



CHAPTER 15

ATOR 2021: Summary and Conclusions

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The 2021 Annual Trends and Outlook Report (ATOR) includes three major sections in addition to the chapter tracking progress toward Comprehensive Africa Agriculture Development Programme (CAADP) goals. First, the report assesses the impact of COVID-19 on African economies with a focus on food systems from access to inputs to household consumption. Second, it reviews policy interventions to stop the spread of the pandemic and contain its negative impact on food systems across the continent. Third, the report highlights innovations in measurement needed to better understand the effects of the pandemic and the factors contributing to resilience.

Overall, the 2021 ATOR presents a body of research-based evidence to understand the pandemic's effects and support the design of post-COVID-19 recovery strategies, and it offers insights on how progress toward such recovery has thus far been measured. The accumulation of evidence, combined with guidance on how additional evidence might be gathered, provides a foundation of knowledge and analytical procedures to support efforts to strengthen the resilience of African food systems. Below, we present the summary of findings and methodologies. Following the structure of the ATOR 2021 report, the summary is organized in terms of reported impacts, strategic responses, measurement issues, and progress toward the CAADP goals.

Impacts of COVID-19 on African Countries

Although significant disruption was observed across the continent until mid-2020, overall trade in the agricultural sector remained resilient following the onset of the pandemic. Trade disruption was limited for staple foods compared to other commodities such as beverage, fishery, and non-food products, including cotton, cut flowers, and tobacco (chapter two). The findings in chapter four also indicate that the COVID-19-induced global trade shock generally had moderate impacts on Africa's food systems, although there was notable variation among countries. African countries with well-diversified export bases tended to be more resilient to external shocks. Chapter three's findings on the impact of COVID-19 on staple food prices confirm that location matters. After restrictions were introduced during the pandemic, prices of staple foods increased in deficit areas of western Africa, while prices declined in both surplus and deficit areas of eastern and southern Africa.

Unlike the limited impact on agricultural trade, COVID-19 has significantly influenced hunger and food insecurity across the continent. As reported

in chapter two, a total of 46 million additional people in the continent were affected by hunger in 2020, exacerbating already high levels of hunger and food insecurity. In addition, the pandemic led more than half of the continent's population (close to 800 million people) to become either moderately or severely food insecure. Chapter five highlights the correlation between food security and vulnerability. This relationship suggests the need for interventions that target the most vulnerable households in order to enhance their resilience capacity.

Strategic Responses of African Countries to COVID-19

In response to the COVID-19 pandemic, African governments took several policy response measures to contain the spread of the virus and support economic activity. There is a great deal of heterogeneity both in the type of measures followed and the speed with which countries adopted them (Hale et al. 2020). As discussed in chapter 6, sector-specific in-kind transfers were the main policy response, though the intensity and type varied between countries. However, the effectiveness in implementing the policy responses as well as the use of innovative approaches were minimal.

The findings in chapter 7 suggest that already existing social transfer programs can better respond to COVID-19-induced shocks than new ad hoc initiatives. However, the programs need to expand to urban areas to aid the vulnerable poor disproportionately affected by the pandemic. To enhance the sustainability of social protection programs, domestic resource mobilization efforts also need to be strengthened. This is important because external funding to finance social protection programs tends to dematerialize during global crises such as the COVID-19 pandemic. Chapter 8 shows that the actions taken by governments in Africa to contain the pandemic not only exacerbated existing challenges but also exposed new sources of vulnerability. The social protection instruments applied by countries in Africa south of the Sahara in response to COVID-19 were limited in scope, scale, and speed. Moreover, there is a need to recognize the role of social protection interventions beyond that of a safety net and to improve the integration of social protection programs into overall development frameworks.

Measurement Issues

The challenge posed by COVID-19 is enormous—the world has not faced a test of such scale since the Second World War (GCA and AAI 2020). Responding to this challenge will require methodological tools to better understand impacts and identify solutions. Chapters 9–13 of this ATOR address measurement issues to help improve evidence-based policymaking processes. Access to accurate and timely food crop production data is paramount, as it provides information that can better prepare a country to respond to shocks. Nonetheless, for several reasons—including human capital, finances, and other limitations—the sustainable collection of accurate and timely data remains a challenge for most African countries. Thus, there is a need to pursue remote sensing data and machine learning techniques as viable data generation and processing options (chapter 9). Digital data must be scaled in use and effectiveness to fulfill a just transition to more regenerative agricultural practices that advance both food production and timely distribution to meet local and cross-border trade needs, as well as to minimize waste. As we head into the decade of ecosystem restoration, how Africa feeds itself must align with how countries meet their National Determined Contributions to meet Paris Agreement targets and contribute to local adaptation and mitigation strategies.

The pandemic has tested the ability of socioeconomic and health systems to withstand major shocks and adapt accordingly (Ayadi 2020). In consideration of the overarching impact of the global health shock brought on by COVID-19, chapter 10 proposes including a basic health-systems capacity index and an economic country-level resilience capacities index to improve efforts to track the resilience component of the Malabo Declaration goals. The chapter's findings confirm that indicators related to health system capacities and the macro-economic effects of a global health shock can be combined to provide useful information to measure progress on the Malabo commitments; these results provide initial evidence of how resilience to COVID-19 may be modelled. In chapter 11, the authors argue that integrating micro and macro scales into resilience analysis helps explain why some countries are more resilient than others. The results also identify which countries have a weaker capacity to react and are thus likely to suffer the greatest toll.

As indicated in chapter 12, disruptions to food systems can negatively influence the availability of and access to nutritious food, leading to unhealthy

diets and health risks. Adequate measurements of dietary patterns are needed to monitor and manage changes in a population's dietary behavior. Although posteriori and priori methods of dietary pattern analysis have been successful in measuring population-wide dietary patterns, the COVID-19 pandemic has necessitated the inclusion of other factors, such as food access, dietary diversity, physical activity, anxiety, and body image perception, to account for related impacts. Chapter 13 presents a methodological approach to develop consumer- focused indicators for assessing the performance of a value chain and its correlation to food security. Different analytical dimensions are included to ensure that value chains focus on both consumers and food security. The framework captures consumers' preferences, categorizes and links them to the pillars of food security, and translates those preferences into measurable value chain actions.

Progress Toward CAADP Goals

Africa's performance in key CAADP indicators is presented in chapter 14. The findings show that Africa as a whole has made progress toward achieving CAADP goals, although the rate of progress on several indicators, including economic growth, has slowed in recent years. The COVID-19 pandemic has further affected the performance of many indicators. In 2020, Africa recorded an economic recession for the first time in more than two decades and the continent's GDP per capita regressed to the level recorded a decade ago. Millions of jobs have also been lost as a result of the pandemic. The significant reduction in household incomes, interruption of services, and fluctuations in the availability and affordability of healthy diets played a notable role in generating similar negative trends for nutrition. After increasing in recent years, the prevalence of undernourishment further expanded in 2020. Prior to 2020, meaningful progress was made to consistently reduce child malnutrition, although the level remained high. The pandemic, however, is expected to reverse this progress for years to come.

Conclusion

Building greater resilience will require both the deployment of new measurement methodologies and the adoption of more ecologically viable agricultural production practices. Amid accelerating agricultural contributions to greenhouse gas emissions, the continent faces the dilemma of how to feed a population set to

double by 2050 while suffering continued degradation of soils and biodiversity loss. The effects of climate change present an additional set of challenges in need of an aggressive response. Combined remote sensing data and machine learning techniques that improve the ex ante estimation of crop production should be further developed to integrate ecological practices that maximize organic soil carbon sequestration and capacity for water retention. Increasing the availability, accuracy, and timeliness of agricultural data would not only help to anticipate and mitigate food crises after shocks, but would also provide valuable information to inform day-to-day policy- and decision-making on sustainable practices that can contribute to multiple sustainable development goals while limiting biodiversity loss.

Analytical methodologies to estimate the resilience of households, communities, and countries to shocks should transcend threats related to climate change. The COVID-19 pandemic has highlighted the need to consider shocks and stressors associated with health emergencies and the lack of health infrastructure. As this volume has underlined, making food systems more resilient will require more complex forms of analysis. To be productive, analyses of food systems should consider the multidimensional nature of the challenges faced across the continent. Such research might, for example, involve more precisely mapping the interdependence of healthy soil systems, exploring innovations in biodiversity management, or examining the roles and needs for capacity building in agricultural workforces. To accumulate evidence, it will be crucial to disaggregate data with respect to age, gender, and land ownership. To develop strategies that are sensitive to spatial variation, the integration of satellite and remote sensing data will be crucial. The 2021 ATOR chapters have demonstrated that paying attention to supply and value chains, logistics, and multi-dimensional resilience must be core features of future research, both for strategic planning and for data management that drives CAADP activities. Work of this kind will require a transdisciplinary, cross-country perspective to better integrate the management of social, natural, and human capital.

With the overall goal of supporting resilient food systems, the ambition of this report is to identify evidence-based strategies that ensure stable food and nutrition security and support economic growth across the continent. The range of shocks and stressors experienced in Africa have long interfered with the continent's ability to achieve this goal. The impact of COVID-19 has introduced another set of pressures that hinder plans to achieve a “prosperous

Africa based on inclusive and sustainable economic growth and development” (African Union 2015, 2). Taken as a whole, the evidence and ideas presented in the 2021 ATOR volume provide a useful starting point to plan interventions and specify data strategies. In closing, the editors of this volume offer three recommendations:

- 1. Enhance social protection programs.** While African governments almost uniformly scaled up social protection programs in response to the pandemic, evidence suggests that coverage did not extend to large shares of the poor and vulnerable. To enhance the role of social protection in both responding to crises and contributing to longer-term development, governments should improve targeting and coverage by reviewing the design and implementation of programs. Adequately funding social protection programs will require increasing the mobilization of domestic resources. Social protection should be reconceptualized to play an important role in economic development, beyond serving as a safety net in crisis situations.
- 2. Ensure the functioning of markets.** Movement restrictions, border closures, and other impediments to domestic and cross-border trade caused sharp changes in staple food prices during the first months of the pandemic. Both price increases and declines contribute to uncertainty and cause harm to different groups of food system actors. Throughout the remainder of the pandemic and when faced with future shocks, governments must design containment policies carefully to ensure that they do not impede the movement of food commodities and the functioning of markets. Trade policies should be coordinated within regions, and impacts of policies should be carefully monitored.
- 3. Develop a more comprehensive indicator framework.** The growing demand for evidence-based solutions underscores the need for a well-developed indicator framework, a need that has been amplified by the multidimensional effects of COVID-19. While the CAADP Results Framework provides a blueprint for the kinds of indicators needed to track agricultural growth and monitor welfare, that framework was developed before the unprecedented effects of a global health shock had been experienced. The effects of COVID-19 highlight the need to include indicators related to health systems, vulnerability to health shocks, and

macro-level effects (such as food and commodity prices, supply chains, and trade) in our data systems.

These three recommendations represent only a partial list of actions that might be taken, but we believe that investing in social protection programs, understanding market dynamics, and developing a more comprehensive data strategy are important first steps.