

**FAOSTAT ANALYTICAL BRIEF 44** 

# Trade of agricultural commodities

2000-2020

## **HIGHLIGHTS**

- → The value\* of global agricultural exports in 2020 is 3.7 times higher in nominal terms than it was in 2000, while the share of agriculture in total merchandise trade value went from 6.3 percent in 2000 to 8.5 percent in 2020.
- → Fruit and vegetables accounted for 22 percent of the total value of food (excluding fish) exports in 2020, followed by cereals and preparations (16 percent) and meat and meat preparations (12 percent).
- → The Americas is the largest net food exporter, and Asia is the largest net food importer. Europe became a net food exporter in 2013.
- → Among the main traded commodities, the top three exporters account for at least 30 percent of the global export value. In most cases, the largest exporters are also the main producing countries.
- → China ranks among the main importers of cereals and meat, due to the size of its domestic market.

## **FAOSTAT CROPS AND LIVESTOCK TRADE**

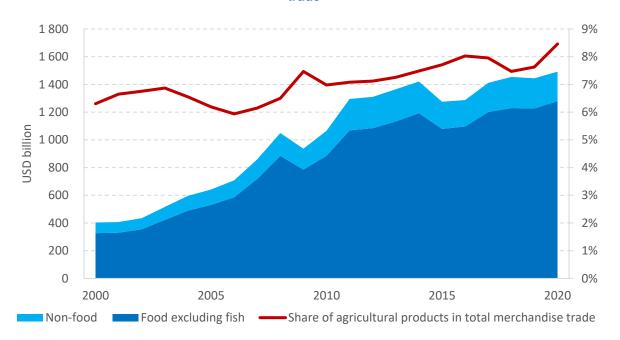
# **FOOD (EXCLUDING FISH)**

The monetary value of global agricultural exports in 2020 (USD 1 492 billion) is 3.7 times higher in nominal terms than it was in 2000 (Figure 1). Food (excluding fish) accounted for most of this, and its share in the total agricultural trade increased during the same period, from 81 percent in 2000 (USD 327 billion) to 86 percent (USD 1 279 billion). Trends in the export value mirror to a large extent the international prices, which surged in 2007/2008 during the food security crisis that saw in particular the price of cereals reach record levels, and remained high between 2011 and 2014. The share of agricultural products in total merchandise trade value went from 6.3 percent in 2000 to 8.5 percent in 2020. Peaks in 2009 (7.6 percent) and 2020 in particular are due, respectively, to the 2008 financial crisis and the COVID-19 pandemic, which affected global trade and resulted in a decrease of the overall value of merchandise traded due to reduced flows or price variations.

Fruit and vegetables accounted for 22 percent of the total value of food (excluding fish) exports in 2020, followed by cereals and preparations (16 percent) and meat and meat preparations (12 percent) (Figure 2). The United States of America was the largest exporter of food (excluding fish) in 2020 with USD 124 billion (10 percent of the total), followed by the Netherlands (USD 79 billion, or 6 percent) and Brazil (USD 73 billion, or 6 percent).

<sup>\*</sup> All values are measured in current prices.

Figure 1: Value of world agricultural products exports by group and share in total merchandise trade



**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. <a href="https://www.fao.org/faostat/en/#data/TCL">https://www.fao.org/faostat/en/#data/TCL</a>

1 400 1 200 1 000 JSD billion 800 600 400 200 0 2000 2005 2010 2015 2020 ■ Fruit and vegetables Cereals and preparations ■ Meat and meat preparations

Figure 2: Value of global food (excluding fish) exports by group

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

■ Fats and oils (excluding butter)

■ Other food

Dairy products and eggs

Beverages

Sugar and honey

Two regions stand out in terms of net trade (defined as the nominal value of exports minus that of imports): the Americas as the largest net exporter with a USD 133 billion surplus in 2020, and Asia as the largest net importer, posting a USD 214 billion deficit in 2020 (Figure 3). Importantly, these values exclude intra-regional trade: for example, the values for Asia include only Asian countries' imports from and exports to countries outside the region. Oceania remained a net exporter of food during the 2000–2020 period and Africa a net importer. While the Americas' and Oceania's surplus, as well as Africa's and Asia's deficit increased between 2000 and 2020, Europe, a net importer of food (excluding fish) during most of the period, became a net exporter in 2013 and overtook Oceania in 2020. The largest net exporting countries in 2020 are Brazil (+USD 64 billion), Spain (+USD 25 billion) and Argentina (+USD 21 billion). Brazil's top export is soybeans (39 percent of the country's total food (excluding fish) export value), Spain's is pig meat (7 percent) and Argentina's is maize (25 percent). The largest net importing countries in 2020 are China (-USD 117 billion), Japan (-USD 39 billion) and the United Kingdom of Great Britain and Northern Ireland (-USD 31 billion). China's top import is soybeans (24 percent of the country's total food (excluding fish) import value), Japan's is pork meat (10 percent) and the United Kingdom's is wine (8 percent).

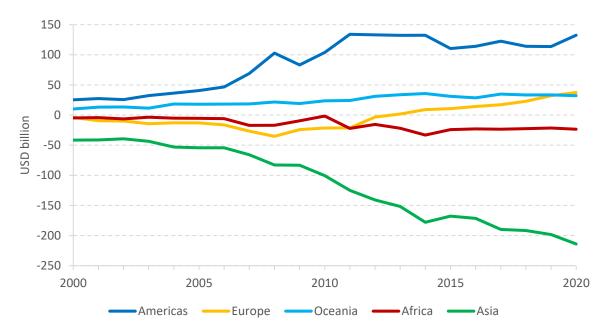


Figure 3: Food (excluding fish) net trade by region

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

Note: Excludes intra-regional trade.

Trade flows vary considerably between regions and commodity groups (Figure 4). The largest individual flows in 2020 are observed for meat and meat preparations (Asia's imports, at USD 61 billion), and cereals and preparations (Europe's exports, at USD 43 billion). Asia was the largest importer for cereals and preparations, dairy products and eggs, fats and oils, meat and meat preparations, and sugar and honey; for beverages, the largest importer was the Americas, and for fruit and vegetables it was Europe. The largest exporter of beverages, cereals and preparations, and dairy and eggs was Europe; the Americas led the exports of fruit and vegetables, meat and meat

preparations, and sugar and honey, while Asia was the largest exporter of fats and oils. The Americas, Europe and Oceania were net exporters of all commodity groups but one. Except for Oceania, that particular sector showed significant net imports: -USD 16 billion for beverages in the case of the Americas, and -USD 37 billion for fruit and vegetables in the case of Europe. Asia is a net importer of all commodity groups, and Africa is a net exporter of only fruit and vegetables.

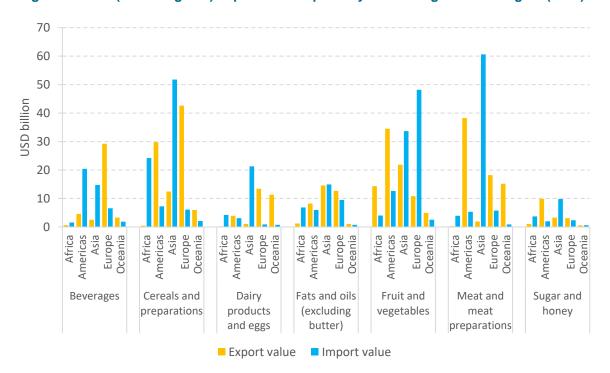


Figure 4: Food (excluding fish) imports and exports by main categories and region (2020)

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

Note: Excludes intra-regional trade.

As seen in Figure 2, fruit and vegetables were the commodity group with the largest export value in 2020: USD 283 billion, up 318 percent from USD 68 billion in 2020. The top four items (aggregated to the extent possible by their base product) are tomato products (USD 15 billion, or 5.3 percent of the fruit and vegetables total), bananas (USD 13 billion, or 4.7 percent), potatoes (USD 11 billion, or 4 percent) and grapes (USD 11 billion, or 3.9 percent) (Figure 5). The relatively low individual shares are in part due to the large number of products (more than 100) included in the fruit and vegetables aggregate. All four items grew by 200–260 percent between 2000 and 2020, which is equivalent to around 6–6.5 percent on average per year. In 2020, the top three exporters accounted for a significant share of the global exports: 46 percent for tomato products, 47 percent for bananas, 52 percent for potatoes and 35 percent for grapes and raisins. In particular, Ecuador alone represented 27 percent of the world exports of bananas. The combined share of the top three importers tends to be lower (between 24 and 42 percent), and the United States of America is the leading importer of the main fruit and vegetables products. With the exception of China for grapes, the largest producers of a product are not necessarily the largest exporters, due to the size of their domestic markets.

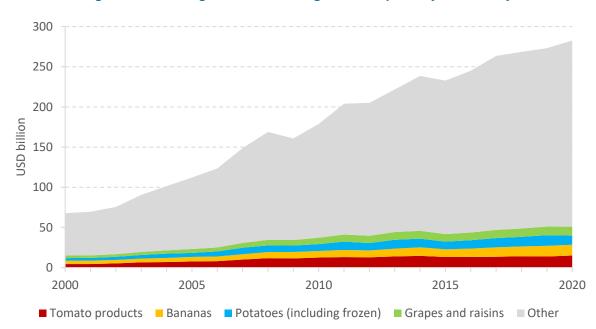


Figure 5: Value of global fruit and vegetables exports by commodity

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

Note: Tomato products include tomatoes; tomatoes, paste; tomatoes, peeled; and juice, tomato.

100% 90% 80% Other Other Other Other 70% Other Other Other Other 60% 50% Canada Costa Rica United 40% Netherlands Kingdom United States of America hilippines Netherlands 30% Belgium Russian Germany Italy **Federation** United China 20% Belgium Chile Kingdom United Belgium **Ecuador** United United 10% States of United States of States of States of America America 0% Export value Import value Export value Import value Export value Import value Export value Import value Tomato products Potatoes (including frozen) Grapes and raisins Bananas

Figure 6: Global trade of main fruit and vegetables, main importers and exporters (2020)

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. <a href="https://www.fao.org/faostat/en/#data/TCL">https://www.fao.org/faostat/en/#data/TCL</a>

The export value of cereals went up 253 percent between 2000 and 2020, from USD 34 billion to USD 119 billion (Figure 7), while the export quantities went up 88 percent over the same period. The overall value surged in 2007/2008 during the food security crisis that saw the price of cereals reach record levels (especially rice and wheat), and fluctuated around USD 115-120 billion between 2011 and 2014 as prices remained high during that period. Three crops accounted for 90 percent of the total cereals export value in 2020: wheat (38 percent, at USD 45 billion), maize (31 percent, at USD 37 billion) and rice (22 percent, at USD 26 billion). The relative shares of these crops in the total did not change much compared to 2000. For each of the main traded cereals in 2020, the main exporters accounted for significant shares of the total export value: 46 percent for wheat, 58 percent for maize and 56 percent for rice. The largest exporter of wheat in 2020 was the Russian Federation (18 percent of the global value); for maize it was the United States of America (26 percent of the global value), and India ranked first for rice (31 percent of the global value). The top three importers accounted for 16 to 24 percent of the total imports for these commodities. The main producers tend to feature among the main exporters, especially for wheat and maize. China stands out as a major producing country focusing on its domestic market since its exports are fairly small compared to its production; it was also the largest importer of rice in 2020.

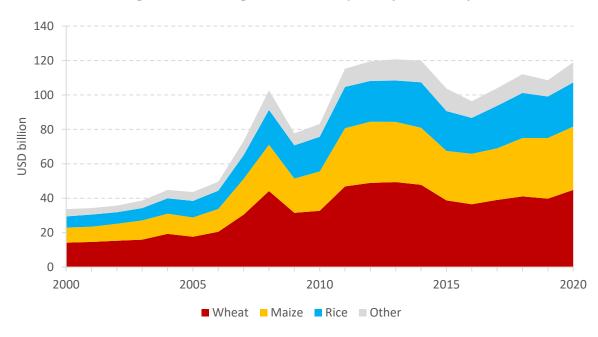


Figure 7: Value of global cereals exports by commodity

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

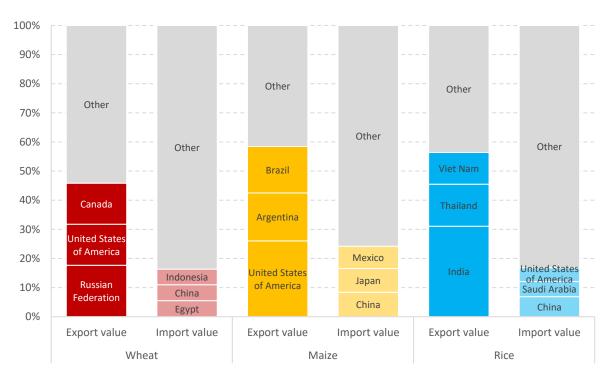


Figure 8: Global trade of main cereals, main importers and exporters (2020)

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. <a href="https://www.fao.org/faostat/en/#data/TCL">https://www.fao.org/faostat/en/#data/TCL</a>

Meat and meat preparations exports amounted to USD 155 billion in 2020, marginally below their record-high value of USD 156 billion in 2019. This represents an increase of 258 percent compared with USD 43 billion in 2000 (Figure 9). In comparison, the export quantities of meat and meat preparations increased by 119 percent between 2000 and 2020. As with cereals, but to a lesser extent, the overall exports value increased significantly in 2007/2008 and remained at high levels between 2011 and 2014. Three main meat groups accounted for 93 percent of the total meat and meat preparations exports value (a share that has been very stable since 2000): bovine meat (USD 57 billion, or 37 percent of the total), pigmeat (USD 54 billion, or 35 percent) and poultry meat (USD 34 billion, or 22 percent). The value of bovine meat exports has been the largest among the main meat groups since 2014, overtaking pigmeat. The main exporters of the three meat groups accounted for 40-45 percent of the global export value in 2020 (Figure 10). The United States of America feature in the top three for all meat groups, and for bovine meat and pigmeat, the largest producers (except China) were also the main exporters, although in a different order. In 2020, the main importers accounted for 33 percent of the global import value of poultry meat, and 45-46 percent of the world total for bovine meat and pigmeat. China was the largest importer of all meat groups in 2020, accounting in particular for 30 percent of global pigmeat imports, while Japan ranked second for pigmeat and poultry meat, and third for bovine meat.

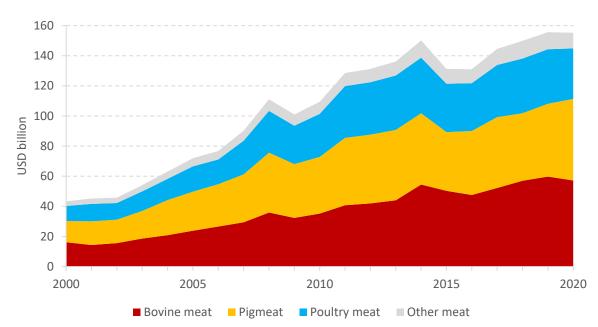


Figure 9: Value of global meat and meat preparations exports by commodity

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. <a href="https://www.fao.org/faostat/en/#data/TCL">https://www.fao.org/faostat/en/#data/TCL</a>



Figure 10: Global trade of main meat commodities, main importers and exporters (2020)

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

#### **NON-FOOD**

Many agricultural commodities are not used for food, and play key roles as inputs to other economic sectors such as the manufacturing or textile industries. Important commodities covered in this section are cotton lint, natural rubber, raw silk and tobacco:

- The top three exporters of cotton lint accounted for slightly more than three-quarters of the total export value in 2020. The United States of America, which was the largest exporter and the third largest producer (FAO, 2021b), had a share of 43 percent. The three main importers were China, Viet Nam and Bangladesh, and represented 57 percent of the global import value in 2020. Such a high share is linked to the importance of the textile industry in these countries.
- The main producers of **natural rubber** are also its main exporters, with Thailand, Indonesia and Côte d'Ivoire respectively the first, second and fifth producer of natural rubber in 2020 (FAO, 2021b) representing two-thirds of the global export value. The three largest importers represented just under half of the global imports. Most of the value of the rubber trade comes from the dry product.
- China, which is the world's largest producer of raw silk (FAO, 2021b), is also, as may be expected, its largest exporter, accounting for 55 percent of the world export value and 83 percent when combined with Viet Nam and Italy. India, which is the second largest producer (FAO, 2021b), is the largest importer (35 percent of the world import value) due to its strong domestic market, followed by Romania (22 percent) and Italy (13 percent).
- In the case of **tobacco**, the top three importers and exporters accounted for 23 and 28 percent, respectively, of the 2020 global value. Most of the value comes from the trade of the manufactured products such as cigarettes, giving an edge to countries with a large tobacco industry such as Poland (the largest exporter) or Germany (the third largest exporter).

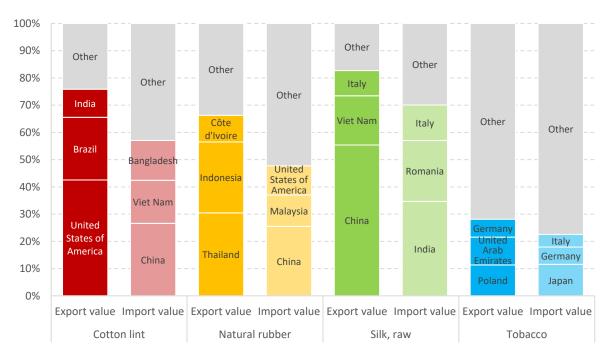


Figure 11: Global trade of key non-food commodities, main importers and exporters (2020)

**Source:** FAO. 2021. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TCL

#### **EXPLANATORY NOTES**

The FAOSTAT Trade data domain disseminates statistics on the international trade of food and agricultural products for the period of 1961–2020. The food and agricultural trade datasets are collected, processed and disseminated by the Food and Agriculture Organization of the United Nations (FAO) according to the standard International Merchandise Trade Statistics Methodology. The detailed tariff line data for reporting countries (import and export quantities, animal numbers and dollar values for total and bilateral flows) are mainly obtained from the United Nations Statistics Division (UNSD) for the world excluding the European Union, while the raw data from European countries are obtained from EUROSTAT and national authorities as needed. Trade partner data are used for non-reporting countries together with other alternative data sources.

## **REFERENCES**

**FAO.** 2021a. Trade: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. <a href="https://www.fao.org/faostat/en/#data/TCL">https://www.fao.org/faostat/en/#data/TCL</a>

**FAO.** 2021b. Production: Crops and livestock products. In: *FAO*. Rome. Cited April 2022. <a href="https://www.fao.org/faostat/en/#data/QCL">https://www.fao.org/faostat/en/#data/QCL</a>

**FAO.** 2021c. Detailed trade matrix. In: *FAO*. Rome. Cited April 2022. https://www.fao.org/faostat/en/#data/TM

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