



Biennial Review 2019

Commitment 6: Enhancing Resilience to Climate Variability

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Overview of Biennial Review Africa Agriculture Transformation Scorecard

In line with the Maputo Declaration that established the Comprehensive Africa Agriculture Development Programme (CAADP) in 2003 and with the 2014 Malabo Declaration, African Union (AU) Member States pledged to conduct a continentwide Biennial Review (BR) to monitor and report on progress in achieving seven thematic commitments outlined in the Declaration. The inaugural 2017 BR Report, the first of its kind in Africa, was launched and endorsed by the AU General Assembly in January 2018. The second BR report was adopted at the AU General Assembly in February 2020.

The seven Malabo Commitments were translated into the following seven thematic areas of performance in the BR:

1. Re-commit to the principles and values of the CAADP process
2. Enhance investment finance in agriculture
3. End hunger by 2025
4. Halve poverty through agriculture by 2025
5. Boost intra-African trade in agricultural commodities and services
6. Enhance resilience to climate variability
7. Strengthen mutual accountability for actions and results

The AU Commission, with support from various partners including the Regional Strategic Analysis and Knowledge Support System (ReSAKSS), Alliance for a Green Revolution in Africa (AGRA), Bill & Melinda Gates Foundation, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), World Bank, United States Agency for International Development, Africa Lead and CAADP Non State Actors Coalition, developed the Africa Agricultural Transformation Scorecard (AATS) as part of the BR to evaluate member states' progress toward the goals and to recognize the best-performing countries. The AATS provides a gradual, incremental scale to assess improvement, with "milestones" or "benchmarks" that indicate whether

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a country or region is on track to achieve the Malabo goals by 2025. For each BR year, the AU has set milestones for all indicators and sub-indicators, as well as overall milestones for the seven thematic commitments, and one overall score milestone. By comparing scores across countries, the peer-to-peer metric can stimulate continuous improvement and help identify countries implementing best practices.

Forty-nine AU Member States reported on their progress during this second cycle of the BR process (compared with 47 Member States in the inaugural report). The 2019 BR milestone score was set at 6.66 out of 10, compared to 3.94 in 2017. Only 4 out of the 49 reporting countries surpassed the 2019 milestone, compared to 20 in 2017. At the regional level, no region was on-track to achieve the Malabo commitments by 2025.

In this brief, we more closely examine Thematic Commitment 6 (Enhancing Resilience to Climate Variability), its goal and targets, scoring methodology, and the successes and challenges faced by countries in meeting the 2019 milestones.

Overview, Data, and Methodology of Commitment 6

This commitment captures countries' preparedness to respond to present and future climate variabilities and shocks, thus "*enhancing resilience of livelihoods and production systems to climate variability and other related risks.*" This theme captures governments' commitments to social protection for rural and vulnerable groups, bolstering vulnerable ecosystems, and mainstreaming risk management. Given increasing climate vulnerabilities, *Resilience and Livelihoods* was chosen as the overall theme of the 2019 BR report. To measure enhanced climate and livelihood resilience, countries reported on the following indicators and sub-indicators:

6.1) Resilience to climate risks

- ▶ 6.1i. Percentage of farm, pastoral and fishing households that are resilient to climate shocks
- ▶ 6.1ii. Share of agricultural land under sustainable management practices

6.2) Investment in resilience-building: *existence of government budget spending lines dedicated to resilience-building initiatives*

The 2019 milestones for sub-indicators 6.1i and 6.1ii are set at 30 percent and 50 percent of the 2025 final goals (respectively) or, for indicator 6.1, a combined score of 40 percent. The 2019 milestone for indicator 6.2 was set at 100 percent of the 2025 goal. Thus, by averaging the scores of indicators 6.1 and 6.2, the minimum overall 2019 milestone for Commitment 6 was set at 70 percent of the 2025 goal [(40% + 100%) / 2].

6.1i: Percentage of farm, pastoral and fishing households that are resilient to climate-related shocks

By 2025, AU member countries committed to improving the resilience capacity of at least 30 percent of their farm, pastoral, and fishing households. In other words, reduce chronic vulnerabilities and facilitate inclusive growth to better equip at least 30 percent of households to mitigate, adapt to, and recover from shocks and stresses. Reporting on this sub-indicator requires gathering multiple years of data and implementing the

RIMA-II analytical method, developed by the Food and Agriculture Organization of the United Nations (FAO).³

6.1iii: Share of agricultural land under sustainable management practices

In the Malabo Declaration, as well as the First Ten-Year Implementation Plan for Africa's Agenda 2063, countries committed to have 30 percent of their agricultural land under sustainable land and water management practices (SSLWM) or climate-smart agriculture by 2025. Qualified practices include *agronomic measures* (e.g., continuous soil cover such as cover crops and mulch; measures that enhance organic matter and soil fertility such as manuring or use of fertilizers; conservation tillage; deep ripping); *vegetative measures* (e.g., planting/reseeding trees or shrubs for live fences or tree crops, planting perennials or grass strips, use of climate-smart seeds); *structural measures* (e.g., terraces, bunds, banks, dams, pans, ditches, walls, barriers, and palisades); and *management measures* (e.g., area enclosure, change of management intensity such as transition from grazing to cut-and-carry). TerrAfrica⁴ or individual countries report on this sub-indicator based on their own statistics and FAOSTAT data⁵.

6.2: Existence of government budget spending lines dedicated to resilience-building initiatives

The final indicator of Commitment 6 aims to create investment and an enabling environment for resilience initiatives, especially for disaster preparedness plans, early warning and response systems, social safety nets, and weather-based index insurance. It is measured by three parameters: 1) policies that enable national or regional response to disasters (0 if no policy, 100 if policies exist); 2) budget lines that fund early warning and response systems (0 if no funds, 100 if funds are allocated); and 3) proportion of vulnerable households that are covered by weather-based index insurance or social protection schemes. The average value of these three parameters equals the total value of indicator 6.2.

BR 2019 Results

The 2019 report shows that although the entire continent is not on-track to achieve Commitment 6, there are 11 countries—Burundi, Cabo Verde, Ghana, Ethiopia, Mali, Mauritania, Morocco, Rwanda, Seychelles, Tunisia, Uganda—now on-track for enhanced climate and livelihood resilience. This marks an improvement since 2017 when only 7 countries achieved the Commitment 6 milestone.

Figure 1 presents the normalized scores for each indicator/sub-indicator under Commitment 6 for all countries. The AU Commission official BR report simply identifies countries as on-track or off-track; here we have divided the countries' scores by the 2019 milestone to better illustrate countries' proximity to achieving the goal. As evident from the gray-shaded countries in Figure 1, lack of data holds countries back from measuring progress. Figure 2 shows the countries with respect to their Commitment 6 score, with their scores decomposed by the theme's indicators and sub-indicators.

All countries that are on-track reported all three of the commitment's indicator/sub-indicators; countries that came close to the milestone (shown in yellow in Figure 1d) reported moderate progress on at least two of the three. While only 11 countries surpassed the milestone in 2019, 36 reporting countries improved their overall climate resilience score between 2017 and 2019. Among those,

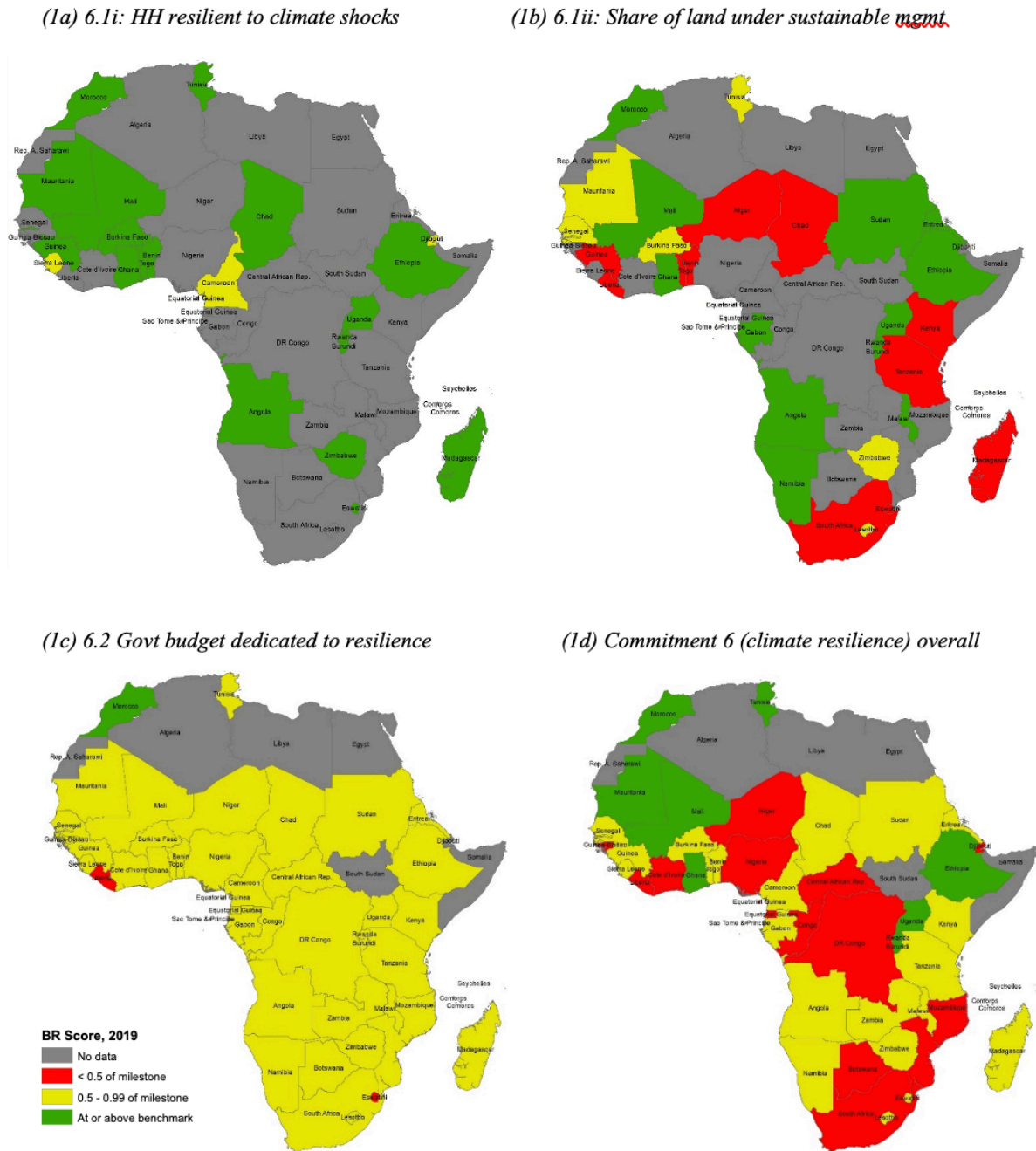
3 Resilience Index Measurement and Analysis – II. <http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/416587/>

4 <http://www.fao.org/land-water/land/sustainable-land-management/terrafrica/en/>

5 <http://www.fao.org/faostat/en/>

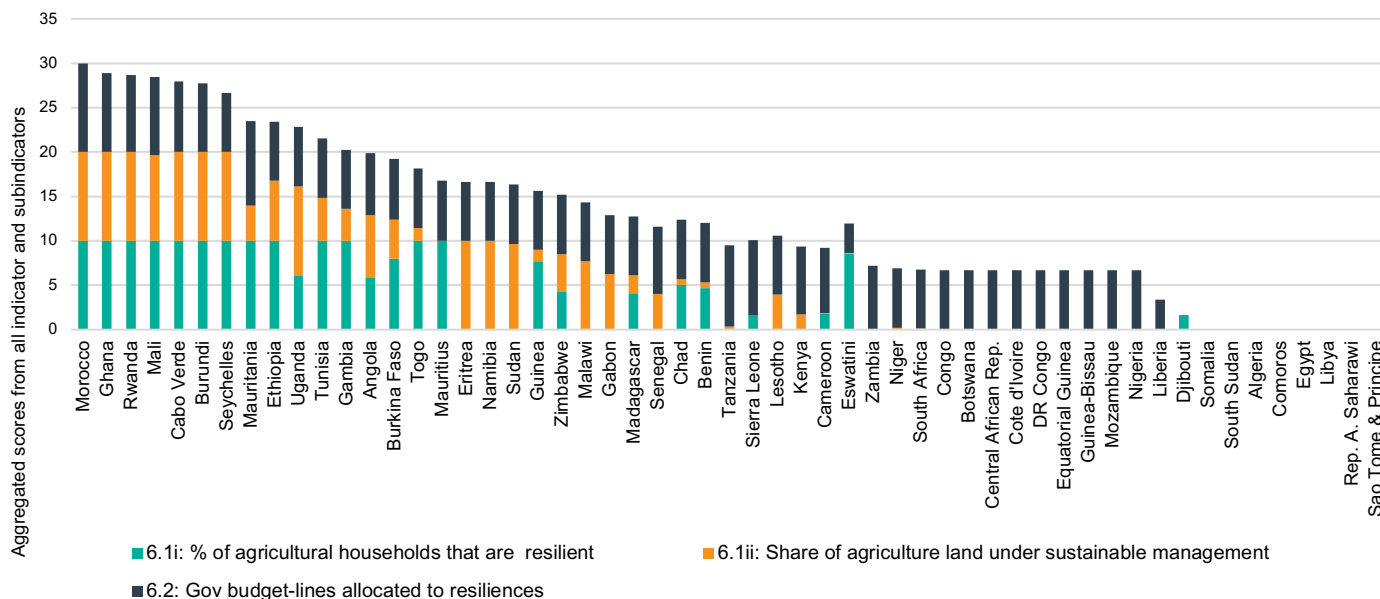
Cameroon, Central African Republic, Chad, Eritrea, Ghana, Mali, Mauritania, Seychelles, Sierra Leone, Sudan, and Tunisia all improved their scores significantly—by 4 or more points on the 10-point scale. Only six countries—Botswana, Djibouti, Egypt, Equatorial Guinea, Mauritius, and Togo—regressed, with a lower score in 2019 than 2017. (see Figure 3)

Figure 1. 2019 Biennial Review Scores, Commitment 6 (Climate Resilience)



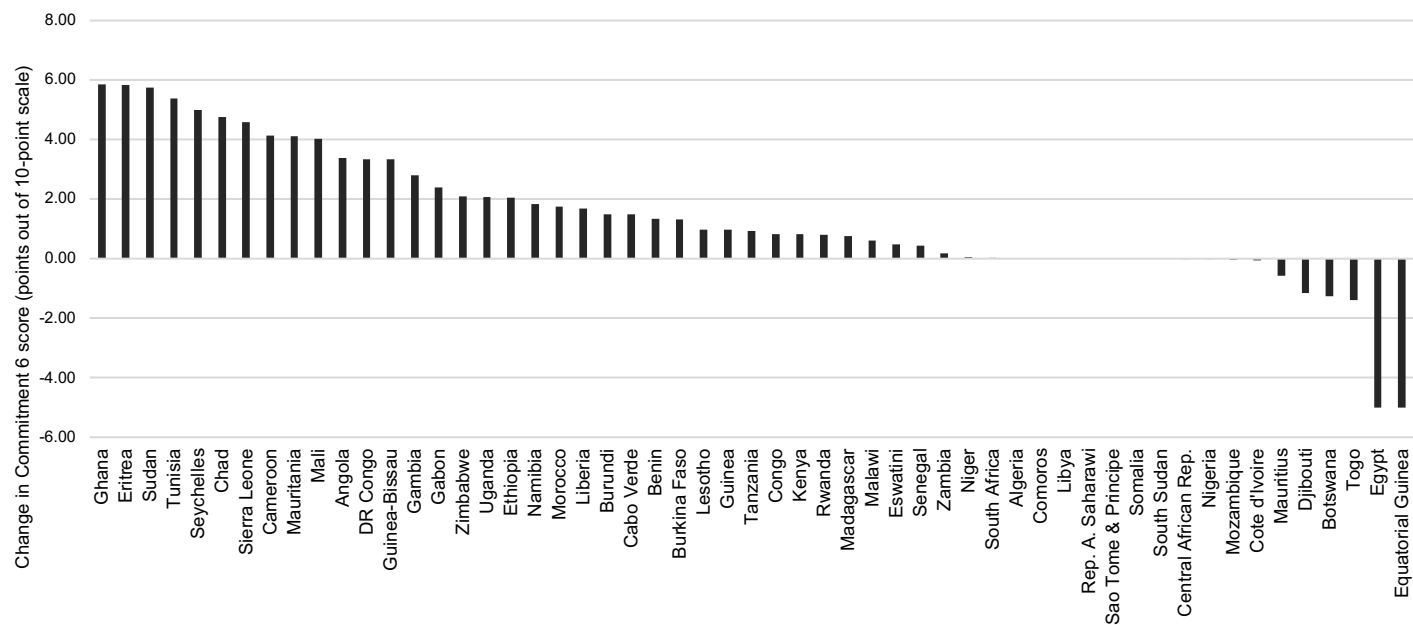
Source: Authors' analysis, based on data from 2017 and 2019 Biennial Reports to the African Union Assembly on implementing the 2014 Malabo Declaration. **Note:** Scores/indicators/sub-indicators include: 1a: Percentage of farm, pastoral, and fisher households that are resilient to climate and weather-related shock (6.1i); 1b: Share of agricultural land under sustainable land management practices (6.1ii); 1c: Existence of government budget-lines allocated for resilience-building initiatives (6.2); 1d: Commitment 6 overall.

Figure 2. Commitment 6 indicator and sub-indicators ordered left-to-right by Overall Commitment 6 Score



Note: Authors' analysis, based on data from 2019 Biennial Report to the African Union Assembly on implementing the 2014 Malabo Declaration.

Figure 3. Agricultural Scorecard Transformation change in score for *Commitment 6: Enhancing Resilience to Climate Variability, 2017–2019*



Note: Authors' analysis, based on data from 2017 and 2019 Biennial Reports to the AU Assembly on implementing the 2014 Malabo Declaration.

Discussion and Policy Recommendations

With respect to Commitment 6, in the 2019 BR report, 11 countries are on-track compared to only 7 countries in the 2017 BR report. However, the trend is less encouraging, given the increased occurrence of shocks, particularly climate-related shocks. Unfortunately, lack of data for Commitment 6 indicators precludes comprehensive assessment of countries' progress.

Data were particularly poor for the sub-indicators on *percentage of farm, pastoral and fishing households resilient to climate-related shocks* (6.1i, Figure 1a), for which 30 countries lacked data, and *share of agricultural land under sustainable management practices* (6.1ii, Figure 1b), for which 22 countries lacked data. Reporting may be particularly poor for these two sub-indicators due to the hefty challenge of reliable data collection and analysis. Here we will address both in more detail.

6.1i) Percentage of farm, pastoral and fishing households resilient to climate-related shocks

Sub-indicator 6.1i requires extensive panel data collection that may be too costly for countries to collect, or countries may lack the analytical expertise to successfully implement the FAO RIMA-II model. Local statisticians may lack the technical context necessary to process RIMA-II or have limited exposure to the model framework since it has only been developed recently; they may not find it intuitive or easy to implement. The FAO currently applies RIMA methodology in several African countries that reported on sub-indicator 6.1i; thus, ongoing FAO country-level RIMA analyses give these countries a leg up for this sub-indicator but may not be sustainable without continued FAO support. Of the 25 countries that reported on 6.1i, all improved their scores (since 2017) and nearly all (21) surpassed the 2019 milestone, suggesting that the mere capacity to report on RIMA-II resilience correlates with success for 6.1i. However, for more complete and measurable improvement in the *percentage of farm, pastoral and fishing households resilient to climate-related shocks*, NEPAD and the AU should consider alternative measurement options for 6.1i. With more than half of countries in 2019 lacking data for 6.1i, which requires several multiyear (panel data) data points, more accessible, reliable, and less-costly data options should be considered to evaluate the percentage of climate-resilient households within countries. Without extensive and consistent multiyear analysis, dependence on the RIMA-II methodology may return meaningless results.

Other data sources may provide meaningful indication of climate resilience; for example, creative use of existing national datasets, such as the reduction or maintenance of the number of “hungry months” despite local climate events can offer a picture of resilience. Data collected through mobile phone providers or satellite crop data, when compared with past climate events and weather, may provide additional indicators of resilience. These data may be particularly useful if regionally compared with indicator 6.1ii, which indicates whether households have adopted sustainable agronomic, vegetative, or structural measures, or management practices that have demonstrated benefits for on-farm resilience. While some climate-resilience strategies apply across regions and landscape types, many are location-specific. For this reason, successful agricultural extension services or farmer-to-farmer education that emphasize climate resilience (see Commitment 3 for more details), such as that supported by FAO's Agroecology Knowledge Hub,⁶ may offer an indication of likely resilience in the face of future climate shocks.

6.1ii) Share of agricultural land under sustainable management practices

Measuring and improving outcomes for sub-indicator 6.1ii entails clear communication of qualifying SSLWM practices and requires either skilled outreach to farm households by agricultural extension spokespersons and/or successful farmer-to-farmer education strategies. Investment in sustainable land management has long been undervalued across Africa, where 65 percent of arable land, 30 percent of grazing land, and 20 percent of forests

⁶ <http://www.fao.org/agroecology/overview/en/>

suffer from degradation, thus threatening food security (FAOSTAT; Malabo Montpellier Panel 2014). Thus, expanding knowledge of regenerative farm management practices is essential to Africa's long-term agricultural potential. Governments should identify and publicize farm and fishing households, communities, and regions that have *existing* traditions of sustainable land management practices that could serve as farmer-to-farmer educational learning hotspots. Policymakers must also pay close attention to property rights (for more details see Commitment 3), especially collective land and resource rights that promote strong sustainable practices, since the cost of long-term sustainability investments may deter farmers who do not have secure tenure or property rights. Secure land rights and/or guarantee of land tenure remain a primary factor determining farmer willingness to invest in long-term management practices and infrastructure that improve on-farm yields and environmental sustainability. Communal land tenure has also demonstrated strong potential for benefiting conservation practices and natural resource protection (Robinson et al. 2018). In regions with limited existing knowledge or tradition of conservation or soil-building practices, promoting adoption may require creative education about the value of sustainable land management, inclusion of farmers in on-farm research, and patience to observe the proof of concept and long-term productivity benefits.

6.2) Government budget lines dedicated to resilience-building

Most countries reported on indicator 6.2—only 9 of 49 countries lacked data. This indicator presumably requires far less time and financial resources to report, as the first two parameters of the indicator (policies and budget spending lines dedicated to disaster response and warning systems) require only a yes or no checkmark about their existence. The final parameter requires more data collection resources in order to calculate the proportion of vulnerable households covered by social protection schemes. Of the 46 countries that reported on indicator 6.2, 24 did not complete the final parameter, suggesting difficulty collecting the required data. Most countries have limited experience collecting data on social protection programs. Existing programs are highly diverse, with complex dynamics, in addition to the challenges of financing and delivering services and ensuring political commitment to programs. Amid these challenges, only one country (Morocco) met the milestone for indicator 6.2. Yet 42 countries scored within 0.50 to 0.99 of the milestone score, implying plausible achievability in the next BR round if the final component of social protection programs can be both successfully implemented and measured. Effective social protection coverage should incorporate targeting methods, such as *proxy means testing* that helps identify the most vulnerable households and communities, or—in regions with healthy ground-level leadership and political integration—allow communities to self-identify the households that most need social protection (Wouterse and Taffesse 2018).

Achieving Malabo Declaration commitments will pave the road for Africa to achieve Sustainable Development Goals. The expected benefits for smallholder farmers, and millions of ultra-poor and food-insecure households are tremendous. However, progress will require persistent investment in *both* the commitments themselves and member states' capacity to measure and report on those commitments. Building resilient food systems across Africa demands extensive investments in land, water, and vulnerable communities, as well as robust systems to track progress and predict and mitigate the risks of increasing shocks. The outbreak of COVID-19 poses significant resilience challenges to an already strained food system in Africa. The pandemic is affecting health, in terms of morbidity and mortality, with negative repercussions on non-health sectors such as agriculture, tourism, transport, and entertainment. The impacts of COVID-19 further exacerbate a situation of on-going shocks such as desert locust outbreaks, fall armyworm, droughts, conflict, and insecurity. As pointed out by FAO/AU (2020), the continent has made important progress in terms of prioritizing social protection as a core component of poverty reduction and rural development strategies, including in the context of the Malabo Declaration; the COVID-19 pandemic offers a critical opportunity to scale up these efforts. Lessons from the HIV/AIDS epidemic, food crises, and Ebola outbreaks highlight that health needs are the main priority, but the impacts on income, food security, and livelihoods

must also be addressed by employing both immediate and medium-term strategies to build resilience and prevent backsliding on poverty reduction and food security gains.

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