## **CHAPTER 2**

# Africa: Food Security and Agricultural Trade During the COVID-19 Pandemic

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<sup>1</sup> Section 2 of this paper was developed with Carlo Cafeiro and Anne Kepple from FAO and is based on FAO et al. (2021). Section 3 was developed with Andrea Zimmermann from FAO.

## Introduction

he COVID-19 pandemic has affected all the countries in the world, transforming lives and economies. Many governments imposed containment measures to curb the spread of the COVID-19 virus. Those measures included various forms of restrictions on the movement of people, closures of businesses, and curtailment of public and private services. The virus containment measures lowered infection rates and pressure on health systems but also affected economic activity worldwide.

Global growth contracted by an estimated 3.3 percent in 2020. The economic output of Africa south of the Sahara is expected to have declined by 1.9 percent from 2019 to 2020. However, in per capita terms, the region is estimated to have suffered a steeper downturn of -4.5 percent, compared to -4.4 percent for the world as a whole (IMF 2021). African countries, like those

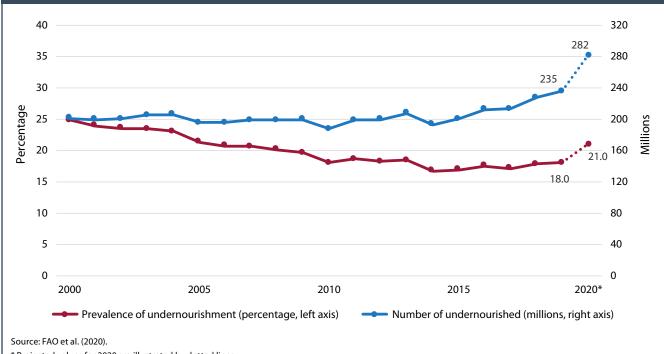
in other regions, greatly expanded social protection programs to respond to the crisis; however, limited resources mean that large numbers of vulnerable people could not be reached (see Duchoslav and Hirvonon, and Benammour et al., chapters 7 and 8 in this volume). As a result of income losses and market disruptions, consumers are having difficulty accessing food, which has affected food and nutrition security.

Some of the impact on African economies and food security was transmitted through trade in food and agriculture. The food and agriculture industries play an important role in many African countries. Exports of agricultural commodities constitute an important means to generate income, provide employment, and sustain livelihoods. At the same time, high population growth, rapid urbanization, and low agricultural productivity have boosted demand for agricultural and food imports. Today, most net food-importing developing countries are located in Africa.

Although the agriculture and food sector was generally exempted from lockdown measures, widespread movement restrictions and business closures still led to disruptions in value chains and trade. In Africa, these induced a decline in exports and imports at the beginning of the pandemic, when the first lockdown measures were imposed. While disruptions of trade in staples remained limited, trade in beverages, fishery products, and nonfood commodities such as cotton and cut flowers was more severely affected. In general, trade in all commodities resumed in the second half of 2020.

This chapter provides an overview of the impact of COVID-19 on African economies, food and nutrition security, and agricultural trade. The next section reviews the estimated impacts of the pandemic on food insecurity and malnutrition. The following section assesses impacts on Africa's agricultural trade. The final section concludes.

FIGURE 2.1—PREVALENCE OF UNDERNOURISHMENT AND NUMBER OF UNDERNOURISHED PEOPLE IN AFRICA, 2000–2020



<sup>\*</sup> Projected values for 2020 are illustrated by dotted lines.

| TABLE 2.1—PREVA            | CABLE 2.1—PREVALENCE OF UNDERNOURISHMENT IN AFRICA, 2000-2020 |      |      |      |      |      |      |      |       |                     |  |  |  |  |
|----------------------------|---|------|------|------|------|------|------|------|-------|---------------------|--|--|--|--|
|                            | 2000  | 2005 | 2010 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020* | Change<br>2019–2020 |  |  |  |  |
| World                      | 13.0  | 12.4 | 9.2  | 8.3  | 8.3  | 8.1  | 8.3  | 8.4  | 9.9   | +1.4                |  |  |  |  |
| Africa                     | 24.8  | 21.3 | 18.0 | 16.9 | 17.5 | 17.1 | 17.8 | 18.0 | 21.0  | +3.0                |  |  |  |  |
| Northern Africa            | 9.2   | 8.5  | 7.3  | 6.1  | 6.2  | 6.5  | 6.4  | 6.4  | 7.1   | +0.7                |  |  |  |  |
| Africa South of the Sahara | 28.9  | 24.6 | 20.6 | 19.4 | 20.1 | 19.5 | 20.4 | 20.6 | 24.1  | +3.5                |  |  |  |  |
| Eastern Africa             | 39.9  | 33.0 | 28.4 | 24.8 | 25.6 | 24.9 | 25.9 | 25.6 | 28.1  | +2.4                |  |  |  |  |
| Middle Africa              | 41.4  | 36.8 | 28.9 | 28.7 | 29.6 | 28.4 | 29.4 | 30.3 | 31.8  | +1.5                |  |  |  |  |
| Southern Africa            | 5.8   | 5.0  | 6.2  | 7.5  | 7.9  | 7.3  | 7.6  | 7.6  | 10.1  | +2.4                |  |  |  |  |
| Western Africa             | 16.9  | 14.2 | 11.3 | 11.5 | 11.9 | 11.8 | 12.5 | 12.9 | 18.7  | +5.8                |  |  |  |  |

Source: FAO et al. (2020).

Note: Changes are in percentage points. The 2020 value is a projection.

## Food Insecurity

Of all the world's continents, Africa has the highest prevalence of undernourishment and food insecurity. About one in five people (21 percent of the population) were facing hunger in Africa in 2020 <sup>2</sup>—more than double the proportion of any other region, based on the prevalence of undernourishment (Sustainable Development Goal [SDG] Indicator 2.1.1). Of the total number of undernourished people in the world in 2020 (768 million), more than one-third (282 million) lived in Africa.

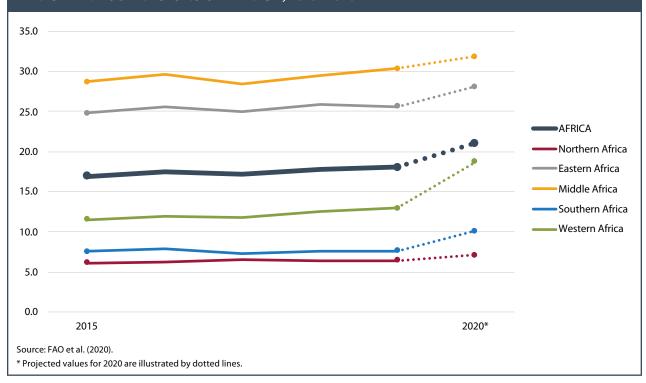
After a long trend of decreasing prevalence and a relatively unchanging number of undernourished people, both began to rise in Africa in 2014 (Figure 2.1). New estimates show the sharpest increase in undernourishment ever observed in a single year—from 2019 to 2020—for the continent. Compared with 2019, 46 million more people in Africa were affected by hunger in 2020.

The estimates show enduring and troubling regional inequalities (Table 2.1). The proportion of the population in northern Africa affected by hunger in 2020 (7.1 percent) is much smaller compared with almost all the subregions of Africa south of the Sahara, except for southern Africa (10.1 percent). In the other subregions, the prevalence ranges from 18.7 percent in western Africa to 31.8 percent in middle Africa. The largest number of undernourished people—more than 125 million—live in eastern Africa.

The prevalence of undernourishment increased from 2019 to 2020 in all the subregions in Africa (Figure 2.2). The sharpest increase of 5.8 percentage points in just one year was in western Africa, corresponding to 24.6 million more people (Table 2.2). If confirmed, this estimated increase would be further evidence of the trends noted by the Food and Agriculture Organization of the United Nations and the World Food Programme in 2020 for several countries in this subregion (FAO and WFP 2020), signaling the need for heightened attention to prevent further deterioration as the situation

<sup>2</sup> All food insecurity data for 2020 presented in this section are projected values and subject to some uncertainty; findings should be considered with caution (FAO et al. 2020).

## FIGURE 2.2—RECENT TRENDS IN THE PREVALENCE OF UNDERNOURISHMENT IN AFRICA AND SUBREGIONS OF AFRICA, 2015–2020



evolves. Large increases of 2.4 percentage points in one year occurred also in eastern Africa and southern Africa, corresponding to 13.8 and 1.7 million more people, respectively. The smallest increase (1.5 percentage points) occurred in middle Africa, where the prevalence nonetheless remains the highest on the continent.

Projections for the number of undernourished globally and at regional levels confirm the enormous challenge of eradicating hunger by 2030. However, the evolution from 2020 to 2030 in terms of numbers of undernourished people is quite different across regions. A significant increase is forecast for Africa, where the number is projected to reach 300 million people, placing it on par with Asia by 2030 (Figure 2.3). Africa is projected to be the region with the highest number of undernourished people

| TABLE 2.2—NUMBER OF UNDERNOURISHED PEOPLE IN AFRIC | CA, 2000-2020 |
|--|---------------|
|--|---------------|

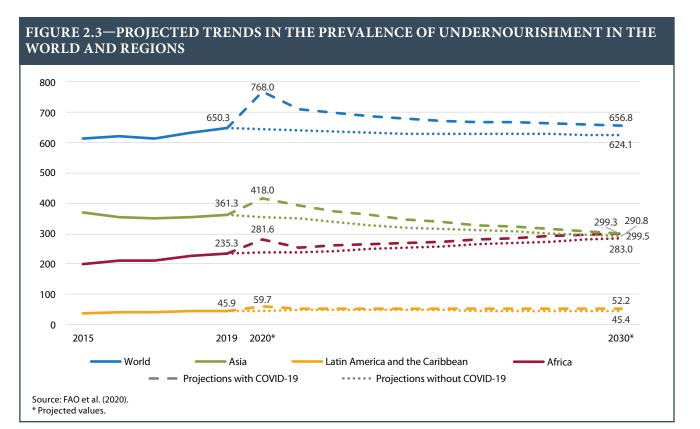
|                            | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020* | Change<br>2019–2020 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|
| World                      | 800.3 | 810.7 | 636.8 | 615.1 | 619.6 | 615.0 | 633.4 | 650.3 | 768.0 | +117.8              |
| Africa                     | 200.9 | 195.0 | 187.4 | 199.7 | 212.0 | 212.3 | 227.1 | 235.3 | 281.6 | +46.3               |
| Northern Africa            | 15.7  | 15.8  | 14.8  | 13.6  | 14.2  | 15.0  | 15.1  | 15.5  | 17.4  | +1.9                |
| Africa South of the Sahara | 185.1 | 179.2 | 172.6 | 186.1 | 197.8 | 197.3 | 212.0 | 219.8 | 264.2 | +44.3               |
| Eastern Africa             | 102.7 | 97.3  | 96.3  | 96.5  | 102.5 | 102.3 | 109.6 | 111.3 | 125.1 | +13.8               |
| Middle Africa              | 39.8  | 41.2  | 38.0  | 44.3  | 47.1  | 46.5  | 49.7  | 52.9  | 57.1  | +4.2                |
| Southern Africa            | 3.0   | 2.7   | 3.6   | 4.7   | 5.1   | 4.7   | 5.0   | 5.1   | 6.8   | +1.7                |
| Western Africa             | 39.6  | 38.0  | 34.7  | 40.5  | 43.2  | 43.8  | 47.8  | 50.6  | 75.2  | +24.6               |

Source: FAO et al. (2020).

Note: Totals may differ from the sum of subregions due to rounding and nonreported values. The 2020 value is a projection.

even in the absence of the COVID-19 pandemic.

Beyond hunger, in 2020, nearly 60 percent of the population of Africa, or almost 800 million people, were affected by moderate or severe food insecurity based on the Food Insecurity Experience Scale (SDG Indicator 2.1.2). Nearly 26 percent (more than 345 million people) faced severe food insecurity. A sharp increase from 2019 to 2020 is seen for the continent, as well as across all subregions (Table 2.3). Moderate or severe food insecurity increased significantly in western Africa, from 54.2 percent in 2019 to 68.3 percent in 2020 (an increase of 62.3 million people). The subregion has the highest prevalence of food insecurity now, surpassing eastern Africa (65.3 percent), which experienced a



| Prevalence of severe food insecurity (%)  Prevalence of moderate or severe food insecurity (%) |      |      |             |             |                |      |      |  |      |      |      |      |      |      |  |
|--|------|------|-------------|-------------|----------------|------|------|--|------|------|------|------|------|------|--|
|  |      | Pr   | evalence of | severe food | l insecurity ( | (%)  |      | Prevalence of moderate or severe food insecurity (%) |      |      |      |      |      |      |  |
|  | 2014 | 2015 | 2016        | 2017        | 2018           | 2019 | 2020 | 2014   | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |  |
| World  | 8.3  | 8.1  | 8.3         | 8.7         | 9.6            | 10.1 | 11.9 | 22.6   | 22.8 | 23.6 | 24.9 | 25.9 | 26.6 | 30.4 |  |
| Africa   | 17.7 | 18.3 | 19.8        | 20.5        | 20.6           | 21.9 | 25.9 | 47.3   | 48.0 | 50.9 | 52.5 | 52.7 | 54.2 | 59.6 |  |
| Northern Africa  | 10.2 | 9.0  | 10.4        | 10.6        | 9.3            | 8.8  | 9.5  | 29.7   | 26.4 | 30.0 | 33.1 | 31.1 | 28.9 | 30.2 |  |
| Africa South of the Sahara   | 19.4 | 20.4 | 22.0        | 22.7        | 23.2           | 24.9 | 29.5 | 51.4   | 53.0 | 55.8 | 57.0 | 57.6 | 59.9 | 66.2 |  |
| Eastern Africa   | 23.7 | 24.1 | 25.8        | 25.3        | 25.0           | 26.0 | 28.7 | 57.7   | 58.1 | 62.2 | 62.1 | 61.6 | 63.4 | 65.3 |  |
| Middle Africa  | n.a. | n.a. | n.a.        | n.a.        | n.a.           | n.a. | 35.8 | n.a.   | n.a. | n.a. | n.a. | n.a. | n.a. | 70.0 |  |
| Southern Africa  | 18.9 | 18.9 | 19.0        | 19.0        | 19.1           | 19.2 | 22.7 | 43.8   | 43.9 | 44.0 | 44.1 | 44.2 | 44.3 | 49.7 |  |
| Western Africa   | 8.6  | 10.8 | 12.9        | 15.3        | 16.8           | 19.6 | 28.8 | 39.2   | 42.8 | 45.5 | 48.7 | 50.6 | 54.2 | 68.3 |  |

Note: n.a. = not available, as data are available only for a limited number of countries, representing less than 50 percent of the population in the region.

TABLE 2.4—NUMBER OF FOOD INSECURE PEOPLE IN AFRICA, BASED ON THE FOOD INSECURITY EXPERIENCE SCALE, 2014-2020

|                            | Number of severely food insecure people (millions) |       |       |       |       |       |       |         | Number of moderately or severely food insecure people (millions) |         |         |         |         |         |  |  |
|----------------------------|--|-------|-------|-------|-------|-------|-------|---------|--|---------|---------|---------|---------|---------|--|--|
|                            | 2014   | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2014    | 2015   | 2016    | 2017    | 2018    | 2019    | 2020    |  |  |
| World                      | 604.5  | 598.4 | 620.2 | 656.8 | 731.3 | 779.9 | 927.6 | 1,645.5 | 1,680.1  | 1,762.9 | 1,881.6 | 1,978.7 | 2,049.9 | 2,368.2 |  |  |
| Africa                     | 203.5  | 215.9 | 240.1 | 254.7 | 262.9 | 286.7 | 346.6 | 545.0   | 567.2  | 617.8   | 653.3   | 671.8   | 708.6   | 798.8   |  |  |
| Northern Africa            | 22.4   | 20.2  | 23.7  | 24.6  | 22.0  | 21.2  | 23.4  | 65.1    | 59.1   | 68.6    | 77.0    | 73.7    | 69.8    | 74.5    |  |  |
| Africa South of the Sahara | 181.0  | 195.7 | 216.5 | 230.1 | 241.0 | 265.5 | 323.3 | 479.8   | 508.1  | 549.2   | 576.3   | 598.1   | 638.8   | 724.4   |  |  |
| Eastern Africa             | 89.9   | 94.0  | 103.2 | 104.2 | 105.6 | 113.0 | 127.9 | 218.7   | 226.3  | 248.9   | 255.4   | 260.5   | 575.0   | 290.9   |  |  |
| Middle Africa              | n.a.   | n.a.  | n.a.  | n.a.  | n.a.  | n.a.  | 64.3  | n.a.    | n.a.   | n.a.    | n.a.    | n.a.    | n.a.    | 125.7   |  |  |
| Southern Africa            | 11.7   | 11.9  | 12.1  | 12.3  | 12.6  | 12.8  | 15.3  | 27.2    | 27.7   | 28.1    | 28.6    | 29.0    | 29.5    | 33.5    |  |  |
| Western Africa             | 29.6   | 38.0  | 46.8  | 56.9  | 63.9  | 76.7  | 115.7 | 134.0   | 150.5  | 164.4   | 180.7   | 192.8   | 212.0   | 274.3   |  |  |

Source: FAO et al. (2020).

Note: n.a. = not available, as data are available only for a limited number of countries, representing less than 50 percent of the population in the region.

smaller increase, but remains the subregion with the highest number of people (291 million) suffering from moderate or severe food insecurity (Table 2.4).

Severe food insecurity in those two subregions showed upward trends. It increased sharply in western Africa from 19.6 to 28.8 percent between 2019 and 2020 (equivalent to 49 million more people), but much less so in eastern Africa, from 26 to 28.7 percent (an increase of slightly less than 15 million people). Moderate increases were seen in southern Africa, where the prevalence of moderate and severe food insecurity rose from 44.3 to 49.7 percent (from 29.5 to 33.5 million people) and severe food insecurity increased from 19.2 to 22.7 percent (from 12.8 to 15.3 million people). Much smaller increases of around 1 percentage point were observed in northern Africa, where food insecurity affected 30.2 percent of the population (or 74.5 million people) in 2020, with one-third facing severe food insecurity (9.5 percent of the population, equivalent to 23.4 million people).

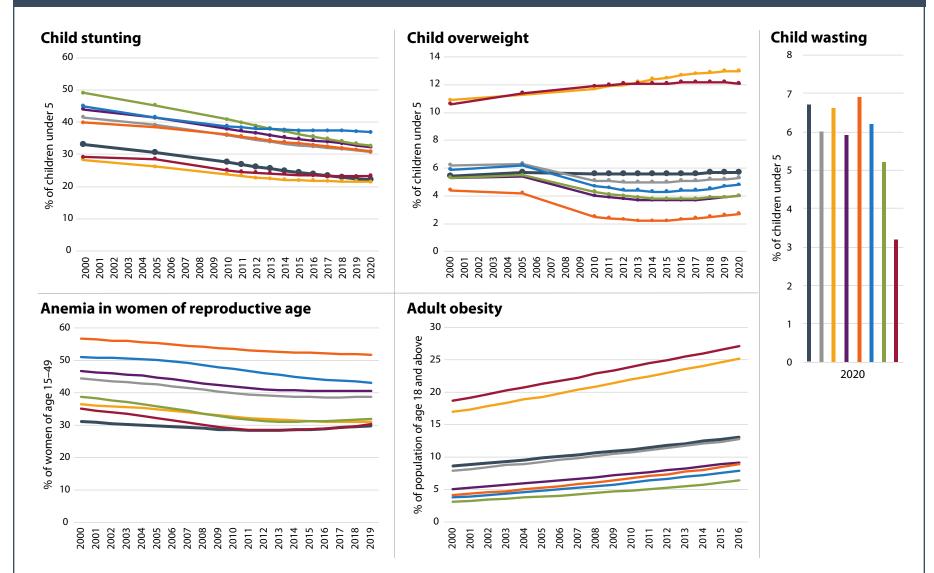
### The State of Nutrition

Due to the physical distancing measures taken to contain the spread of the COVID-19 pandemic, data on nutrition outcomes were limited in 2020. Consequently, the latest estimates do not account for the effects of the

COVID-19 pandemic. Nevertheless, Figure 2.4 presents the trends for Africa for four SDG Target 2.2 nutrition indicators—child stunting, child wasting, child overweight, and anemia in women of reproductive age (15–49 years)—as well as adult obesity, which is part of the Global Action Plan for the Prevention and Control of Noncommunicable Diseases adopted by the World Health Assembly (WHA) in 2013.

The prevalence of stunting among children under five years of age in Africa was 30.7 percent in 2020, higher than the global average of 22 percent. This is down from 32.8 percent in 2015 and from 41.5 percent 20 years ago. The downward trend was observed in all the subregions of Africa, with the most notable progress in eastern Africa. In 2020, the prevalence in Africa south of the Sahara (32.3 percent) was more than 10 percentage points higher than in northern Africa (21.4 percent). Within Africa south of the Sahara, middle Africa was the most affected, with a prevalence of 36.8 percent, followed by eastern Africa (32.6 percent), western Africa (30.9 percent), and southern Africa (23.3 percent). In 2020, 37 percent of the world's 149 million children under five years of age affected by stunting—about 55 million—lived in Africa south of the Sahara.

#### FIGURE 2.4—PREVALENCE OF SELECTED INDICATORS OF MALNUTRITION IN AFRICA AND SUBREGIONS OF AFRICA



Source: Data for stunting, wasting, and overweight are based on UNICEF-WHO-World Bank: Joint Child Malnutrition Estimates—Levels and Trends (2021 Edition), https://data.unicef.org/topic/nutrition/, www.who.int/nutgrowthdb/ estimates, https://datatopics.worldbank.org/child-malnutrition. Data for anemia are based on the WHO Global Health Observatory database, 2021, accessed April 26, 2021, www.who.int/data/gho/data/themes/topics/anaemia\_in\_ women\_and\_children. Data for adult obesity are based on the WHO Global Health Observatory database, 2017, accessed April 19, 2021, www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-amongadults-bmi-=-30-(age-standardized-estimate)-(-).

<sup>\*</sup> Wasting is an acute condition that can change frequently and rapidly over the course of a calendar year. This makes it difficult to generate reliable trends over time with the input data available and, as such, this report provides only the most recent global and regional estimates.

The percentage of children under five years of age affected by wasting in Africa was 6 percent in 2020 (12.1 million children), lower than the global average of 6.7 percent. Across different subregions, wasting affects 5.9 percent of children in Africa south of the Sahara (6.9 percent in western Africa, 6.2 percent in middle Africa, 5.2 percent in eastern Africa, and 3.2 percent in southern Africa) and 6.6 percent in northern Africa. In 2020, nearly one-quarter of the world's 45.4 million wasted children—about 10 million children—lived in Africa south of the Sahara.

Since 2010, the child overweight trend in Africa had remained stagnant around 5 percent, but it began to tick upward in recent years, reaching 5.3 percent in 2020 (nearly 11 million children under five years of age). Although this is still lower than the global average of 5.7 percent, the prevalence was much higher in northern Africa and southern Africa, with 13 and 12.1 percent, respectively. the trend has been on a rapid rise, especially in northern Africa. In other subregions, while the prevalence is lower (4 percent in eastern Africa, 4.8 percent in middle Africa, and 2.7 percent in western Africa), it has been on the rise since 2015.

The prevalence of anemia in women of reproductive age in Africa has been decreasing slowly since 2000 but showed a slight increase in recent years. In 2019, 38.9 percent of African women ages 15–49, or nearly 123 million women, were affected by anemia. This is higher than the global average of 29.9 percent. The prevalence is the highest in western Africa at 51.8 percent, followed by middle Africa (43.2 percent), northern Africa (38.9 percent), eastern Africa (31.9 percent), and southern Africa (30.3 percent). Since 2015, none of the subregions of Africa has made significant progress toward reducing the prevalence of anemia among women of reproductive age.

Like the global trend, the prevalence of adult obesity continued to rise in Africa and all its subregions between 2012 and 2016. Obesity among adults 18 years of age and older increased from 11.5 percent (65.5 million) in 2012 to 12.8 percent (81.5 million) in 2016, which is slightly lower than the global average of 13.1 percent. Southern Africa and northern Africa had the highest prevalence of 27.1 percent and 25.2 percent, respectively, representing more than one-fourth of the adult population. In 2016, the prevalence of adult obesity in other subregions was below 10 percent (6.4 percent in eastern

|                            | Child stunting (%) |      |      | Child overweight (%) |      |      | Child wasting (%) |      | Anemia in women of reproductive age (%) |      |      | Adult obesity* (%) |      |      |
|----------------------------|--------------------|------|------|----------------------|------|------|-------------------|------|---|------|------|--------------------|------|------|
|                            | 2012               | 2020 | 2030 | 2012                 | 2020 | 2030 | 2020              | 2030 | 2012                                    | 2019 | 2030 | 2012               | 2016 | 2025 |
| World                      | 26.2               | 22.0 |      | 5.6                  | 5.7  |      | 6.7               |      | 28.5                                    | 29.9 |      | 11.7               | 13.2 |      |
| Africa                     | 34.5               | 30.7 |      | 5.0                  | 5.3  |      | 6.0               |      | 39.2                                    | 38.9 |      | 10.4               | 11.8 |      |
| Northern Africa            | 22.7               | 21.4 |      | 12.0                 | 13.0 |      | 6.6               |      | 31.9                                    | 31.1 |      | 22.5               | 25.4 |      |
| Africa South of the Sahara | 36.6               | 32.3 |      | 3.8                  | 4.0  |      | 5.9               |      | 41.2                                    | 40.7 |      | 6.9                | 8.0  |      |
| Eastern Africa             | 38.9               | 32.6 |      | 4.0                  | 4.0  |      | 5.2               |      | 31.4                                    | 31.9 |      | 4.3                | 5.2  |      |
| Middle Africa              | 38.0               | 36.8 |      | 4.4                  | 4.8  |      | 6.2               |      | 46.1                                    | 43.2 |      | 5.5                | 6.6  |      |
| Southern Africa            | 24.3               | 23.3 |      | 12.1                 | 12.1 |      | 3.2               |      | 28.5                                    | 30.3 |      | 23.2               | 25.6 |      |
| Western Africa             | 34.9               | 30.9 |      | 2.3                  | 2.7  |      | 6.9               |      | 52.9                                    | 51.8 |      | 6.4                | 7.7  |      |

Source: UNICEF, WHO, and World Bank (2021); NCD-RisC (2017). Data for anemia are based on the WHO Global Health Observatory database (2021). Data for adult obesity are based on the WHO Global Health Observatory database (2017).

<sup>\*</sup> There is no official target for adult obesity for 2030.

Africa, 7.9 in middle Africa, and 8.9 in western Africa), but it is projected to rise based on historical trends.

With respect to SDG Target 2.2 and the WHA global nutrition targets, estimates regarding levels of malnutrition in 2030 are characterized by a greater level of uncertainty this year than in the past, as with the projections for hunger. The estimates of progress toward these targets presented in Table 2.5 do not account for the effect of the COVID-19 pandemic, do not give weight to the more recent trends, and do not factor in future potential change in trends.

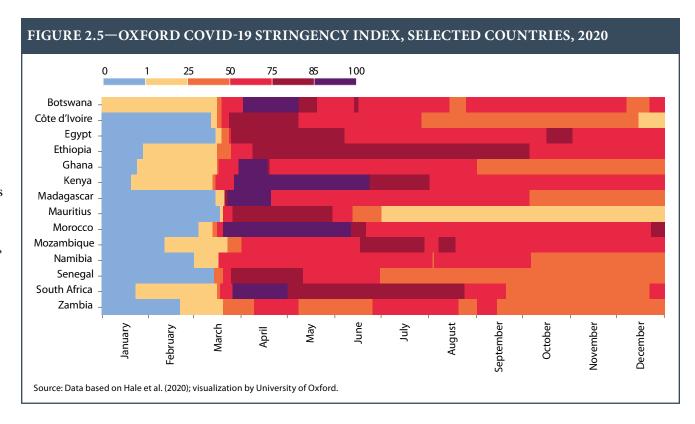
Africa as a whole is off track for all four SDG 2.2 nutrition targets (stunting, wasting, and overweight among children under five, and anemia in women of reproductive age). All subregions have shown progress toward the stunting target since 2012 but not enough to achieve the 2030 target (Table 2.5). For child wasting and overweight, and

anemia in women, most subregions are making no progress. All subregions are off track to meet the 2025 WHA target to halt the rise in adult obesity by 2025.

## Patterns of Agricultural and Food Trade During the COVID-19 Pandemic in 2020

Trade in agricultural and food products is crucial for the economies and food security of many African countries. Exports of commodities such as cocoa, coffee, fruits, and vegetables generate income, while imports of staples such as cereals, dairy products, meat, and fats and oils provide energy and complement diets (FAO and AUC 2021).

While the World Trade Organization (WTO) estimated a 9.2 percent contraction of world merchandise trade due to COVID-19 impacts (WTO



2020a), global trade in agricultural and food products was only marginally affected. Particularly for food products for which demand is inelastic, trade continued to occur despite lockdowns; much of global trade in nonperishable staples is characterized by bulk shipments and automated processes (WTO 2020a; Schmidhuber and Qiao 2020). However, some disruptions in agricultural and food trade were observed at the very beginning of global movement restrictions (WTO 2020b). African countries for which early data were available reported sizable declines in agricultural exports and imports in the early months of the pandemic (FAO 2021).

COVID-19 containment measures of African countries and of their trading partners worldwide affected agricultural and food trade. Countries in Africa started imposing strict lockdown measures at the end of March 2020 (Figure 2.5). The most stringent measures were phased out by July, but none of the countries considered in this analysis had returned to full normality by the end of 2020. Restrictions on the movement of people followed similar patterns in many countries, notably developed countries, which are among Africa's main trade partners (FAO and AUC 2021; Malabo Montpellier Panel 2020).

The virus containment measures imposed by most countries in the world affected both export and import value chains. Agricultural and food production, processing, trade, and distribution were affected through restrictions on the movement of people, business closures, and in some cases, trade restrictions. Increasing unemployment, declining incomes, and the closure of the hospitality and tourism sectors in many countries led to shifts in demand and consumption patterns: decreased consumption of food away from home, including restaurants and other food services, drove declines in demand for

beverages and other high-value food products, while home consumption and consumption of staple foods increased (FAO 2021).

Concerns over trade and value chain disruptions at the beginning of the pandemic led many countries to impose policy measures to limit potentially adverse impacts on food security and safety. Several African countries applied measures such as temporary export restrictions; relaxation of import barriers on specific or all foods to increase or stabilize domestic supply; measures to facilitate trade procedures; and temporary import restrictions or additional certification requirements in response to fears over possible COVID-19 transmission through the importation of food products. Measures to provide more targeted support to farmers and consumers included input subsidies, the expansion or release of food stocks, and the implementation or expansion of

TABLE 2.6—POLICY MEASURES AFFECTING WHEAT AND WHEAT FLOUR, MAIZE, RICE, MEAT AND DAIRY, AND VEGETABLE OILS

|                         |                           | Border Meas            | ures  |  | Domest        | ic Measures                               |                                       |
|-------------------------|---------------------------|------------------------|---|--|---------------|---|---------------------------------------|
|                         | Export restrictions       | Lowering export duties | Lowering import restrictions/ subsidizing imports | Domestic market<br>controls*; stock release/<br>food aid       | Food reserves | Market price support/<br>producer subsidy | Non-product-specific producer subsidy |
| Wheat and flour         |                           |                        |   |  |               |   |                                       |
| Net importing countries | Algeria, Angola           |                        | Chad, Morocco,<br>South Africa                    |  | Egypt         |   |                                       |
| Maize                   |                           |                        |   |  |               |   |                                       |
| Net importing countries | Algeria, Angola,<br>Sudan |                        | Chad, Kenya                                       | Rwanda, Nigeria  |               |   |                                       |
| Rice                    |                           |                        |   |  |               |   |                                       |
| Net importing countries | Algeria, Angola,<br>Mali  |                        | Chad, South Africa                                | Côte d'Ivoire, Gambia,<br>Madagascar, Mali, Rwanda,<br>Senegal |               | Côte d'Ivoire                             | Senegal                               |
| Meat and dairy markets  |                           |                        |   |  |               |   |                                       |
| Net importing countries | Algeria, Angola,<br>Mali  |                        | South Africa                                      |  |               |   |                                       |
| Vegetable oils          |                           |                        |   |  |               |   |                                       |
| Net importing countries | Algeria, Angola           |                        | Chad, Mauritania,<br>South Africa                 | Rwanda   |               |   |                                       |

Source: Adapted from FAO (2021).

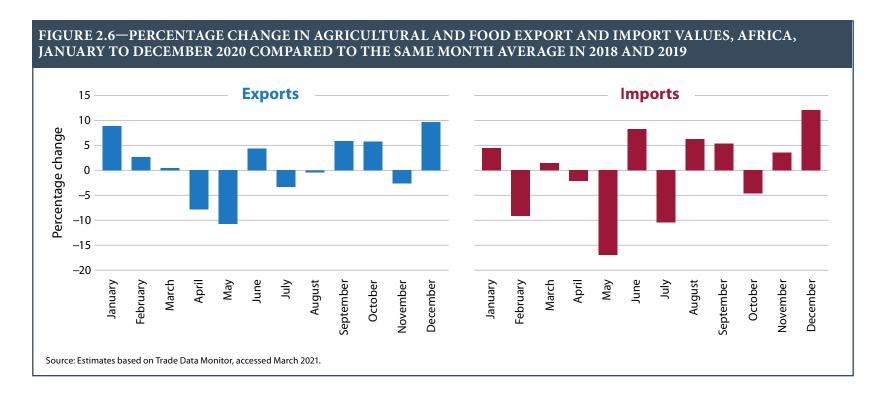
<sup>\*</sup> Only reported if, in the sources, wheat and/or wheat flour, maize, rice, meat and dairy, and vegetable oils were explicitly listed among the food products upon which domestic market controls were applied.

price control mechanisms (FAO 2021). Table 2.6 presents the list of countries applying these measures.

In April and May 2020, when most countries in the world had imposed strict lockdown measures, agricultural and food export values of the aggregate of 14 African countries fell compared with the average of the same months in 2018 and 2019 (Figure 2.6).<sup>3,4</sup> Similar to global-level patterns, this decline was followed by a rebound effect in June (FAO 2021). In the second half of 2020,

agricultural and food exports of the African countries tended to be higher in value terms than the average of 2018 and 2019.

The development of import values in 2020 was relatively more volatile. Import values of the aggregate of the African countries considered in the analysis had dropped already in February. By May 2020, they were down 15 percent compared with average values in the previous two years. Imports showed a strong rebound effect in June but declined again in July 2020. On



<sup>3</sup> The analysis considered 14 African countries: Botswana, Côte d'Ivoire, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique, Namibia, Senegal, South Africa, and Zambia. These countries were estimated to account for nearly 40 percent of Africa's total population, around 48 percent of total gross domestic product, 45 percent of total exports, and 57 percent of total imports as of 2020 (based on World Bank 2021). The monthly trade data were used as reported by these countries at the end of March 2021. Trade data are subject to frequent revisions and can only give an indication of the changes in trade patterns in 2020 compared with those of the previous years. Data on trade of African countries, especially intra-African trade, are scarce in general, and official statistics do not reflect informal trade, which constitutes a large share of intra-African trade (Malabo Montpellier Panel 2020). The data include exports to and imports from trading partners as reported by the 14 countries, including trading partners that are not among the reporting countries. All monthly data in 2020 were compared with the average of the same time period in 2018 and 2019 to account for some volatility in these years.

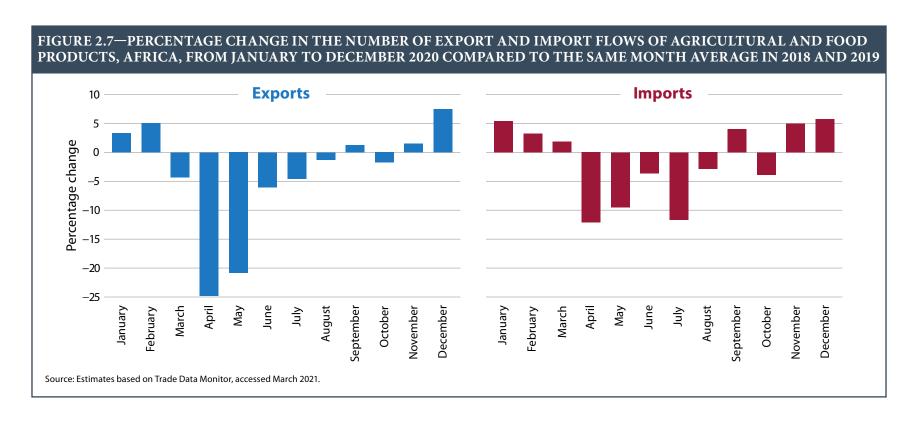
<sup>4</sup> Trade in agriculture and food includes all products covered by the World Trade Organization Agreement on Agriculture, Annex 1, plus fishery products.

average, import values remained above prepandemic levels in the second half of 2020.

Export and import values reflect both changes in traded quantities and variations in export and import prices. They can give an indication of overall trade developments, measured in value terms. The FAO Food Price Index shows a steep decline in global food prices from January to May 2020, followed by a sharp increase in prices through the end of the year. Average price levels in 2020 were below those of 2018 and 2019 between March/April and August (FAO 2021). In addition to changes in prices and in volumes of trade with partners, part of the effect of the COVID-19 pandemic and related containment measures on trade in agricultural and food products was induced by

complete disruptions of trade flows. In fact, the number of export flows, or export "links," of specific goods between two specific trading partners had shrunk by 25 percent already in April 2020 compared with the same month average in 2018 and 2019 (Figure 2.7). <sup>5</sup> That number was still down by more than 20 percent in May 2020 and remained subdued through June and July. The number of export flows did not deviate much from the pre-COVID average between August and November but increased by around 7 percent in December 2020.

The number of import flows of the African countries considered in the analysis declined by more than 10 percent in April and slightly less than 10 percent in May 2020 relative to the average number of



<sup>5</sup> Export and import flows are also referred to as "export/import links" or "active export/import lines." They are counted at the Harmonized System six-product level and by bilateral trade flow. The number of export/import links is a simple measure of export/import diversification (Cadot, Carrère, and Strauss-Kahn 2010). A higher number of export/import links indicates a larger variety of products traded and/or more trade partners.

import flows in 2018 and 2019 (Figure 2.7). In July 2020, it was again more than 10 percent lower, while relatively little variation was observed between August and October. More import flows than the average of previous years were recorded in November and December 2020.

Moreover, the number of intraregional import flows of countries in Africa south of the Sahara showed a relatively sharper decline than import flows from other regions in the first phase of the pandemic and related containment measures. The relative resilience of extra-African imports might reflect the global orientation of African trade (FAO 2021). Much of Africa's trade and transport infrastructure is adapted to facilitate external trade (Fleshman 2009). In addition, although official statistics do not capture informal trade, available data suggest that informal intra-African trade also declined sharply in early 2020 compared to previous years. Informal trade accounts for a significant share of intra-African trade, but its exact magnitude is unknown. Bouët, Laborde, and Seck (2021) summarize findings from several informal trade monitoring efforts in western and eastern Africa that suggest informal cross-border trade declined precipitously in the early months of the pandemic due to border closures and increased screening of travelers.

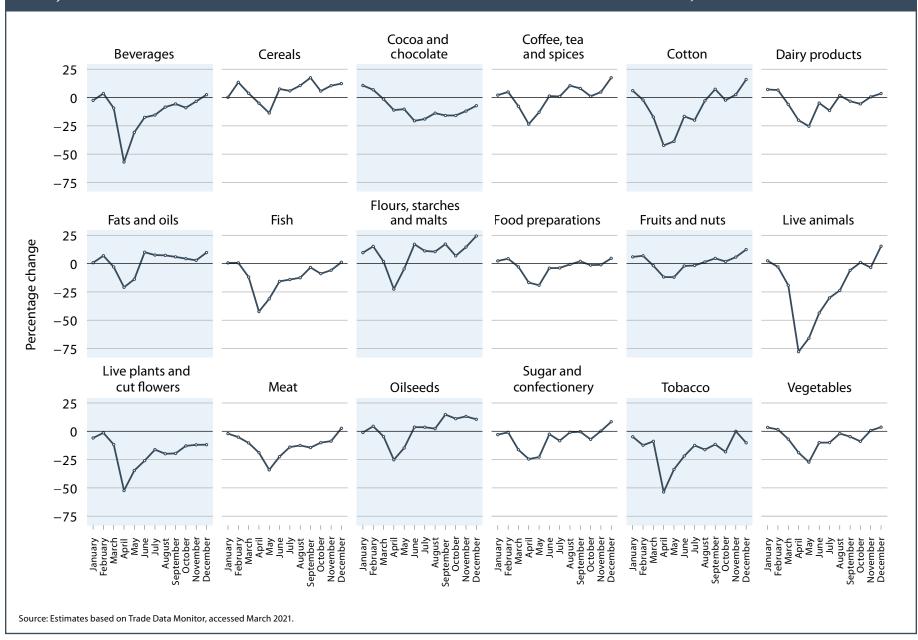
African exports and imports of products that did not immediately affect food security—unlike staples and foods important for a healthy diet—showed a relatively sharp decline at the beginning of lockdowns; Figure 2.8 shows the changes in the number of export links by commodity group. 6 This was similar to global-level patterns. Demand for beverages and fishery products declined rapidly at the beginning of the pandemic, which was partly attributed to the closure of bars, cafés, and restaurants in many countries (Cranfield 2020; Eftimov et al. 2020; FAO 2020). Similarly, demand for cut flowers decreased as a result of florist and cemetery closures and restrictions on social gatherings (Coluccia et al. 2021; FAO 2021; Vickers et al. 2020). Policy restrictions in some countries affected trade and demand for live animals, fishery products, and alcoholic beverages (FAO 2021; Sikuka 2020), while exports and imports of cotton and tobacco were mainly affected by trade disruptions and declining demand (Muhammad, Smith, and Yu 2021; TextileFuture 2020; Voora, Larrea, and Bermudez 2020).

In general, markets had recovered already in the second half of 2020 and trade in all commodities resumed.

The aggregate effects, particularly the decline in trade links during April and May 2020, show some variation that was likely caused by the restrictions imposed to curb the spread of the COVID-19 virus. However, exports and imports of agricultural and food products may have evolved differently at the country level. A distinct feature of trade for many African countries is a strong reliance on exports of a handful of primary agricultural commodities such as cocoa, coffee, fruits, and vegetables and imports of staples such as cereals. Examples in Box 2.1 illustrate that trade disruptions caused by the pandemic did not necessarily exert a strong impact on exports and imports of products that are crucial for export earnings and food security in some African countries.

<sup>6</sup> Changes in import links and export and import values follow largely similar patterns.

# FIGURE 2.8—PERCENTAGE CHANGE IN THE NUMBER OF EXPORT LINKS OF AGRICULTURAL AND FOOD PRODUCTS, AFRICA, FROM JANUARY TO DECEMBER 2020 COMPARED TO THE SAME MONTH AVERAGE IN 2018 AND 19, BY COMMODITY GROUP



#### BOX 2.1—COMMODITY-SPECIFIC DEVELOPMENTS IN CÔTE D'IVOIRE, ETHIOPIA, MADAGASCAR, AND NAMIBIA

Based on four selected countries, this box sheds light on trade developments of a few product categories that are important to generate export earnings in some African countries. It also looks at developments in cereals imports of the four countries.

The countries were selected from different subregions in Africa and represent different country income groups. Côte d'Ivoire is a lower-middle-income country located in western Africa; Ethiopia is a low-income country in eastern Africa; Madagascar is a low-income island country in eastern Africa; and Namibia is an upper-middle-income country located in southern Africa.

Côte d'Ivoire is the world's largest producer and exporter of cocoa beans. Cocoa exports account for more than 50 percent of Côte d'Ivoire's total agricultural exports and play an important role in the domestic economy of the country.1 Compared with trade in other commodities, African exports of cocoa and cocoa products were generally not strongly affected by the pandemic (Figure 2.8). Export values of cocoa and cocoa products from Côte d'Ivoire were lower between February and April 2020 than the average of the same months in 2018 and 2019. However, they recovered strongly in May and remained above average levels throughout the rest of the year 2020 (Figure 2.9). The number of export links remained almost stable.

Côte d'Ivoire is classified as a lower-middle-income food-deficit and net foodimporting developing country, with rice being the main staple imported. Overall cereals imports of Côte d'Ivoire were relatively volatile throughout 2020 (Figure 2.9). Both cereals import values and links dropped in February and May 2020 relative to previous years. In particular, the cereals import values ranged from a decline of more than 60 percent in February and a rise of more than 90 percent in November 2020 compared with the 2018 and 2019 average in each month.

In Ethiopia, coffee is the most important export commodity. Ethiopian exports in the slightly broader category of "coffee, tea, and spices" were not strongly affected by the pandemic and related containment measures. The number of trade links dropped in March and April but remained above average levels in the second half of 2020 (Figure 2.9). Export values were above average in the first half and slightly below average in the second half of 2020.

Vanilla makes up the largest share of exports from Madagascar. Vanilla exports appear to have been affected by the pandemic. Export values in the category "coffee, tea, and spices," which includes vanilla, were almost 40 percent below average from January to March 2020. In April 2020, they further declined, with a drop of almost 60 percent, compared with the 2018 and 2019 average (Figure 2.9). The number of export links were also below average and dropped again in April 2020. Both values and the number of links surged in May 2020. While values remained volatile throughout the rest of the year, the number of export links remained more stable above-average values.

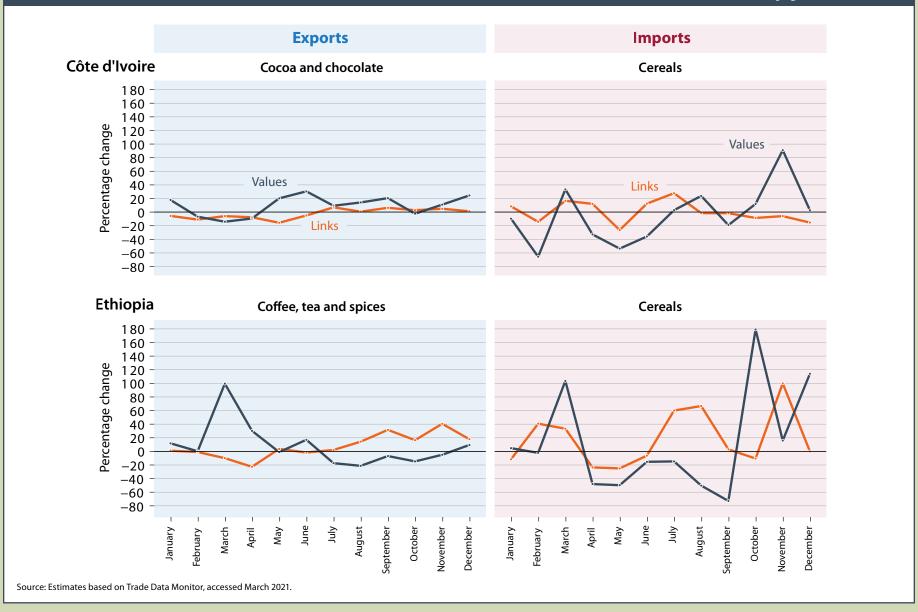
Both Ethiopia and Madagascar are low-income food-deficit and net foodimporting developing countries. They also depend on the import of cereals. Cereals imports in Ethiopia and Madagascar were volatile in 2020 without following a clear pattern, especially in value terms (Figure 2.9).

Namibia is an upper-middle-income net food-importing developing country. It exports mainly diamonds, gold, and copper. Its agricultural exports are dominated by fish and fishery products. Both the number of export links and export values of fish and fishery products declined in April 2020 compared with those of previous years (Figure 2.9). Export links were more than 20 percent lower in April 2020 than the average of 2018 and 2019; export values were 40 percent lower than they were in the same month in 2018 and 2019. After the drop in April, the number of export links and values remained subdued until November and increased to above average levels only in December 2020.

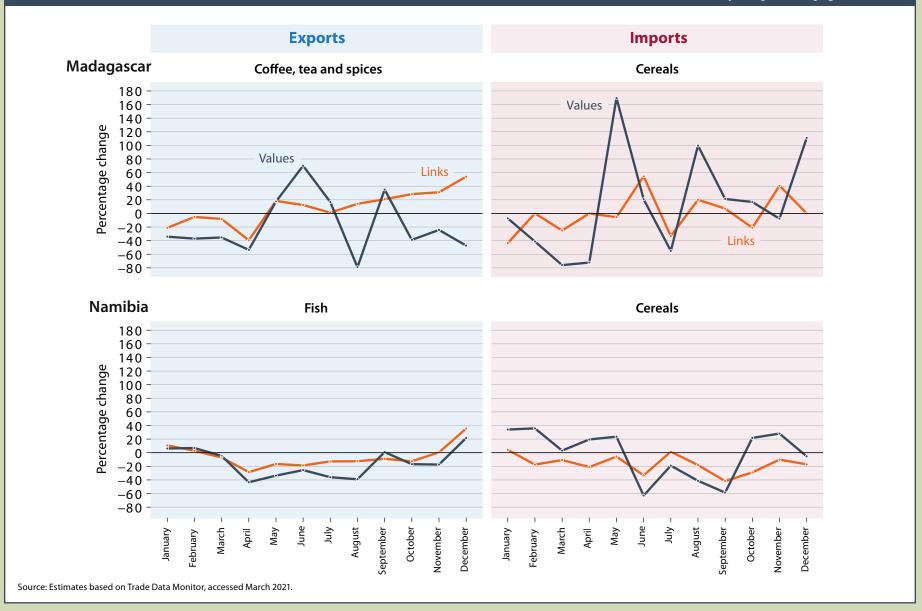
Namibia imports a wide range of products not clearly dominated by any specific category. For consistency, Figure 2.9 shows the development of Namibia's cereals imports in 2020 compared with average values in 2018 and 2019. While the number of import links tended to remain below average levels, cereals import values were first above average and then dropped to 60 percent below average levels in June 2020. Import values remained low through September and increased again in October 2020.

<sup>1</sup> General trade patterns based on export and import shares in this section were retrieved from The Atlas of Economic Complexity (https://atlas.cid.harvard.edu/).

# FIGURE 2.9—PERCENTAGE CHANGE IN EXPORT AND IMPORT VALUES AND LINKS, SELECTED COUNTRIES AND COMMODITIES, JANUARY TO DECEMBER 2020 COMPARED TO THE SAME MONTH AVERAGE IN 2018 AND 2019 (continued on next page)



## FIGURE 2.9—PERCENTAGE CHANGE IN EXPORT AND IMPORT VALUES AND LINKS, SELECTED COUNTRIES AND COMMODITIES, JANUARY TO DECEMBER 2020 COMPARED TO THE SAME MONTH AVERAGE IN 2018 AND 2019 (continued from previous page)



## Conclusion

The COVID-19 pandemic and the measures adopted by countries around the world to contain it affected the global economy, food and nutrition security, and trade in agricultural and food products. While trade in food and agriculture proved relatively resilient, African countries were hit hard by deteriorating macroeconomic conditions, increased unemployment, and declining incomes that exacerbated acute and chronic food insecurity.

In Africa, following a long trend of decreasing prevalence of undernourishment and a relatively unchanging number of undernourished people, new estimates showed the sharpest increase in hunger in a single year from 2019 to 2020. The prevalence of undernourishment increased from 2019 to 2020 in all subregions of Africa. Compared with 2019, 46 million more people in Africa were affected by hunger in 2020. The numbers show deep regional inequalities, with the largest number of undernourished people living in eastern Africa.

Projections of the number of undernourished people globally and at the regional level confirm the enormous challenge of eradicating hunger by 2030. A significant increase in hunger is forecast for Africa from 2020 to 2030, with an estimated 300 million people undernourished, on par with Asia. By 2030, Africa is projected to have the highest number of undernourished people even without considering the impact of the COVID-19 pandemic.

Beyond hunger, nearly 60 percent of the population of Africa—amounting to almost 800 million people—was affected by moderate or severe food insecurity in 2020. Nearly 26 percent (more than 345 million) faced severe food insecurity. A sharp increase from 2019 to 2020 is seen for the continent, as well as across all subregions.

Africa as a whole is off track for all four SDG 2.2 nutrition targets. All subregions have shown progress toward the stunting target since 2012, but not enough to achieve the 2030 target. For child wasting and overweight, and anemia in women, most subregions are making little progress. All subregions are off track to meet the 2025 WHA target to halt the rise in adult obesity by 2025.

Disruptions in African exports and imports of agricultural and food products remained limited to a short period in the first half of 2020. Whereas trade in staples was only minimally affected, exports and imports of some other product categories declined more sharply during that period. Such categories included beverages and fishery products, which were affected by changes in

consumption patterns and, partly, policy restrictions. Disruptions in value chains and dwindling demand contributed also to decreasing trade in non-food commodities such as cotton, cut flowers, and tobacco. In the second half of 2020, trade resumed and remained at or even exceeded prepandemic levels.

As the COVID-19 virus continues to mutate and vaccination rollout in many developing countries remains sluggish, economic recovery is uncertain. This situation will likely further aggravate existing problems in many African countries, hinder development, and deepen their dependence on external assistance for food. It has resulted in grim projections for meeting the SDG food and nutrition security targets in the next 10 years, given the enormous challenges.