CHAPTER 11

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 ratified by 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, 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 which they made seven broad commitments including upholding the CAADP principles and targets, ending hunger and halving poverty by 2025, tripling intra-African agricultural trade, and enhancing mutual accountability for results by conducting a continental Biennial Review (BR) using the CAADP Results Framework (RF).

The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) was established in 2006 to provide data and knowledge products to facilitate CAADP benchmarking, review, dialogue, and mutual learning processes. It 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). ReSAKSS led the development of the first CAADP Monitoring and Evaluation (M&E) Framework (Benin, Johnson, and Omilola 2010) and has been helping to track progress on core CAADP indicators since 2008 through its website (www.resakss.org) and flagship Annual Trends and Outlook Reports (ATORs).

The new CAADP RF for 2015-2025 outlines 40 indicators for tracking and reporting on progress in implementing the Malabo Declaration across three levels (AUC and NPCA, 2015). Level 1 includes the high-level 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 institutions, including assessing 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.

ReSAKSS is expanding its database to track the indicators in the new CAADP RF and continue to support CAADP implementation processes, including promoting mutual accountability through agriculture joint sector review (JSR) assessments, providing technical support to the CAADP BR process, and leading efforts to establish country-level strategic analysis and knowledge support systems (SAKSS) that provide data and analysis in support of CAADP.

This chapter discusses progress on 29 of the 40 indicators in the new CAADP RF. These 29 indicators are the ones 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 to 3 of this report. The remaining indicators will be added in subsequent ATORs and on the ReSAKSS website as data become available. ReSAKSS will also continue to present data for 13 indicators that were reported on previously and which remain of interest to stakeholders both in this report and on the ReSAKSS website. Details of the indicators and aggregate statistics are available in the data tables in Annex 5 of this report.

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 Round Table process, which 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 following somewhat similar steps as they develop second generation or new NAIPs/RAIPs and prepare for the first CAADP BR scheduled for January

2018. The following section describes country and regional progress in completing the CAADP process as well as progress by ReSAKSS in supporting the process through its support for NAIP formulation, JSR assessments, and the CAADP BR.

As of August 2017, 42 of 55 AU member states had signed CAADP compacts and 33 had developed, reviewed, and validated related NAIPs. The NAIPs provide detailed implementation plans for achieving CAADP/ Malabo goals and targets. Following the signing of the compact and the development of a NAIP, countries hold a business meeting to discuss financing modalities for the plan. By August 2017, 28 countries had held business meetings (Table L3(a)). To help countries finance the gaps in their NAIPs and achieve their targeted outcomes, the Global Agriculture and Food Security Program (GAFSP) was created in 2010. To date, 17 countries in Africa have been approved for GAFSP funding totaling US\$611.5 million (Table L3(a)).

Beginning in 2016, the AU and NPCA and relevant RECs have organized Malabo domestication events in various countries to launch the NAIP formulation process and ensure its alignment with Malabo commitments. Among the outputs of the event is a roadmap outlining the country's NAIP development process. To date, domestication events have been held in eight countries (Table L3(a)). Technical support from ReSAKSS and IFPRI leads to the production of a Malabo Status Assessment and Profile that evaluates the current situation in a country, and a Malabo Goals and Milestones Report that analyzes requirements for achieving Malabo targets. By August 2017, Malabo Status Assessments and Profiles had been completed for 13 countries and Malabo Goals and Milestone Reports had been completed for 4 countries (Table L3(a)).

The Malabo Declaration calls for strengthening national and regional institutional capacities for knowledge and data generation and management that support evidence-based planning, implementation, and M&E. Agricultural JSRs are one way 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 are aimed at evaluating the institutional and policy landscape as well as the quality of current agricultural review processes, and identifying areas that need strengthening in order to help countries develop JSR processes that are regular, comprehensive, and inclusive. Out of 30 country-level JSR assessments that have been initiated, 7 were completed in 2014 and 11 were completed between 2015 and 2016, bringing the total number of countries with completed assessments to 18 (Table L3(a)). At the regional level, in June 2016 the Economic Community of West African States (ECOWAS) was the first REC to hold a regional JSR. The experiences and lessons learned during the JSR assessments are being used to strengthen JSR processes and to support AUC and NPCA in preparing for the inaugural CAADP BR report that will be presented at the AU summit in January 2018.

Starting in 2016, ReSAKSS, under the leadership of AUC and NPCA, has been supporting the CAADP BR process by providing technical support to countries in data collection, analysis, and reporting. Before the BR process was rolled out to all countries, the AUC and NPCA organized six regional training workshops where country representatives were trained on BR tools and guidelines. As of August 2017, 52 of the 55 AU member states had launched the BR process and were at varying stages of completing their country reports and data templates that will be used to produce an inaugural continental BR report and scorecard for the January 2018 summit. A total of 31 countries had their BR reports drafted, validated, and submitted to the respective REC. The BR process is proving to be a useful tool for rallying agriculture sector stakeholders and enhancing mutual accountability. A second round of the BR is scheduled for 2020, with the preparation process expected to start in 2018.

Progress in CAADP Indicators

Of the 40 CAADP RF indicators, 34 are quantitative while 6 are qualitative and largely deal with strengthening country-level capacities to deliver on the CAADP agenda. The following section assesses Africa's performance on 29 of the 40 indicators for which data are readily available, that is 23 quantitative and all 6 qualitative indicators. The progress is organized using the three levels of the CAADP RF: Level 1—Agriculture's Contribution to Economic Growth and Inclusive Development; Level 2—Agricultural Transformation and Sustained Inclusive Agricultural Growth; and Level 3—Strengthening Systemic Capacity to Deliver Results.

Unlike the qualitative indicators that 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 favor-able 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)⁵³; (5) by the period during which countries signed the CAADP compact (CC1, CC2, CC3, and CC0)⁵⁴; and (6) by the level or stage of CAADP implementation reached by the end of 2016 (CL0, CL1, CL2, CL3 and CL4).⁵⁵ Annex 4 lists the countries in each CAADP category. Progress is also reported over different sub-periods, where achievement in post-CAADP sub-periods (that is, annual average levels in 2003–2008 and 2008–2016) are compared with achievement in the pre-CAADP or base sub-period of 1995–2003. The discussion here is mainly confined to trends for Africa as a whole and for countries categorized by

year in which they signed a CAADP compact and by stage of CAADP implementation reached.

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

Wealth Creation

In the aftermath of the global commodity and financial crises in 2007 and 2008, Africa has experienced slower economic growth, breaking from the strong growth the continent had experienced since the early 2000s. Recently, and especially in 2016, the slowdown in growth has been attributed to lower commodity prices and a less-supportive global environment (IMF 2016). To illustrate, although per capita gross domestic product (GDP) for Africa as a whole grew at an annual average rate of 3.9 percent in 2003–2008, it fell to 0.6 percent in 2008-2016 (Table L1.1.1). A similar trend is also observed across most classifications: geographic regions, economic classifications, RECs, and CAADP groups. The group of countries with more favorable agriculture conditions seems to have fared well in 2008–2016 with the highest annual average growth rate of 3.5 percent, perhaps because they are less dependent on oil and mineral resources, which faced declining prices. On average, the groups of countries that have been implementing CAADP the longest (especially CC1 countries) or are most advanced in implementing CAADP (CL4) achieved higher GDP per capita growth in 2003–2008 compared to the groups of non-CAADP countries (CC0 or CL0). Despite the slower rate of economic growth, Africa as a whole and

 ⁵³ 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.

⁵⁴ 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.

⁵⁵ 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.

all classifications have experienced sustained increases in GDP per capita. For example, Africa's GDP per capita increased from an annual average of US\$1,437 in 1995–2003 to US\$1,691 in 2003–2008 and US\$1,883 in 2008– 2016. Since 2003–2008, southern and northern Africa and middle-income countries experienced the highest GDP per capita (above US\$3,000), while mineral-rich countries have had the lowest GDP per capita (US\$431).

Since 2003, *household consumption expenditures per capita* have grown steadily for Africa as a whole and across all classifications (Table L1.1.2). Moreover, many of the classifications either maintained or registered improved growth rates in 2008–2016 compared to 2003–2008. And consistent with the GDP per capita growth pattern, Africa's household consumption expenditure per capita increased from US\$1,014 in 1995–2003 to US\$1,127 in 2003–2008, reaching US\$1,296 in 2008–2016. The groups of countries engaged in CAADP, and especially those that signed a CAADP compact earlier (CC1) and those that have gone through most of the CAADP stages (CL4), registered higher growth in household consumption expenditure during the CAADP era (2003–2008 and 2008–2016), thereby reducing the expenditure-per-capita gap between them and the groups of non-CAADP countries or those that have not yet embarked on the process (CC0 and CL0).

Food and Nutrition Security

Rates of hunger and malnutrition (undernourishment and child underweight, stunting, and wasting) have been declining over the last 20 years but remain high across all classifications. For example, the proportion of people that are *undernourished* in Africa as a whole decreased from 24.9 percent in 1995–2003 to 20.8 percent in 2003–2008 and further down to 17.6 percent in 2008–2015 (Table L1.2.1). Despite the declining trend for Africa as a whole, rates of undernourishment remained rather high, above 30 percent, in eastern Africa and mineral-rich countries during 2008–2015. The groups of countries involved in the CAADP process, especially those that signed CAADP compacts earlier (CC1) and are most advanced in implementing the process (CL4), have seen faster declines in the rate of undernourishment than the groups of countries that are not part of the process (CC0 and CL0). Although the rate of decline has been slower in the groups of countries that have not engaged in the CAADP process, which include South Africa and most northern Africa countries, the levels of undernourishment are much lower in these groups.

As part of the Malabo commitment to ending hunger, African leaders resolved to improve the nutritional status of children, namely by reducing stunting to 10 percent and underweight to 5 percent by 2025. The *prevalence of underweight children* under five years of age has consistently declined across all classifications. For Africa as a whole, prevalence decreased from an annual average level of 24.6 percent in 1995–2003 to 22.4 percent in 2003–2008 and further down to 19.8 percent in 2008–2016 (Table L1.2.2A). Although northern Africa countries together had the lowest prevalence of underweight children in 1995–2003, they also had the fastest rates of decline, bringing down the prevalence from 8.2 percent in 2003 to 4.6 percent in 2016, thus meeting the Malabo underweight goal as a group. Fast declines in the rate of underweight children were also observed in southern Africa, which brought down the prevalence from 16.9 percent in 2003 to 10 percent in 2016. In addition, the group of countries engaged in the CAADP process experienced faster declines in the prevalence of underweight children than those that are not engaged in the CAADP process.

The *prevalence of child stunting* remains stubbornly high in Africa as a whole, at 33.7 percent in 2016. The prevalence rate has also remined high across most classifications, at above 35 percent, despite sustained declines. The prevalence of stunting in Africa as a whole fell slowly from 41.8 percent in 1995–2003 to 39.2 percent in 2003–2008 and to 35.3 percent in 2008–2016 (Table L1.2.2B). The rate of decline in child stunting slowed during the first segment of the CAADP period (2003–2008) across all classifications but increased during 2008–2016. Northern Africa countries which make up the majority of the groups of countries that have not yet joined the CAADP process (CC0 and CL0) began with the lowest rates of child stunting, which fell to about 20 percent during 2008–2016. With stunting levels still above 35 percent for most classifications, there is need to accelerate the rate of decline in order to achieve the Malabo target of bringing down stunting to 10 percent by 2025.

Although levels of *child wasting* in Africa are relatively lower than other measures of malnutrition, the rate of decline has been slow across all classifications. For Africa as a whole, the prevalence of child wasting averaged 10.6 percent in 1995–2003, declining marginally to 9.9 percent in 2003–2008 and further down to 9.1 percent in 2008–2016 (Table L1.2.2C). Although child wasting levels are relatively lower than child stunting and underweight levels, they have consistently increased in northern Africa and in the group of countries that have not yet joined the CAADP process (CC0 and CL0). This trend indicates that the higher levels of GDP per capita and household

consumption per capita observed in northern Africa have not led to lower child wasting.

Despite good progress in reducing malnutrition, the rates of decline have been slow and not on track to achieve the Malabo goals of reducing stunting to 10 percent and underweight to 5 percent by 2025 for Africa as a whole. Concerted and urgent effort is needed to speed up the reduction of malnutrition including by making agriculture programs nutrition sensitive.

Africa's dependence on cereal imports has gradually increased over time, reaching an annual average level of 31.8 percent in 2008-2010 (Table L1.2.3). This means that about 32 percent of Africa's cereal food supply in 2008–2010 was imported from elsewhere. The increasing trend is consistent across most classifications even though the level of dependency is quite different among the classifications. Central and northern Africa regions had the highest cereal import dependency ratio at 73.5 percent and 50.7 percent, respectively, in 2008–2010. Southern Africa is the only region that reduced its cereal import dependency ratio in 2008-2010, by an average of -9.9 percent per year. As may be expected, countries with more favorable agricultural conditions had the lowest cereal import dependency ratio, even though their dependency has steadily increased over time from 12.2 percent in 1995–2003 to 15.7 percent in 2003–2008 and further to 17.3 percent in 2008–2010. This indicates that due to the amenable agricultural conditions, much of the available domestic food supply of cereals has been produced in the countries themselves. The groups of countries that joined CAADP earlier (CC1) and those that have progressed the furthest in the CAADP process (CL3 and CL4) are among those with lowest cereal import dependency ratios.

Employment

Tables L1.3.1A and L1.3.1B show *employment rates* as the number of employed people as a percentage of the labor force (15-64 years, Table L1.3.1A) and as a percentage of the working-age population (+15 years, Table L1.3.1B). Naturally, the employment rate relative to the labor force is much higher. On average, the employment rate for Africa as a whole and other classifications has increased marginally or remained fairly constant over time. For Africa as a whole, the rate is moderate when considering the working-age population; it increased marginally from 58.5 percent in 1995-2003 to 59.0 percent in 2003-2008 and to 59.8 percent in 2008-2016 (Table L1.3.1B). The employment rates are relatively higher in groups of countries that have signed CAADP compacts or are further along in the CAADP process than in groups of countries that are not part of the process (CC0 and CL0). Given the presence of high levels of undernourishment discussed earlier (and poverty discussed in the next section), the moderate employment rates, with employment concentrated in the agricultural sector, indicate that many of the working-age population or labor force may be considered poor, that is working poor. Moreover, underemployment and poor quality jobs continue to present significant challenges for Africa.

Poverty

The incidence and depth of poverty have been on a declining trend, but rates are still relatively high. In Africa as a whole, the *proportion of population that lives below US\$1.90 a day*, measured by the poverty headcount ratio, declined marginally from 49.5 percent in 1995–2003 to 45.6 percent in

2003–2008 and to 42.2 percent in 2008–2016 (Table L1.3.4). The reduction in poverty headcount was also consistent across all classifications. Northern Africa, despite having the lowest poverty rate, experienced the fastest poverty reduction during the CAADP era, reducing its poverty rate from 3.8 percent in 2003–2008 to 2.1 percent in 2008–2016. Although southern Africa has one of the highest levels of GDP per capita and household consumption expenditure per capita (Tables L1.1.1 and L1.1.2), the incidence of poverty in the region remains high at 39.3 percent in 2008–2016. This suggests the need to exert more effort to achieve inclusive growth and the Malabo target of halving poverty by 2025.

The depth of poverty—or the poverty gap—measures the extent to which individuals fall below the poverty line, which has implications for the resources needed help them move out of extreme poverty. For Africa as whole, the depth of poverty, measured by *poverty gap index at US\$1.90 a day*, fell from 25 percent in 1995–2003 to 20.9 in 2003–2008 and down to 17.1 percent in 2008–2016 (Table L1.3.3). On average, during the CAADP era, the rate of decline was faster in 2008–2016 compared to the 2003–2008, despite the recent slowdown in GDP per capita growth discussed earlier. In more recent years, 2008–2016, the poverty gap index was highest in central Africa (28.9 percent) and mineral-rich countries (32.1 percent) and was lowest in northern Africa (0.4 percent). Also, the poverty gap index declined fastest in northern Africa countries at 16.7 percent per year in 2008–2016. Groups of countries that have progressed furthest in the CAADP process (CL3 and CL4) registered a lower poverty gap index than those that have signed a compact only (CL1) or have gone further and developed a NAIP (CL2).

In Africa as a whole, *income inequality* measured by the Gini index, has been a declining slowly. As Table L1.3.5 shows, the Gini index for Africa as a whole declined marginally from 43.8 in 1995–2003 to 43.1 in 2003–2008 and to 42.6 in 2008–2016. However, while income inequality has fallen across most classifications, more recently (2008–2016) it has increased marginally in central Africa and in the groups of countries that signed a CAADP compact earlier (CC1) and those that have not embarked on the CAADP process (CC0 and CL0).

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

Agricultural Production and Productivity

Over the past two decades, *agriculture value added* in Africa as a whole almost doubled, increasing from an annual average of US\$7.2 billion per country in 1995–2003 to US\$13.2 billion in 2008–2016 (Table L2.1.1). The value added also increased across all classifications. For Africa as a whole, agriculture value-added grew at an annual rate of 4.7 percent in 2008–2016, slightly up from 4.2 percent in 2003–2008, but lower than the CAADP target of 6 percent. However, several classifications including northern Africa, countries with more favorable agricultural conditions, and the group of countries that signed a compact in 2010–2012 (CC2) surpassed the 6 percent target in 2008–2016. In addition, groups of countries engaged in the CAADP process achieved stronger agricultural growth rates than those that are not (CC0 and CL0).

The *agricultural production index* (API) for Africa as a whole and all other classifications has increased steadily over the past 20 years. Table L2.1.2 shows that the API for Africa as a whole increased from 80.9 in 1995–2003 to 100.6 in 2003–2008 and further to 119.6 in 2008–2014. The rate of increase in the API has been higher in the CAADP era than the pre-CAADP period across all classifications and also higher for the group of countries that are furthest in the CAADP implementation process than in the groups of non-CAADP countries.

Over the past 20 years too, labor and land productivity, which play a key role in driving agricultural growth, have been increasing in Africa as a whole and across most classifications. For example, the rate of growth in labor productivity, measured by agriculture value added per agricultural worker, rose steadily for Africa as whole from 1.4 percent per year in 1995-2003 to 1.7 percent in 2003-2008 and to 2.7 percent per year in 2008-2016 (Table L2.1.3). Across several classifications, labor productivity grew faster in the CAADP era, reversing the negative growth experienced during the pre-CAADP period (1995-2003). In 2008-2016, labor productivity grew most rapidly in eastern and northern Africa, countries with more favorable agricultural conditions, middle-income countries, EAC, IGAD, and UMA regions, and in the groups of countries that joined the CAADP process later (CC3) and those that have not progressed much in the CAADP process (CL1). Higher levels of labor productivity in the groups of non-CAADP countries (CC0 and CL0) are likely due to the higher levels of mechanization in that group.

Land productivity, measured by agriculture value added per hectare of arable land, grew faster than labor productivity, with the rate of growth increasing from 3.1 percent per year in 1995–2003 to 5.4 percent per year in 2008–2016 for Africa as a whole (Table L2.1.4). Land productivity also performed much better across all classifications during the CAADP era and especially in 2008–2016. Also in 2008–2016, the greatest growth was observed in eastern Africa, countries that have more favorable agricultural conditions, middle-income countries, CEN-SAD, COMESA, EAC, IGAD, UMA, and in the groups of countries that joined the CAADP process later (CC3) and those have not progressed far in the CAADP process (CL1). In addition, groups of countries that joined CAADP earlier and are furthest along in the process attained higher levels of land productivity than the groups of non-CAADP countries.

Yield trends for the top five agricultural commodities (cassava, yams, maize, meat, and cow milk)⁵⁶ show varied performance over the past 20 years. For Africa as a whole, both *cassava and yam yields*, measured in metric tons per hectare (ton/ha), grew faster during 2003–2008 but experienced negative growth during the later CAADP period, 2008–2014 (Tables L2.1.5A and L2.1.5B). *Maize yield* stayed at 1.7 ton/ ha in both 1995–2003 and 2003–2008 but grew to 2.0 ton/ha in 2008–2014 (Table L2.1.5C). *Meat and milk yields*, measured as kilograms per head, have both experienced an increasing trend with meat yield increasing faster during 2003–2008 and milk yield during 2008–2014 (Tables L2.1.5D and L2.1.5E). Meat and milk yields are much higher in the groups of non-CAADP countries due to the high level of mechanization in that group of countries.

Intra-African Regional Trade and Market Performance

Tripling intra-African agricultural trade is one of the seven commitments of the Malabo Declaration. *Intra-African agricultural exports* have been increasing, and have more than doubled for Africa as a whole, increasing from US\$0.6 billion in 1995–2003 to US\$1.6 billion in 2008–2016 (Table L2.2.1A). Growth was particularly remarkable in southern Africa where it more than doubled and in northern Africa where it grew six-fold during the same period. The group of countries that are further along in the CAADP process (CL3 and CL4) and those countries that joined the process earlier (CC1 and CC2) witnessed consistent increases in intra-African agricultural exports compared to those that have not advanced in the process (CL1 and CL2) or those that signed compacts later (CC3). The groups of non-CAADP countries experienced a decline in their exports in 2003–2008, followed by a rapid increase in 2008–2016.

Intra-African agricultural imports (Table L2.2.1B) increased steadily over the two decades for Africa as a whole and most classifications. Africa's intra-African agricultural imports more than doubled between 1995–2003 and 2008–2016, growing from US\$252 million to US\$514 million, respectively. The group of countries that are further along in the CAADP process especially (CL3) experienced faster growth in intra-African agricultural imports than those that have not advanced very far (CL1 and CL2). The groups of non-CAADP countries together also experienced rapid growth in imports, particularly in 2008–2016.

For Africa as a whole, the *domestic food price volatility index*, which measures the variation (volatility) in domestic food prices over time, rose during 2003–2008 as a result of the 2007 global food price crisis. Following the crisis, food price volatility has been decreasing, declining by an average

 $^{^{56}\,}$ These were the commodities with the largest shares in total value of production for Africa as a whole.

of 11 percent per year in 2008–2016, compared to the average increase of 3.7 percent per year in 2003–2008 (Table L2.2.2). Although food price volatility was higher in the groups of countries that joined CAADP earlier and are further along in the CAADP process, these groups also had faster rates of decline in volatility during 2008–2012. Raising agricultural productivity levels to ensure adequate domestic supply can help insulate African countries from volatile global food prices.

Resilience of Livelihoods and Management of Risks

The existence of food reserves and programs and early warning systems is a key level 2 indicator for increased resilience of livelihoods and improved management of risks in the agriculture sector. As of August 2017, 38 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

The 2016 ATOR also presents an additional set of qualitative indicators for tracking progress in implementation of actions aimed at strengthening systemic capacity for agriculture and food security policy planning and implementation. These indicators are presented in Table L3(b). As of August 2017, 15 countries had formulated new or revised NAIPs through an inclusive and participatory process. Twenty-one countries had inclusive, institutionalized mechanisms for mutual accountability and peer review (mainly JSRs). Twenty-eight countries were implementing evidence-informed policies with relatively adequate human resources in place. Twenty-two countries had functional multisectoral and multistakeholder coordination bodies—mainly agricultural sector working groups. Sixteen countries had successfully undertaken agriculture-related public-private partnerships (PPPs) aimed at boosting specific agricultural value chains. In addition, SAKSS platforms help meet country-specific data, analytical, and capacity needs, and to date, ReSAKSS has helped to establish these platforms in a total of 14 countries.

Public Agriculture Expenditure

Through the Malabo Declaration, African leaders committed to enhance both public and private investment finance for agriculture and uphold their commitment to allocate at least 10 percent of public expenditure to agriculture. Over the past 20 years, for Africa as a whole, public agriculture expenditures have increased steadily, growing from US\$0.7 billion per country per year in 1995–2003 to US\$1.1 billion in 2008–2016 (Table L3.5.1). Public agriculture expenditures grew strongly in both 1995–2003 and 2003-2008, by 11.5 and 11 percent, respectively. However, following the global food-price and financial crises, which reduced fiscal revenues, growth in expenditures decelerated at about 4.8 percent per year on average in 2008–2016, and expenditures fell to US\$0.9 billion per country as of 2016. The declining trend in public agricultural expenditure was also observed in eastern, southern, and western Africa; only central and northern Africa experienced increased expenditures during 2008–2016. Declines in public agriculture expenditures were also witnessed in the groups of CAADP countries (CC1, CC3, CL1, CL4).

Although public agriculture expenditures have increased remarkably over time, for Africa as a whole, the *share of agriculture expenditure in total public expenditure* has fallen short of the CAADP target of 10 percent budget share. The share grew from an annual average of 3.2 percent in 1995–2003 to 3.5 percent in 2003–2008 and declined to 3.0 percent in 2008–2016 (Table L3.5.2). Although a handful of countries met the CAADP budget target, none of the classifications managed to achieve the CAADP budget target in 2008–2016. The groups of countries that joined the CAADP process early (CC1 and CC2) and those that are further along in the implementation process (CL2, CL3, and CL4) had relatively higher shares of public expenditures, at more than 4 percent during 2008–2016.

In Africa as a whole, *public agricultural expenditure as a share of agriculture* GDP averaged 6.2 percent per year in 2003–2008 and declined to 5.5 percent in 2008–2016 (Table L3.5.3). Northern and southern Africa regions, mineral-rich countries, SADC, UMA, and the groups of non-CAADP countries had higher shares, above 10 percent in 2008–2016, indicating they invest more in agriculture relative to the size of the sector. More needs to be done to raise public agriculture investments in order to increase agricultural productivity growth and deepen the progress toward achieving Malabo targets for poverty, hunger, and nutrition by 2025.