# 5. Intra-African food trade

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This chapter, on the intra-African food trade, builds upon the synopsis presented in Chapter 2 that situated Africa's agriculture and food trade in Africa's overall trade. Intra-African exports are second only to those to the European Union (EU) in importance as a market for exports of food and agricultural commodities and are dominated by trade in food products, while involving less trade in agricultural commodities. In contrast, agricultural commodities comprise a large share of Africa's agricultural exports to countries in Asia, the Americas and elsewhere in the world. Intra-African trade also includes a large informal component in which trade in food products is correspondingly dominant.

This chapter further builds on Chapter 3 on production and consumption of the basic foods. Eight products that make up the 'basic foods' basket were identified: cassava, yams, rice, maize, wheat, meat, poultry and fish. While trade was not the focus of that chapter, the general underperformance of production of most of these foods in relation to global output provided insights into the underlying dynamics of Africa's status as a net food importer. A major implication is that intra-African trade, although dominated by trade in food products, remains relatively small. This is why, as we saw in Chapter 4, agricultural transformation is the overriding objective of the Comprehensive African Agriculture Development Programme (CAADP) and boosting the food component of intra-African trade is a specific Malabo Declaration commitment. The African Continental Free Trade Area (AfCFTA), which came into force in 2019, is an even more ambitious effort to increase trade flows, including on food, within the continent. Intra-African food trade and its composition, regional patterns and informal trade are the focus of this chapter. The likely impact of the AfCFTA is examined in Chapter 6.

Comprising three main sections, the chapter reviews the overall trends in intra-African food trade, followed by a focus on food trade at the regional level including the trade patterns of the basic foods and concluding with an outline of the main features of informal cross-border food trade.

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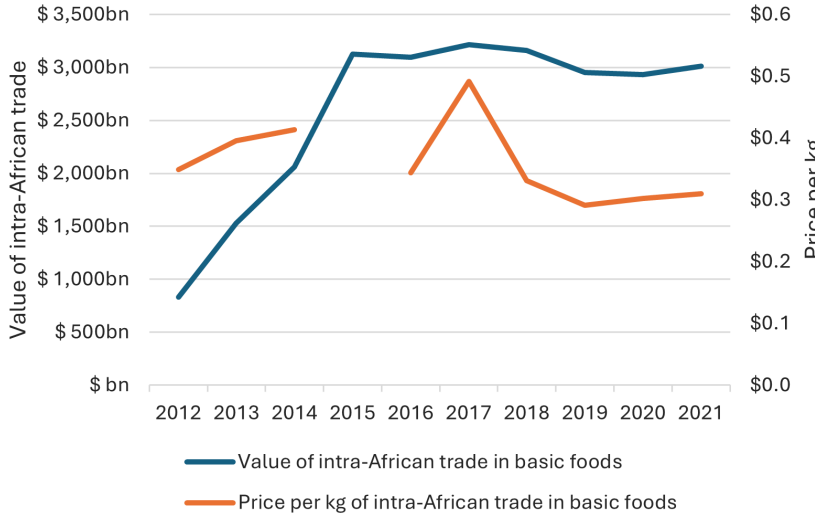
## 5.1 Trends in intra-African food trade

The value of intra-African imports of basic foods (and conversely exports) have grown over the last 10 years, albeit with fluctuations as shown in Figure 5.1. Growth in intra-African imports of basic food tails off after 2015. This appears to be only partly explained by trends in the average price per kg of basic food (either within individual foods or due to a shift to more expensive foods – see Figure 5.2). A rapid rise in demand for fish up to 2015 (as shown in Figure 5.6), which also tails off after 2015, could also explain the trend. This could be linked to a boom in prices of commodities that Africa exports that lasted from 2004 until 2014, which may have supported higher consumption of fish on the continent linked to higher incomes for some persons, with prices bottoming out in 2016 (Cust and Zeufack 2023, p.101; International Monetary Fund 1992).

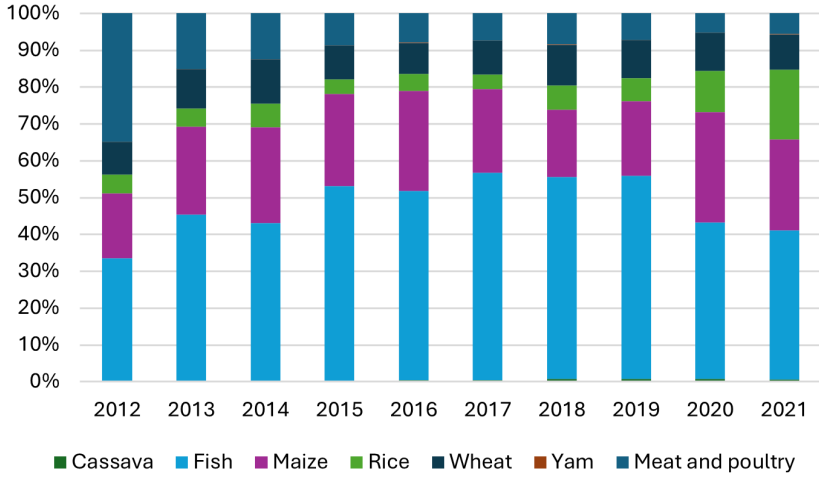
Cereals, vegetables and fruits, and fish and fish preparations are the major intra-Africa food imports (see Figure 5.3).[1] However, African countries import almost twice as many cereals from the rest of the world than they do from each other. Figure 5.4 provides a breakdown of intra-Africa cereal imports compared to cereal imports from the rest of the world.

**Figure 5.1: Intra-African imports of basic foods (US$ billion at 2022 prices), 2012–2021, and average price per kg of traded food (US$)**



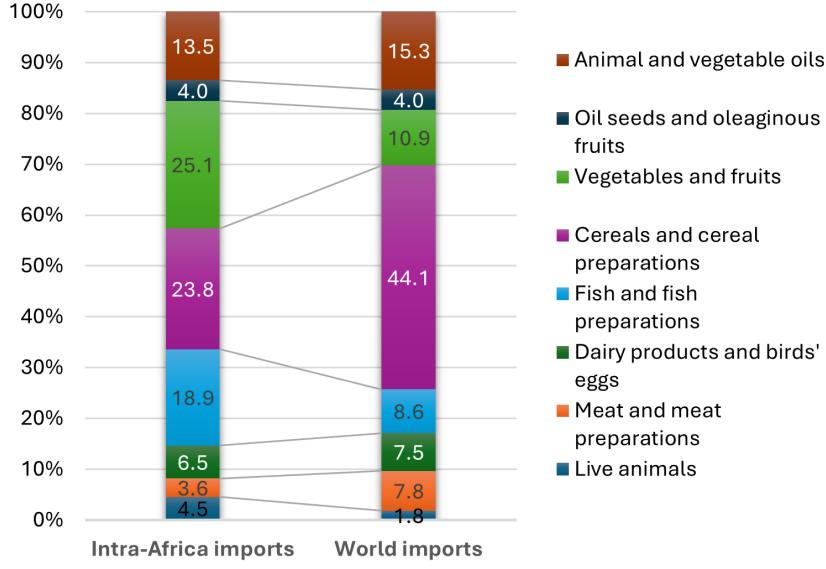

Source: Authors' calculations based on UN Comtrade and GDP deflator (base year varies by country) (2023). Owing to fewer countries reporting in 2022 than in 2021, we present only data up to 2021. Data on traded volumes is not available for all countries in 2015, which is why data on average prices is not available for that year.

**Figure 5.2: Share (in percentage) of basic foodstuffs in total intra-African trade in basic foods, by value, 2012–2021**



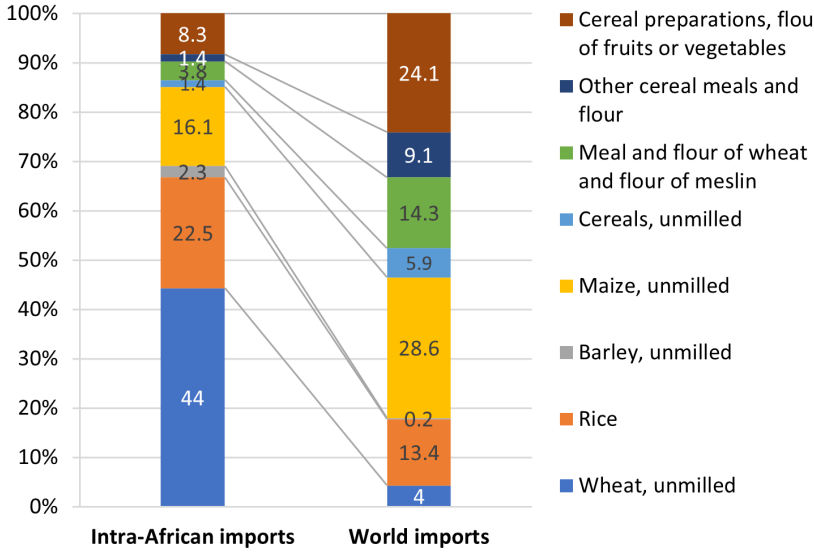

Source: Authors' calculations based on based on UN Comtrade.
Note: For each basic foodstuff shown in this chart, shares in intra-African basic food trade include the contribution of products derived from that basic food. The only exception is yams.

**Figure 5.3: Intra-African and world imports of food products by group (in percentage), 2017–2021 averages, by value**




Source: Authors' calculations using data from UNCTADSTAT.

**Figure 5.4: Shares (in percentage) of various cereals in Africa's overall imports of cereals, intra-Africa vs. total imports, 2017–2021 averages**



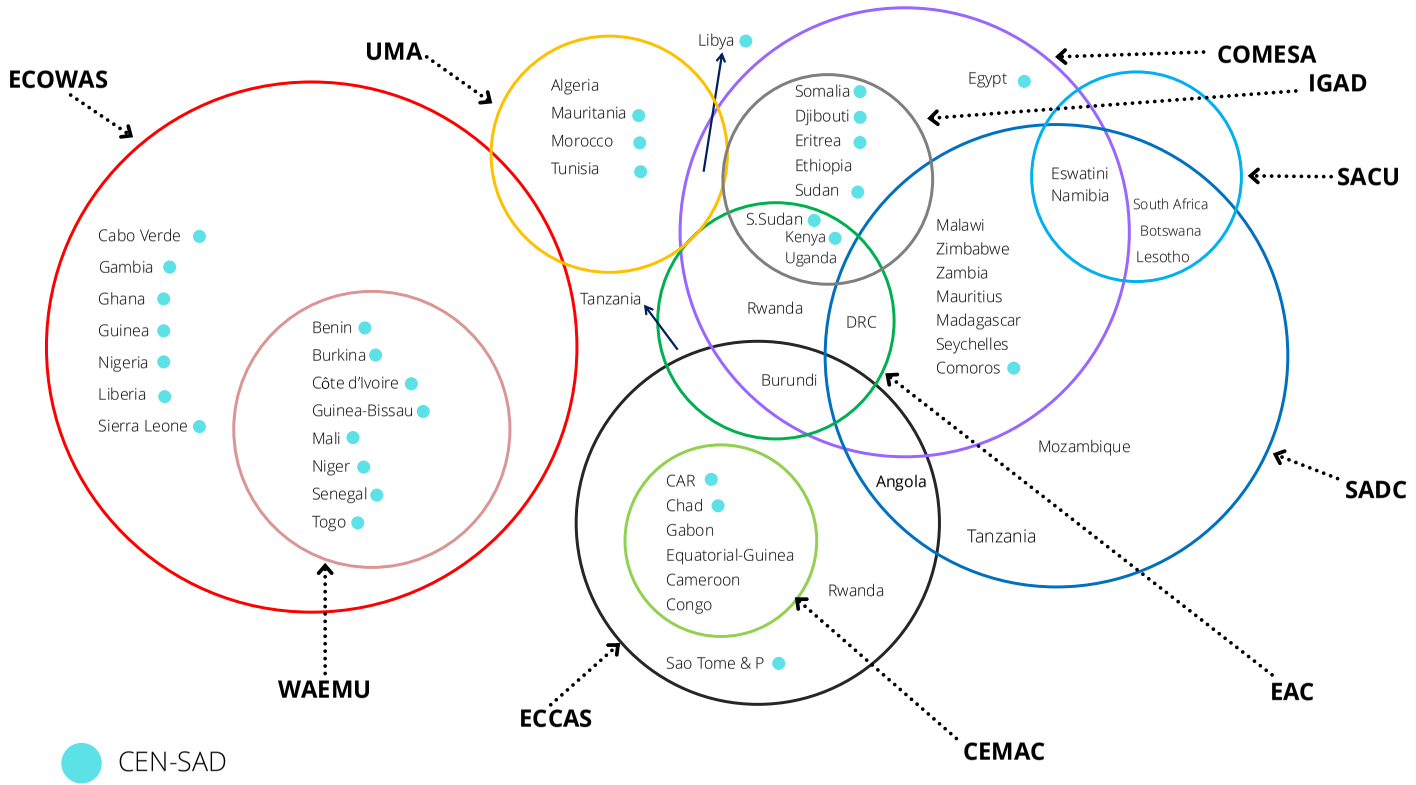

Source: Authors' calculations using data from UNCTADSTAT.

## 5.2 Regional food trade

Intra-African trade mainly occurs within the regional economic communities rather than between them. The AU recognises eight of these regional organisations as building blocks of economic integration on the continent. Four of the eight (the Common Market for Eastern and Southern African (COMESA), the East African Community (EAC), the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC)) have working preferential trade arrangements in the form of free trade areas and have active trade development programmes. Of these, COMESA, EAC and ECOWAS also have customs unions. The Arab Maghreb Union (AMU), the Intergovernmental Authority on Development (IGAD) and the Community of Sahel–Saharan States (CEN-SAD) do not have their own regional trade agreements, while the Economic Community of Central African States (ECCAS) does but it is not fully implemented (United Nations Economic Commission for Africa et al. 2019, p.11; Rettig, Kamau and Muluvi 2023). Figure 5.5 shows membership of the continent's regional economic communities.

As noted in Chapter 3, CAADP requires the regional economic communities (RECs) to have regional agriculture investment programmes. To this end, the RECs are also included in the mutual accountability framework for reporting on progress required by the Malabo Declaration. This recognised

**Figure 5.5: Membership of Africa's regional economic communities by country**




Source: MacLeod, Luke and Guepie (2023, p.41).
Notes: In 2024, Somalia became a member of EAC, while Burkina Faso, Mali and Niger announced that they were leaving ECOWAS and Sudan suspended its membership of IGAD. These changes are not shown in this graphic.

**Table 5.1: Intra-REC export shares of all goods and of basic foods, by value, period averages (%)**

| REC | All goods | | Basic food | |
|---|---|---|---|---|
| | Average 2010–2015 | Average 2016–2021 | Average 2010–2015 | Average 2016–2021 |
| AMU | 3.3 | 3.3 | 8.2 | 5.9 |
| CEN-SAD | 6.5 | 7.4 | 17.5 | 14.0 |
| COMESA | 8.3 | 10.3 | 19.6 | 20.4 |
| EAC | 18.2 | 18.0 | 23.4 | 31.6 |
| ECCAS | 2.3 | 2.5 | 29.6 | 30.6 |
| ECOWAS | 8.0 | 9.1 | 25.5 | 20.0 |
| IGAD | 10.9 | 19.6 | 12.9 | 19.7 |
| SADC | 19.1 | 21.4 | 38.6 | 33.3 |

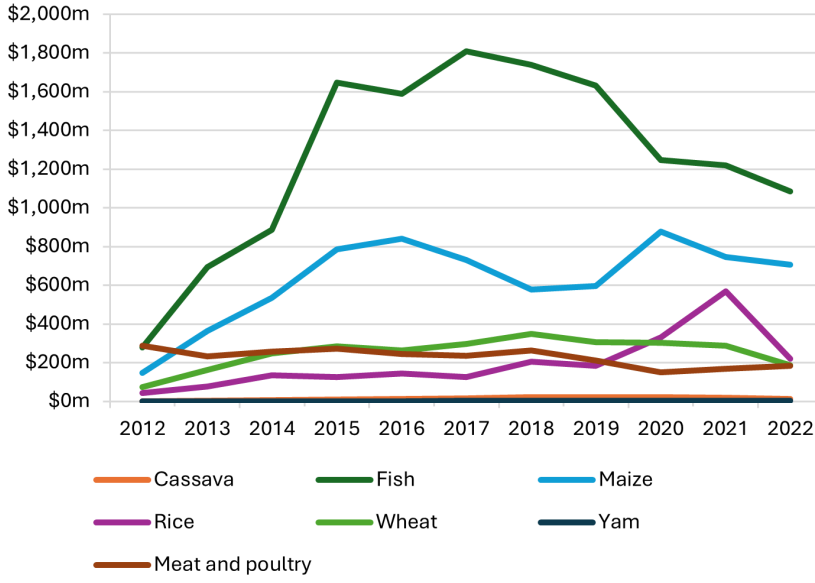
Source: Authors' calculations using data from UNCTADSTAT.
Note: Since most African countries are members of more than one REC, the same trade flows will be counted in the intra-regional trade of several RECs.

the role that the RECs are expected to play in the continental effort to build a thriving intra-African food market by designing and implementing programmes aimed at boosting agricultural production, supporting research and catalysing investment into a regional food industry (Pasco 2019).

The development plans of RECs such as ECOWAS, SADC and EAC include regional initiatives on sustainable agriculture (MacLeod, Luke and Guepie 2023). RECs such as COMESA and EAC have pioneered simplified trade regimes with minimal customs and border checks to enable smallholder farmers to integrate into regional value chains through cross-border trade. In spite of this, the African Union's most recent review under CAADP's mutual accountability mechanism found that none of Africa's subregions was on track to meet its commitments under the Malabo Declaration (African Union n.d.).

Table 5.1 presents averages of intra-REC export (and conversely imports) shares of all goods and of the basic food products for two periods, 2010–2015 and 2016–2021. Trade flows in both categories are relatively high in SADC and EAC. ECCAS and AMU have the lowest trade flows in all goods but ECCAS performs strongly in trade in basic foods. Indeed, all the RECs have higher trade flows in basic goods than they do in all goods. It should further be noted that the higher trade flows in basic foods were maintained during the Covid-19 pandemic in most of the RECs. This is in line with the initiatives taken at country and regional levels to introduce and harmonise 'safe trade' measures to facilitate trade and goods transit (MacLeod and Guepie 2023). It is also known that 'groupage' arrangements emerged during the pandemic, whereby traders banded together to transport larger consignments of goods across borders (McCartan-Demie and MacLeod 2023).

**Figure 5.6: Intra-African imports of basic food products (US$ million at 2022 prices), 2012–2022**




Source: Author's calculations based on United Nations (n.d.).
Notes: Adjustment to constant prices is based on World Bank (2023).

## Cassava

Each of the basic foods tends to be traded within Africa in its own way. The vast majority of trade in cassava takes place in Eastern Africa,[2] with the sub-region accounting for 90 per cent of intra-African imports of that crop. This is somewhat surprising given that the continent's largest producers are in West and Central Africa, as shown in Chapter 3. This may reflect the fact these producers find it easier to export to North America and Europe, given their location on the Atlantic Ocean.[3] Indeed, in 2022, over 75 per cent of cassava exports by value from the continent's largest producers (Democratic Republic of the Congo, Ghana and Nigeria) went to the EU and North America, with only 11 per cent being exported to Africa.[4]

Rwanda alone imported around 80 per cent by value (but 53 per cent by volume) of total intra-African trade in cassava, while Tanzania was the largest intra-African exporter (with around 90 per cent of the total). Exports from the latter to the former accounted for 40 per cent of the total intra-African trade in cassava by value in 2022.[5]

Rwanda uses cassava primarily for food. Although Rwanda consumes far less cassava than many other African countries, as of 2021 the continent's main consumers tended to meet their needs through domestic production, importing only small amounts (whether from Africa or outside the continent)

(author's analysis of FAOSTAT 2023b). Aside from Eastern Africa, there is also significant intra-African trade in cassava in several countries in Central, Western and Southern Africa, but very little in Northern Africa (which accounts for just 0.2 per cent of intra-African imports).[6] This is not surprising since cassava hardly features in the North African diet.

## Fish

Intra-African trade in fish is more evenly split. Western Africa accounts for 47 per cent of intra-African fish imports (of which Côte d'Ivoire alone accounts for almost three-quarters), with Eastern Africa accounting for 14 per cent, Central Africa for 18 per cent, Southern Africa for 9 per cent and Northern Africa for 11 per cent (all figures are by value). Three of the four countries that import the most fish from the rest of Africa (Côte d'Ivoire, Algeria and South Africa) are coastal but have relatively high per capita incomes. Fish trade in these cases may be driven by an ability to afford a higher level of fish in the diet. Also, among the countries importing the most fish from the rest of Africa (by value) are Zambia (seventh), which is landlocked, and Democratic Republic of the Congo (fifth), which is almost landlocked (authors' analysis of UNCTAD 2023a).

Western Africa exports more fish than any other subregion on the continent (accounting for 54 per cent of exports), and around three-quarters of its intra-African fish imports come from within the region (authors' analysis of United Nations n.d. and UNCTAD 2023a). This is followed by Southern Africa (25 per cent), Northern Africa (14 per cent), Eastern Africa (5 per cent) and Central Africa (2 per cent). By far the largest intra-African exporters of fish are Mauritania, Namibia and Senegal, all of which are located on the Atlantic Ocean, which suggests strong demand for its fish varieties (UNCTAD 2023a). Despite this, most of the fish that Africa imports comes from outside the continent, and a substantial share of the continent's exports go to non-African countries. For example, Spain was the leading importer of African fish in 2022, primarily from its neighbour Morocco but also from other African countries (Chatham House 2021).

## Maize

Intra-African trade in maize is concentrated in Eastern and Southern Africa, which account for 60 per cent and 29 per cent of intra-African imports, respectively. They also account for 49 per cent and 47 per cent of intra-African exports of this product, respectively. As these figures imply, the trade occurs between countries of Eastern and Southern Africa trading with one another; only a small share involves either imports from or exports to the other subregions (authors' analysis of United Nations n.d.).

As with cassava, some of the largest producers of maize (Nigeria and Egypt) are found in other subregions, even though Eastern and Southern Africa are the location of most of the continent's trade in this product. But, unlike the case of cassava, the apparent discrepancy (Egypt and Nigeria are leading producers but small players in the intra-African market) is not because these countries export their product outside Africa – it is because they use it for their domestic markets (authors' analysis of United Nations n.d. and FAOSTAT 2023b). Indeed, in 2021, Egypt exported only 2 per cent of its total maize production, while Nigeria exported less than 1 per cent (authors' analysis of FAOSTAT 2023b). Overall, Africa still has a deficit in maize (authors' analysis of FAOSTAT 2023b). As was seen in Chapter 2, most of the major partners for African countries' food imports and exports are outside the continent. Western Africa imports a substantial share of its maize from Latin America, while South Africa (which accounts for most of the continent's exports by itself) sends most of its maize exports to Asia and Italy (Chatham House 2021).

## Meat and poultry

Intra-African trade in meat and poultry also occurs predominantly within and between Eastern and Southern Africa. In 2022, Southern Africa accounted for 44 per cent of intra-African imports and Eastern Africa accounted for 28 per cent by value. Southern Africa accounts for around two-thirds of intra-African exports of meat and poultry, with South Africa by itself exporting around half of the continent's meat and poultry by value. In neither of these two subregions does a single country dominate demand for imports. It is unclear whether this is due to higher volumes of meat being traded in Southern Africa, or higher values, as information on *volumes* of intra-African trade in meat and poultry is not available (authors' analysis of United Nations n.d.). Moreover, Southern Africa's exports are not predominantly driven by bovine meat or processed meat (which can be more expensive than other meats) (authors' analysis of UNCTAD 2023a).

Eastern Africa actually exports more meat by value than does Southern Africa, but around 80 per cent of its exports by value go to Western Asia, which may be explained by its geographical proximity and high demand from higher-income countries in that region (authors' analysis of UNCTAD 2023a). At the same time, most of Africa's meat imports are sourced from outside the continent (authors' analysis of Chatham House 2021). Africa has a deficit in both meat and poultry products (FAOSTAT 2023b).

## Rice

Eastern Africa also dominates intra-African trade in rice. As of 2022, the subregion imported 56 per cent of total intra-African rice imports by value.

Almost nine-tenths of this rice came from within the subregion (rather from the rest of Africa). No single country dominates this share, though Uganda accounts for more than a third of the subregion's intra-African rice imports by itself. Central and Western Africa each accounted for 13 per cent of intra-African rice imports, while Southern Africa accounted for 16 per cent and Northern Africa less than 1 per cent. This is not because Eastern Africa imports the most rice. Western Africa imports over three times the level that Eastern Africa does, but it sources most of this rice from Asia, as do all of Africa's subregions (UNCTAD 2023a). Africa's exports of rice are overwhelmingly to other African countries, although some of these same countries also import rice from outside the continent, suggesting that some re-export but also that there could be potential to increase intra-African exports of rice at the expense of imports from the rest of the world (authors' analysis of Chatham House 2021).

## Wheat

Intra-African imports of wheat are relatively evenly split between Southern Africa (31 per cent), Eastern Africa (22 per cent) and Northern and Western Africa (21 per cent each). Central Africa accounts for only 5 per cent of these imports. In Southern and Western Africa, most of these imports come from within the same subregion, but for the continent's other subregions this is not the case (though for Northern Africa significant trade flows may be missing from the UN Comtrade database for 2021 and 2022 as there is no data for Libya and Sudan, which are significant intra-African importers of wheat).[7] Central Africa's marginal role in intra-African trade may be partly explained by the fact that the region uses the least wheat (and products derived therefrom) than of any of the continent's other subregions. As of 2021, that subregion had the lowest domestic food supply of wheat and wheat products per capita basis of any subregion (author's analysis of FAOSTAT 2023b). Northern Africa's modest share in intra-African trade in wheat may seem surprising given that it produces more wheat and wheat products than any other region in Africa, accounting for 70 per cent of the continent's production in 2021. This could be because much of North Africa's wheat exports are sold outside the region, largely to Western Asia. Overall, most wheat that is traded in Africa comes from the rest of the world, even though African countries also export wheat outside the continent (Chatham House 2021). This suggests that reducing intra-African trade barriers could allow African producers to capture more business from the continental market (and costs of wheat may fall for producers and consumers if the costs of trading wheat within the continent can be brought below those of trading it with the rest of the world). Indeed, research published in 2022 suggests that reductions in intra-African trade costs have historically driven substantial increases in intra-African trade (Olney 2022). In 2022, African Development Bank

launched an initiative aimed at boosting the continent's production of wheat, rice and other crops. This included plans to improve transport links between African countries, cutting the cost of trading (Ibukun 2022).

### Yams

Intra-African imports in yams were dominated in 2022 by Southern Africa (accounting for around 73 per cent) and Western Africa (20 per cent).[8] Western Africa exports almost 98 per cent of the yams that are traded in the continent (and also accounts for an estimated 97 per cent of the continent's yam production) (authors' analysis of FAOSTAT 2023a; United Nations n.d.). This reflects the fact that Western Africa has much higher domestic food supply of yams per capita than any other subregion (75 kg per year, compared to 7 kg in central Africa and less than 1 kg in all other subregions) (FAOSTAT 2023b). Southern Africa accounts for a significant share of intra-African trade in yams. But intra-African trade in yams accounted for less than 0.02 per cent of the continent's production by volume in 2022 and reported world trade accounted for less than 0.2 per cent of the continent's production in 2021 (authors' analysis of FAOSTAT 2023a; United Nations n.d.). Yams produced in Africa are therefore overwhelmingly consumed within the country of production rather than being traded within the continent or internationally. Yam imports into Southern Africa may be linked to the crop's use for traditional healing in that subregion (Beinart 2020).

For many of these products, aside from fish, intra-African trade occurs between countries of the same subregion, often Eastern and Southern Africa and to a lesser extent Western Africa. This may reflect the fact that there are functioning regional free trade areas within these subregions. The fact that Eastern and Southern Africa dominate trade in most of these products (ahead of Western Africa) suggests that these RECs may be more effective in promoting intra-regional trade in these foods. This aligns with research findings vis-à-vis general trade (Kassa and Sawadogo 2021).

## 5.3 Informal cross-border food trade

Informal cross-border trade (ICBT) is ubiquitous in Africa but defining it has proved to be elusive. The term 'informal' often evokes an allusion to illegal activities. In practice, however, informal cross-border traders use both formal and informal routes. In the latter case, the intent may not necessarily be to evade customs control or border taxes but rather to avoid cumbersome border procedures, especially when the value of the consignment is small. High and arbitrary charges levied at borders, social marginalisation from formalisation efforts and closure of official borders are some reasons why cross-border traders use informal routes (Nakayama, 2022; Nkendah, 2020; Wiseman, 2022).

As previously noted, some RECs have adopted simplified trade regimes for small consignments.

Estimates of the extent of ICBT vary according to the methodology that is used but suggest that it accounts for a significant proportion of intra-African trade (Bouët, Pace and Glauber 2018; Walkenhorst 2020; Gaarder, Luke and Sommer 2021). Gaarder, Luke and Sommer (2021) suggest that the average value of ICBT lies between US$10.4 billion and US$24.9 billion, representing 7–16 per cent of total intra-African trade or 30–72 per cent of formal trade between neighbouring countries. This is comparable with estimates for SADC and for COMESA, where ICBT was assessed to be up to 40 per cent of recorded intra-REC trade (Afrika and Ajumbo 2012; Nshimbi and Moyo 2017).

The Famine Early Warning Systems Network (FEWS NET), an initiative established by the US Agency for International Development, collects data on informal cross-border trade at selected border posts across Eastern, Northern and Southern Africa.[9] Analysing this data for the eight basic food products discussed in this book suggests that informal trade (by volume) could account for a significant share of total trade, depending on the product, as shown in Table 5.2 below.

In relation to ICBT food composition, the World Bank (Walkenhorst 2020) found that for Uganda and Rwanda nine of the top 10 ICBT products are food products. Engel and Jouanjean (2013, p.13) found cereals, tubers like cassava and yam, fruits and vegetables, and livestock products to be widely traded in West Africa.

Table 5.3 shows that, for several food products, small-scale cross-border trade is the main channel through which these goods are imported and exported. These figures may be higher for Uganda and Rwanda than for some other countries since both are landlocked, eliminating seaborne trade, which is more likely to be formal as it must pass through a port.

With food products accounting for the largest share of ICBT, it remains an important source of affordable food for many households, not only in rural

**Table 5.2: Lower-bound estimated shares of informal cross-border trade in total trade between 14 countries in Eastern, Northern and Southern Africa for selected food products, 2022**

| | Food product | | | | | |
|---|---|---|---|---|---|---|
| | Cassava and derivative products | Fish | Maize and derivative products | Rice and derivative products | Wheat and derivative products | Yams |
| Share of informal trade | 4% | 48% | 21% | 18% | 1% | 1% |

Source: Authors' calculations based on Chatham House (2021); FEWS NET Famine Early Warning Systems Network (n.d.); United Nations (n.d.).

**Table 5.3: Shares of small-scale cross-border trade in total trade, food products where the former accounts for at least 50 per cent of the latter, 2017**

| Uganda imports | Uganda exports | Rwanda imports | Rwanda exports |
|---|---|---|---|
| Bananas, 100% | Dried fish, 98% | Preserved fish, 100% | Swine meat, 100% |
| Wheat flour, 91% | Live bovine animals, 92% | Coffee, 99% | Bovine meat, 100% |
| Cassava, 89% | | Bananas, 94% | Live poultry, 100% |
| Vegetable oil, 89% | | Beer, 86% | Dried fish, 97% |
| Fruit juice, 85% | | Potatoes, 55% | Milk and cream, 94% |
| Dried legumes, 69% | | Dried leguminous. vegetables, 54% | Prepared fish, 92% |
| Leguminous vegetables, 69% | | Cereal flour, 50% | Swine meat, 100% |
| Dried fish, 66% | | | Sugar, 64% |
| Onion and garlic, 60% | | | Cereal flour, 64% |

Source: Adapted from Walkenhorst (2020, p.12).

areas (Zarrilli and Linoci 2020) but also across African cities (Skinner and Watson 2020, p.127).

## Summary

The role of intra-African trade in meeting basic food supply varies from commodity to commodity. In some cases (fish), it may perform well, playing an indispensable role in transferring food from countries that are sizeable exporters, perhaps due to geographical advantages, to others that may not be able to meet domestic demand, either due to being landlocked or having higher-income economies where higher wages and stronger currencies may mean that it is more affordable to import fish from other countries across the continent. For commodities like yams and for some of Africa's largest producers of maize, intra-African trade and indeed international trade may be of marginal importance, and needs are met through domestic supply. This appears to be true even when data on informal trade is considered. While African demand for cassava is largely met through domestic production, Africa's supply of this crop exceeds its demand, and the balance is exported outside the continent (author's analysis of FAOSTAT 2023b; Silva et al. 2023; Yuan et al. 2024). For wheat, maize, meat and poultry, substantial shares of Africa's imports come from outside the continent, while at the same time exports go in the other direction, suggesting that a reduction in costs of intra-African

trade could allow producers to capture greater market share. Even with fish, where intra-African trade has an important role, Africa imports more from the rest of the world than within the continent, while at the same time exporting much of its catch to non-African countries, although it is not known how much of what is recorded as African fish exports is via illegal fishing (see Chapter 9).

In addition to reducing intra-African trade costs and boosting production, a shift towards crops in which Africa has high potential could also help the continent to close its food trade deficit. For example, cassava is one of the most productive crops in the world (Danino 2023). African countries have the opportunity to significantly increase their production of yams, another crop in which the continent has (almost) no trade deficit (Owusu Danquah et al. 2022; FAOSTAT 2023b). Aquaculture has the potential to reduce Africa's fish imports (Eyayu, Getahun and Keyombe 2023; Ragasa et al. 2022), along with better controls over coastal and offshore fishing.

## Notes

[1] Based on averages for the period 2017–2021. Data is from UNCTADSTAT.

[2] In this chapter, we use regional and subregional classifications following the UN Statistics Division's classification (UNSTATS n.d.).

[3] Interestingly, the Organisation for Economic Co-operation and Development (OECD) estimates that the costs of insurance and freight for Ghana, Nigeria and Democratic Republic of the Congo of trading cassava and other similar products with the United States and Europe are similar to the cost of trading these products within Africa. This may suggest that there are other reasons for these producers to prefer the European and North American markets. These could be the difficulty in using trade preferences within Africa (Author's analysis based on OECD n.d.). On the challenges of using preferences, see UNCTAD (2023b).

[4] Authors' analysis of United Nations (n.d.). Accessed via World Bank World Integrated Trade Solution.

[5] Authors' analysis of United Nations (n.d.). Accessed via World Bank World Integrated Trade Solution.

[6] Authors' analysis of United Nations (n.d.). Accessed via World Bank World Integrated Trade Solution.

[7] While the overall picture of intra-African trade in wheat being dominated by Eastern, Northern, Southern and Western Africa had been the case already in 2021, the specific shares changed and Intra-African trade in wheat and wheat products declined around one-third from 2021 to 2022. The fact that fewer countries reported trade data for 2022 accounts only for three percentage points of this decline. A decline in Africa's total

wheat production accounts for around 10 percentage points. A possible explanation for the remaining decline is that Africa's wheat exports to the rest of the world increased as other countries sought wheat from alternative sources as Russia's invasion of Ukraine disrupted supplies from those countries, meaning that there was less wheat to trade within the continent. For example, this appears to have affected Sudan's wheat exports but political instability in that country could also be part of the explanation (Authors' analysis of United Nations n.d.; Chatham House 2021).

[8] In 2021, Central Africa accounted for 7 per cent of intra-African yam imports. Data for Cameroon and Gabon, the two countries in Central Africa with the highest intra-African yam imports in 2021, was missing in 2022, so these calculations add in figures for these two countries based on 2021 import levels.

[9] The border posts are in Djibouti, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Somalia, South Africa, South Sudan, Sudan, United Republic of Tanzania, Uganda, Zambia and Zimbabwe.

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