

FAOSTAT ANALYTICAL BRIEF 81

Agriculture producer prices indices

2018-2022

HIGHLIGHTS

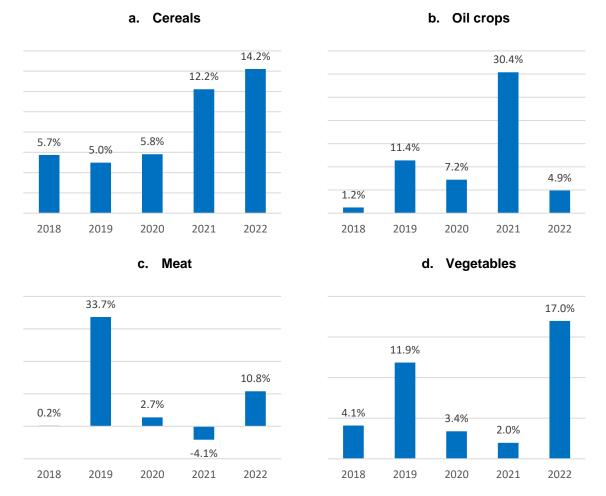
- → Producer price indices continue to show an increasing trend at the global level, especially for cereals, oil crops and vegetables, for the 2018–2022 period.
- Rising costs of agricultural and livestock inputs, coupled with adverse weather conditions and supply chain disruptions due to the COVID-19 pandemic and conflicts in various regions, have resulted in increased producer prices for cereals, vegetables and meat.
- → Oil crops prices are still increasing, largely due to the continuing rise in the price of soybeans, sunflower seed and oil palm fruit.

FAOSTAT PRODUCER PRICES

GLOBAL

The global trend in the producer price index (PPI) for cereals exhibits a consistent upward trajectory from 2018 to 2022, with an acceleration of the increase after 2019. The 12.2 percent increase in 2021 could be attributed to a decrease in cereal availability on international markets, due to reduced harvests in major exporting countries including Canada, the Russian Federation and the United States of America (FAO, 2021). The 14.2 percent increase in 2022 was driven by a combination of different factors including adverse weather, economic shocks and conflicts, which caused high production costs due to high inputs costs, and food supply chain disruptions (FAO, 2022c). The PPI for oilcrops posted an unprecedented gain of 30.4 percent in 2021 compared with 2020, which can be attributed to unfavourable weather conditions in southern Brazil, Argentina and Paraguay that raised concerns about soybean production. Additionally, robust purchasing activities from China, the leading soybean importer, and increasing world quotations for rapeseed, driven by global supply tightness and low production in Canada, contributed to the upward trend (FAO, 2022e). After a surge in 2019 due to a sharp decline in pig meat production triggered by the outbreak of African swine fever (ASF) in China (Jiang, 2021), the meat PPI decreased to -4.1 percent in 2021 and recorded a 10.8 percent increase in 2022. The meat PPI decrease in 2021 was due to an increased production in China, Brazil, Australia and Viet Nam (FAO, 2022a). The further increase in 2022 is mainly due to tight supply in the main producing markets (FAO, 2023). Similarly to cereals, the PPI for vegetables recorded a notable increase in 2022 to 17 percent, mainly due to high inputs costs, pushing further up the high price levels recorded in the previous years.

Figure 1: Global annual change rate of the producer price index by product group



Source: Authors' own elaboration based on FAO. 2023. Producer prices. In: *FAOSTAT*. Rome. [Cited January 2024]. http://www.fao.org/faostat/en/#data/PP.

CEREALS

Top cereals producers exhibit large differences in the variation of their PPI: those located in Asia tended to exhibit lower values than those in other regions. China had the lowest average annual change, actually a decrease of -0.4 percent, followed by Indonesia (0.8 percent), Bangladesh (2.5 percent) and India (7.5 percent), while the average increase in Pakistan was much higher, at 19.7 percent, which can be attributed to tight supply, inflationary pressures and elevated transportation and agricultural input expenses in the country (FAO, 2022c). In contrast, top producers in the Americas had rather high average annual changes: the United States of America led with 16.3 percent, followed by Argentina (18.9 percent), compared to average increase of 26.5 percent in Brazil, where cereal prices in 2022 were driven by high production costs, lower harvests and rises in the price of wheat from the United States and Canada (FAO, 2022c). In Europe, France has the lowest average annual change among large producers (5.8 percent); the Russian Federation (12 percent) and Ukraine (13.2 percent) post significantly larger average annual increases. In the case of the Russian Federation (the world's largest exporter of cereals), production costs increased significantly after a spike in agricultural input prices in

the European Union and major cereal-producing nations (Popescu, Stanciu, Şerban and Ciocan, 2022), and wheat and barley production decreased in 2021 due to weather conditions (FAO, 2022b).

Beyond top producers, an important country in Eastern Africa is Ethiopia, where national currency depreciation, international prices and conflict-related trade disruptions are the main causes of cereal price increases (translating into an average annual increase of 5.6 percent). In other countries of Eastern and Southern Africa, price behaviour was attributed to inflation, national currency depreciation, reduced harvest due to adverse weather, and high international prices (FAO, 2022c). In Western Africa, high production costs, inflation, national currency depreciation and high international commodity prices, as well as a reduced harvest, all played a role in the price increase for cereals in 2022 for several coastal countries, including Benin, the Gambia, Ghana and Guinea, while other countries such as Burkina Faso, Chad, Mali, the Niger and Senegal have been affected by conflicts, producing supply disruptions (FAO, 2022c).

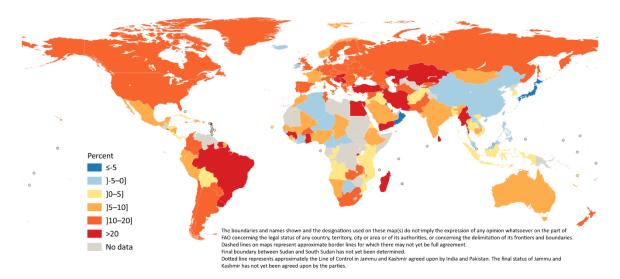


Figure 2: 2018–2022 average annual change rate of the PPI for cereal products

Note: Average increases over 20 percent are mainly due to general hyperinflation in all economic sectors.

Source: FAO. 2023. Producer prices. In: *FAOSTAT*. Rome. [Cited January 2024]. http://www.fao.org/faostat/en/#data/PP based on UN Geospatial, 2020.

OIL CROPS

The global increase in oil crop prices in 2022 can be attributed to a fall in sunflower seed output induced by the war in Ukraine, which has resulted in substantial disruptions in planting attempts and lower yields due to input shortages. In addition, extreme weather conditions in important crop areas, consumption trends driven by global economic outlooks, variations in trade regulations, changes in biodiesel blending standards, and volatility in crude oil prices all contribute to keeping oil crops PPI at high levels.

The ten largest oil crops producers show average annual increases of their PPI between 2018 and 2022 ranging between 5.7 percent (in India) and 26.8 percent (in Brazil). In Indonesia, the leader in oil crops production (in particular oil palm fruit), the average increase is 14.8 percent, close to the value observed in China (14.4 percent) but much lower than in Malaysia (23.3 percent), where a labour constraint hampered global palm oil production (FAO, 2022d; Chu, 2022). The values for the largest producers in

the Americas are due to different trends and a different mix in crops (with soya beans, rape/colza seed and sunflower see being the main crops): the 26.8 percent average annual increase observed in Brazil stems mostly from an 80 percent surge in the PPI between 2020 and 2021; droughts in parts of Northern America affected Canada and the United States of America at different times between 2020 and 2022, resulting in average increases of 16.1 percent and 14.3 percent, respectively. In Argentina, the increase was 14 percent on average between 2018 and 2022, with a slight acceleration in 2021 and 2022. The two leading oil crops producers in Europe are the Russian Federation (15.2 percent average annual increase) and Ukraine (25.8 percent).

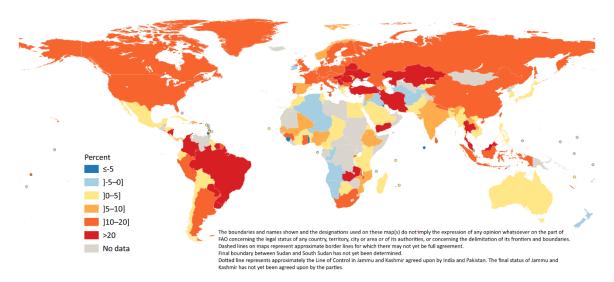


Figure 3: 2018–2022 average annual change rate of the PPI for oil crops

Note: Average increases over 20 percent are mainly due to general hyperinflation in all economic sectors.

Source: FAO. 2023. Producer prices. In: *FAOSTAT*. Rome. [Cited January 2024]. http://www.fao.org/faostat/en/#data/PP based on UN Geospatial, 2020.

MEAT

The rise in the PPI for meat in 2022 was largely attributed to supply disruptions caused by ongoing conflicts worldwide; to escalating food price inflation, elevated input costs, labour shortages, adverse weather conditions, widespread disease outbreaks such as the highly pathogenic avian influenza (HPAI) virus in key producing regions such as Europe and North America; and high international meat prices and policy developments affecting the meat industry (FAO, 2023).

The average annual increase in the meat PPI between 2018 and 2022 was rather low in most of the largest producers worldwide, between 1.3 percent in France and 6.5 percent in Germany, with China (13.5 percent) and Argentina (24.7 percent) appearing as outliers in the group.

Outside the main meat-producing regions, extended droughts in Africa, notably in the Horn of Africa, led to substantial livestock losses. Coupled with currency depreciation and regional conflicts, these factors contributed to elevated costs for meat products. In Egypt, the production of chicken meat declined due to soaring prices, the devaluation of the national currency, and a dependence on imported feed (FAO, 2023).

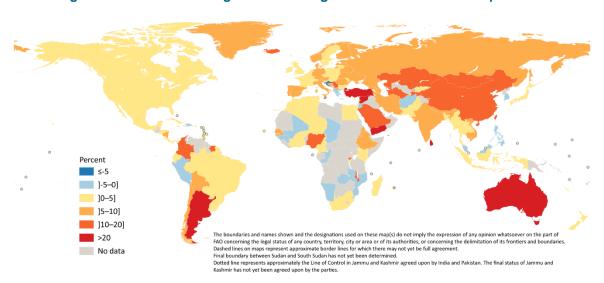


Figure 4: 2018–2022 average annual change rate of the PPI for meat products

Note: Average increases over 20 percent are mainly due to general hyperinflation in all economic sectors.

Source: FAO. 2023. Producer prices. In: *FAOSTAT*. Rome. [Cited January 2024]. http://www.fao.org/faostat/en/#data/PP based on UN Geospatial, 2020.

VEGETABLES

With the exception of Türkiye (42.4 percent average annual increase) and Egypt (30.8 percent), the average annual increase in the PPI for vegetables in the main producers was fairly low, varying between 5.7 percent in China and 10.2 percent in the Russian Federation and Viet Nam. It was even slightly negative in Mexico (-0.01 percent). The two largest producers in Asia (and the world) had similar values: 5.7 percent for China and 5.9 percent for India.

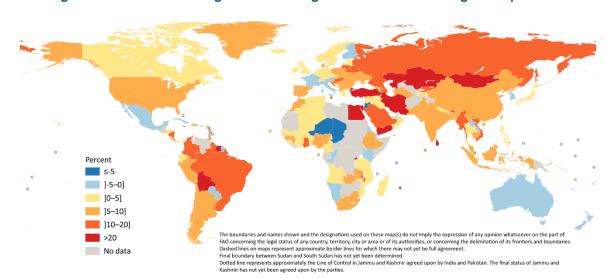


Figure 5: 2018–2022 average annual change rate of the PPI for vegetable products

Note: Average increases over 20 percent are mainly due to general hyperinflation in all economic sectors.

Source: FAO. 2023. Producer prices. In: *FAOSTAT*. Rome. [Cited January 2024]. http://www.fao.org/faostat/en/#data/PP based on UN Geospatial, 2020.

NEXT RELEASE

Country agriculture producer price indices are updated in FAOSTAT on an annual basis. The next release presenting global and regional trends will be in December 2024.

REFERENCES

Chu, M.M. 2022. Labour shortages set up Malaysia for third year of palm oil losses. In: *Reuters*. Cited March 2023. https://www.reuters.com/markets/commodities/labour-shortages-set-up-malaysia-third-year-palm-oil-losses-2022-09-07/

FAO. 2021. Food Outlook – Biannual Report on Global Food Markets. Food Outlook, November 2021. Rome. https://doi.org/10.4060/cb7491en

FAO. 2022a. Food Outlook – Biannual Report on Global Food Markets. Food Outlook, June 2022. Rome. https://doi.org/10.4060/cb9427en

FAO. 2022b. *GIEWS Country Brief: The Russian Federation, 21 January 2022.* https://reliefweb.int/report/russian-federation/giews-country-brief-russian-federation-21-january-2022

FAO. 2022c. *FPMA Bulletin #10, 14 December 2022*. Rome. https://www.fao.org/3/cc3632en/cc3632en.pdf

FAO. 2022d. *Food Outlook – Biannual Report on Global Food Markets*. Food Outlook, November 2022. Rome. https://doi.org/10.4060/cc2864en

FAO. 2022e. Oilseeds, Oils & Meals Monthly Price Update #150, 14 January 2022. Rome. https://www.fao.org/3/cb8263en/cb8263en.pdf

FAO. 2023. *Meat Market Review: Overview of global meat market and policy developments in 2022*. Rome. https://www.fao.org/3/cc8200en/cc8200en.pdf

Jiang, H. 2021. China: Evolving Demand in the World's Largest Agricultural Import Market. In: *U.S. Department of Agriculture*. Washington, D.C. [Cited March 2023]. https://www.fas.usda.gov/data/china-evolving-demand-world-s-largest-agricultural-import-market

Popescu, A., Stanciu, M., Şerban, V. and Ciocan, H.N. 2022. Cereals production and price in the European Union. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development. Vol.* 22, Issue 4, 2022. https://managementjournal.usamv.ro/pdf/vol.22_4/Art62.pdf

This analytical brief was prepared by Jean Marie Vianney Munyeshyaka and Michele Vollaro under the supervision of Veronica Boero, team leader of the Social and Economic Statistics Team, FAO Statistics Division.

Required citation: FAO. 2024. *Agriculture producer prices indices 2018–2022*. FAOSTAT Analytical Briefs, No. 81. Rome. Cover photo: ©FAO/Marco Salustro

CONTACTS

Statistics – Economic and Social Development statistics@fao.org www.fao.org/food-agriculture-statistics/en/
Food and Agriculture Organization of the United Nations Rome, Italy

