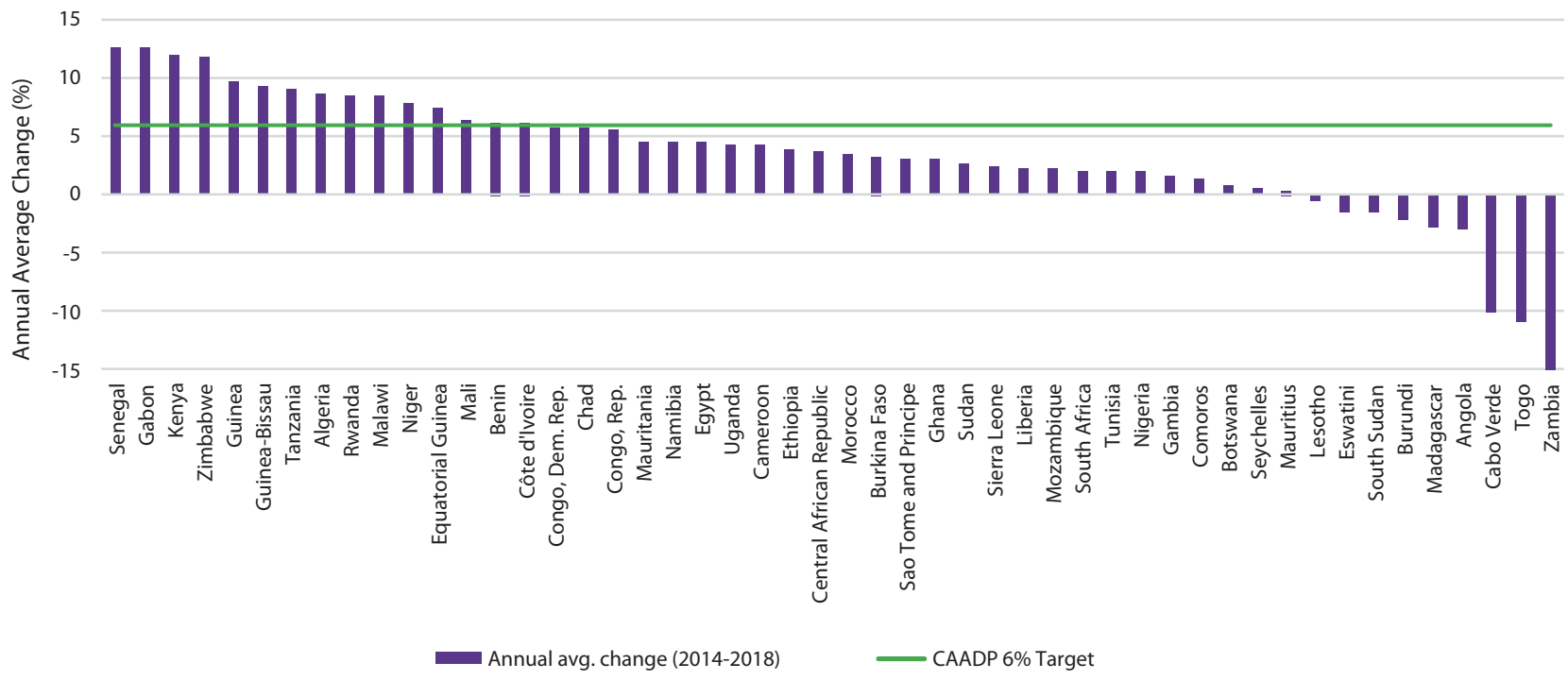
Income inequality for Africa as a whole, measured by the *Gini index*, declined marginally from 42.0 percent in 2003–2008 to 41.6 percent in 2014–2018 (Table L1.3.5). Over the same period, marginal reductions in income inequality were also achieved across all the other country categories, with the exception of upper-middle-income countries, the ECCAS group of countries, non-CAADP countries, and the group of countries that do have a NAIP. In addition, distinctly higher income inequality is observed in Southern Africa, upper-middle-income countries, and the SADC group of countries. The Gini index in these country categories averaged more than 50 percent in 2014–2018. Income inequality is lowest in Northern Africa, a region enjoying high levels of GDP per capita, where it averaged 33.6 percent in 2014–2018.

CAADP Results Framework Level 2 Indicators: Agricultural Transformation and Sustained Inclusive Agricultural Growth

Agricultural Production and Productivity

For Africa as a whole, *agriculture value added* grew faster in the pre-CAADP era compared to the post-CAADP period. Specifically, it grew at 5.0 percent

FIGURE 13.6—AGRICULTURE VALUE ADDED ANNUAL AVERAGE GROWTH (%), 2014–2018

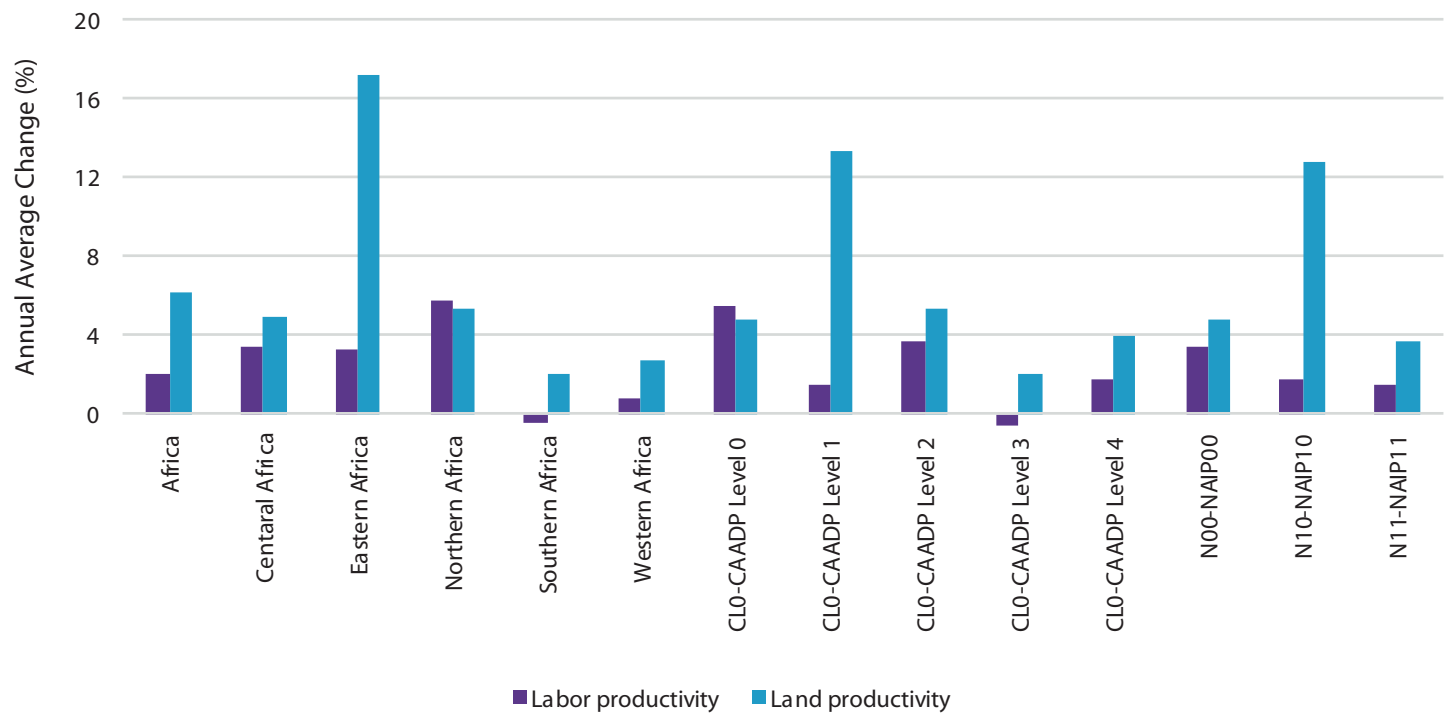


Source: ReSAKSS based on World Bank (2019) and ILO (2019).

in 1995–2003 and decelerated to 2.0 percent in 2003–2008 before increasing marginally to 3.1 percent in 2008–2014 and to 3.2 percent in 2014–2018, still below the CAADP 6 percent target (Table L2.1.1). However, a few categories of countries managed to meet the CAADP 6 percent target during the more recent period of 2014–2018, including Northern Africa, countries with less favorable agricultural conditions, EAC, UMA, and the groups of countries that signed the compact between 2010 and 2012 (CC2 and CC3). In addition, 15 countries either met or surpassed the 6 percent target in 2014–2018 (Figure 13.6).

Meanwhile, Africa's agriculture value added has consistently increased over time. It rose from an annual average of US$9.5 billion per country in 2003–2008 to $11.7 billion and $13.9 billion per country in 2008–2014 and 2014–2018, respectively. The increasing trend is consistent across all categories of countries. Moreover, in the 2014–2018 period, annual average agriculture GDP per country was more than $25 billion in Western Africa, lower-middle-income countries, members of ECOWAS, and the groups of countries that joined CAADP early (CC1), those that are most advanced in CAADP implementation (CL4), and those that have formulated both first- and second-generation NAIPs (N11). On the other hand, over the same period, annual average agriculture value added of less than $5 billion per country is observed in Central Africa, countries with less favorable agricultural conditions, mineral-rich countries, and the groups of countries that are somewhat advanced in CAADP implementation (CL2 and CL3).

FIGURE 13.7—LABOR AND LAND PRODUCTIVITY, ANNUAL AVERAGE GROWTH (%), 2014–2018



Source: ReSAKSS based on World Bank (2019), FAO (2019), and UNCTAD (2017).

The *agricultural production index* (API) shows total agricultural production for each year relative to the base period of 2004–2006. During the review period, API increased consistently for Africa and for all categories of countries. For Africa as a whole, it grew by 2.8 percent in 1995–2003, 3.2 percent in 2003–2008, and 3.6 percent in 2014–2016. Country categories that experienced API annual average growth rates of at least 5 percent in 2008–2014 include those in Eastern Africa, countries with more favorable agricultural conditions, and the groups of countries that are not advanced in CAADP implementation (CL1) and that have formulated a first-generation NAIP only (N10) (Table L2.1.2).

Over the review period, both labor and land productivity have been increasing, with productivity for land rising faster than for labor (Figure 13.7). Agriculture *labor productivity* for Africa as a whole, measured by agriculture value added per agricultural worker, decelerated from an annual average growth of 2.2 percent in the period 1995–2003 to 1.5 percent in 2008–2014 before increasing to a 2.0 percent growth rate over the 2014–2018 period (Table L2.1.3). Country categories that have witnessed the largest increases in labor productivity, of 5 percent or more, during the 2014–2018 period are Northern Africa, upper-middle-income countries, EAC, UMA, and the groups

of countries that have not started the CAADP process (CC0 and CL0). Notably, with the exception of EAC, the categories that experienced the largest growth in labor productivity are also the ones that had the highest annual average levels of labor productivity in 2008–2018. This is partially due to the higher levels of mechanization in these country categories, which include South Africa and the Northern African countries.

For Africa as a whole, annual average growth in *land productivity*, measured by agricultural value added per hectare of arable land, declined from 3.3 percent in 1995–2003 to 1.7 percent in 2008–2014 and rose to 6.2 percent in 2014–2018 (Table L2.1.4). In the most recent period, 2014–2018, all country categories witnessed positive growth in land productivity. The highest growth rates were seen in Eastern Africa, COMESA, IGAD, and the groups of countries that signed a CAADP compact in 2013–2015, that are not as advanced in CAADP implementation (CL1), or that have formulated the first-generation NAIP only (NAIP10) (Figure 13.7). The country categories that exhibit the highest annual average levels of land productivity in 2014–2018 include Northern Africa, lower-middle-income countries, CEN-SAD, and the group of countries that are the furthest along in CAADP implementation (CL4). These data, presented at the aggregate level, do not permit us to analyze gender-specific constraints to increasing land and labor productivity. As more sex-disaggregated data on land and labor productivity become available, we will be better able to address gender-related constraints to boosting agricultural productivity in Africa.

Yields of the top five agricultural commodities—cassava, yams, maize, meat, and cow milk[10]—show variable performance between the first CAADP subperiod of 2003–2008 and the later subperiods of 2008–2014 and 2014–2018 (Table L2.1.5A, Table L2.1.5B, Table L2.1.5C, Table L2.1.5D, Table L2.1.5E). In particular, yields of *cassava, yams, maize, and meat* for Africa and several categories show a declining trend during the 2008–2014 and 2014–2018 periods compared to 2003–2008. For example, average yields of cassava for Africa as a whole grew at an annual average rate of 1.2 percent in 2003–2008 but experienced negative growth in both 2008–2014 and 2014–2017. Although average milk yield for Africa as a whole has increased over time, this growth decelerated in both 2003–2008 and 2014–2017, while accelerating between 2008 and 2014. Yields of meat and milk are much higher in Northern Africa, upper-middle-income countries, and in the groups of countries that have not yet embarked on the CAADP process (CC0 and CL0). Countries in these categories are also those that have high levels of agricultural mechanization.

Intra-African Regional Trade and Market Performance

Boosting intra-African agricultural trade is one of the seven Malabo Declaration commitments that can help generate jobs in agricultural value chains, raise incomes, and improve food security and nutrition. Trade trends reveal that for Africa as a whole, *intra-African agricultural exports* more than quadrupled during the post-CAADP period. They rose from an annual average of US$0.5 billion per country in 2003–2008 to $2.1 billion in 2014–2018 (L2.2.1A). Several categories of countries consistently experienced relatively high and positive growth in intra-African agricultural exports in the post-CAADP period, including Eastern, Northern, and Western Africa, countries with more favorable agricultural conditions, CEN-SAD, EAC, ECOWAS, and the groups of countries that joined CAADP early (CC1) and that have formulated both first- and second-generation NAIPs (N11). Intra-African agricultural exports averaged over $3 billion per country per year in 2014–2018 in Southern Africa, upper-middle-income countries, SADC, and the groups of countries that are yet to embark on the CAADP process (CC1 and CL0) and those that have not yet formulated a NAIP (N00). On the other hand, Central Africa, mineral-rich countries, and ECCAS consistently recorded the lowest levels of intra-Africa agricultural exports throughout the review period, averaging less than $30 million in 2014–2018 per country per year.

Intra-African agricultural imports also grew significantly during the post-CAADP period, more than doubling from an annual average per country of US$301 million in 2003–2008 to $655 million in 2014–2018 (L2.2.1B).[11] Relatively higher growth rates in intra-African agricultural imports are seen in Southern Africa, upper-middle-income countries, SADC, and the groups of countries that have not yet joined the CAADP process (CL0 and CC0) or formulated a NAIP (N00). Due in part to having a much lower level of intra-African agricultural

10 These five were the commodities with the largest shares in total value of production for Africa as a whole.

11 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, likely due to differences in how the origin of initial exports versus re-exports are reflected in the imports, as well as differences in the valuation of exports versus imports in terms of use of c.i.f. or f.o.b. values.

imports in terms of value, intra-African imports grew at a remarkable 12.9 percent in Eastern Africa in 2014–2018.

While the growth in intra-African agricultural exports and imports is commendable, the progressive elimination of tariff and nontariff barriers as envisioned under the African Continental Free Trade Area is expected to significantly improve Africa's trade performance. Nontariff barriers and, to a lesser extent, the lack of agricultural product diversification and high trading costs are among the largest impediments to Africa's ability to trade effectively (Bouet and Odjo 2019).

For Africa as a whole and all country categories, the variability in domestic food prices over time, measured by the *domestic food price volatility index*, has been in a steady decline in recent years (L2.2.2). Domestic food price volatility in Africa decreased from 12.7 percent per year in 2003–2008 to 11.5 percent in 2008–2014 and averaged 8.6 percent in 2014. Domestic food price volatility in the 2008–2014 period was somewhat higher in Southern Africa, countries with less favorable agricultural conditions, upper-middle-income countries, COMESA, EAC, IGAD, SADC, and the group of countries that are fairly advanced in implementing CAADP (CL3). However, these categories were also those that experienced some of the largest relative declines in domestic food price volatility during this period.

Resilience of Livelihoods and Management of Risks

The existence of food reserves, food insecurity response programs, and early warning systems is a key indicator for assessing the resilience of livelihoods and production systems to climate variability as well as for the management of risks associated with the agriculture sector. As of September 2019, 42 countries had food reserves, conducted local purchases of food for relief programs, had early warning systems, and were implementing school feeding programs (Table L3(b)).

CAADP Results Framework Level 3 Indicators: Strengthening Systemic Capacity to Deliver Results

Capacities for Policy Design and Implementation

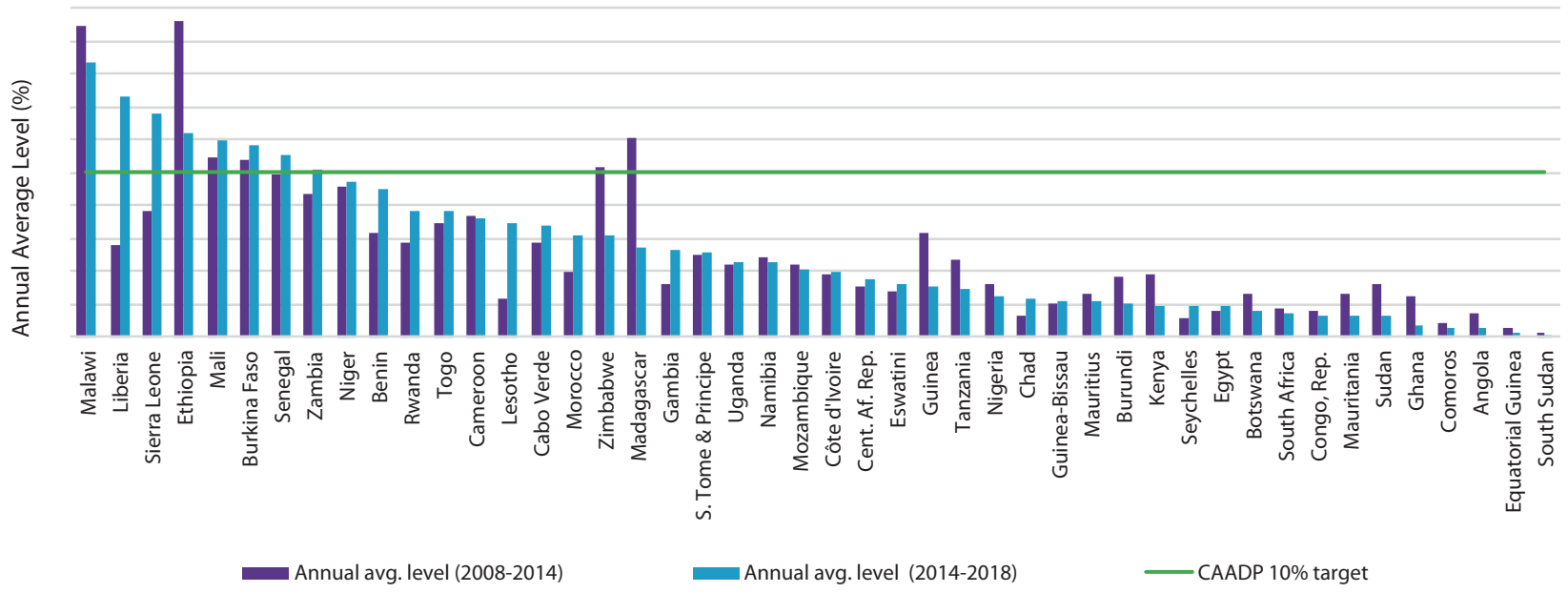
Progress in the implementation of actions aimed at strengthening systemic capacity for agriculture and food-security policy planning and implementation are presented in Table L3(b). As of September 2019, 19 countries had formulated new or revised second-generation NAIPs through inclusive and participatory processes; 28 had inclusive institutionalized mechanisms for mutual accountability and peer review (mainly JSRs); 36 were implementing evidence-based policies; 30 had functional multisectoral and multistakeholder coordination bodies—mainly agriculture sector working groups; and 25 had successfully undertaken agriculture-related public-private partnerships aimed at boosting specific agricultural value chains. Furthermore, Strategic Analysis and Knowledge Support System (SAKSS) platforms, which help countries to meet their specific data, analytical, and capacity needs, were established in 14 countries. Building the capacity to generate and analyze gendered data will be an important part of this agenda in the future to support Malabo commitments toward gender equality.

Government Agriculture Expenditure

For Africa as a whole, government agricultural expenditure increased from an average of US$0.59 billion per country per year in 1995–2003 to $0.86 billion in 2003–2008 and rose to $1.0 billion in 2014–2018 (Table L3.5.1). However, the annual average growth in Africa's government agricultural expenditure has significantly declined in recent years. It grew at 0.5 percent in 2008–2014 and at 0.9 percent in 2014–2018 compared with 7.2 percent in 2003–2008 and 10.5 percent in 1995–2003. Several categories experienced negative growth in expenditures during both 2008–2014 and 2014–2018 including Eastern, Southern, and Western Africa, lower-middle-income countries, and the groups of countries that joined the CAADP process early (CC1), that are either not very advanced or are advanced in CAADP implementation (CL1 and CL4), and that have formulated either a first- and or a second-generation NAIP (N10 and N11). On the other hand, other categories registered steady and positive growth in government agricultural expenditure; these include Central and Northern Africa, countries with less favorable agricultural conditions, upper-middle-income countries, non-CAADP countries (CC0 and CL0), and the groups of countries that signed CAADP compacts between 2010 and 2015, that are fairly advanced in implementing CAADP (CL3), or that have not formulated a first- or a second-generation NAIP (N00).

Another key commitment of the 2003 Maputo Declaration, reaffirmed in the 2014 Malabo Declaration, is the commitment to allocate 10 percent of national budgets to the agriculture sector. An assessment of progress on the commitment shows that the *share of agricultural expenditure in total government expenditure* remains below the CAADP 10 percent target across all categories (Table L.3.5.2). For example, Africa's share of agricultural expenditure increased on average 3.6 percent per year between 2003 and 2008, but then decelerated to only grow at 3.2 percent between 2014 and 2018. However, a few categories

FIGURE 13.8—SHARE OF GOVERNMENT AGRICULTURE EXPENDITURE IN TOTAL PUBLIC EXPENDITURE (%), 2008–2014 AND 2014–2018



Source: ReSAKSS based on IFPRI (2015), World Bank (2019), and national sources.

managed to consistently register an agriculture expenditure share of at least 7 percent. These include countries with both less and more favorable agricultural conditions, and the group of countries that are further along in implementing CAADP (CL3). Moreover, although ECCAS had one of the smallest shares of agriculture expenditure in 2014–2018, it recorded one of the largest growth rates in the share of the government expenditure going to agriculture—at more than 6 percent—during the same period. Moreover, while on average no regional category met the 10 percent target, Figure 13.8 shows that 10 countries—Burkina Faso, Ethiopia, Liberia, Madagascar, Malawi, Mali, Senegal, Sierra Leone, Zambia, and Zimbabwe—managed to meet or surpass the target in either 2008–2014 or 2014–2018. Meanwhile, Benin, Cameroon, Niger, Rwanda, and Togo came close to the CAADP 10 percent target, with shares of government agriculture expenditure of more than 7 percent in 2014–2018.

The *share of government agriculture expenditure in agriculture GDP* grew faster in 2003–2008 compared with the more recent post-CAADP periods of 2008–2014 and 2014–2018 (Table L3.5.3). For Africa as a whole, the share declined from an annual average of 5.9 percent in 2003–2008 to 5.8 percent in 2008–2014 and further to 5.5 percent in 2014–2018. During 2014–2018, the highest shares were observed in Northern Africa, upper-middle-income countries, UMA, non-CAADP countries, and the group of countries without a NAIP, reflecting the relatively larger agriculture expenditures in these countries relative to the size of their agriculture sector.

Overall Conclusions and Implications

This chapter shows that African countries and regions continue to steadily advance the implementation of CAADP. To date, 25 countries have held

domestication events to launch the process to formulate Malabo Declaration compliant second-generation NAIPs. Countries have also made good progress in preparing the second BR report and AATC to be presented at the AU summit of heads of state and government in January 2020.

Trends presented in this chapter show that, on average, Africa and most country categories (regions and economic classifications) have continued to make good progress on key CAADP targets and development outcomes, although the rate has slowed. For example, due to lower commodity prices and weaker global growth, particularly in 2016, growth in Africa's GDP per capita decelerated from 3.3 percent in 2003–2008 to 0.2 percent in 2014–2018. Meanwhile, the prevalence of undernourishment in Africa only declined modestly, from 20.6 percent in 2003–2008 to 18.2 percent in 2014–2016. For Africa and for many categories, the prevalence rates for stunting, underweight, and wasting in children under the age of five are still high, and are considered very high (at least 40 percent) in the case of stunting in Central Africa, countries with less favorable agricultural conditions, and mineral-rich countries. In addition, while Africa's prevalence rates of stunting, underweight, and wasting in children under the age of five have been declining for both boys and girls, the rates have been higher among boys than girls.

On average, annual growth in agriculture value added for Africa increased marginally from 2.0 percent in 2003–2008 to 3.2 percent in 2014–2018, still below the CAADP 6 percent growth target. Although Africa as whole did not meet the target, several categories of countries managed to meet the target during 2014–2018, including Northern Africa, countries with less favorable agricultural conditions, EAC, UMA, and the group of countries that signed their CAADP compact between 2010 and 2015. In addition, a total of 15 countries either met or surpassed the 6 percent target in 2014–2018. Both labor and land productivity increased in 2014–2018 after declining in 2008–2014. Land productivity has risen faster than labor productivity. Growth in intra-African agricultural exports and imports has been particularly strong, with Africa's intra-African agricultural exports more than quadrupling between 2003–2008 and 2014–2018 while intra-African agricultural imports more than doubled during the same period. The progressive elimination of tariff and nontariff barriers as envisioned under the African Continental Free Trade Area is expected to significantly improve Africa's trade performance. The chapter shows that the share of agricultural expenditure in total government expenditure remains below the CAADP 10 percent target across all country categories. For example, Africa's share of government agriculture expenditure declined from 3.6 percent in 2003–2008 to 3.2 percent in 2014–2018. Although no regional category met the 10 percent target, 10 countries—Burkina Faso, Ethiopia, Liberia, Madagascar, Malawi, Mali, Senegal, Sierra Leone, Zambia, and Zimbabwe—managed to meet or even surpass the target in either 2008–2014 or 2014–2018.

Progress in CAADP implementation is commendable and most CAADP indicators have trended in the expected direction since 2003. However, considering slowing economic growth, some deceleration in the reduction of inequality, poverty, and undernourishment, and still relatively high levels of child malnutrition, there is need to accelerate efforts to transform Africa's agriculture sector. This calls for substantially raising agricultural productivity growth and investments in the sector, including for market access and trade infrastructure. This is particularly important as many countries still lag behind in allocating 10 percent of their national budget to agriculture. The second-generation NAIPs now being prepared provide an important entry point for designing and implementing plans that are evidence-based and Malabo-compliant. In addition, fast-tracking progress and the achievement of desired outcomes will require reinforcing the adoption of regular, comprehensive, and inclusive CAADP mutual accountability processes, such as JSRs and BRs, to facilitate evidence-based review and dialogue and to hold stakeholders accountable for their commitments to the sector.

To move the Malabo commitments to improve gender equality forward, more and better gendered data need to be collected regularly and used for monitoring and policy formulation. Our analysis of sex-disaggregated data in this chapter has been limited by the lack of comparable data over time from the different countries. Data on the empowerment of women in agriculture that can be collected at a national level will allow measuring of progress toward empowering women in the sector. A key recommendation from Buvinic and Carey (Chapter 12, in this report) is worth noting: data producers need to be better connected to decision-makers to improve the potential for data uptake and impact. Understanding the relevant policy questions can guide data producers on where to focus their efforts, while decision-makers' understanding of the possibilities and limits of gender data can better inform policy formulation and program implementation toward achieving gender equality.