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## SUB-SAHARAN AFRICA

Building a More Food-Secure  
Sub-Saharan Africa

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## **Building A More Food-Secure Sub-Saharan Africa**

October 2022 Regional Economic Outlook: Sub-Saharan Africa Analytical Note

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# Building a More Food-Secure Sub-Saharan Africa

Climate change, global price shocks, and country-specific circumstances are driving food insecurity in sub-Saharan Africa. In response to the recent crisis, countries have resorted to second-best short-term policy measures such as tax cuts and subsidies, which should be phased out gradually. Looking ahead, increasing climate-resilient agricultural production and productivity, with sustained support from the international community, will be critical to address food security challenges while laying the foundation for greater food availability and affordability.

## SUB-SAHARAN AFRICA REMAINS THE MOST FOOD-INSECURE REGION IN THE WORLD

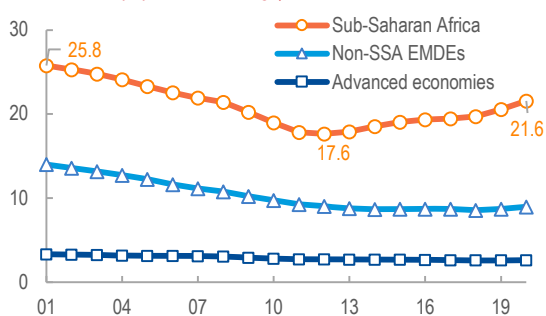
The share of undernourished people in sub-Saharan Africa has been steadily increasing since 2012, reversing important progress made during the 2000s (Figure 1).<sup>1</sup> The pandemic and Russia’s war in Ukraine have exacerbated food insecurity in the region by depressing incomes, disrupting global supply chains, and driving up the prices of food and agricultural inputs, particularly fertilizers. By the end of 2022, at least 123 million people or 12 percent of sub-Saharan Africa’s population will face acute food insecurity (two-thirds of the total globally), one-third of which have become acutely food-insecure since the start of the pandemic (Figure 2; IMF 2022).<sup>2</sup>

The key drivers of food insecurity in sub-Saharan Africa include climate change-induced weather extremes, conflict and security challenges that disrupt farming, and food price shocks. Food insecurity increases by 5–20 percentage points with each flood or drought

(April 2020 *Regional Economic Outlook: Sub-Saharan Africa*, Chapter 2). This is particularly worrisome given that one-third of global droughts occur in the region, and the frequency and intensity of floods and cyclones—all of which will hamper agricultural production and food distribution—are rising. Conflict is another key driver of acute food insecurity, while food insecurity itself drives conflict. A larger rural population and higher food inflation are also associated with increasing undernourishment, while greater food aid, higher agricultural value added, greater political stability, more arable land, and higher cereal production correlate positively with lower undernourishment (Figure 3).

Lower international food aid and increased dependence on imported staples, especially rice and wheat, are partly responsible for rising food insecurity in the past decade. International food aid contributed significantly to the

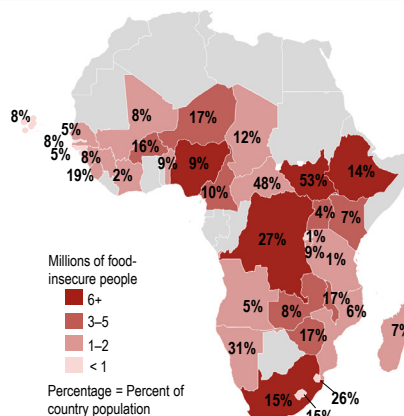
**Figure 1. Prevalence of Undernourishment, 2001–20**  
(Percent of total population, average)



Sources: FAOSTAT; and IMF staff calculations.

Note: Non-SSA EMDEs = non sub-Saharan African emerging markets and developing economies.

**Figure 2. Sub-Saharan Africa: Acute Food Insecurity, 2022**  
(Acutely food-insecure people in millions, and percent of country population)



Sources: Global Network Against Food Crisis (2022); and IMF staff calculations.

Note: Acute food-insecurity includes populations in Phase 3 and above (food crisis, emergency, and famine).

<sup>1</sup> Most countries in the region experienced a decline in the prevalence of undernourishment during the 2000s, with oil exporters making considerable progress. The reversal since 2012 is driven mainly by a few countries (Central African Republic, Democratic Republic of the Congo, Madagascar, Nigeria, South Africa), which account for about 40 percent of the undernourished in the region.

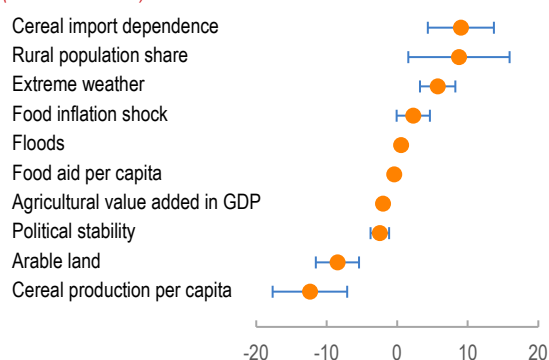
<sup>2</sup> *Undernourishment* occurs when food consumption is insufficient to provide the amount of dietary energy required for a healthy life (FAO and others 2021). “Prevalence of undernourishment” is the Food and Agriculture Organization’s traditional indicator to monitor hunger and has a wide coverage across countries and time. *Acute food insecurity*—a more serious condition than undernourishment—is any manifestation of food deprivation that threatens lives or livelihoods, regardless of the causes, context, or duration. Acute food insecurity data are from Global Network Against Food Crises (2022), covering a smaller sample of countries and a limited time horizon.

lower prevalence of undernourishment in the region during the 2000s. But food aid per capita has declined considerably over the past decade—30 percent lower in the 2010s compared with the decade before—likely contributing to rising undernourishment. Furthermore, the statistical analysis shows that dependence on cereal imports has been associated with significantly higher prevalence of undernourishment in the recent decade. In the context of rising cereal import dependence and most countries being net importers of one or more of their major staples consumed (maize, rice, and wheat; Figure 4), recent global supply constraints and high global food prices have worsened food insecurity.<sup>3</sup>

**The current food security crisis could persist.** In response to international food price shocks, domestic food inflation peaks after six to 12 months, with an almost one-for-one pass-through for imported staples (October 2022 *World Economic Outlook*; Okou, Spray, and Unsal 2022). Therefore, even as the surge in global food prices has eased recently, domestic price pressure will likely persist, at least through the end of the year. Furthermore, an unprecedented four-season drought has hit Ethiopia and Kenya, eroding households’ access to food, while higher fertilizer prices are disrupting domestic food supplies for this and future harvest seasons, even for net food exporters.

**Figure 3: Sub-Saharan Africa: Correlates of Prevalence of Undernourishment, 2001–20**

(Beta coefficients)



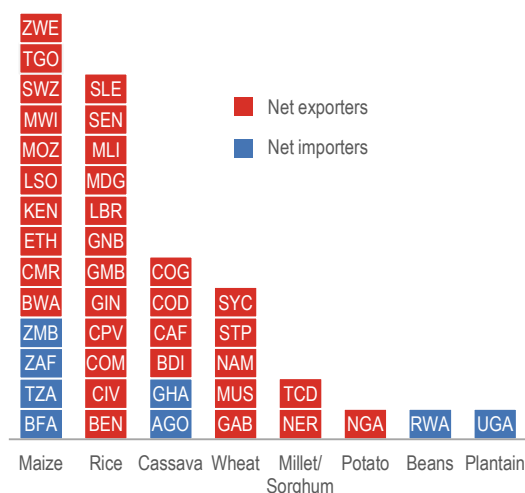
Sources: FAOSTAT database; World Bank, World Development Indicators; Organisation for Economic Co-operation and Development; Emergency Events database; and IMF staff calculations.

Note: The figure shows point estimates and 95 percent confidence intervals (with heteroskedasticity-consistent standard errors) for coefficients of a panel regression of prevalence of undernourishment over 2001–20 on a set of explanatory variables (shown), GDP per capita, poverty rate, export restrictions, and country and year fixed effects (not shown). Explanatory variables are standardized to have zero mean and unit standard deviation.

**Without adequate social protection programs, countries in the region have resorted to second-best short-term policy measures.** According to a recent IMF survey, 35 of 43 sub-Saharan African countries that responded have implemented more than 100 policy measures since January 2022 in response to the food and fuel price shocks. Most measures are temporary and untargeted, and are divided equally between improving food security and stabilizing fuel prices (Figure 5). Countries have adopted measures such as cutting taxes on food or fuel; foregoing import tariff revenues; deferring tax payments; introducing new food, fuel, and fertilizer subsidies; and adjusting wage bills. Some have resorted to distortionary measures, such as price controls and export bans.

**Financing these short-term measures is putting additional pressure on already-tight government budgets.** The cost of new measures implemented since January 2022 to address the surge in food and energy prices stands at 0.9 percent of GDP on average (Figure 6),<sup>4</sup> and only half of the countries in the region have included these costs in their national budgets at the time of the survey. To finance these measures, governments have typically drawn on revenue windfalls or resorted to borrowing and running arrears. To a lesser extent, they also relied on expenditure reprioritization and financial support from donors or international financial institutions.

**Figure 4: Sub-Saharan Africa: Main Staple Consumed by Country, 2019**



Sources: FAOSTAT; and IMF staff calculations.

Note: Net importers are identified as countries with a share of primary staple commodity in total imports greater than 50 percent. Main staples consumed are identified for each country as providing the highest kilocalories per capita per day.

<sup>3</sup> The cereal import dependency ratio (net imports as a share of total supply) has remained elevated at about 40 percent on average since 2012, after rising gradually over the 2000s.

<sup>4</sup> This is comparable to the cost in other emerging markets and developing economies and advanced economies.

## WORK TO ACHIEVE A FOOD-SECURE FUTURE MUST BEGIN NOW

Achieving long-term food security requires integrated strategies to address short-term challenges while laying the foundation for greater food availability and affordability. Addressing the lack of resilience to climate change—critically underlying chronic food insecurity in sub-Saharan Africa—will require careful policy prioritization. However, implementing multiple measures amid high debt levels, competing development needs, and capacity constraints will be challenging.

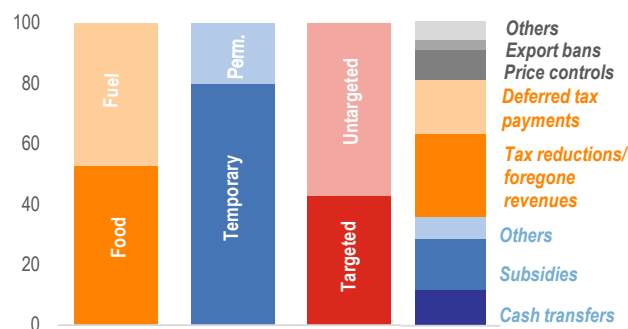
- In the short-term, to alleviate immediate pressures, countries should protect the most vulnerable from rising food prices through **temporary and preferably targeted fiscal measures**. However, these measures can be costly and, given limited fiscal space, should be phased out gradually (Amaglobelli and others 2022).
- In the medium-term, **domestic climate-resilient agricultural capacity and productivity** must be increased, which requires substantial investment (for example, improving irrigation infrastructure) and structural reforms (for example, securing land rights).<sup>5</sup> The share of cultivated arable land and cereal yields are low compared with other parts of the world, and even a modest expansion of arable land and narrowing of the yield gap could have significant implications for food security. Improving **access to finance and digitalization** is key to stepping up private investment in agricultural resilience, boosting productivity, and improving the earning capacity of subsistence farmers. Greater **regional trade integration**

and resilient transport infrastructure can enhance food availability and affordability further.

- Concurrently, **robust contingency planning** by governments can help manage the response to food security shocks more effectively. These include contingent loans, catastrophe insurance, and social protection programs that can be scaled up to reach vulnerable individuals during natural disasters.

**International support must be stepped up to enhance food security in the region now and in the future.** In the short term, as part of the emergency response, the international community can channel food aid to the region and help scale up existing social safety nets and fast-track targeted interventions. Recent initiatives pursue this goal, including the Global Alliance for Food Security (a Group of Seven and World Bank initiative expected to mobilize \$14 billion in 2022); the UN Global Crisis Response Group on Food, Energy, and Finance; and the IFI Action Plan to Address Food Insecurity, among others. More broadly, climate finance for Africa has been lackluster so far: of the \$73 billion per year in climate finance disbursed by advanced economies during 2016–19, only a quarter went to Africa, and part of that replaced other previously committed development finance (OECD 2021).<sup>6</sup> Therefore, ahead of the 2022 United Nations Climate Change Conference, progress is needed urgently toward the \$100 billion climate finance per year pledged by advanced economies to help developing countries. The composition of climate finance should also be revisited (for example, by increasing the ratio of grants to loans). Ongoing dialogue with regional and international stakeholders will also help design an effective food security agenda that is resilient to the changing environment, financial constraints, and challenges of making the transition toward a green economy.

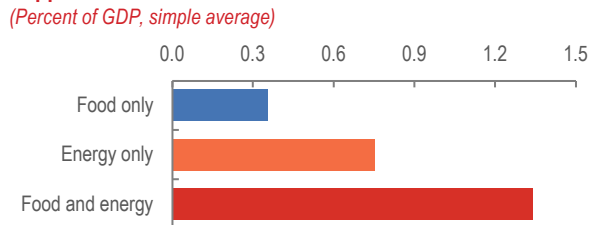
**Figure 5: Sub-Saharan Africa: Measures to Combat Rising Food and Fuel Prices**  
(Percent of total measures)



Sources: IMF, Fiscal Affairs Department survey; and IMF staff calculations.

Note: Data include measures introduced since January 2022. Survey was conducted in July 2022.

**Figure 6: Sub-Saharan Africa: Food and Energy Government Support**  
(Percent of GDP, simple average)



Sources: IMF, Fiscal Affairs Department survey; and IMF staff calculations.

Note: Data include measures introduced since January 2022. Survey was conducted in July 2022. The average across all measures is 0.9 percent of GDP.

<sup>5</sup> In line with the 2014 Maputo Declaration, African nations committed to at least 10 percent of public spending to food and agriculture, with the aim of fostering food security. But only a few countries have met this target.

<sup>6</sup> Climate finance disbursed by advanced economies stood at \$83 billion in 2020 (OECD 2022).



# BUILDING A MORE FOOD-SECURE SUB-SAHARAN AFRICA

## Most food-insecure region in the world



**123M**  
food-insecure people  
**68%**  
of global total

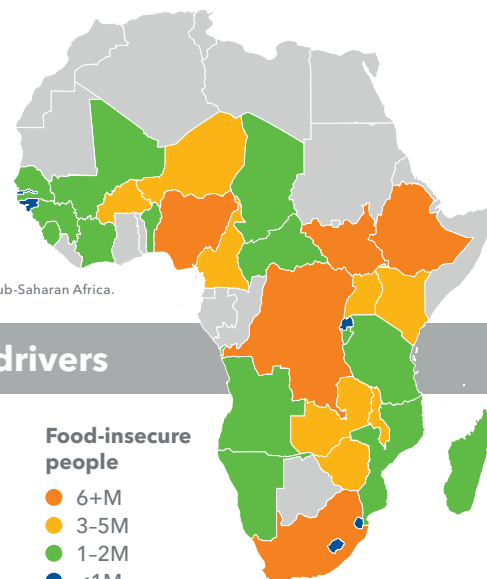
### Prevalence of Undernourishment, 2012 and 2020

(Percent of total population, average)



AEs = advanced economies; EMDEs = emerging markets and developing economies; SSA = Sub-Saharan Africa.

### Acute Food Insecurity, 2022

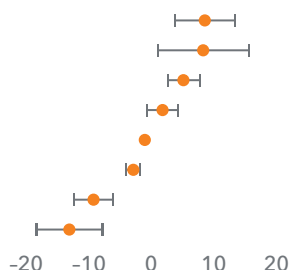


## Weather, economic shocks, and conflict are key drivers



### Drivers of Undernourishment

- Cereal import dependence
- Rural population share
- Extreme weather
- Food inflation shock
- Food aid per capita
- Political stability
- Arable land
- Cereal production per capita



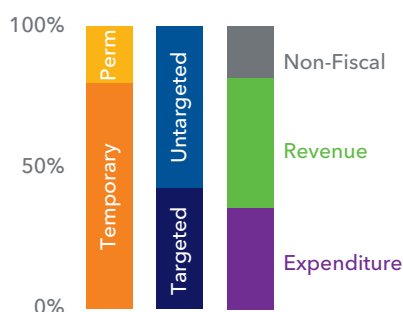
## Policy responses to recent price increases



**100+**  
new fiscal measures implemented in 2022

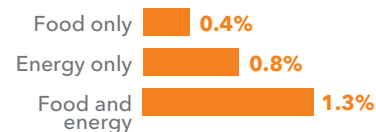
### Measures to Combat Rising Food and Fuel Prices

(Percent of total measures)



### Food and Energy Government Support

(Percent of GDP, simple average)



## Work to achieve a food secure future must begin now

Enhance **domestic production capacity** via substantial investment in agriculture

Build **resilience to climate disasters** by investing in climate-smart agriculture

Design and implement **scalable social protection programs**

Develop **contingency plans** in case of food crises

Mobilize **international support** for rapid channeling of food aid

Design an effective food security agenda in **coordination with regional and international stakeholders**

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