



Food and Agriculture
Organization of the
United Nations

ISSN 0251-1959

Food Outlook

BIANNUAL REPORT ON GLOBAL FOOD MARKETS



June 2024

Food Outlook

BIANNUAL REPORT ON GLOBAL FOOD MARKETS

Food and Agriculture Organization of the United Nations
Rome, 2024

Required citation:

FAO. 2024. *Food Outlook – Biannual report on global food markets*. Food Outlook, June 2024. Rome. <https://doi.org/10.4060/cd1158en>

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

ISSN 0251-1959 [print]

E-ISSN 1560-8182 [online]

ISBN 978-92-5-138860-0

© FAO, 2024



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode>).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original [Language] edition shall be the authoritative edition."

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization <http://www.wipo.int/amc/en/mediation/rules> and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

Third-party materials. Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

Sales, rights and licensing. FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org. Requests for commercial use should be submitted via: www.fao.org/contact-us/licence-request. Queries regarding rights and licensing should be submitted to: copyright@fao.org.

Photo credits (left to right/top to bottom):

©Istock; ©Istock; ©iStock; ©Shutterstock; ©iStock; ©Shutterstock; ©iStock; ©iStock; ©iStock; ©Shutterstock; ©FAO; ©Shutterstock; ©iStock; ©Shutterstock; ©Shutterstock; ©iStock

HIGHLIGHTS

FAO's latest forecasts point to increases in production and higher closing stocks across several basic foodstuffs. However, global food production systems remain vulnerable to shocks stemming from extreme weather events, geopolitical tensions, policy changes and developments in other markets, potentially tipping the delicate demand-supply balances and impacting prices and world food security.

WHEAT

Global wheat markets are expected to contract in 2024/25 as global wheat production, utilization, trade and stocks are all forecast to decline from their respective 2023/24 levels. Nonetheless, ample supplies and lower demand for feed and other uses globally are likely to maintain a soft tone in wheat markets.

COARSE GRAINS

The outlook for global coarse grain markets points to another season of abundant supplies with stocks seen reaching their highest level since 2017/18. International trade in coarse grains will likely decline in 2024/25, with anticipated smaller export availabilities in Brazil and Ukraine and weaker import demand from China.

RICE

International rice prices have remained elevated amid lingering export curbs and strong purchases by some Asian countries. However, early prospects for 2024/25 point to world production reaching a fresh peak, which could revive rice utilization growth and push stockpiles to a record high.

MEAT

Global meat production is forecast to expand marginally in 2024, driven by an increase in poultry meat production, notwithstanding possible negative impacts stemming from extreme weather events, the spread of animal diseases and thin profit margins. Meanwhile, global trade in meat will likely rebound as demand is expected to exceed domestic supplies in leading meat-importing countries.

SUGAR

Improved global supply prospects for the 2023/24 season led to significant declines in international sugar prices. Driven by lower sugar quotations, world sugar consumption is foreseen to expand above its recent trend. Global trade in sugar is anticipated to expand, amid ample export availabilities and a stronger global import demand.

OILCROPS

In 2023/24, forecasts of record world outputs for oilseeds and meals/cakes are expected to lead to a further stock accumulation in oilmeals, whereas an anticipated marginal increase in oils/fats production, amid below-potential palm oil outputs, could be outstripped by consumption growth, thus resulting in a somewhat tightening global supply-demand balance for vegetable oils.

DAIRY

World milk production is forecast at nearly 979 million tonnes in 2024, up 1.4 percent from 2023. Asia will continue to lead production growth, driven by rising dairy cow numbers and growing contributions of large-scale dairy farms. Meanwhile, global trade in dairy products is predicted to recover moderately despite subdued import demand foreseen for some leading importing countries.

FISHERIES

In 2024, stable landings from capture fisheries are expected to be complemented by an expanding aquaculture sector. Stifled overall demand, coupled with an increased supply of some aquaculture species, has caused a fall in prices for certain aquatic products. Overall, rising production costs and stagnant consumer spending remain challenging.

SPECIAL FEATURE

Focus on fertilizers

Fertilizers have been subject to economic, environmental, and geopolitical disruptors. In 2023, the reduction in energy prices spurred production and improved supply, which helped ease prices and fueled a robust rebound. The 2024/25 outlook for fertilizers suggests stability, but shocks to energy markets continue to pose risks.

Dynamic effects of shocks to shipping costs on the food import bill

Recent restrictions and disruptions to maritime transportation have added pressure on international trade. The feature article analyses the dynamic effects of shocks to the shipping costs on the food import bill. The analysis distinguishes between modes of maritime transportation – dry bulk and container – and examines how these shocks affect net food-importing developing countries.

ACKNOWLEDGEMENTS

vi

MARKET SUMMARIES

1-9

MARKET ASSESSMENTS

10-63

Wheat	11
Coarse grains	17
Rice	25
Oilcrops, oils and meals	31
Sugar	39
Meat and meat products	44
Milk and milk products	51
Fish and fishery products	57

SPECIAL FEATURES

64-77

Focus on fertilizers	65
Dynamic effects of shocks to shipping costs on the food import bill	71

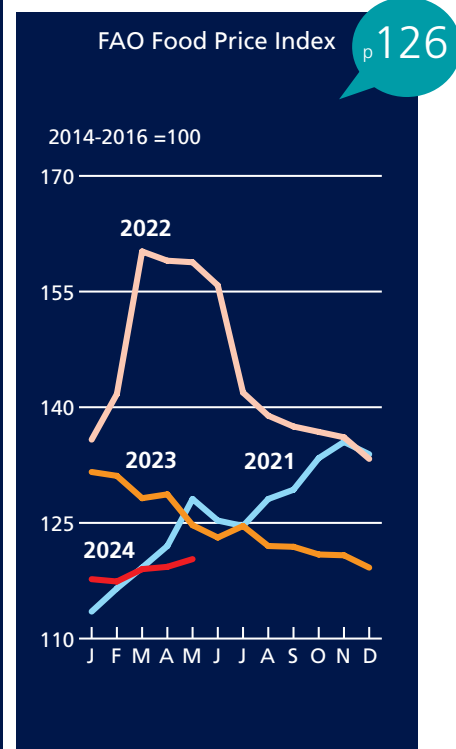
MARKET INDICATORS

78-91

Futures markets	79
Ocean freight rates	83
Global food import bill	86
The FAO price indices	88

STATISTICAL TABLES

92-129



ACKNOWLEDGEMENTS

The Food Outlook report is a product of the FAO Markets and Trade Division of the Economic and Social Development stream. This report was prepared under the overall guidance of Boubaker Ben-Belhassen, Director and Monika Tothova, Senior Economist. Market assessments were written by a team of economists, whose names appear under their respective market summary contributions. A contribution by the International Grains Council on ocean freight rates for the market indicators section is also gratefully acknowledged. The report benefited from research support from many staff, namely, David Bedford, Victoria Johnston, Emanuele Marocco, Grace Karumathy, Lavinia Lucarelli, Emanuele Mazzini, Marco Milo, Fabio Palmeri, Harout Dekermendjian and the Fisheries and Aquaculture Statistics Team and GLOBEFISH.

Special thanks go to David Bedford and Lavinia Lucarelli for preparing the charts and statistical tables and to Elisa Miccinilli for her administrative support. Additionally, the team is grateful to Ettore Vecchione for the desktop publishing and Amber Paulen for her valuable editorial assistance.

MARKET SUMMARIES

FAO's first forecast for the 2024/25 season points to an overall comfortable global supply-and-demand situation. Current prospects for world cereal production indicate an output of 2 846 million tonnes (including rice in milled equivalent), virtually on par with the record outturn in 2023/24. Among the major cereals, global maize and wheat outputs are forecast to decline. The recent adverse weather conditions in the Black Sea region will likely result in a downgrade in world wheat production.¹ By contrast, outputs of barley, rice and sorghum are all predicted to increase.

World cereal total utilization in 2024/25 is expected to increase by 0.5 percent to a new record high of 2 851 million tonnes. Global use of cereals for food consumption is predicted to expand the most, up 1.1 percent from 2023/24. This increase is foreseen to be led by rice (up 1.4 percent), followed by coarse grains (up 1.2 percent) and wheat (up 0.8 percent). Global feed utilization of cereals is also forecast to increase, up 0.4 percent, driven by strong demand for coarse grains (especially maize and sorghum) for animal feed, while feed uses of wheat and rice are both forecast to contract.

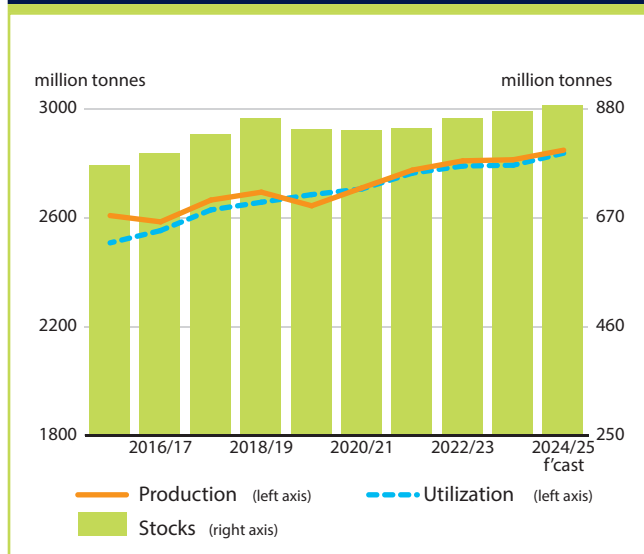
World cereal stocks will likely increase by 1.5 percent (13.2 million tonnes) above their opening levels to a record 897 million tonnes, reflecting expectations of higher inventories of coarse grains (with increases for maize, barley and sorghum) and rice. By contrast, wheat stocks could decline to their lowest level since 2021/22. With utilization also forecast to rise in 2024/25, the global cereal stock-to-use ratio will likely remain close to its 2023/24 level, around 30.9 percent.

Forecast at 481 million tonnes, world trade in cereals is predicted to decline by 1.3 percent from the 2023/24 level to 481 million tonnes in 2024/25. Lower trade prospects for maize underlie most of this anticipated decline, with smaller decreases in wheat and barley trade also contributing to the contraction. By contrast, international rice trade is forecast to recover.

In May 2024, the FAO Cereal Price Index averaged 118.7 points, down 8.2 percent from its value one year earlier and 5.7 percent below its five-year average level for the same month. This decrease reflects sharp declines (both year on year and compared to average levels) in the world prices of wheat and coarse grains, which outweighed increases in rice prices compared to their values last year and the five-year averages.

¹ This statement reflects changes that occurred after the closure of the database that this report is based on.

CEREAL GRAIN PRODUCTION, UTILIZATION AND STOCKS



WORLD CEREAL MARKET AT A GLANCE¹

	2022/23	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	Change: 2024/25 over 2023/24
	<i>million tonnes</i>			%
WORLD BALANCE				
Production	2 812.4	2 847.4	2 846.3	0.0
Trade²	479.3	487.4	481.3	-1.3
Total utilization	2 792.4	2 835.9	2 851.0	0.5
Food	1 184.9	1 200.1	1 213.3	1.1
Feed	1 043.5	1 063.8	1 068.2	0.4
Other uses	564.0	572.1	569.5	-0.5
Ending stocks³	872.0	884.0	897.2	1.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	148.6	149.2	149.4	0.1
LIFDC ⁴ (kg/yr)	142.1	142.5	141.8	-0.5
World stocks-to-use ratio (%)	30.7	31.0	30.9	
Major exporters stocks-to-disappearance ratio (%)	21.0	21.4	21.4	
FAO CEREAL PRICE INDEX (2014-2016=100)				
	2022	2023	2024 <i>Jan-May</i>	Change: Jan/May 2024 over Jan/May 2023 %
	155	131	115	-22

¹ Rice in milled equivalent.

² Trade refers to exports based on a July/June marketing season for wheat and coarse grains and on a January/December basis for rice.

³ May not equal the difference between supply (defined as production plus opening stocks) and utilization due to differences in individual countries' marketing years.

⁴ Low-Income Food-Deficit countries marketing years.

WHEAT

In 2024, global wheat production is expected to decrease marginally (0.1 percent) from the previous season's level down to 787 million tonnes. Most of the downturn in output is expected to result from foreseen production declines in the European Union, Ukraine, Türkiye, the United Kingdom of Great Britain and Northern Ireland and Morocco. The recent adverse weather conditions in the Black Sea region will likely result in a downgrade in world wheat production.¹

Global wheat utilization in 2024/25 is expected to contract by 0.8 percent from the record level reached in 2023/24 to 794 million tonnes, falling marginally below the ten-year trend. While food consumption of wheat should continue to rise, supported by population growth, wheat feed use and other uses are forecast to fall by 3.8 percent and 5.0 percent, respectively, with the declines anticipated to be concentrated mostly in China and India.

With global production forecast to fall short of utilization, world wheat stocks are likely to decrease from their opening levels by 1.6 percent to 307 million tonnes by the close of seasons in 2025. Although this would mark a second consecutive year-on-year decline, the world wheat stocks-to-use ratio forecast for 2024/25, which now stands at 38.0 percent, indicates an overall comfortable supply level. A significant drop expected in the European Union's inventories accounts for most of the forecast global drawdown, with smaller decreases foreseen in Kazakhstan and the Russian Federation. Helping to balance those declines, stocks should increase in China, India and the United States of America.

The preliminary forecast for world trade in wheat in 2024/25 (July/June) stands at 198 million tonnes, indicating a potential 1.2 percent contraction from the 2023/24 level. The decline mainly stems from anticipated lower imports by China and the European Union, along with smaller export volumes expected from the Russian Federation, Ukraine and Türkiye.

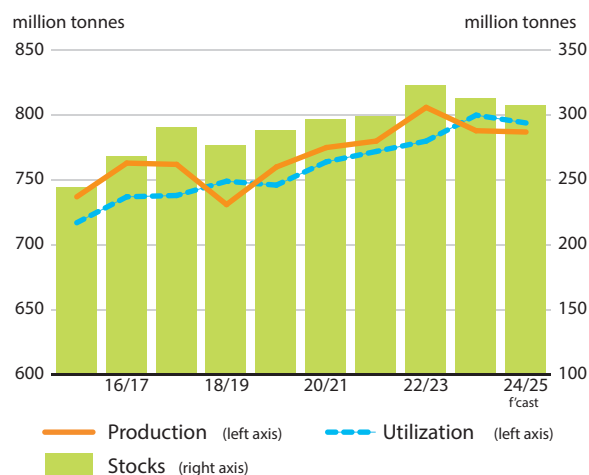
International wheat export prices continued a steady downward trend over the 2023/24 season, reflecting ample supplies and strong competition among exporters, especially from robust, competitively priced exports from the Russian Federation. With the 2024/25 season about to start, world wheat prices are below their levels of last year as well as their five-year average values. With expectations of falling global utilization and larger harvests in several major exporting countries, wheat markets will likely remain under downward pressure in 2024/25.

¹ This statement reflects changes that occurred after the closure of the database that this report is based on.

Contact:

Erin Collier
Jonathan Pound (Production)

WHEAT PRODUCTION, UTILIZATION AND STOCKS



WORLD WHEAT MARKET AT A GLANCE

	2022/23	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	Change: 2024/25 over 2023/24
	<i>million tonnes</i>		<i>%</i>	
WORLD BALANCE				
Production	806.0	787.7	786.7	-0.1
Trade¹	201.7	200.4	198.0	-1.2
Total utilization	780.0	800.3	794.0	-0.8
Food	531.7	536.7	544.3	1.4
Feed	150.3	152.4	162.0	6.3
Other uses	89.9	90.9	93.9	3.3
Ending stocks²	322.2	311.8	306.8	-1.6
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	67.3	67.7	67.6	-0.1
LIFDC (kg/yr)	41.6	41.7	41.3	-1.0
World stocks-to-use ratio (%)	40.3	39.3	38.0	
Major exporters stocks-to-disappearance ratio ³ (%)	21.2	20.2	18.1	
FAO WHEAT PRICE INDEX⁴ (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan/May 2024 over Jan/May 2023 %
	165	127	109	-21%

¹ Trade refers to exports based on a common July/June marketing season.

² May not equal the difference between supply (defined as production plus carryover stocks) and total utilization due to differences in individual country marketing years.

³ Major exporters include Argentina, Australia, Canada, the European Union, Kazakhstan, the Russian Federation, Ukraine and the United States of America.

⁴ Derived from the International Grains Council (IGC) wheat index.

COARSE GRAINS

FAO's initial production forecast indicates a marginal (0.3 percent) decline in world production of coarse grains from the record 2023 level to 1 525 million tonnes in 2024. The decline stems from an anticipated 1.3 percent decrease in global maize production, led by foreseen smaller outputs in Brazil and the United States of America. By contrast, world production of barley is seen rising by 3.6 percent, largely concentrated in the European Union, as is global sorghum production, by 4.1 percent, with most of the increase expected in Argentina and the United States.

In 2024/25, global trade in coarse grains is forecast to contract by 2.4 percent to 230 million tonnes, reflecting expected declines in maize and barley trade. Lower imports from China foreseen for both maize and barley are a major factor behind those declines. On the export side, expectations of smaller sales from two of the four major exporters, Brazil and Ukraine (on the account of lower exportable maize surpluses), as well as from Paraguay and South Africa, are seen reducing global trade volumes. As regards exports of barley, reductions in sales from Australia, Kazakhstan and Ukraine are all forecast to contribute to the decrease in global barley trade.

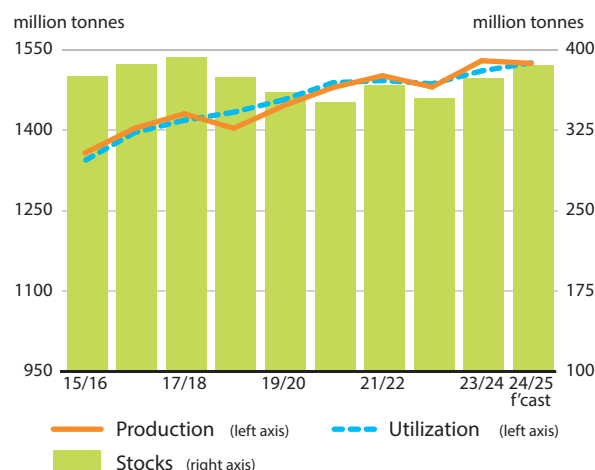
World total utilization of coarse grains is forecast to reach a new record high of 1 526 million tonnes, representing a 1.0 percent increase from 2023/24. The year-on-year increase will be driven primarily by predicted growth in the feed use of maize and sorghum, especially in China, Brazil, the Russian Federation and the United States.

World stocks of coarse grains with the close of the seasons in 2025 will likely rise by 3.4 percent to 385 million tonnes, with expected increases in the stocks of all major coarse grains. Making up the bulk of the increase, global maize stocks are predicted to rise by 3.5 percent, mostly on expectations of build-ups in the European Union and China, along with smaller increases in Brazil and the United States. If it materializes, the projected increase would lead to a higher world stocks-to-use ratio and a higher ratio of major exporters' closing stocks to their total disappearance, indicating a comfortable global supply situation again in 2024/25. The ample supplies outlook is expected to maintain a bearish tone in coarse grain markets in 2024/25. World coarse grain prices have already started the season at well below-average levels.

Contact:

Erin Collier
Jonathan Pound (Production)

COARSE GRAIN PRODUCTION, UTILIZATION AND STOCKS



WORLD COARSE GRAIN MARKET AT A GLANCE¹

	2022/23	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	Change: 2024/25 over 2023/24
	million tonnes		%	
WORLD BALANCE				
Production	1 480.8	1 529.6	1 524.6	-0.3
Trade¹	224.7	235.6	229.9	-2.4
Total utilization	1 487.0	1 510.7	1 525.6	1.0
Food	225.4	229.2	232.0	1.2
Feed	869.2	883.3	895.0	1.3
Other uses	392.4	398.1	398.7	0.1
Ending stocks²	353.9	372.5	385.3	3.4
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	28.3	28.5	28.6	0.4
LIFDC ⁴ (kg/yr)	72.1	72.6	72.0	-0.8
World stocks-to-use ratio (%)	23.4	24.4	23.9	
Major exporters stocks-to-disappearance ratio ³ (%)	12.7	13.1	14.2	
FAO COARSE GRAIN PRICE INDEX (2014-2016=100)				
	2022	2023	2024 <i>Jan-May</i>	Change: Jan/May 2024 over Jan/May 2023 %
	169	134	108	-0.2

¹ Trade refers to exports based on a July/June marketing season for wheat and coarse grains and on a January/December marketing season for rice.

² May not equal the difference between supply (defined as production plus opening stocks) and utilization due to differences in individual countries' marketing years.

³ Low-Income Food-Deficit countries marketing years.

RICE

Although much will still depend on how the northern hemisphere's summer rains unfold, world rice production is tentatively forecast to expand by 0.9 percent in 2024/25 to a fresh peak of 534.9 million tonnes, as attractive prices and government support are expected to continue to underpin plantings, while improved growing conditions following the dissipation of the El Niño phenomenon may revive yield growth.

During 2024/25, world rice utilization is likely to register its first tangible expansion in three seasons, reaching 531.4 million tonnes, as ample supplies could fuel growth in food use. Even so, production is anticipated to exceed total utilization, which should cause world rice stocks at the close of the 2024/25 marketing seasons to increase by a further 2.7 percent to a record high of 205.1 million tonnes. In contrast to previous seasons, however, accumulations are anticipated to be less concentrated and take place in both rice exporting and importing countries.

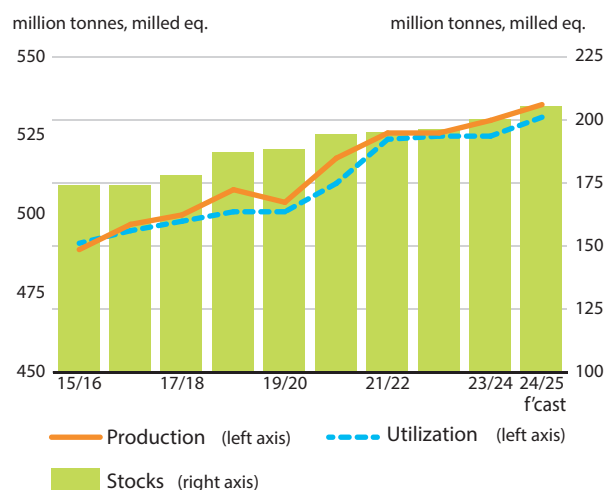
In 2024, international trade in rice is forecast to decline for the second successive year to a four-year low of 51.4 million tonnes. On the import side, the reduction is expected to be led by lower purchases by African countries. Imports by Asian countries could instead stabilize at comparatively robust levels, while import demand is anticipated to grow in all other regions. On the export side, among rice exporters, India is seen accounting for much of the forecast trade decline, due to existing curbs on exports of Indian broken and non-basmati white rice. Nevertheless, robust shipments of other qualities and varieties of rice and exceptions to export prohibitions should keep India the world's largest rice supplier. Viet Nam is also predicted to ship less than in 2023, while the export outlook is positive namely for Pakistan, the United States of America and Thailand.

Although the upward trend that international rice prices maintained for much of 2022 and 2023 has abated somewhat in recent months, rice export quotations remain elevated, as reflected by the FAO All Rice Price Index. At an average of 137.3 points in May 2024, the Index was 2.7 percent below its value at the close of 2023, but still 7.5 percent above its year-earlier level.

Contact:

Shirley Mustafa

RICE PRODUCTION, UTILIZATION AND STOCKS



WORLD RICE MARKET AT A GLANCE

	2022/23	2023/24 f'cast	2024/25 f'cast	Change: 2024/25 over 2023/24
	million tonnes, milled equivalent			%
WORLD BALANCE				
Production	525.6	530.1	534.9	0.9
Trade¹	52.9	51.4	53.4	3.7
Total utilization	525.3	525.0	531.4	1.2
Food	422.8	426.6	432.5	1.4
Ending stocks²	195.8	199.7	205.1	2.7
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	53.0	53.0	53.3	0.5
LIFDC (kg/yr)	28.4	28.2	28.5	1.0
World stocks-to-use ratio (%)	37.3	37.6	38.2	
Major exporters stocks-to-disappearance ratio ³ (%)	29.2	31.0	31.9	
FAO RICE PRICE INDEX (2014-2016=100)				
	2022	2023	2024 Jan-May	Change: Jan/May 2024 over Jan/May 2023 %
	109	132	139	11.2

¹ Calendar year exports (second year shown).

² May not equal the difference between supply (defined as production plus carryover stocks) and total utilization due to differences in individual country marketing years.

³ Major exporters include India, Pakistan, Thailand, the United States of America and Viet Nam.

OILCROPS

Global oilseed production is forecast to continue expanding in 2023/24 (October/September), likely reaching a record high of 667.6 million tonnes. These gains primarily reflect expectations of higher soybean and sunflower seed outputs, more than offsetting lower production of rapeseed and other oilseeds. The anticipated soybean production growth is driven by a favourable production outlook in South America, chiefly due to an increase of harvested areas, outweighing a smaller crop in the United States of America. World sunflower seed production is forecast to rebound from the reduced level registered in the previous season, underpinned by continued output expansion in the Russian Federation and a partial recovery in Ukraine amid the ongoing war. By contrast, global rapeseed production is set to decrease from the all-time high reached in 2022/23, mainly reflecting lower harvests in Australia and Canada caused by suboptimal moisture conditions.

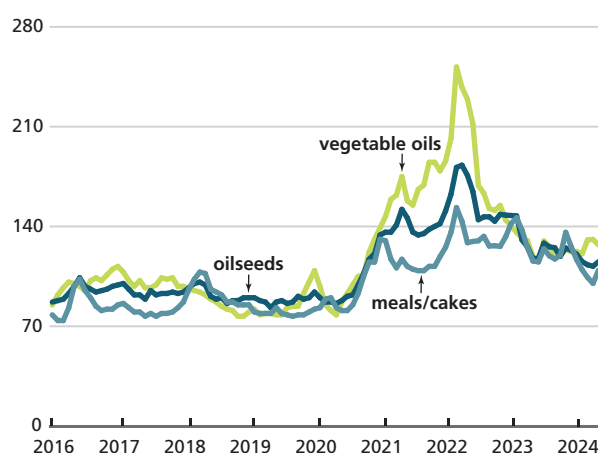
In 2023/24, world output of oils/fats is expected to increase marginally amid stagnating palm oil outputs across major producing countries. At the same time, global consumption is forecast to expand by 2.0 percent from the previous season, supported by rising demand from the biofuel sector. With world utilization set to exceed production, global ending stocks of oils/fats should decline slightly. International trade in vegetable oils could also contract modestly, following reduced import demand, particularly from Asia. Meanwhile, world production of meals/cakes is predicted to rise by 2.8 percent, which would surpass an anticipated recovery in global utilization, leading to a further accumulation in world oilmeal carry-over stocks. International trade in meals/cakes is also forecast to increase marginally, possibly hitting a fresh record due to improving feed demand from the livestock sector.

As for the upcoming 2024/25 season, very preliminary forecasts point to a further production expansion for oilseeds and its derived products. Growth of global supplies of meals/cakes is expected to outpace a foreseen moderate increase in consumption, which should lead to a further inventory replenishment. For oils/fats, a likely less buoyant output growth, particularly in view of stagnating palm oil production prospects, could be overshadowed by a modest expansion in utilization, resulting in a contraction in global vegetable oil ending stocks.

Contact:

Di Yang

FAO MONTHLY INTERNATIONAL PRICE INDICES FOR OILSEEDS, VEGETABLE OILS AND MEALS/CAKES (2014-2016=100)



WORLD OILCROP AND PRODUCT MARKET AT A GLANCE

	2021/22	2022/23 <i>estim.</i>	2023/24 <i>f'cast</i>	Change: 2023/24 over 2022/23
	<i>million tonnes</i>			<i>%</i>
TOTAL OILCROPS				
Production	620.4	650.6	667.6	2.6
OILS AND FATS				
Production	247.6	256.5	259.3	1.1
Supply	279.9	290.3	295.2	1.7
Utilization	245.3	254.7	259.9	2.0
Trade	126.9	141.1	136.5	-3.3
<i>Global stocks-to-use ratio (%)</i>	13.8	14.1	13.6	
<i>Major exporters stocks-to-disappearance ratio (%)</i>	10.9	9.3	9.8	
MEALS AND CAKES				
Production	159.0	166.9	171.5	2.8
Supply	187.9	193.2	198.6	2.8
Utilization	161.1	162.4	167.2	3.0
Trade	101.3	107.9	108.9	0.9
<i>Global stocks-to-use ratio (%)</i>	16.4	16.7	18.0	
<i>Major exporters stocks-to-disappearance ratio (%)</i>	9.6	8.1	9.8	
FAO PRICE INDICES (2014-2016=100)				
	2022	2023	2024 <i>Jan-May</i>	Change: Jan-May 2024 over Jan-May 2023 <i>%</i>
Oilseeds	158	128	115	-13.8
Meals/cakes	133	127	108	-18.9
Vegetable oils	188	126	127	-3.7

Note: Kindly refer to footnote 1 on page 31 and to table 2 on page 34 for further explanations regarding definitions and coverage.

SUGAR

FAO's forecast for world sugar production in 2023/24 (October/September) is pegged at 179.4 million tonnes, marking a slight uptick of 0.5 million tonnes, or 0.3 percent, from the previous season's output. This new forecast is up from FAO's preliminary expectations mainly due to a larger-than-earlier anticipated output in Brazil, the world's largest sugar producer and exporter. The bumper outturn in Brazil along with the anticipated rebounds in China and the European Union are expected to more than offset the production declines foreseen in India and Thailand.

Global sugar consumption is forecast to continue increasing in 2023/24, up 2.5 million tonnes, or 1.4 percent, from the previous season. Africa and Asia are expected to account for this growth, along with an anticipated rebound in Europe from the previous season's downturn. Despite the anticipated growth in global sugar consumption, the upward revision to the global production forecast should result in a global surplus of 1.9 million tonnes in 2023/24.

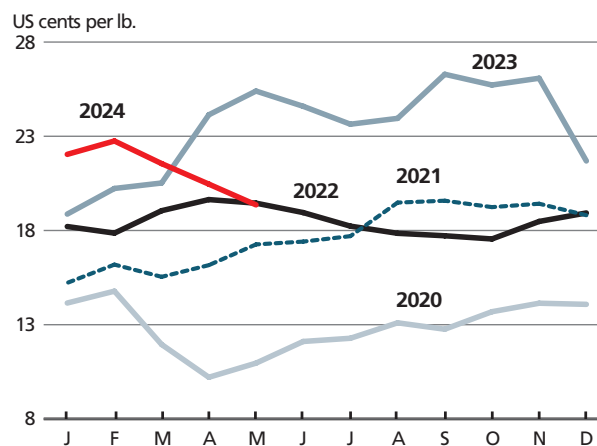
In 2023/24, the forecast for the world sugar trade stands at 63.3 million tonnes, which corresponds to a 1.0 percent increase from the estimated volume for 2022/23. The expansion is the result of an anticipated increase in exportable supplies in Brazil that will more than offset foreseen lower shipments from India and Thailand. On the import side, larger purchases by Asia and Africa are forecast to outweigh a likely sharp decline in Europe. In China, the largest international sugar buyer, imports are officially forecast to increase from last year, despite the rebound in domestic production. By contrast, sugar imports by the European Union are set to drop markedly from last year on the back of higher domestic production.

International sugar prices generally declined since reaching their 12-year highs in September 2023, and in May 2024, they dropped to their lowest value since January 2023. The price declines were mostly related to improved global supply prospects. Additionally, the good start of the new harvest season in Brazil has exerted further downward pressure on prices. The Brazilian real has generally weakened against the United States dollar since October 2023, encouraging exports and contributing to the lower world sugar prices (expressed in United States dollar).

Contact:

Elmamoun Amrouk
Fabio Palmeri

INTERNATIONAL SUGAR PRICES*



* As measured by the International Sugar Agreement (ISA)

WORLD SUGAR MARKET AT A GLANCE

	2021/22	2022/23 estim.	2023/24 f'cast	Change: 2023/24 over 2022/23
	<i>million tonnes</i>			%
WORLD BALANCE				
Production	174.6	178.8	179.4	0.29
Trade*	62.4	62.7	63.3	0.97
Total utilization	173.8	174.9	177.4	1.43
Ending stocks	111.9	115.6	117.4	1.52
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	22.0	22.0	22.1	0.55
LIFDC (kg/yr)	12.4	12.5	12.5	0.40
World stocks-to-use ratio (%)	64.4	66.1	66.2	0.09
ISA DAILY PRICE AVERAGE (US cents/lb)				
	2022	2023	2024 Jan-May	Change: Jan-May 2024 over Jan-May 2023 %
	18.49	23.43	21.14	-3.16%

* Trade figures refer to exports.

MEAT AND MEAT PRODUCTS

Global meat production in 2024 is forecast to expand marginally to 371 million tonnes (carcass weight equivalents). Output increases are anticipated in all the regions, except for Asia, most notably of pig meat in China.

In 2024, the forecast expansion of global meat production is likely to be led by poultry meat, which is forecast to increase by 1.1 million tonnes, or 0.8 percent year on year, to 146 million tonnes. This expansion will be driven primarily by a strong consumer demand for poultry meat due to its relative affordability coupled with the impact of relatively low feed costs on prices, notwithstanding risks stemming from highly pathogenic avian influenza (HPAI) outbreaks and high operational costs in the top producing countries. Global bovine and ovine meat outputs are also forecast to expand further in 2024, underpinned by ample supplies of slaughter-ready cattle; however, constrained consumer purchasing power due to subdued economic growth and relatively high bovine meat prices will likely limit demand and impact production growth prospects. By contrast, global pig meat production is predicted to shrink by about 1.2 million tonnes or 0.9 percent from 2023. This reduction will be principally caused by an anticipated decline in China following the government's efforts to contain oversupply and sustain domestic price stability by reducing the breeding sow numbers and adjusting the target of the national swine stock.

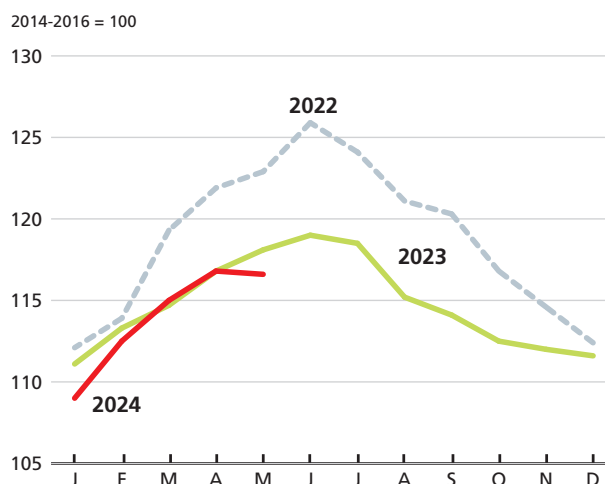
World trade in meat and meat products is forecast to rebound after two consecutive years of contraction. The rebound will be principally driven by a solid import demand expected in all regions, especially in Northern America. However, this positive outlook could be affected by trade restrictions stemming from the spread of animal diseases, geopolitical factors and curbed consumer purchasing power.

As measured by the FAO Meat Price Index, international meat prices increased moderately from January to May this year despite a slowdown in the pace of price increase in recent months. Price increases were registered across bovine, poultry and pig meats, principally underpinned by a solid demand from leading importing countries, notwithstanding increased supplies from the major meat exporters. By contrast, international ovine meat prices declined, mainly due to ample exportable supplies in Oceania, the world's largest supplier.

Contact:

Upali Galketi Aratchilage
Emanuele Marocco

FAO INTERNATIONAL MEAT PRICE INDEX (2014-2016 = 100)



WORLD MEAT MARKET AT A GLANCE

	2022	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change: 2024 over 2023
	<i>million tonnes (carcass weight equivalent)</i>			%
WORLD BALANCE				
Production	364.7	370.0	370.7	0.2
Bovine meat	75.8	76.7	77.2	0.7
Poultry meat	142.7	145.1	146.2	0.8
Pig meat	122.8	124.5	123.3	-0.9
Ovine meat	16.8	17.1	17.3	0.8
Trade	41.1	40.5	41.2	1.8
Bovine meat	11.7	11.9	12.1	1.9
Poultry meat	16.1	16.1	16.3	1.5
Pig meat	10.7	9.8	10.1	2.5
Ovine meat	1.1	1.2	1.3	3.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	45.5	45.8	45.5	-0.7
Trade - share of prod. (%)	11.3	10.9	11.1	1.6
FAO MEAT PRICE INDEX (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan-May 2024 over Jan-May 2023 %
	119	115	114.0	-0.7

MILK AND MILK PRODUCTS

World milk production is forecast to reach nearly 979 million tonnes in 2024, up 1.4 percent from 2023. Much of the expansion is expected to come from Asia – led by India, China and Pakistan – and will be driven principally by rising dairy cow numbers and growing contributions of more efficient large-scale dairy farms with higher milk yields. The forecast growth in global milk output assumes a relatively moderate worldwide impact of the emerging La Niña weather phenomenon, steady farm gate milk prices, and relatively lower feed costs stemming from easing grain prices, all of which should lead to improved profit margins in major milk-producing regions. Macroeconomic challenges, including currency fluctuations and subdued economic growth anticipated in some leading milk-producing regions, will likely constrain consumer demand for dairy products and, ultimately, milk production growth.

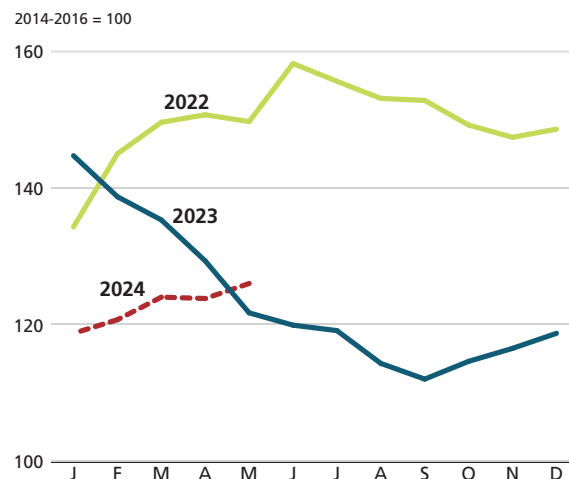
Global trade in dairy products is forecast to reach 85.3 million tonnes in 2024, rising by 0.8 percent year on year. Increases are expected to be notable in Mexico, the Philippines, Saudi Arabia, the United States of America, Algeria and Japan and will be underpinned by demand recoveries partly induced by relatively lower international dairy prices and increased demand from the food services sector. Dairy imports by China are forecast to fall slightly, mainly reflecting rising domestic supplies. Australia, the United States, New Zealand, Argentina and the United Kingdom of Great Britain and Northern Ireland will likely supply much of the anticipated increase in imports of dairy products, reflecting competitive prices and ample exportable availabilities.

International dairy prices, as measured by the FAO Dairy Price Index, increased by 6.2 percent from January to May this year, pushing the index value 3.5 percent above its value a year ago. During the five months, butter and cheese prices increased significantly, reflecting steady global import demand, coupled with improved retail and food services sales and somewhat tighter inventories in leading producing regions, especially the European Union. Meanwhile, whole milk powder prices increased moderately, as purchases by leading importers in the Near East and North Africa regions remained robust despite a slowdown in the pace of imports by China. By contrast, world prices of skim milk powder fell due to sluggish global import demand.

Contact:

Upali Galketi Aratchilage

FAO INTERNATIONAL DAIRY PRICE INDEX (2014-2016 = 100)



WORLD DAIRY MARKET AT A GLANCE

	2022	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change: 2024 over 2023
	<i>million tonnes (milk equivalent)</i>			%
WORLD BALANCE				
Total milk production	951.6	965.2	978.5	1.4
Total trade	85.6	84.7	85.4	0.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	119.4	120.0	120.6	0.4
Trade - share of prod. (%)	9.0	8.8	8.7	-0.5
FAO DAIRY PRICE INDEX (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan-May 2024 over Jan-May 2023 %
	150	124	123	-8.4

FISH AND FISHERY PRODUCTS

In 2024, output from fisheries and aquaculture is set to increase by 4.2 million tonnes, or 2.2 percent, to 191 million tonnes. Aquaculture production is forecast to grow by 3.3 percent, reaching 100.8 million tonnes, largely driven by a surge in farmed shrimp production and smaller gains in oysters and carp. Despite this growth, the sector continues to face challenges with low market prices and high production costs.

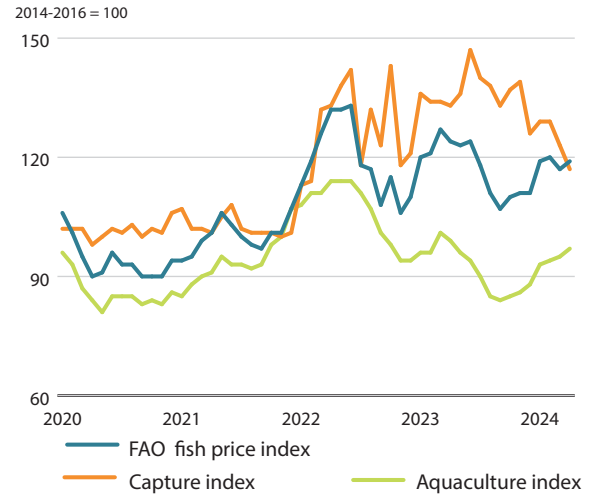
Notwithstanding notable improvements in global economic conditions – including lower inflation rates and a stronger-than-expected gross domestic product (GDP) growth in some countries – consumer spending patterns in the United States of America and the European Union have remained notably restrained. This curtailment has been reflected in sluggish demand for many segments of the aquatic food market, with consumers favouring lower-priced seafood products.

In 2024, the value of global trade in aquatic animal products is expected to decline by 1.0 percent, with major importers such as China, the European Union, the United States of America and Japan all seen registering a contraction in value from last year. Meanwhile, trade volumes will likely remain largely flat, with a slight decline of 0.3 percent compared with the 2023 levels.

Contact:

William Griffin
Audun Lem
Adrienne Egger

FAO FISH PRICE INDEX (2014-2016 = 100)



Source of the raw data for the FAO Fish Price Index (see table below).

WORLD FISH MARKET AT A GLANCE

	2022	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change: 2024 over 2023
	<i>million tonnes (live weight)</i>			<i>%</i>
WORLD BALANCE				
Production	185.4	187.2	191.4	2.2
Capture fisheries	91.0	89.6	90.6	1.1
Aquaculture	94.4	97.6	100.8	3.3
Trade value (exports USD billion)	192.2	185.2	183.3	-1.0
Trade volume (live weight)	70.0	68.5	68.3	-0.3
Total utilization	185.4	187.2	191.4	2.2
Food	164.6	167.3	170.8	2.1
Feed	17.2	16.2	16.7	3.3
Other uses	3.6	3.7	3.8	2.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	20.7	20.8	21.0	1.2
From capture fisheries (kg/year)	8.8	8.7	8.6	-0.4
From aquaculture (kg/year)	11.8	12.1	12.4	2.3
FAO FISH PRICE INDEX (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan-Apr 2024 over Jan-Apr 2023 %
	119.0	117.3	118.7	-3.6

Sources: EUMOFA. 2024. EUMOFA database of international prices. [Accessed on 5 May 2024]. <https://eumofa.eu/international-prices>; INFOFISH. 2024. INFOFISH Trade News. Series 4/2024. Kuala Lumpur, INFOFISH. Issue 4/2024. <https://infofish.org/4/media/attachments/2024/04/23/in-4-2024.pdf>; INFOPECSA. 2024. Revista Infopesca Internacional. Series 71. Montevideo, INFOPECSA. <https://www.infopesca.org/conten/revista-infopesca-internacional-mo-71-0>; Norwegian Directorate of Fisheries. 2024. Directorate of Fisheries' statistics bank. [Accessed on 5 May 2024]. <https://statistikbanken.fiskeridir.no/PxWeb/pxweb/no/Fiskeridir/statistikbanken>; and Danish Fisheries Agency. 2024. Danish fishing auctions. [Accessed on 5 May 2024]. <https://fiskeristatistik.fiskeristyrelsen.dk/SASVisualAnalytics/?reportUri=%2Freports%2F39d55fbf-eb88-46bc-b1ab-793afd7d9fac&so> provided the raw data for the FAO Fish Price Index.

MARKET ASSESSMENTS

WHEAT



PRICES

Weaker demand and strong export competition likely to weigh on international wheat prices

International wheat prices steadily declined over the 2023/24 season, and by May 2024 stood 9.0 percent below both their May 2023 values and their five-year average value. The main drivers behind the general downward trend throughout the season were ample availability, competitively priced supplies from the Russian Federation, and strong competition among exporters – especially

between the Russian Federation and the European Union (of common wheat). Forecasts for the 2024/25 marketing year point to lower global wheat utilization, weaker import demand, and larger harvests expected in many major exporting countries, which are all likely to sustain downward pressure on wheat prices in 2024/25. Similarly reflecting the ample supply outlook, wheat futures have also declined. The September Chicago Board of Trade (CBOT) soft red winter futures averaged USD 223/tonne in April, 12.0 percent lower than in April 2023. More detailed analysis of the futures markets can be found in the Market Indicators section of this report.

Figure 1. IGC Wheat Price Index

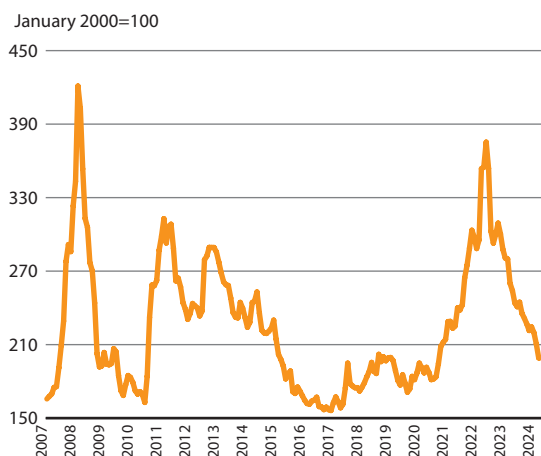
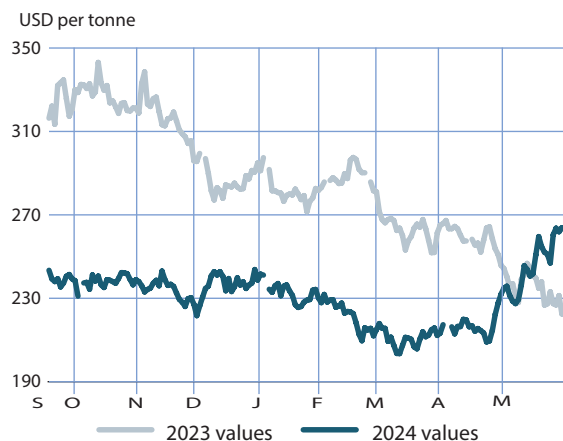


Figure 2. CBOT wheat futures for September



PRODUCTION

Global wheat production to decrease marginally in 2024

In 2024, global wheat production is forecast to decrease marginally by 0.1 percent (0.9 million tonnes) to 786.7 million tonnes. The production outlook marks a small downgrade compared to initial expectations from March, as adverse weather conditions in some main producing countries in the northern hemisphere led to a trimming of yield forecasts. In the southern hemisphere, firmer data indicated moderately smaller sown areas than preliminary estimates.

In *Europe*, forecasts of reduced year-on-year wheat outputs are largely contributing to the stunted global production prospects in 2024. In the **European Union**, wheat production is forecast to fall to 128 million tonnes, 4.2 percent down year on year. The foreseen decline is driven by a sizeable drop in winter sowings due to excessive rainfall in late 2023. Notwithstanding localized dryness earlier in the season in the southern and eastern parts of the **European Union**, generally conducive weather in March and April bolstered yield expectations, and the average wheat yield is forecast to surpass the previous five-year average. In the **United Kingdom of Great Britain and Northern Ireland**, excessive wetness curtailed wheat sowings, is impairing yield prospects and pushing the production forecast down to 12 million tonnes, 14.0 percent below the output in 2023. Since the closure of data used in this report, yield outlooks have worsened in parts of the **Russian Federation**, as drier-than-average conditions were followed by a prolonged late season frost. This adverse weather is expected to drag yields below what is currently forecast in this report and is likely to push wheat production to a level lower than 90 million tonnes in 2024. The war in **Ukraine** continues to negatively impact the agriculture sector and as a result, wheat production is expected to fall by 11.0 percent to 20 million tonnes in 2024.

In *North America*, wheat production is expected to increase. In the **United States**, generally beneficial weather conditions are foreseen to lead to an upturn in yields and a fall in the abandonment rate, meaning a likely increase in the harvested area despite lower sowings. Currently, production is forecast at 50.6 million tonnes, up 2.5 percent from the previous year's output. In **Canada**, plantings of the main spring crop are underway. Thinner profit margins are anticipated to cause a decline in the sown area, but a return to average yields should push production up to an above-average level of 34.6 million tonnes. At this level, the wheat output

Table 1. World wheat market at a glance

	2022/23	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	Change: 2024/24 over 2023/23
	<i>million tonnes</i>			<i>%</i>
WORLD BALANCE				
Production	806.0	787.7	786.7	-0.1
Trade¹	201.7	200.4	198.0	-1.2
Total utilization	780.0	800.3	794.0	-0.8
Food	531.7	536.7	544.3	1.4
Feed	150.3	152.4	162.0	6.3
Other uses	89.9	90.9	93.9	3.3
Ending stocks²	322.2	311.8	306.8	-1.6
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	67.3	67.7	67.6	-0.1
LIFDC (kg/yr)	41.6	41.7	41.3	-1.0
World stocks-to-use ratio (%)	40.3	39.3	38.0	
Major exporters stocks-to-disappearance ratio ³ (%)	21.2	20.2	18.1	
FAO WHEAT PRICE INDEX⁴ (2014-2016=100)				
	2022	2023	2024 <i>Jan-May</i>	Change: Jan/May 2024 over Jan/May 2023 %
	165	127	109	-21%

¹ Trade refers to exports based on a common July/June marketing season.

² May not equal the difference between supply (defined as production plus carryover stocks) and total utilization due to differences in individual country marketing years.

³ Major exporters include Argentina, Australia, Canada, the European Union, Kazakhstan, the Russian Federation, Ukraine and the United States of America.

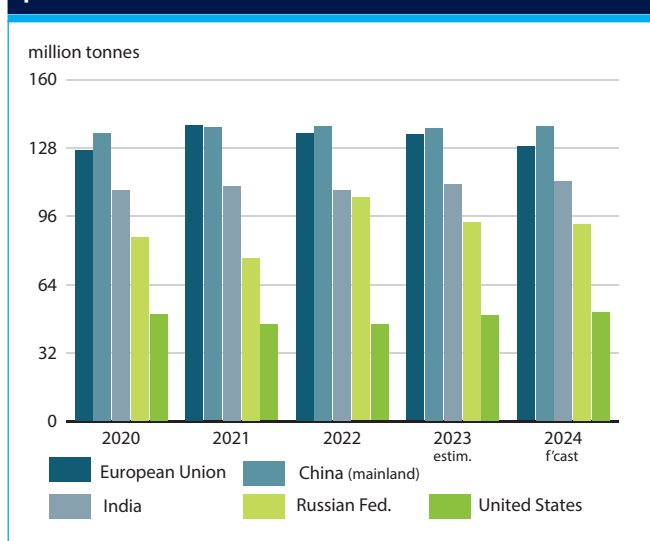
⁴ Derived from the International Grains Council (IGC) wheat index.

Table 2. Wheat production: leading producers*

	2022	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change: 2024 over 2023
	<i>million tonnes</i>			<i>%</i>
China (Mainland)	137.7	136.6	137.7	0.8
European Union	134.3	133.7	128.1	-4.2
India	107.7	110.6	112.0	1.3
Russian Federation	104.2	92.8	92.0	-0.8
United States of America	44.9	49.3	50.6	2.5
Australia	40.5	26.0	29.5	13.6
Canada	34.3	32.0	34.6	8.3
Pakistan	26.2	28.2	28.5	1.1
Ukraine	20.7	22.5	20.0	-11.0
Türkiye	19.8	22.0	20.0	-9.1
Argentina	12.6	15.9	16.5	3.8
United Kingdom of Great Britain and Northern Ireland	15.5	14.0	12.0	-14.2
Kazakhstan	16.4	12.1	13.0	7.3
Grand total	715.0	695.5	694.5	-0.1
World	806.0	787.7	786.7	-0.1

* Countries listed according to their position in global production (average 2021-2023).

Figure 3. Wheat production in major wheat producers



would be 8.3 percent above the dry-weather-affected harvest of 2023.

In *Asia*, conducive weather conditions and adequate water supplies for irrigation are bolstering production expectations. In **India** in 2024, the wheat outturn is anticipated to rise by 1.3 percent year on year to a new record of 112 million tonnes. **Pakistan** is forecast to gather an all-time high wheat crop of 28.5 million tonnes. This record is tied to remunerative prices that supported a larger wheat area and improved access to high-quality seeds. Production in **China (mainland)** is also foreseen to increase to 137.7 million tonnes due to large sowings and favourable yield prospects.

Amid broadly favourable weather conditions that have benefited crop development and replenished irrigation water supplies, wheat harvests are expected at average to above-average levels in most Near East Asian countries in 2024. Similarly, wheat production in Central Asia is predicted to expand year on year in 2024, buoyed by conducive weather conditions.

In *North Africa* by contrast, substantial rainfall deficits and high temperatures have had a pronounced negative impact on wheat crop conditions in the western countries. In **Morocco**, production is forecast to fall by nearly 40.0 percent from last year to a below-average level of 2.5 million tonnes. The output in **Algeria** is forecast close to the previous year's drought-stricken harvest, while a small production upturn in eastern **Tunisia** is anticipated, following the multiyear low harvest in 2023. **Egypt's** wheat crop is less affected by rainfall conditions, as the crop is produced almost entirely under irrigation, and the 2024 harvest is expected to remain close to last year's high level.

In the *southern hemisphere*, early and tentative prospects point to moderate production upturns in **Australia**, **Argentina** and **Brazil**. In **Australia**, prevailing dryness in western provinces may see a pullback in sowings compared to initial intentions, but overall, the national wheat area is anticipated to rise moderately, with planting underway. El Niño-linked drier weather conditions adversely impacted the 2023 wheat cropping season, but more conducive rainfall conditions are anticipated from June. These conditions are foreseen to foster a recovery in yields. The upturn in crop productivity could push up the Australian wheat output to 29.5 million tonnes, representing a near 14 percent increase from last year's reduced level. In **Argentina** in 2024, wheat production is anticipated to increase because of an expansion in the area planted, decreasing input costs and optimal soil moisture levels. However, there are concerns over the impact of impending dry conditions on crop yields. In 2024, **Brazil's** wheat output is also expected to increase to 9 million tonnes, resting on an expected recovery in yields following last year's low.

TRADE

Wheat trade to contract for a second season in 2024/25

In 2024/25 (July/June), world trade in wheat is expected to contract by 1.2 percent (2.4 million tonnes) from the 2023/24 level to 198 million tonnes, reaching its lowest level since 2021/22. In general, the predicted decline in trade reflects weaker import demand from **China (mainland)** and the **European Union**, along with smaller exports from **Türkiye** and the Black Sea exporters.

The largest anticipated decline in wheat imports, at the regional level, is anticipated in **Europe**. The region's wheat imports are forecast to fall by 26.0 percent in 2024/25 from their 2023/24 level. The prediction solely rests on an anticipated 4.1-million-tonne drop in imports by the **European Union** (largely of common wheat). Following two consecutive seasons of large purchases, wheat imports by the **European Union** are likely to return closer to average levels in 2024/25 due to lower anticipated domestic feed demand as well as a decline in exportable supplies in **Ukraine**, which is typically its main source of imports.

In *Asia*, the highest importing region in the world constituting more than half of global wheat imports, aggregate wheat imports are forecast to remain near their 2023/24 level of approximately 104 million tonnes. **China (mainland)** is expected to reduce its purchases by 1.7 million tonnes on account of higher production and reduced demand for feed use of wheat, as its

price advantage over other feed grains has diminished. Lower imports in 2024/25 are also forecast for several other countries in the region, including **Saudi Arabia**, **Uzbekistan**, and Viet Nam. Balancing those anticipated declines, larger purchases are anticipated for **India**, the **Islamic Republic of Iran**, and **Türkiye** in 2024/25. For India, wheat imports are foreseen at 1.5 million tonnes, significantly higher year on year. Sustained local demand and low inventories have pushed up domestic prices and will likely prompt increased purchases from international markets with comparatively low prices. In Türkiye, lower domestic production following a year of high exports is behind the anticipated increase in imports, which are partially destined for processing and re-exporting.

Similarly in *Latin America and the Caribbean*, wheat imports in 2024/25 are forecast to remain near their 2023/24 level of 22 million tonnes. Wheat imports by Brazil and Mexico, the region's largest and second largest wheat importers respectively, are both forecast to be on par with last year's levels.

By contrast, import demand from *Africa* is expected to grow with purchases forecast to rise by 2.2 percent to a record 55.6 million tonnes. Making up the bulk of that increase, imports by Morocco could increase by 19.0 percent to compensate for an expected reduced domestic production. In 2024/25 Egypt, the region's leading wheat importer, may also slightly increase its wheat imports given its tight stock levels following elevated exports in 2023/24.

Turning to export prospects for 2024/25, the anticipated decline in exports mostly reflects smaller sales from the Black Sea region and **Türkiye**. The largest decline in exports is expected from **Ukraine**, where exports could fall by almost 3 million tonnes to below 14 million tonnes, which would be their lowest volume in ten years, as trade prospects align to the declining production levels. Following a record export season in 2023/24, in 2024/25 the **Russian Federation** is also predicted to export less (down 2 million tonnes) due to a slightly smaller harvest and strong competition from other major exporters. However, at 49.5 million tonnes, the **Russian Federation's** exports would still be at their second highest level, and the country would maintain its position as the top wheat exporter in the world. Wheat exports from **Türkiye** are also forecast to come down from their record level in 2023/24 as durum sales may slide with competition from **Canada**. Yet exports are still forecast to remain elevated at 6 million tonnes, their second highest level, with sales of wheat flour expected to remain strong.

Exports by all other major wheat exporters, including Argentina, Australia, Canada, the European Union, and

United States, are all predicted to increase above their respective 2023/24 levels. The biggest increases in exports are forecast in Australia, Canada, and the United States, where there are prospects for higher supplies due to better harvests than last season. In Argentina, a larger output is also expected to support an increase in wheat exports. Wheat exports (largely consisting of common wheat) by the European Union are seen remaining near their five-year-average levels, pointing to a marginal increase in 2024/25, with tighter domestic supplies expected to limit sales despite potentially less competition from Black Sea exporters. Competition for market share among exporters is set to remain strong in 2024/25, with export surpluses in major exporting countries of the Black Sea region expected to fall, thus opening the door for other major exporters to increase their sales.

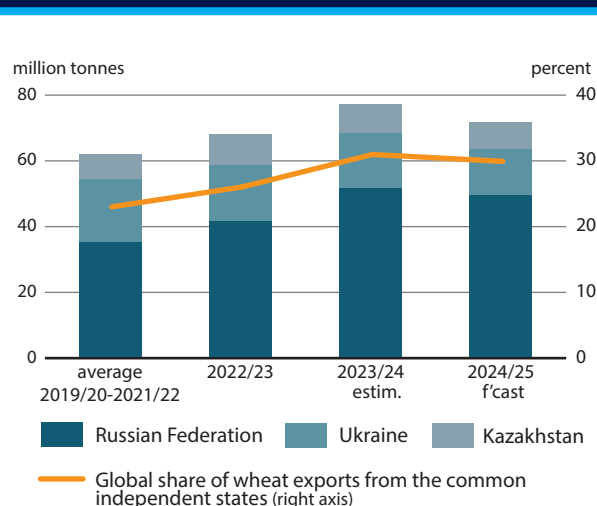
UTILIZATION

Wheat utilization to decline in 2024/25

Global wheat utilization in 2024/25 is forecast to contract by 0.8 percent (6.3 million tonnes) from the 2023/24 record level, reaching 794 million tonnes. The decline stems from an anticipated fall in global feed use (by 3.8 percent, or 6.1 million tonnes) and other use (by 5.0 percent, or 4.7 million tonnes) of wheat, while food consumption is seen continuing to grow (by 0.8 percent, or 4.5 million tonnes).

Most of the projected decrease of feed use is expected in **China (mainland)**, where the price advantage relative to maize and rice of using wheat for feed has diminished. In the **European Union** and the **Russian Federation**, the world's largest and third largest markets for feed wheat, feed use is predicted to remain near last season's levels.

Figure 4. Wheat exports from the Black Sea



includes the industrial sector, seed and postharvest losses – is in India due to reduced spoilage of government-held stocks and high domestic prices that incentivize food consumption rather than other uses. By contrast, world food consumption is forecast to continue to increase. The average global per capita wheat consumption is expected to remain broadly steady at around 67.6 kg/annum. In terms of total regional wheat for human consumption, however, Africa and Asia are forecast to continue to lead in annual growth, albeit at slower rates than the previous season in line with slower population growth.

STOCKS

Wheat inventories to tighten in 2024/25

World wheat stocks are forecast to fall for a second consecutive season, declining to 307 million tonnes, down 1.6 percent (5 million tonnes) below their opening levels.

The anticipated year-on-year decline in global wheat inventories largely reflects a drawdown of stocks in the **European Union**. Lower production in the **European Union**, coupled with expectations of smaller imports, is predicted to drive wheat stocks down in the bloc by 42.0 percent to their lowest level since 2020/21 (assuming export levels remain near last season's). Wheat inventories are also expected to tighten sharply (by 65.0 percent) in **Kazakhstan** following two consecutive seasons of high export levels. Smaller drawdowns anticipated in several other countries, including Algeria, the **Russian Federation**, **Türkiye**, **Ukraine**, and **Uzbekistan**, are also expected to contribute to the forecast global decline.

By contrast, and helping to limit the fall in global inventories, a rise in wheat stocks is foreseen in **China**

Figure 5. Wheat exports: top 10 wheat exporters

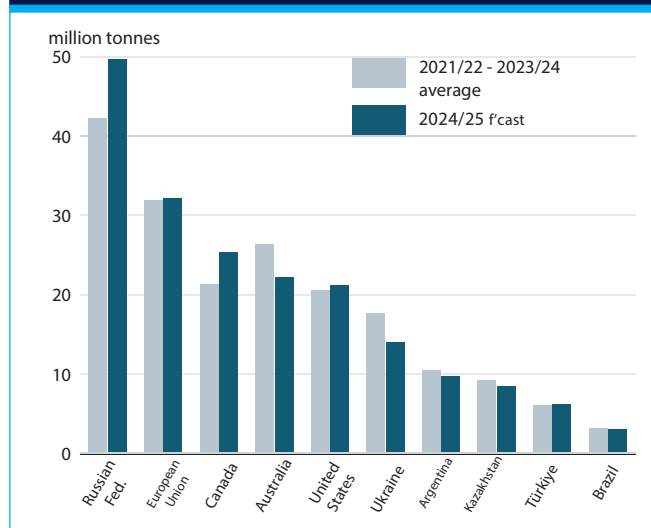


Figure 6. Wheat imports: top 10 wheat importers

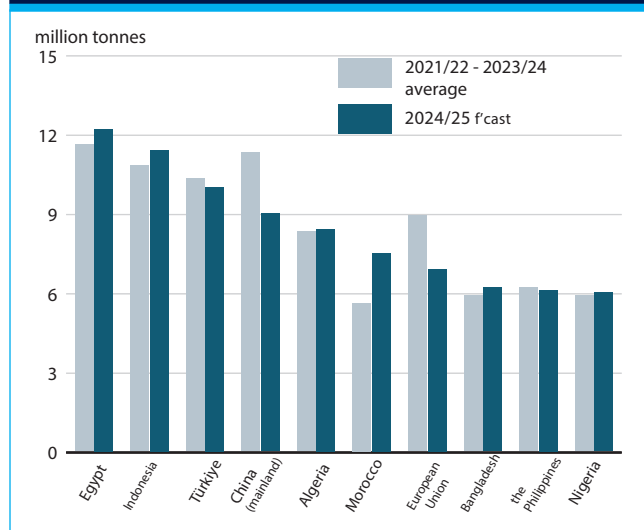


Figure 7. Global wheat utilization

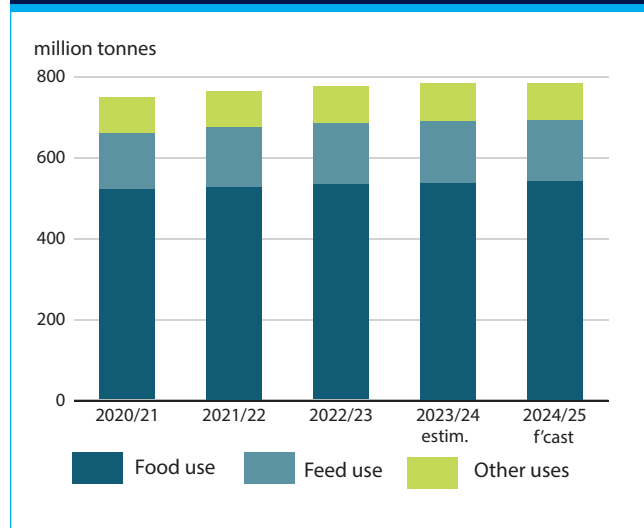
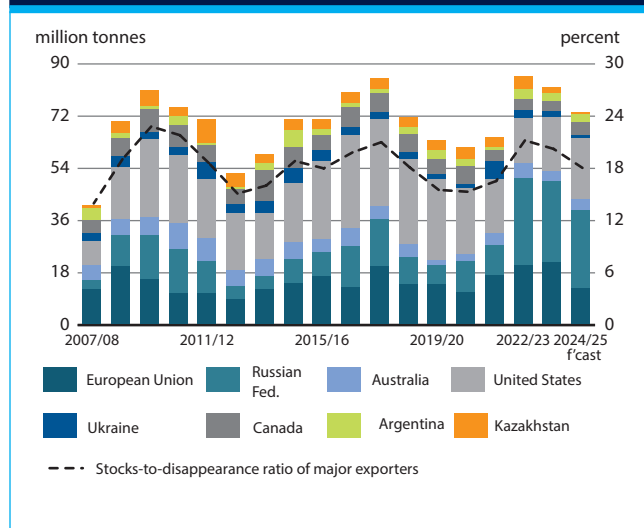


Figure 8. Wheat stocks of major exporters



(mainland), India, and the United States. In China (mainland), reduced feed use of wheat, on top of higher production, is predicted to increase stocks. The forecast increase in stocks in the United States is attributed to a rise in production. An anticipated increase in stocks in India would represent a slight recovery from a sharp drawdown in 2023/24 on account of high consumption.

In 2024/25, based on current forecasts, the world wheat stocks-to-use ratio would stand at 38.0 percent, down from the 2023/24 level of 39.3 percent and below the recent elevated five-year-average level of 38.7, but

still this ratio represents a very comfortable supply level. The ratio of the major wheat exporters' closing stocks to disappearance (defined as domestic utilization plus exports) is considered to be a better measure of global availabilities and is expected to decrease for a second consecutive season, from 20.2 percent in 2023/24 to 18.1 percent in 2024/25. This decrease reflects a forecast decline in the stocks of most major exporters, including most notably the European Union, as well as in Kazakhstan, the Russian Federation, and Ukraine.

Figure 9. Wheat stocks of top importers

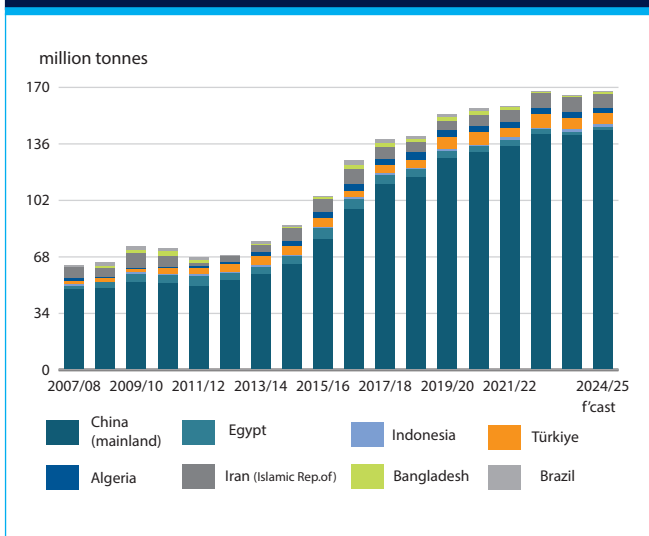
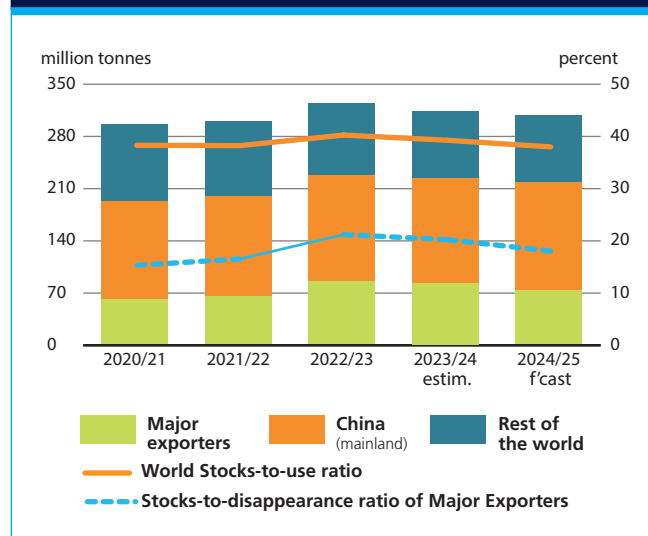


Figure 10. Wheat stocks and ratios



COARSE GRAINS*



* Coarse grains include maize, barley, sorghum, millet, rye, oats and NES (not elsewhere specified).

PRICES

International coarse grain prices seen remaining below average levels

In 2023, the record global coarse grain production was behind the overall decline in international coarse grain prices over the 2023/24 season. In May 2024, prices averaged 16.0 percent below both their May 2023 value and their five-year average levels. With maize production

increasing the most among the major coarse grains, leading to a build-up of global maize stocks, world maize prices exhibited the sharpest descent in 2023/24, falling by 19.0 percent over the season. Ample supplies and robust maize exports, from Brazil in particular, underscored the decline in global maize prices. Expectations for continued ample global maize supplies going into the 2024/25 season, based on good production prospects for maize harvests in major exporters in both the southern

Figure 1. Maize export price (US No. 2 yellow, Gulf)

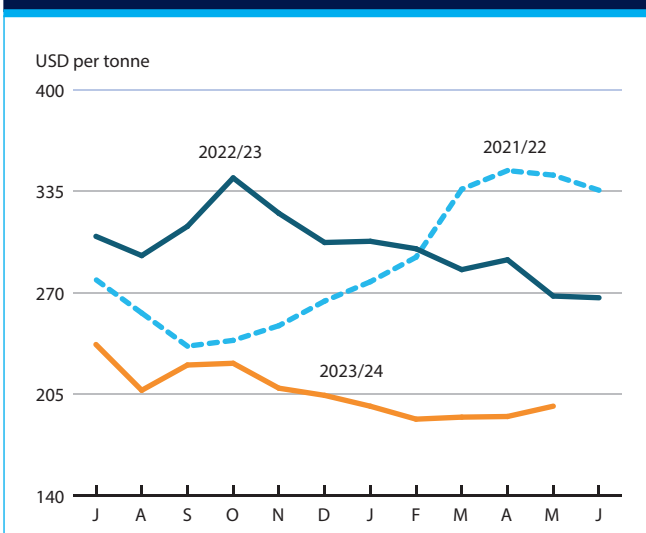


Figure 2. CBOT maize December futures



and the northern hemispheres, have also contributed to the downward pressure on maize markets. In line with maize market trends, international prices of barley and sorghum also declined in 2023/24. By May 2024, world barley and sorghum prices reached 5.0 percent and falling 17.0 percent below their respective one-year-earlier values.

The current ample export availabilities and expectations for another season of abundant supplies ahead is reflected in the Chicago Board of Trade (CBOT) maize futures for delivery in December 2024, which is the benchmark delivery month for the new United States crop. The CBOT averaged USD 185 per tonne in April, down 15.0 percent from the previous year's level. A more detailed analysis of the futures markets can be found in the Market Indicators section of this Food Outlook report.

PRODUCTION

Global coarse grain production is pegged to fall marginally below the 2023 record

Global coarse grain production is pegged at 1 525 million tonnes in 2024, marginally down from the record high of 2023. The primary driver behind this decline is the reduced production prospects for maize that largely reflect acreage contractions in the United States and Brazil and yield downturns in Southern African countries.

A large proportion of the global production decline is concentrated in *Northern America*, specifically in the **United States**, where a cutback in maize plantings, amid softer prices and better profit margins for alternative crops including soybean, is underlying expectations of a 3.0 percent decrease in production in 2024 from the record high of 2023. An anticipated increase in yields is forecast to limit the year-on-year decrease, and consequently the maize outturn is pegged at an above average level of 377.5 million tonnes. In **Canada**, maize production is forecast at 14.9 million tonnes, virtually on par with last year's above-average outturn, owing to large plantings that are expected to compensate for lower yields.

In *Europe*, maize production in the **European Union** is seen rebounding to 69.3 million tonnes, which would put this year's outturn above the five-year average. Larger plantings underlie this outlook, and notable acreage increases are expected in France and Poland in 2024. Further contributing to the favourable production outlook, the bloc's average maize yield is also anticipated to increase. In **Ukraine**, primarily driven by the effects of the war, maize production is forecast to decrease to 27.5 million tonnes in 2024, 10.0 percent lower year on year and a well below-average level. Comparatively lower profit margins for maize are also incentivizing Ukrainian farmers to switch to

alternative crops, mainly oilseeds. Maize production in the **Russian Federation** is forecast to remain unchanged year on year at 15 million tonnes.

In *South America*, maize production in **Brazil** is forecast to decline by 15.0 percent to 111.6 million tonnes, albeit remaining above the five-year average. The year-on-year decrease reflects, almost equally, a cutback in plantings, driven by lower prices, and reduced yields, particularly on account of less-than-favourable weather conditions in the main producing southern and central-western areas. Contrastingly, maize production in **Argentina** is anticipated to recover to a near-average level of 56 million tonnes in 2024, potentially up one-third compared to the 2023 outturn. This positive outlook reflects an upswing in plantings, as well as a likely increase in yields following to the lows of 2023; however, yield prospects have been cut back recently due to the widespread outbreak of maize stunt disease toward the end of the season.

In *Africa*, widespread drought conditions in Southern Africa have sharply cut maize production prospects in 2024. In **South Africa**, the continent's principal maize producer, El Niño-linked drought conditions have dragged down yield prospects, and as a result the maize harvest is forecast to decrease to a below-average level of 14 million tonnes. Disaggregated by crop type, white maize has been more affected (it is produced in far fewer countries than the globally dominant yellow maize crop), and production of this crop is forecast to fall by 25.0 percent year on year, driving the overall decline in 2024. Substantial rainfall deficits and elevated temperatures have also affected neighbouring countries, and consequently steep decreases in maize production are forecast in **Zambia** and **Zimbabwe**.

Figure 3. Major maize producers

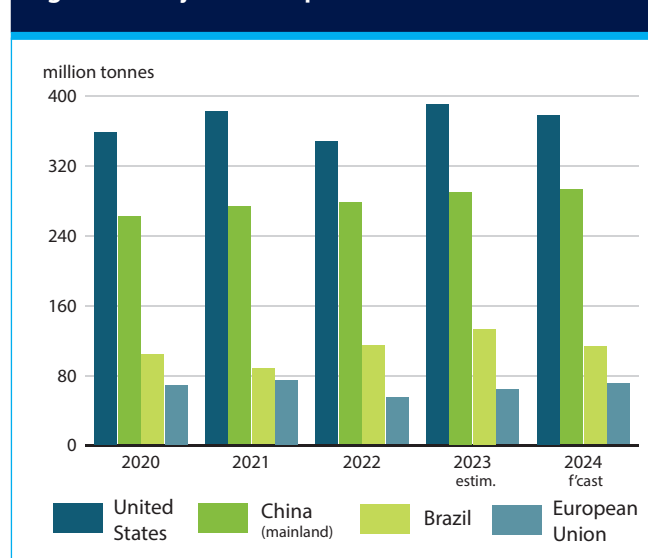


Table 1. World coarse grain market at a glance

	2022/23	2023/24 estim.	2024/25 f'cast	Change: 2024/25 over 2023/24
	million tonnes			%
WORLD BALANCE				
Production	1 480.8	1 529.6	1 524.6	-0.3
Trade¹	224.7	235.6	229.9	-2.4
Total utilization	1 487.0	1 510.7	1 525.6	1.0
Food	225.4	229.2	232.0	1.2
Feed	869.2	883.3	895.0	1.3
Other uses	392.4	398.1	398.7	0.1
Ending stocks²	353.9	372.5	385.3	3.4
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	28.3	28.5	28.6	0.4
LIFDC ³ (kg/yr)	72.1	72.6	72.0	-0.8
World stocks-to-use ratio (%)	23.4	24.4	23.9	
Major exporters stocks-to-disappearance ratio ⁴ (%)	12.7	13.1	14.2	
FAO COARSE GRAIN PRICE INDEX (2014- 2016=100)	2022	2023	2024 Jan-May	Change: Jan/May 2024 over Jan/May 2023 %
	169	134	108	-0.2

¹ Trade refers to exports based on a common July/June marketing season.

² May not equal the difference between supply (defined as production plus carryover stocks) and total utilization due to differences in individual country marketing years.

³ Low-Income Food-Deficit countries.

⁴ Major exporters include Argentina, Australia, Brazil, Canada, the European Union, the Russian Federation, Ukraine and the United States of America.

Table 2. Coarse grain production: leading producers*

	2022	2023 estim.	2024 f'cast	Change: 2024 over 2023
	million tonnes			%
United States of America	356.7	403.2	392.1	-2.8
China (Mainland)	287.0	298.4	301.6	1.1
European Union	134.8	138.5	152.9	10.4
Brazil	117.8	138.1	118.2	-14.4
Argentina	67.0	48.9	64.1	31.1
India	56.8	53.8	56.2	4.4
Russian Federation	47.8	43.2	43.1	-0.3
Ukraine	34.8	38.0	34.2	-10.2
Mexico	32.4	31.4	29.8	-5.0
Canada	30.6	27.2	28.6	5.2
Ethiopia	22.8	22.8	22.9	0.3
Indonesia	23.6	23.0	23.2	0.9
Nigeria	21.8	19.1	20.9	9.7
Australia	19.1	15.2	15.6	2.8
South Africa	16.6	17.0	14.5	-14.7
Türkiye	18.0	19.3	16.4	-14.9
Pakistan	11.5	10.8	11.0	1.8
Other countries	181.9	181.5	179.2	-1.3
World	1,480.8	1,529.6	1,524.6	-0.3

* Countries listed according to their position in global production (average 2021-2023).

In *Asia*, maize production in **China (mainland)**, the world's leading producer, is forecast to rise to 288 million tonnes, marginally up year on year. The increase is due to an acreage expansion amid remunerative crop prices. Elsewhere in *Asia*, maize harvests are forecast at comparable levels to the preceding year.

Global barley production is forecast at 148.9 million tonnes in 2024, up 3.6 percent from the previous year's output. The anticipated upturn is underpinned by good production prospects in the **European Union**, supported by an acreage increase concentrated in Eastern Europe and higher yields, which are expected to bounce back to near-average levels after the reduced levels in 2023. Barley harvests are also seen rising in **Australia** and **Canada** and rest on likely yield recoveries from the lows of 2023. These expected production upturns are anticipated to more than offset sizeable production declines in **Morocco**, **Türkiye** and **Ukraine**.

World production of sorghum is pegged at 60.7 million tonnes in 2024, 4.1 percent higher than the outturn in 2023. The increase reflects an expectation of larger outputs in **Argentina** and the **United States**, underpinned by good yield prospects.

TRADE

World trade in coarse grains likely to contract in 2024/25

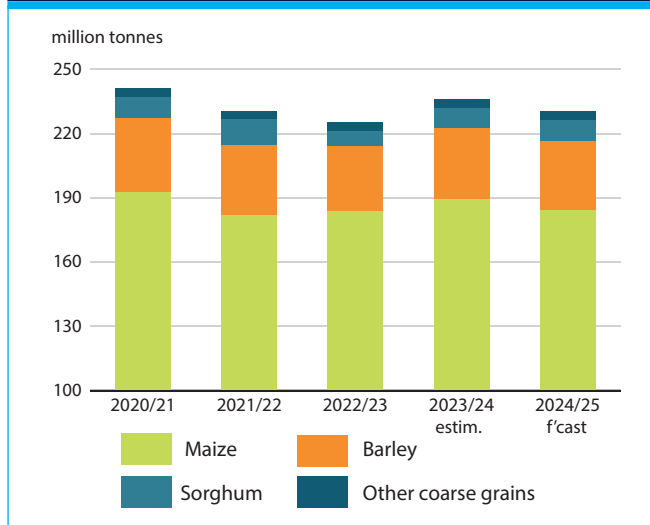
Pegged at 230 million tonnes, FAO's first forecast for world trade in coarse grains in 2024/25 (July/June) points to a 2.4 percent decrease from the 2023/24 level. The decrease stems from anticipated declines in trade of maize and barley, while sorghum trade is seen rising.

Leading the decline, global maize trade in 2024/25 (July/June) is forecast to drop by 2.7 percent from 2023/24, reaching 184 million tonnes. This would mark the first contraction in global maize trade since 2021/22.

The main driver behind the decline is weaker import demand from *Asia* (down 7.0 percent), the world's top importing region, bringing the regional import forecast to 94 million tonnes. In particular a reduction of purchases is anticipated by **China (mainland)**. Larger domestic production and rising stocks are forecast to reduce China's import demand from last season's high level of 28.5 million tonnes to 20 million tonnes in 2024/25, albeit still an elevated level as a result of high domestic maize prices. This decline is slightly offset by small increases in imports elsewhere in the region, including **Türkiye**, **Saudi Arabia**, **India**, and **Bangladesh**.

In *Latin America and the Caribbean*, maize imports by **Mexico** could remain near last season's level of

Figure 4. Global trade of coarse grains by type



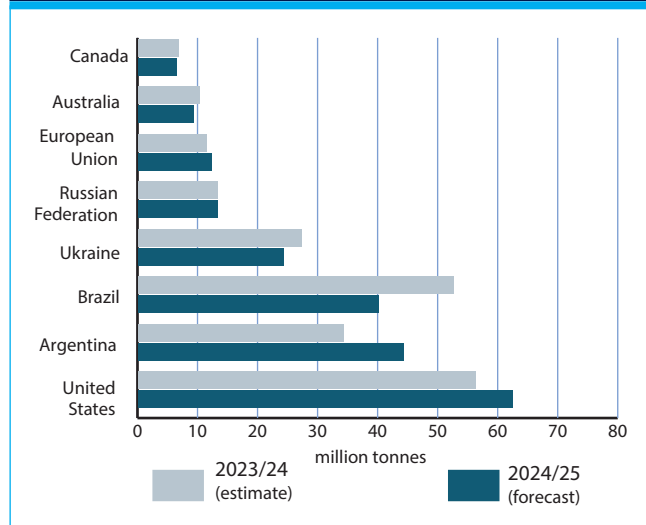
20 million tonnes. At this level, Mexico could reclaim its position as one of the world's largest importers, tied with **China (mainland)**, for the first time since 2017/18. For the region, aggregate maize imports are forecast to remain in line with 2023/24 levels, with smaller purchases by **Colombia, Dominican Republic, and Uruguay** balanced by bigger imports by **Brazil and Chile**.

In *Europe*, maize imports are also seen remaining generally stable. The **European Union** is forecast to maintain its spot as one of the world's top three importers with purchases near 17 million tonnes, remaining on par with last season's level as higher domestic production is seen limiting import demand growth.

In *Africa*, maize imports are likely to increase by 12.0 percent in 2024/25, reaching 23 million tonnes and approaching the record registered in 2020/21. The largest year-on-year increases in maize imports are expected in **Malawi, Zambia, and Zimbabwe**, where maize is the primary staple food. Smaller increases are also foreseen in **Egypt, Morocco, and Mozambique**.

On the export side, reductions in maize exports from **Brazil, Ukraine, and Paraguay** are predicted to outweigh larger anticipated sales by **Argentina** and the **United States**. The biggest year-on-year fall in exports is forecast for Brazil as a result of lower domestic production. With Brazil's sales expected to fall by 24.0 percent to 40 million tonnes in 2024/25, Brazil would relinquish its position as the world's leading exporter, which it has held for the past two seasons. In 2024/25, maize exports from Ukraine are forecast to decrease by 10 percent to 22 million tonnes, its lowest volume since 2017/18. This decrease reflects tighter supplies and logistical disruptions due to the war. Smaller maize shipments from **Paraguay**

Figure 5. Coarse grain exports: major exporters



(after surging in 2023/24) and **South Africa** will also contribute to the decline in trade in 2024/25, although these two countries are not major maize exporters but important regional suppliers. By contrast, a sharp recovery in exports is forecast for **Argentina** (up 31.0 percent, to 40 million tonnes) following two seasons of limited sales. An increase in sales is also predicted for the United States (up 11.0 percent, to 55.5 million tonnes), which is likely to reclaim its position as the leading maize exporter in the world.

World trade in barley (excluding malt) is also anticipated to contract in 2024/25, down 2.4 percent from the 2023/24 level to 32 million tonnes. The main driver behind the decline is weaker import demand from **China (mainland)**, where purchases could fall by 14 percent on account of smaller exportable surpluses in **Australia**, its main supplier, and cheaper international maize supplies to meet feed demands. Regarding exports, in addition to an anticipated fall in Australia's sales, **Ukraine** and **Kazakhstan** are also seen reducing their shipments from their levels last season.

By contrast, global trade in sorghum is forecast to increase for a second consecutive season in 2024/25, reaching 10 million tonnes, up 6.4 percent from 2023/24. The predicted increase mainly reflects slightly bigger purchases from **China (mainland)** and the **European Union** and larger sales by **Argentina** and the **United States** due to bigger harvests.

Figure 6. Maize exports: top 10 maize exporters

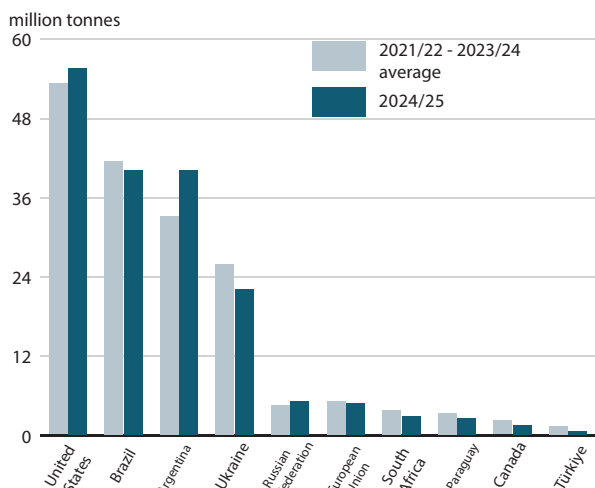


Figure 7. Maize imports: top 10 maize importers

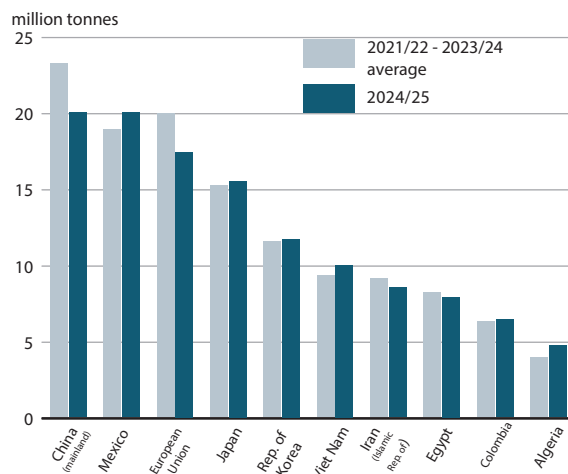


Figure 8. Sorghum exports: top 5 sorghum exporters

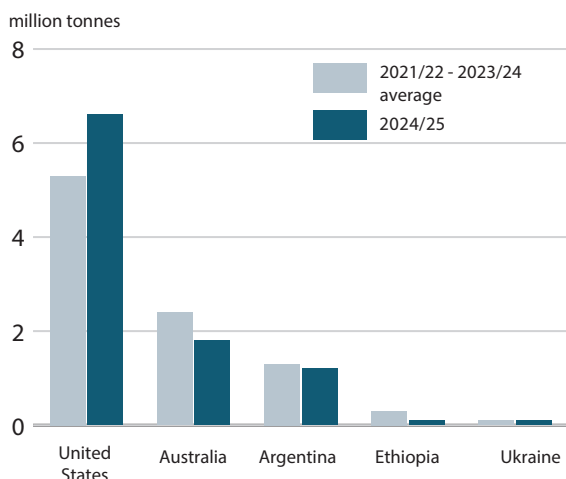


Figure 9. Sorghum imports: top 5 sorghum importers

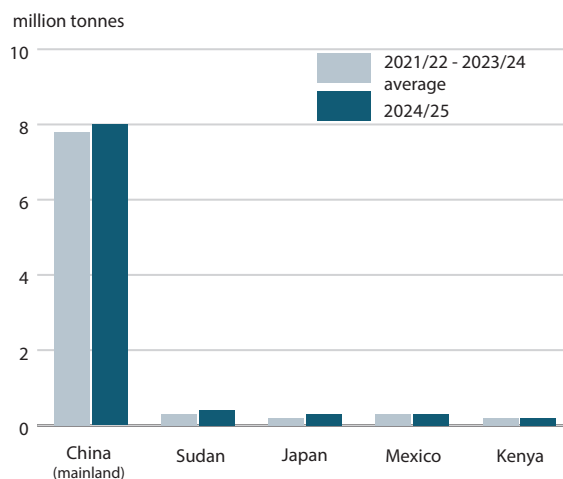


Figure 10. Barley exports: top 10 barley exporters

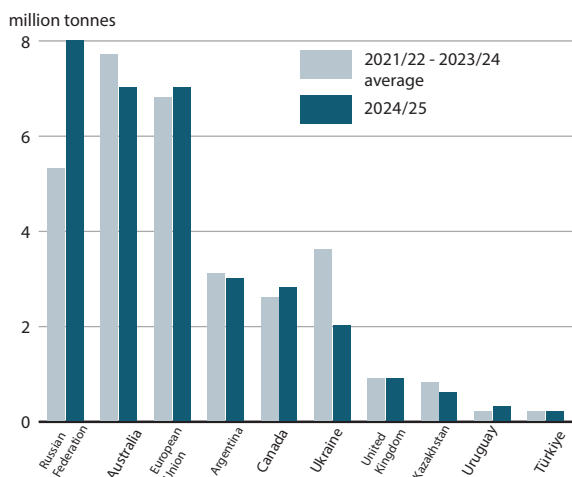
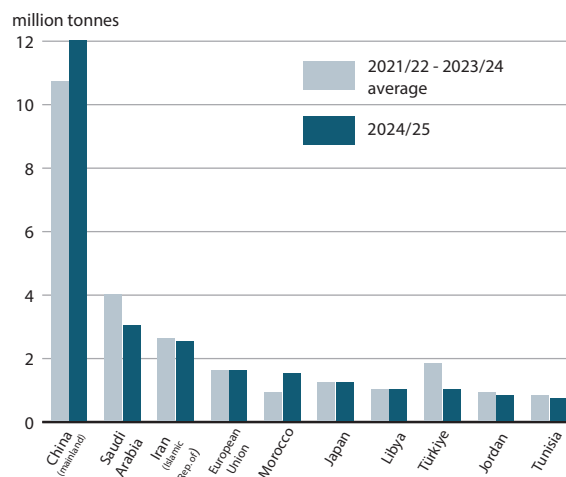


Figure 11. Barley imports: top 10 barley importers



UTILIZATION

Total utilization of coarse grains to expand in 2024/25

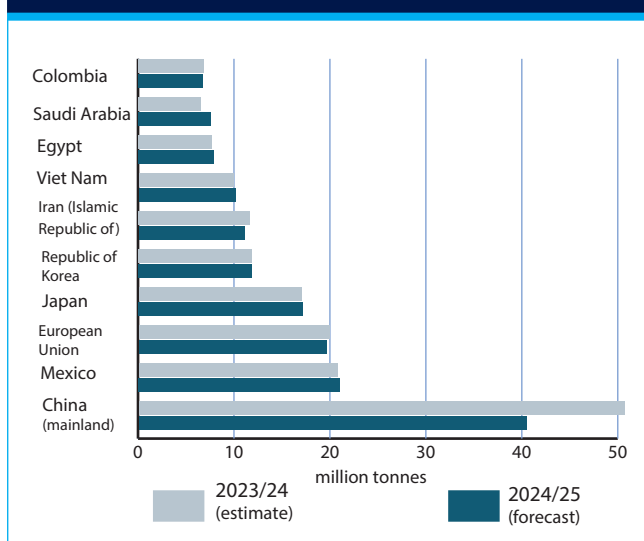
World utilization of coarse grains in 2024/25 is forecast to reach 1 526 million tonnes, 1.0 percent higher than in 2023/24 and marking a new record. Among the major coarse grains, maize utilization is projected to rise by 1.1 percent to 1 224 million tonnes, and sorghum utilization is set to reach nearly 62 million tonnes, 4.1 percent above the 2023/24 level. By contrast, total utilization of barley is projected to remain near its 2023/24 level of 148 million tonnes.

Making up the majority of the expected increase in utilization, feed use of coarse grains in 2024/25 is foreseen to increase by 1.3 percent to 895 million tonnes. Feed use of maize alone is anticipated to surpass its 2023/24 level by 1.5 percent and to reach 729 million tonnes. Feed use of sorghum follows and is predicted to increase by 7.3 percent to 24 million tonnes. **China (mainland)** is forecast to lead the increase in both feed use of maize and sorghum, with higher maize production and, consequentially, lower maize prices forecast to encourage using maize instead of wheat to produce feed, and larger imports of sorghum are predicted to go towards feed use. Feed use of maize is also forecast to increase in **Brazil** (up 3.7 percent) and the **Russian Federation** (up 31.8 percent), both supported by large domestic supplies, along with strong demand from the livestock sector in Brazil. Smaller increases in maize feed use are also anticipated in **India** (5.0 percent) and the **United States** (0.9 percent), which is also predicted to contribute to the rise in sorghum feed use (up 40.0 percent) owing to larger domestic supplies.

Forecast at 232 million tonnes, world food consumption of coarse grains in 2024/25 is set to exceed the 2023/24 level by 1.2 percent, which would maintain its share of total utilization at 15.0 percent. Regionally, the bulk of the expected increase in food consumption of coarse grains is in Africa (largely of maize), the region with the largest food consumption of coarse grains, followed by Asia (maize, barley, and sorghum). Within coarse grains, maize consumption is expected to increase by 1.1 percent in 2024/25 to 150 million tonnes. Food consumption of barley is forecast to increase in 2024/25 by 3.6 percent, and food use of sorghum is projected to rise by 1.6 percent to 28.6 million tonnes.

At 399 million tonnes, industrial use of coarse grains in 2024/25 is forecast only fractionally (0.1 percent) above the 2023/24 level. Increases in industrial use of maize (mostly in **Brazil**) and sorghum (almost exclusively in the **United States**) are offset by a forecast decline in industrial use of barley (largely in **Australia**).

Figure 12. Top 10 coarse grain importers



STOCKS

World inventories of coarse grains predicted to rise in 2024/25

FAO's first forecast for world stocks of coarse grains at the close of the seasons in 2025 stands at 385 million tonnes, pointing to a likely 3.4 percent increase above their opening levels and representing the highest level since 2017/18. Consequently, the world stocks-to-use ratio of coarse grains is set to rise slightly from 24.4 percent in 2023/24 to 24.8 percent in 2024/25, reaching its highest level since 2018/19. Moreover, the ratio of major exporters' closing stocks to their total disappearance – defined as domestic utilization plus exports and considered a better indicator of global availabilities from a trade perspective – is set to increase from 13.0 percent in 2023/24 to 14.4 percent in 2024/25, which would be the highest level since 2017/18.

Accounting for the bulk of the anticipated increase in coarse grain stocks, global maize stocks are forecast to rise by 3.5 percent above their opening levels, reaching 325 million tonnes. The largest buildup is predicted in the **European Union** (up 37.0 percent above opening levels) and is supported by expectations of higher production and a third consecutive season of large imports. In **China (mainland)**, high opening stocks, larger domestic production and an elevated level of imports for a fifth consecutive season are predicted to boost maize inventories by 2.1 percent above their opening levels. Maize inventories are also seen increasing in the **United States** (up 4.0 percent above their opening levels and reaching their highest level since 2018/19), and in **Brazil** (up 12.5 percent)

Figure 13. Maize exports from the Black Sea

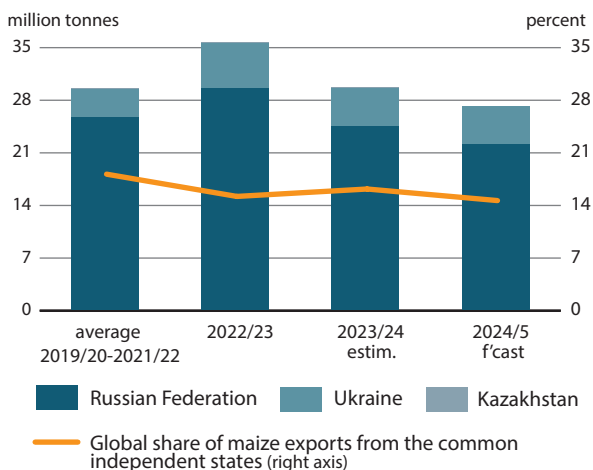


Figure 14. Global coarse grain utilization

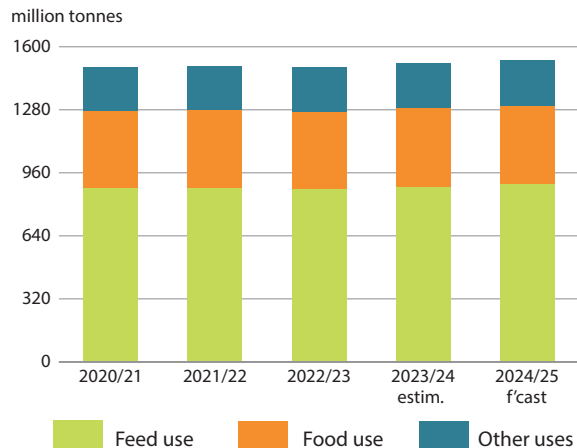


Figure 15. Global barley and maize consumption

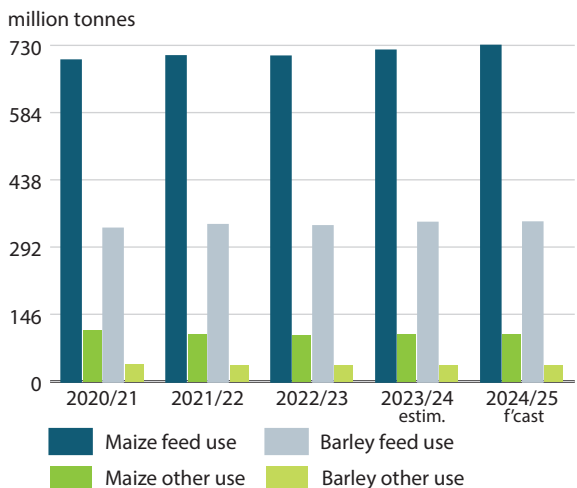


Figure 16. Maize stocks for major exporters

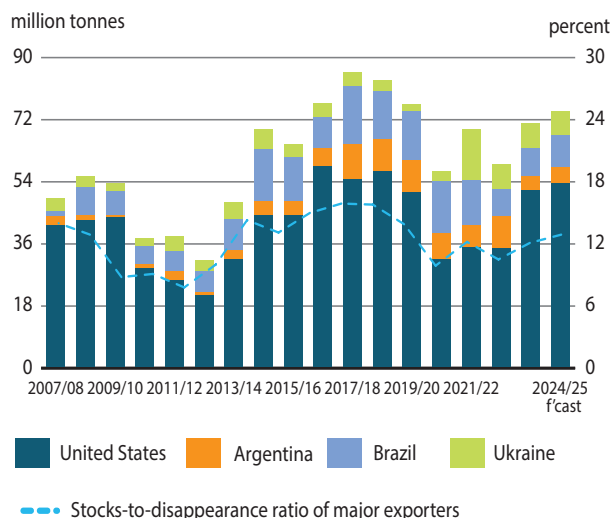


Figure 18. Coarse grain stocks and ratios

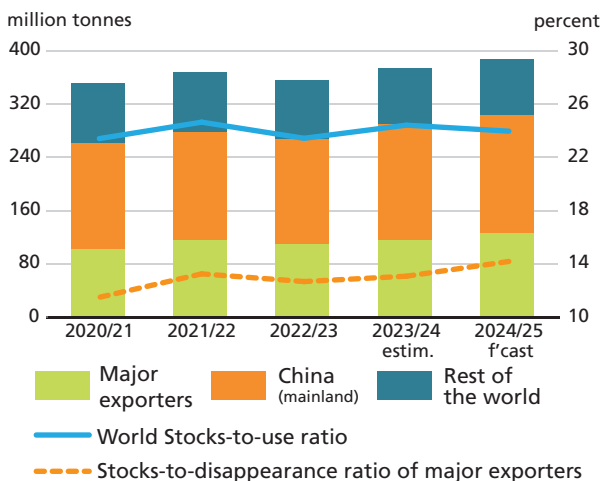
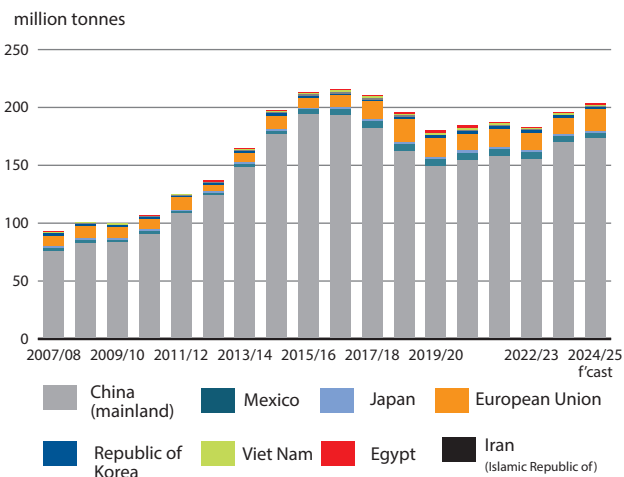


Figure 17. Maize stocks for top importers



thanks to a third consecutive bumper harvest.

Among other major coarse grains, both global barley and sorghum inventories are forecast to increase by 3.5 percent above their opening levels to 30.4 million tonnes and 7.4 million tonnes, respectively. Most of the predicted increase in global barley inventories

is in the **European Union**, while higher sorghum inventories are mostly seen in **Argentina, Brazil**, and the **United States**.

Table 3. Maize use for ethanol (excluding non-fuel) in the United States

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24 estim.	2024/25 (f'cast)
Maize production	384 778	371 096	363 787	344 651	357 818	381 469	346 739	389 694	377 461
Ethanol use	132 695	137 978	142 373	136 607	127 716	135 133	131 476	138 435	138 435
Yearly change (%)	0.5	4.0	3.2	-4.0	-6.5	5.8	-2.7	5.3	0.0
As of production (%)	34.5	37.2	39.1	39.6	35.7	35.4	37.9	35.5	36.7

Source: WASDE-USDA 12 May 2023 and FAO estimates.

RICE



INTERNATIONAL PRICES

Despite some declines in recent months, international prices remain elevated

The strength that dominated international rice markets for much of 2022 and 2023 has abated somewhat in recent months. According to the FAO All Rice Price Index, international prices have declined by 2.7 percent since the close of 2023, while remaining 7.5 percent above their year-earlier level. Indica quotations have driven price

movements in recent months, easing under the influence of new crop arrivals, low demand from African buyers, and the weakness of the Thai baht and Vietnamese dong against the United States dollar. Yet, Indica quotations remain 15.0 percent more expensive than in May 2023. Their strength reflects the underpinning provided by large purchases by Southeast Asian buyers, most notably Indonesia, as well as the lingering effects of India's rice export restrictions in the international market. This is notwithstanding the sizeable exceptions to the export bans on Indica white rice and broken approved by the

Figure 1. FAO All Rice Price Index

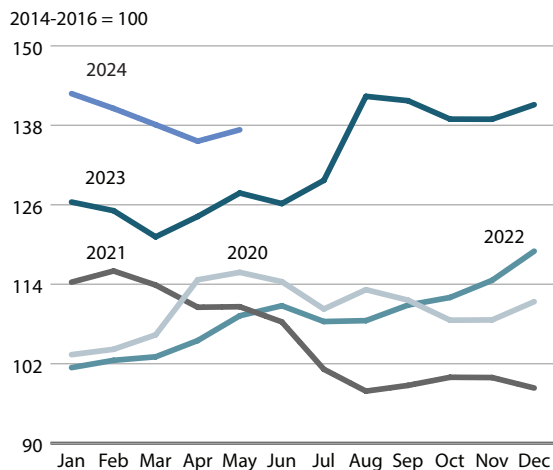
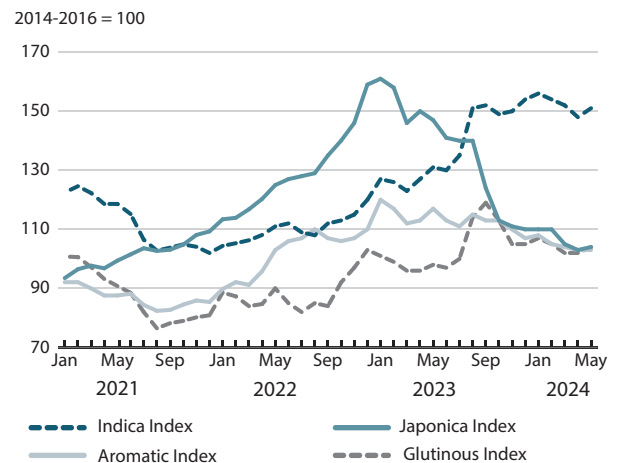


Figure 2. FAO Rice Price Indices



Government of India since the bans were put in place. Sentiment has been less resilient in other market segments, where lacklustre demand and, in the case of Japonica prices, easing drought disruptions have exerted downward pressure on prices. This has kept glutinous quotations well below their 2019 peaks, while lowering aromatic and Japonica quotations 11.5 and 29.6 percent below their respective May 2023 levels.

PRODUCTION

Rice production to hit a record high in 2024/25

Although much will still depend on how the northern hemisphere's summer rains unfold, world rice production is forecast to expand by 0.9 percent in 2024/25 to reach a fresh peak of 534.9 million tonnes (milled basis). A combination of area expansions and yield improvements are expected to sustain this growth, as attractive paddy prices at the onset of the season could keep plantings at the record extension attained in 2023/24, if not advance them further, while improved growing conditions following the dissipation of the El Niño phenomenon may revive yield growth.

Asia is expected to account for much of the production expansion envisaged for 2024/25, with an aggregate harvest of 478.9 million tonnes, up 0.6 percent from 2023/24. Within the region, **Bangladesh, India,** and the **Philippines** are all seen gathering record crops on the back of improved growing conditions and strong government support. Nevertheless, area expansions in response to attractive prices are also anticipated to bolster production in **Cambodia, Nepal,** and **Pakistan**. In Pakistan, shifts away from cotton cultivation are forecast to facilitate this

growth, as are efforts to revive spring paddy cultivation in Nepal. In the case of **China (mainland)**, a 0.6 percent annual expansion to 142.3 million tonnes is expected to be sustained by yield improvements, while firm paddy prices relative to competing crops, such as maize, stabilize area under paddy following three successive seasons of cutbacks. Easing drought constraints could also enable output to recover in **Iraq,** the **Islamic Republic of Iran** and **Türkiye**. The outlook is less positive elsewhere in the region. In **Thailand,** prospects of a full upturn are tempered by possible planting delays stemming from early season dryness, as well as uncertainties surrounding announced reforms to government support programmes. In the **Republic of Korea,** production is forecast to contract, as producer participation in the state's diversion scheme could increase following hikes in incentives for farmers who substitute table rice with floury rice and bean cultivation. In **Myanmar,** an anticipated production fall comes amid forecasts of an increased likelihood of below normal rains this season, which could aggravate challenges posed by an escalation of conflict, as well as fuel and energy shortages. Smaller crops are also forecast to be harvested in **Malaysia, Timor-Leste, Viet Nam** and especially in **Indonesia,** where the season is more advanced and where main-crop development was beset by unseasonable dryness associated with El Niño conditions. This is even if efforts are ongoing in Indonesia to mitigate falls by bolstering off-season production via hikes in fertilizer subsidies and through auxiliary irrigation.

Africa appears to be headed towards its third successive production expansion, with 28.4 million tonnes forecast to be gathered across the continent in 2024/25, up 4.0 percent year-on-year and a record high. Despite some flooding problems, the **United Republic of Tanzania** could see attractive local prices and abundant rainfall lift output to 2.9 million tonnes. In Western Africa, **Benin, Burkina Faso, Guinea, Mali, Senegal, Sierra Leone,** and **Togo** could also harvest more, a reflection of the high prices prevailing in many of these countries, expectations of broadly positive rainfall performance, and sustained government support to the sector. The latter includes the continuance of input assistance programmes that were announced by many of them, and in the case of Senegal, an intensification of existing measures, such as cuts in subsidized fertilizer prices, alongside steps to ease sector liquidity constraints. In Burkina Faso and Sierra Leone, the season also looks set to unfold under the framework of newly launched programmes: the *Offensive Agropastorale et Halieutique 2023-2025* in Burkina Faso that seeks to achieve full self-sufficiency in rice by boosting paddy output to 1 million tonnes; and the Feed Salone

Figure 3. Global paddy production and area



Table 1. World rice market at a glance

	2022/23	2023/24 <i>f'cast</i>	2024/25 <i>f'cast</i>	Change: 2024/25 over 2023/24
	<i>million tonnes, milled equivalent</i>			<i>%</i>
WORLD BALANCE				
Production	525.6	530.1	534.9	0.9
Trade ¹	52.9	51.4	53.4	3.7
Total utilization	525.3	525.0	531.4	1.2
Food	422.8	426.6	432.5	1.4
Ending stocks²	195.8	199.7	205.1	2.7
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	53.0	53.0	53.3	0.5
LIFDC (kg/yr)	28.4	28.2	28.5	1.0
<i>World stocks-to-use ratio (%)</i>	37.3	37.6	38.2	
<i>Major exporters stocks-to-disappearance ratio³ (%)</i>	29.2	31.0	31.9	
FAO RICE PRICE INDEX (2014-2016=100)				
	2022	2023	2024 <i>Jan-May</i>	Change: Jan/May 2024 over Jan/May 2023 <i>%</i>
	109	132	139	11.2

¹ Calendar year exports (second year shown).

² May not equal the difference between supply (defined as production plus carryover stocks) and total utilization due to differences in individual country marketing years.

³ Major exporters include India, Pakistan, Thailand, the United States of America and Viet Nam.

Table 2. Rice Production: leading producers*

	2022/23	2023/24	2024/25 <i>f'cast</i>	Change: 2024/25 over 2023/24
	<i>million tonnes, milled equivalent</i>			
China (mainland)	142.8	141.5	142.3	0.6%
India	135.8	135.3	136.7	1.0%
Bangladesh	38.5	39.0	39.5	1.2%
Indonesia	35.1	34.6	33.7	-2.4%
Viet Nam	27.7	28.2	27.8	-1.4%
Thailand	22.3	21.6	21.8	1.2%
Myanmar	16.8	17.1	16.7	-2.0%
Philippines	13.1	13.0	13.3	2.8%
Pakistan	7.3	9.9	10.1	2.7%
Brazil	7.3	6.8	7.0	2.2%
Japan	7.3	7.2	7.2	0.5%
Cambodia	7.0	7.7	7.9	1.8%
United States of America	5.1	6.9	7.0	0.9%
Nigeria	5.2	5.3	5.3	-0.6%
Egypt	3.6	4.0	4.0	-0.5%
World	525.6	530.1	534.9	0.9%

* Countries listed according to their position in global production (average of 2021/22-2023/24).

programme of Sierra Leone that targets to nearly double yields and bring more areas under paddy cultivation. In the case of **Côte d'Ivoire** and **Ghana**, harvest results are still seen positive overall, given strong planting incentives prevailing at the onset of the season. This positive growth conditions could return yields in these countries to more normal levels relative to the exceptional results of last season. Conversely, forecasts of below average rains dim expectations for **Liberia**, while, in the case of **Nigeria**, the production outlook is dampened by hikes in input costs and difficulties marketing produce following reductions in milling operations caused by hikes in energy costs. Adverse weather conditions associated with the El Niño event are likewise anticipated to depress output in **Mozambique** and **Zambia**, while also slowing growth in **Madagascar**. Meanwhile, in **Egypt**, expectations of further output growth are tempered by increased competition with animal feed crops, as well as sustained state efforts to curb plantings to preserve scarce water resources. These factors could keep output somewhat below the 2023/24 result.

Countries located in *Latin America and the Caribbean* are anticipated to harvest 18 million tonnes in 2024/25, a still below-normal harvest despite being 1.9 percent above the poor 2023/24 result. The downcast outlook primarily mirrors weather-related challenges in South America, where main crop harvests were just concluded. In **Brazil, Paraguay** and **Uruguay**, producers' capacity to respond to high prices through area expansions was limited or altogether precluded by short water supplies and/or planting delays caused by El Niño-induced rains. Flooding problems aggravated losses, leading to expectations of output in Brazil remaining at its second lowest in 26 years, while harvests in Paraguay and Uruguay slide by 10.0–12.0 percent year-on-year. Unseasonable dryness and high temperatures also impaired crops in the **Plurinational State of Bolivia, Colombia, and Suriname**, while **Argentina** could harvest its largest crop in three years amid comparatively fewer weather-induced losses. The season has unfolded more favourably in **Guyana, Peru**, and the **Bolivarian Republic of Venezuela**, where positive margins combined with sufficient water supplies for irrigation could further underpin expansions. In Central America and the Caribbean, the season has only just begun. The transition towards El Niño neutral conditions would generally bode well for crops in the sub-region. Still, much will depend on how the Atlantic hurricane season unfolds, as it could bring above-normal storm activity if the La Niña phenomenon soon emerges, as presaged by climate forecasting centres. Barring major setbacks, however, improved growing conditions and strong government support could sustain recoveries in the

Dominican Republic and **Panama**, with output also seen expanding in **Mexico** and **Nicaragua**. Within the sub-region, however, serious concerns surround the persistent and acute constraints in access to basic inputs faced by producers in **Cuba** and **Haiti**. These have caused output in both countries to succumb in recent years and, in the case of Haiti, have been aggravated by an escalation of violence.

In *Northern America*, the 2024/25 crop in the **United States** could exceed the already good 2023/24 outcome by 0.9 percent to reach 7 million tonnes, as high Indica prices prompt producers to expand plantings of long-grain varieties, including by cutting back on Japonica cultivation. In **Australia**, *Oceania's* largest rice producer, ample water supplies for irrigation and generally conducive weather are also seen sustaining a 9.3 percent annual output recovery to 370 000 tonnes. Production in *Europe* is similarly poised to normalize following three successive seasons of below-normal results. Indeed, output in the **European Union** could rise by 14.0 percent year on year to 1.5 million tonnes, as abundant spring rains eased water supply constraints in Spain and Italy, the two largest EU producers. This is even if the wet spring conditions also delayed Italian plantings, possibly dampening yield potential. In the **Russian Federation**, a 6.0 percent annual output expansion to a four-year high of 754 000 tonnes is expected to be sustained by prospects of favourable returns and furthered by government support under the aegis of a recently announced target to nearly double rice production in three to six years.

INTERNATIONAL TRADE

World rice trade to fall to a four-year low in 2024

International trade in rice is forecast to contract for the second successive year in 2024 (January-December), passing from an estimated 52.9 million tonnes in 2023 to 51.4 million tonnes this year. If confirmed, this volume would represent a four-year trade low and, from a regional perspective, would be largely imputable to expected import cuts in *Africa*. Aggregate deliveries to the region, which normally accounts for close to a third of global imports, are seen 8.6 percent below their already reduced 2023 level at an eight-year low of 15.4 million tonnes. The contraction would be consistent with the positive harvest results attained on the continent, which coupled with strong imports in 2023 could enable **Guinea, Kenya, Mali, Senegal, South Africa**, the **United Republic of Tanzania**, and **Togo** to buy less. Amid persistent cost pressures stemming from weak local currencies, elevated international prices and, in some cases, also higher

Figure 4. Rice imports by region

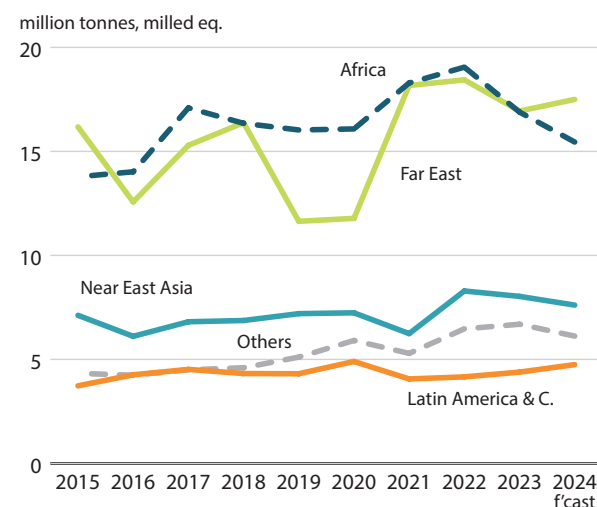


Figure 5. Rice exports by origin

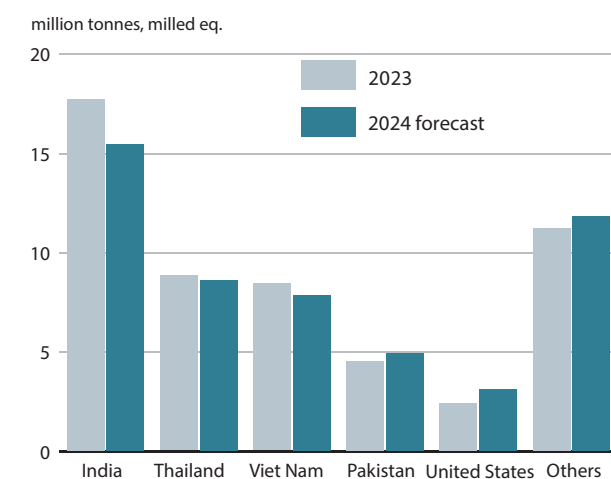
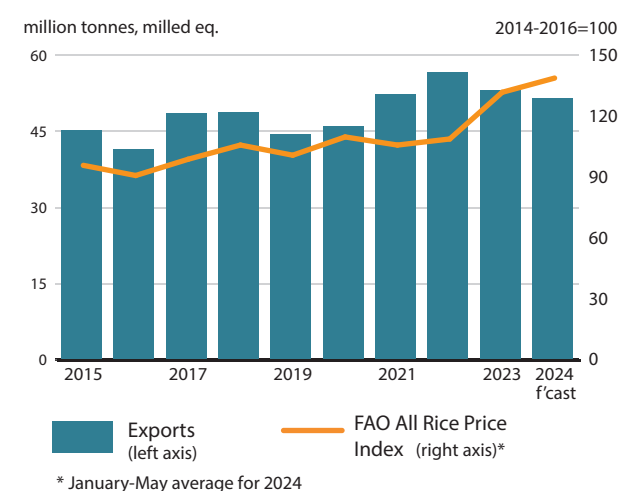


Figure 6. Global rice trade and FAO All Rice Price Index



transport and insurance costs, **Nigeria**, as well as **Egypt**, **Ethiopia**, **Ghana**, **Madagascar** and **Sierra Leone**, could also slash purchases or keep them at comparatively reduced levels. This could offset import increases envisaged, namely, for **Burkina Faso**, **Cameroon**, and **Côte d'Ivoire**.

Conversely, at a total of 25.3 million tonnes, aggregate imports by *Asia* are forecast to remain close to their overall abundant level of 2023, mainly because production setbacks and/or depleted inventories could lift purchases by Far Eastern countries such as **Malaysia**, **Nepal**, the **Philippines**, and **Timor-Leste**. This could add to a second successive year of substantial purchases by **Indonesia**, where the government has continued to rely on imports to refurbish public stockpiles and service market interventions. Improved availabilities of fully broken supplies for non-food industrial uses coupled with demand for fragrant varieties are also envisaged to raise purchases by **China (mainland)** somewhat. However, at a forecast 3.1 million tonnes, Chinese imports would remain well below 2021 and 2022 levels, amid expectations of lingering low demand for brokens for use in animal feed. In the Asian Near East, purchases by the **Islamic Republic of Iran** are forecast to accelerate in 2024, as rice imports become re-eligible for the preferential exchange rate availed by the government, while ample stockpiles from strong 2023 purchases could lower imports by **Iraq**, **Türkiye**, and **Saudi Arabia**.

In the rest of the world, demand for fragrant varieties is seen underpinning purchases by the **European Union** and the **United States**. Aggregate imports by Latin America and the Caribbean also appear poised for an 8.3 percent annual increase to 4.8 million tonnes, as production setbacks could expand imports mainly by **Colombia**, **Mexico**, **Peru**, and **Brazil**, with purchases by Brazil further bolstered by import duty suspensions and government imports seeking to contain local prices and refurbish state stockpiles.

Among rice exporters, **India** is seen shouldering much of the forecast trade decline of 2024, given existing export prohibitions on Indian brokens and non-basmati white rice. Yet, with close to 15.4 million tonnes of shipments in 2024, India is still envisaged to remain the world's largest rice exporter due to exceptions to the export bans that were passed by the Government of India on food security grounds, still competitive parboiled pricing, and robust basmati demand. Export prospects are downcast for **Viet Nam**, which could see its competitive edge in the Indica market curtailed by output shortfalls, in the context of still tepid glutinous demand from China and increased Japonica export competition. Tight exportable supplies are also expected to curtail shipments by **Brazil**, **Paraguay**, and **Uruguay**. Despite some increases relative to 2023 lows,

Myanmar's shipments are also seen at a below potential level of 2.1 million tonnes due to profitability hurdles posed by rules on foreign exchange conversion of export earnings. Meanwhile, shipments by **Thailand** could remain close to the strong 2023 level, at 8.6 million tonnes sustained by demand from Asian markets, more competitively priced fragrant supplies, and forays into the Latin American market. A bumper 2023/24 crop and reduced competition in the whole-grain Indica and broken segments are also expected to lift shipments by **Pakistan** to a peak of 4.9 million tonnes. Deliveries by the **United States** are also forecast to rise to a five-year high of 3.1 million tonnes, amid strong demand from traditional Latin American outlets. Export prospects are also positive for **Cambodia**, owing to strong cross-border demand from Viet Nam for domestic consumption and re-export, with **Argentina**, **Australia**, **China (mainland)**, and **Guyana** also seen shipping more than in 2023.

UTILIZATION

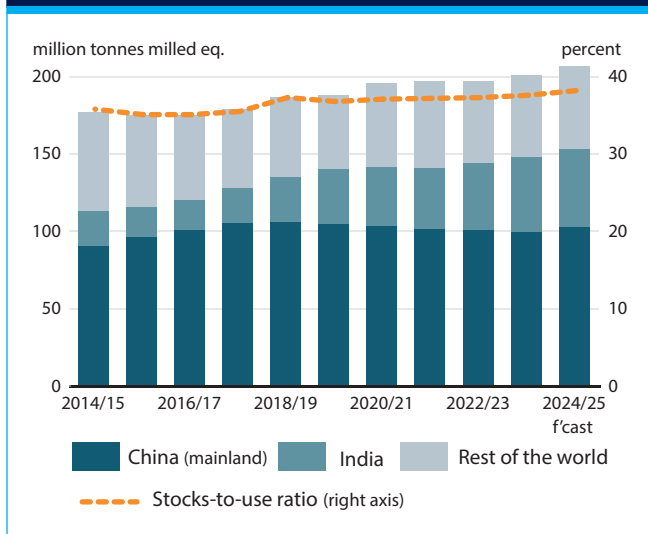
Ample supplies to revive growth in world rice utilization

Amid ample supply prospects, world rice utilization is forecast to expand by 1.2 percent in 2024/25 to 531.4 million tonnes (milled basis). If confirmed, this level would represent a fresh historical peak and mark the first tangible expansion in world rice uses to take place in three seasons. Food intake is envisaged to fuel this growth, absorbing 432.5 million tonnes, or 5.9 million tonnes more than in 2023/24. Taking expected population growth into account, this would result in a 0.5 percent annual increase in global per capita food intake to 53.3 kg. This forecast increase mirrors prospects of intake expansions in all regions, including in Africa and Latin America and the Caribbean, where intake has fallen for three successive seasons. On the other hand, non-food uses of rice are predicted to stagnate at around 98.9 million tonnes, as price-led reductions in China (mainland) could drive feed uses further down. This could largely offset expected increases in volumes absorbed by post-harvest losses, used as seeds or for non-food industrial purposes.

STOCKS

Rice stocks to cross the 200 million tonne mark

World rice stocks at the close of 2024/25 seasons are predicted to expand by 2.7 percent to a record high of 205.1 million tonnes. This expansion would be sufficient to cover 4.6 months of anticipated world uses and to raise the global stocks-to-use ratio from 37.6 points in

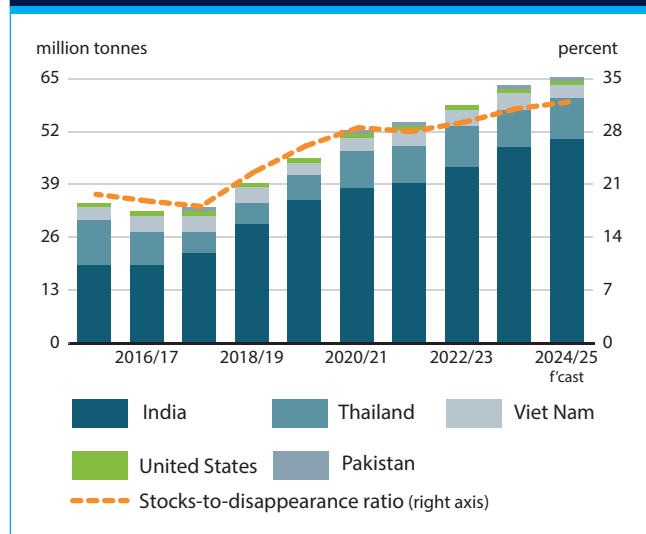
Figure 7. Global closing stocks and stocks-to-use ratio

2023/24 to 38.2 points in 2024/25. As in previous seasons, world reserves are expected to remain highly influenced by developments in **China (mainland)** and India, which, combined, are estimated to normally account for over 70 percent of global stocks. In **China (mainland)**, subdued local demand and a comparatively timid pace of exports could boost reserves by 2.8 percent to 101.8 million tonnes. In **India**, stocks could reach a high of 49.7 million tonnes, as government reserves could expand further due to large carry-ins and likely continued large purchases from the domestic market as enforcement of its producer price support policy.

Nevertheless, aside from **China (mainland)**, various traditional *importing countries* could end their respective seasons with larger stockpiles, including **Bangladesh**, the **European Union**, **Nigeria**, and the **Philippines**, with gains in the Philippines also possibly sustained by efforts to revitalize state purchases from the local market. In contrast, **Indonesia** is predicted to cut its reserves in the wake of a production contraction. **Kenya**, **South Africa** and **Saudi Arabia** are also seen drawing from the ample stockpiles that were amassed the previous season through strong imports. Steps to trim the size of state reserves through releases to non-food use sectors are also envisaged to reduce carryovers in the **Republic of Korea**.

Aside from **India**, other major rice exporters,¹ such as **Pakistan**, **Thailand** and the **United States** are also envisaged to accumulate more. This accumulation would more than compensate for a drawdown in **Viet Nam** that could be necessary to meet consumption and export needs in the wake of a production contraction. As a result, the

¹ India, Pakistan, Thailand, the United States and Viet Nam.

Figure 8. Stocks held by the five major rice exporters and stocks-to-disappearance ratio

group's stocks-to-disappearance² ratio might rise for the third successive season to 31.9 percent. Among other suppliers, **Paraguay**, **Uruguay**, and **Myanmar** are seen drawing on their reserves due to production cuts, while stockpiles in **Brazil** could rise, in part as result of official efforts to reconstitute state reserves through imports.

² Defined as the sum of domestic utilization and exports.

OILCROPS, OILS AND MEALS¹



PRICES²

International prices of oilseeds and oilmeals eased while those of vegetable oils rebounded somewhat

Since the onset of the 2023/24 (October/September) season, international prices of oilseeds fluctuated in a relatively narrow band and drifted slightly lower, and oilmeal prices embarked on a downward trajectory, heading for multiyear lows. Meanwhile, world vegetable oil prices rebounded lately, as reflected by the FAO price indices that track the development of the oilcrops complex. In May 2024, FAO's price indices for oilseeds and oilmeals stood at, respectively, 1.9 and 5.0 percent below their year-earlier levels, whereas the vegetable oil price index climbed, reaching 7.7 percent above its corresponding level of a year ago.

¹ Almost the entire volume of oilcrops harvested worldwide is crushed to obtain oils and fats for human nutrition or industrial purposes, and to obtain cakes and meals that are used as feed ingredients. Therefore, rather than referring to oilseeds, the analysis of the market situation is mainly undertaken in terms of oils/fats and cakes/meals. Production data for oils and meals are derived from domestic production of the relevant oilseeds in a specific year, i.e. they do not reflect the outcome of actual oilseed crushing in a given country and period. Regarding oilseed trade, situations where oilseeds are produced in one country but crushed in another are reflected in national oil/meal consumption figures. It is important to note that data on trade in oils (meals) refer to the sum of trade in oils (meals) plus the oil (meal) equivalent of oilseeds traded. Similarly, stock figures for oils (meals) refer to the sum of oil (meal) stocks plus the oil (meal) equivalent of oilseed inventories.

² For details on prices and corresponding indices see statistical appendix, table 24.

The lower oilseed price index was mainly driven by declining soybean quotations, more than offsetting higher rapeseed and sunflower seed values. International soybean prices continued to decline in recent months, largely underpinned by lingering subdued global import purchases, record-breaking production in South America, and prospects of ample world supplies in the upcoming 2024/25 season. This is despite unfavourable weather conditions in several main producing regions in Brazil, which contained further decline in soybean prices.

Figure 1. FAO monthly international price indices for oilseeds, vegetable oils and meals/cakes (2014-2016=100)

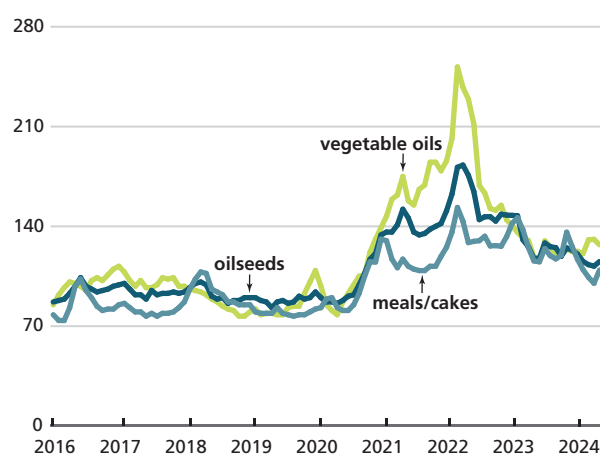


Figure 2. FAO monthly price index for oilseeds (2014-2016=100)

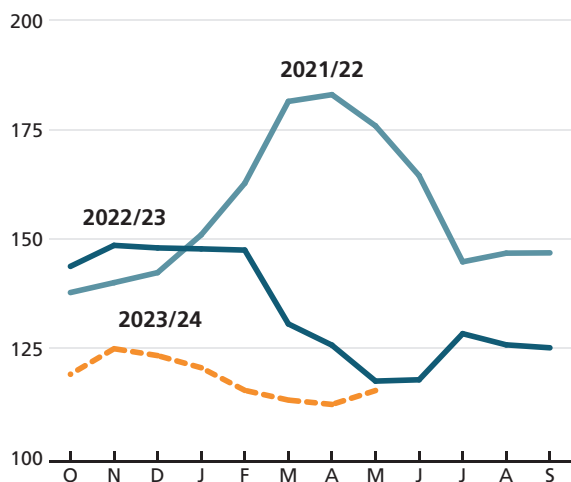


Figure 3. FAO monthly price index for oilmeals/cakes (2014-2016=100)

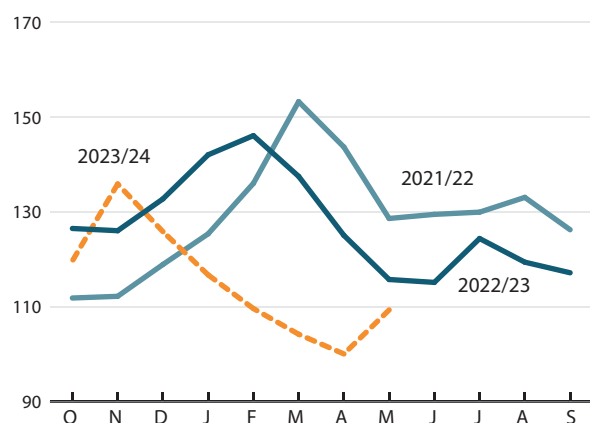
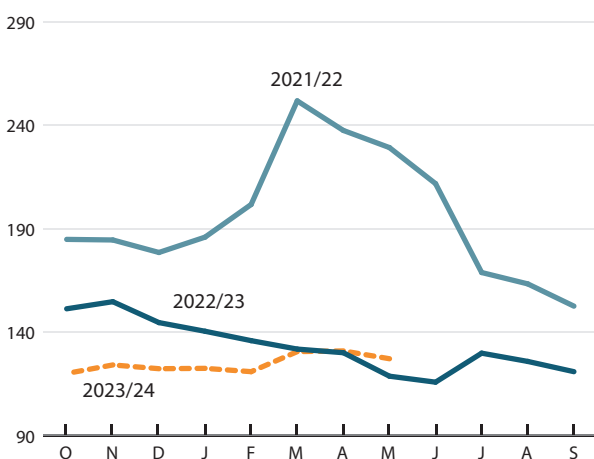


Figure 4. FAO monthly price index for vegetable oils (2014-2016=100)



Instead, world rapeseed quotations increased markedly after hitting multiyear lows in October 2023, supported by reduced winter crop plantings across Canada, the European Union and Ukraine. In the case of sunflower seed, international prices rose amid depleting stocks in the Black Sea region after fast paced sales in the early part of the 2023/24 season.

With regard to oilmeals, the contraction of the index primarily reflected lower soymeal prices. Expectations of a sharp rebound of soymeal output in Argentina, the world's leading exporter of the commodity, combined with ample supplies following robust crushing activities in Brazil and the United States, weighed on international prices. On the consumption side, additional downward pressure stemmed from protracted sluggish protein feed demand from the livestock sector, particularly in China.

By contrast, the vegetable oil price index increased, reflecting the net effect of higher palm, rapeseed and sunflower oil quotations, offsetting lower soyoil values. International palm oil prices trended higher since late 2023 and displayed unusual premiums over some competing oils. The rising prices were largely underpinned by below-potential outputs and corresponding dwindling inventories across major producing countries in Southeast Asia, although seasonally higher production and subdued global import demand weighed on prices lately. In the meantime, after registering nearly uninterrupted declines since reaching record highs in 2022, world rapeseed oil prices rebounded on lower supply prospects for 2024/25. Sunflower oil price quotations also rose markedly on strong global import purchases. Conversely, despite firm demand from the biofuel sector in both Brazil and the United States, world soyoil prices eased sizeably, in line with lower soybean prices amid abundant global supply outlooks for the upcoming season.

OILSEEDS

Global oilseed production expected to continue expanding in 2023/24

In 2023/24, global total oilseed production is expected to expand for the second consecutive season, possibly reaching a record high of 667.6 million tonnes. The continued growth would be primarily driven by higher soybean and sunflower seed production, more than offsetting lower outputs of rapeseed and other oilseeds.

In 2023/24, global soybean production is expected to climb to 393.4 million tonnes, 4.0 percent higher than the previous record set in 2022/23. The anticipated increase chiefly reflects a favourable production outlook in South America, due to an increase in harvested areas

Table 1. World production of major oilcrops

	2021/22	2022/23 <i>est.</i>	2023/24 <i>f'cast</i>	Change 2023/24 over 2022/23
	<i>million tonnes</i>			<i>%</i>
Soybeans	357.8	378.3	393.4	4.0
Rapeseed	76.6	90.4	89.1	-1.4
Sunflower seed	58.9	54.7	57.5	5.2
Groundnuts (unshelled)	48.2	47.6	48.3	1.5
Cottonseed	41.4	41.5	40.9	-1.3
Palm kernels	19.2	19.5	19.6	0.5
Copra	6.5	6.1	6.3	2.8
Total	608.6	638.1	655.2	2.7

Note: The split years bring together northern hemisphere annual crops harvested in the latter part of the first year shown, with southern hemisphere annual crops harvested in the early part of the second year shown. For tree crops, which are produced throughout the year, calendar year production for the second year shown is used.

and generally conducive weather conditions, such as in **Argentina** and **Uruguay**. In **Brazil**, however, although plantings expanded on relatively attractive profit margins, protracted hot and dry conditions in some of the major growing areas in the central west are predicted to reduce yield levels, while unexpected floodings in the south during the harvest could lead to lower harvested areas. Yet, the country is still expected to potentially harvest a second largest crop since the records began. In the northern hemisphere, production is set to decline in the **United States** on the account of a smaller area of plantings, and output in **India** could also decrease from the previous season owing to erratic monsoon rainfall. By contrast, production in **China** is seen expanding steadily amid supportive policy measures that incentivized farmers to increase soybean acreage modestly.

World sunflower seed production in 2023/24 is forecast to rebound by 5.2 percent from the reduced level registered in the previous season. Despite the ongoing war in **Ukraine**, a partial recovery in harvest areas, combined with favourable yield outcomes due to beneficial weather conditions, will facilitate a sizeable production recovery in the country – although still below the five-year average level. In the **Russian Federation**, similarly, conducive growing conditions and expanded plantings could lead to a marked production growth for the third successive season, with the output potentially setting a new high. Instead, production in **Argentina** is forecast to drop from last season's bumper crop, mainly due to smaller plantings.

Conversely, global rapeseed production in 2023/24 is estimated to decrease from the all-time high reached in 2022/23. The expected decline would be primarily driven by a lower harvest in **Australia**, underpinned by persistently

dry weather across major producing regions. Likewise, production in **Canada** is also set to decline slightly on lower yield results amid suboptimal moisture conditions. On the other hand, the rapeseed crop in **Ukraine** is forecast to increase for the third season in a row, largely fuelled by continued area expansion due to favourable returns compared with grains. Production in the **European Union** and **China** could also increase from the previous season due to expanded plantings, while the harvest in **India** is seen stabilizing at the record level.

OILS AND FATS³

World oils/fats production to increase marginally in 2023/24

The oilseed production prospects depicted above, combined with expectations of stagnating global palm oil output, are likely to translate into a marginal increase of 1.1 percent in world oils/fats production to 259.3 million tonnes. With regard to individual oils, while global palm oil production is forecast to remain stable compared to the previous season, predicted gains in soy and sunflower oil production are expected to be mostly offset by a smaller output of rapeseed oil. In **Indonesia**, after several years of subdued growth, palm oil production is forecast to remain below potential and possibly to stagnate in 2023/24. Protracted issues of inadequate replantings, particularly among smallholder growers, combined with suboptimal weather conditions linked to El Niño in late 2023, are likely to result in a further decline in yields. Similarly, owing to a worsening age profile of oil palms, the palm oil output in

³ This section refers to oils and fats of all origins, which include palm oil, marine oils and animal fats – in addition to products derived from the oilcrops discussed under the previous section on oilseeds.

Figure 5. Global production and utilization of oils/fats

Table 2. World oilcrops and product market at a glance

	2021/22	2022/23 <i>estim.</i>	2023/24 <i>f'cast</i>	Change: 2023/24 over 2022/23
	<i>million tonnes</i>			<i>%</i>
TOTAL OILCROPS				
Production	620.4	650.6	667.6	2.6
OILS AND FATS¹				
Production	247.6	256.5	259.3	1.1
Supply ²	279.9	290.3	295.2	1.7
Utilization ³	245.3	254.7	259.9	2.0
Trade ⁴	126.9	141.1	136.5	-3.3
<i>Global stocks-to-use ratio (%)</i>	<i>13.8</i>	<i>14.1</i>	<i>13.6</i>	
<i>Major exporters stocks-to-disappearance ratio (%)⁵</i>	<i>10.9</i>	<i>9.3</i>	<i>9.8</i>	
MEALS AND CAKES⁶				
Production	159.0	166.9	171.5	2.8
Supply ²	187.9	193.2	198.6	2.8
Utilization ³	161.1	162.4	167.2	3.0
Trade ⁴	101.3	107.9	108.9	0.9
<i>Global stocks-to-use ratio (%)</i>	<i>16.4</i>	<i>16.7</i>	<i>18.0</i>	
<i>Major exporters stocks-to-disappearance ratio (%)⁷</i>	<i>9.6</i>	<i>8.1</i>	<i>9.8</i>	
FAO PRICE INDICES (Jan-Dec) (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan-May 2024 over Jan-May 2023 %
Oilseeds	158	128	115	-13.8
Meals/cakes	133	127	108	-18.9
Vegetable oils	188	126	127	-3.7

Note: Kindly refer to footnote 1 on page 31 for overall definitions and methodology.

¹ Includes oils and fats of vegetable, animal and marine origin.

² Production plus opening stocks.

³ Residual of the balance.

⁴ Trade data refer to exports based on a common October/September marketing season.

⁵ Major exporters include Argentina, Brazil, Canada, Indonesia, Malaysia, Ukraine and the United States.

⁶ All meal figures are expressed in protein equivalent; meals include all meals and cakes derived from oilcrops as well as meals of marine and animal origin.

⁷ Major exporters include Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay, the Russian Federation, Ukraine, the United States and Uruguay.

Malaysia is also projected to remain broadly steady for the second consecutive season in 2023/24, notwithstanding improving labour availabilities. As for soy and sunflower oils, the anticipated production growth is tied to a larger harvest of respective oilseeds, whereas a lower global production of rapeseed is seen leading to a contraction in rapeseed oil output.

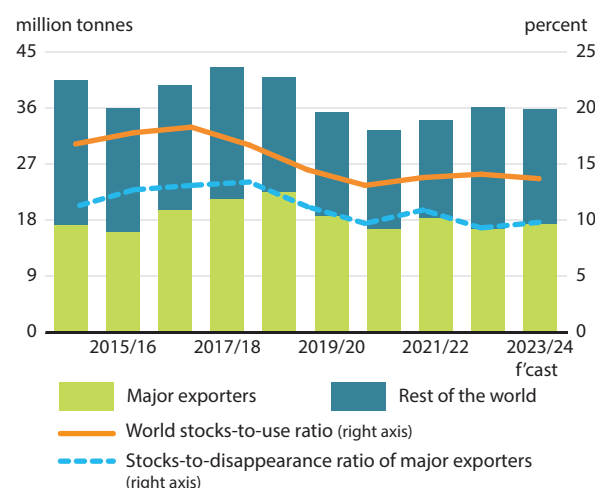
Global supplies of oils/fats, which consist of 2022/23 carry-over stocks that marked four-year highs, are expected to increase by 1.7 percent from the previous season. Domestic availabilities are forecast to rise in **Argentina**, the **European Union** and the **Russian Federation** on account of higher production. Supplies in **China** could also step up

due to large carry-in inventories. By contrast, declining oils/fats production in **Brazil**, **Canada** and the **United States** is seen driving lower domestic availabilities in respective nations. Meanwhile, in **India**, **Indonesia** and **Malaysia**, steady harvest outcomes would translate into stable domestic supplies in 2023/24.

Growth in global oils/fats consumption to slow down in 2023/24

Following revived growth in 2022/23, global oils/fats utilization is forecast to expand at a lower rate of 2.0 percent in 2023/24. Consumption of palm, soy, rapeseed and sunflower oils is all anticipated to increase year on year, more than offsetting expected lower usage of groundnut and olive oils.

The bulk of the global utilization increase is expected to take place in the Americas. In **Argentina**, on account of a significant production recovery, consumption of oils/fats is projected to rebound markedly to the five-year average level. In **Brazil**, despite reduced domestic availability, vegetable oil utilization is also forecast to expand sizeably, mainly underpinned by an elevation of the biodiesel admixture mandate by 2.0 percent to 14.0 percent, effective March 2024. Rising demand from the biofuel sector is also seen driving higher oils/fats uptake in the **United States**, amid rapid expansion of processing capacities in the country. In Asia, **Indonesia** and **Malaysia** are predicted to continue enlarging their palm oil consumption on sustained expansion in both industrial and food uses, while the slight utilization increase in **China** and **India** would be largely tied to steady growth for the food industry. Contrasting with the above uptrend, utilization in the **European Union** is forecast to stagnate in 2023/24,

Figure 6. World stocks and ratios of oils/fats (including the oil contained in seeds stored)

with rising uptake of soy, rapeseed and sunflower oils offset by lower palm and olive oil consumption.

Global ending stocks of oils/fats to decline slightly from their opening levels

With world oils/fats utilization forecast to exceed production, global ending stocks of oils (including the oil contained in stored, not-yet crushed oilseeds, where possible) are expected to decline slightly to 35.2 million tonnes in 2023/24. Stock drawdowns are anticipated for palm, sunflower, groundnut and olive oils, which will be partially compensated by replenishments in soy and rapeseed oils.

Among the major stockholders, **India, Indonesia** and **Malaysia** are expected to release their inventories from elevated levels accumulated during the previous season, and **Brazil** could also register a stock contraction. By contrast, **Argentina** and the **United States** could build up their stocks due to, respectively, a considerable output recovery and subdued export prospects. **Canada** and **China** are also anticipated to continue replenishing their reserves.

Based on these forecasts, the global stocks-to-use ratio for oils/fats in 2023/24 could decline slightly from the previous season to 13.6 percent, whereas stock accumulations in some of the major exporting countries should lead to a marginal increase in the stocks-to-disappearance ratio for the group.^{4,5}

World oils/fats trade to contract in 2023/24

After reaching record highs in 2022/23, the international exchange of oils/fats is projected to decline by 3.3 percent to 136.5 million tonnes (including the oil contained in traded oilseeds) in 2023/24. Global shipments of palm, soy, rapeseed and olive oils are expected to contract from the previous season, whereas sunflower oil trade could continue to expand. While palm oil would remain the leading traded oil in terms of volume, its market share could wane somewhat due to uncompetitive prices against rival oils, in particular sunflower oil, whose market share has been growing steadily in the past few seasons supported by rising supplies.

On the import side, lower purchases from Asia are seen driving the global import contraction. After receiving record volumes during the previous season, **China** and **India** are both forecast to reduce their procurement in 2023/24. The **European Union** is also expected to reduce its vegetable oil imports, reflecting weakening demand for palm oil from both the biodiesel and food sectors, more

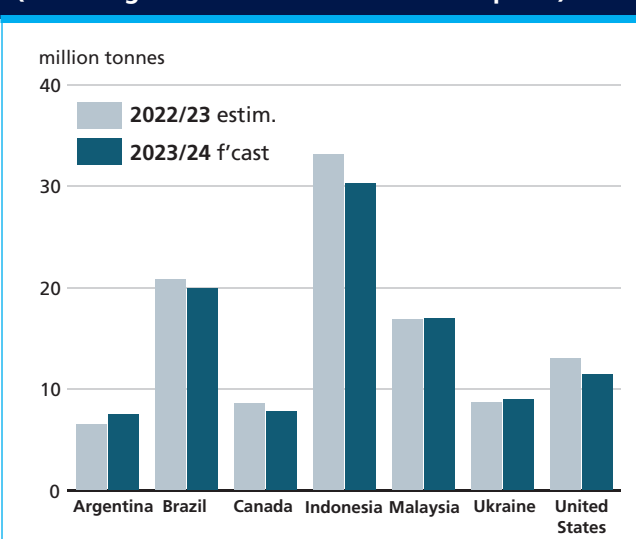
⁴ Disappearance is defined as domestic utilization plus exports.

⁵ The group of major exporting countries consists of Argentina, Brazil, Canada, Indonesia, Malaysia, Ukraine and the United States.

Figure 7. Total oils/fats imports by region or major country (including the oil contained in seed imports)



Figure 8. Oils/fats exports by major exporters (including the oil contained in seed exports)



than offsetting expected higher purchases of sunflower oil due to competitive prices. By contrast, the **United States** is anticipated to raise imports of oils/fats, facilitating robust growth in its biofuel production.

As for exports, palm oil shipments by **Indonesia** are forecast to drop markedly, affected by expected stagnant output and firm domestic demand, particularly from the biodiesel industry. Likewise, **Brazil** and the **United States** are likely to deliver less soyoil than the previous season. Conversely, after declining for three consecutive seasons, soyoil exports by **Argentina** are expected to recover substantially on higher oilseed production. In the meantime, palm oil sales by **Malaysia** are anticipated to grow steadily year on year, while ample sunflower oil supplies would also lead to higher consignments by the **Russian Federation** and **Ukraine**.

MEALS AND CAKES⁶

Global meals/cakes production to expand further in 2023/24

In line with the forecast expansion in world oilseed production, global output of meals/cakes is expected to rise by 2.8 percent to 171.5 million tonnes (expressed in protein equivalent) in 2023/24, possibly reaching a fresh record. As for individual meals, higher production of soy and sunflower meals would more than compensate for a reduced output of rapeseed and other oilmeals.

Global supplies of meals/cakes, which include the closing stocks of the preceding season, are anticipated to increase moderately, due largely to expected growth in oilmeal production. This is the case for **Argentina**, the **European Union**, the **Russian Federation** and **Ukraine**. Supplies in **China** could also increase year on year thanks to record carry-over stocks from the previous season. On the other hand, contracted production would contribute to lower domestic availabilities in **Brazil**, **India** and the **United States**.

Growth in world meals/cakes consumption likely to accelerate in 2023/24

After three consecutive seasons of subdued growth, world consumption of meals/cakes is forecast to increase at a higher rate of 3.0 percent in 2023/24. Commodity wise, the utilization of soymeal, the product with the dominant share in terms of volume, is expected to recover from the reduced level registered last season. Consumption of rapeseed and sunflower meals could also improve, outweighing stagnant cotton seed meal and smaller groundnut meal uptake, respectively.

Much of the demand resurgence is expected to take place in **China**. In this world's leading consumer of meals/cakes, although live hog and sow inventories have declined since late 2023, expectations of growing demand from the poultry and aquaculture sectors as well as improving profitability of hog farms following lower feed costs, could promote higher protein meal consumption in 2023/24. Elsewhere, oilmeal utilization is also projected to increase in **Argentina**, **Brazil**, the **European Union**, **India**, **Pakistan** and the **United States**, largely underpinned by growth in their livestock industries amid an ample supply of global meals/cakes.

⁶ This section refers to meals of all origins. In addition to the products derived from the oilcrops (discussed under the section on oilseeds), fishmeal and meals of animal origin are included.

Figure 9. Global production and utilization of meals/cakes (in protein equivalent)

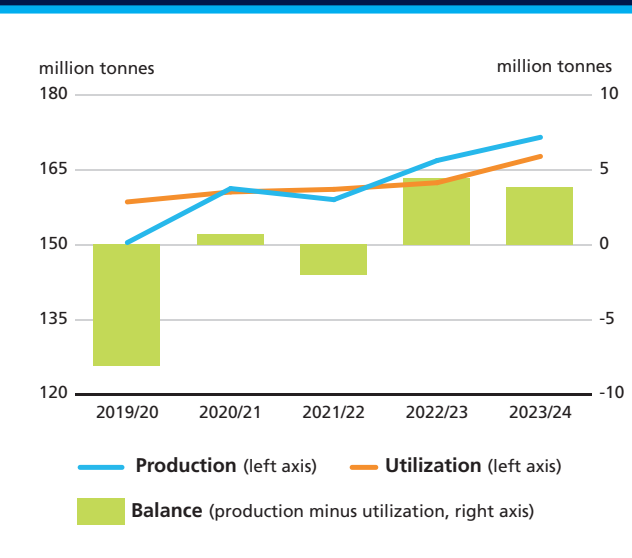
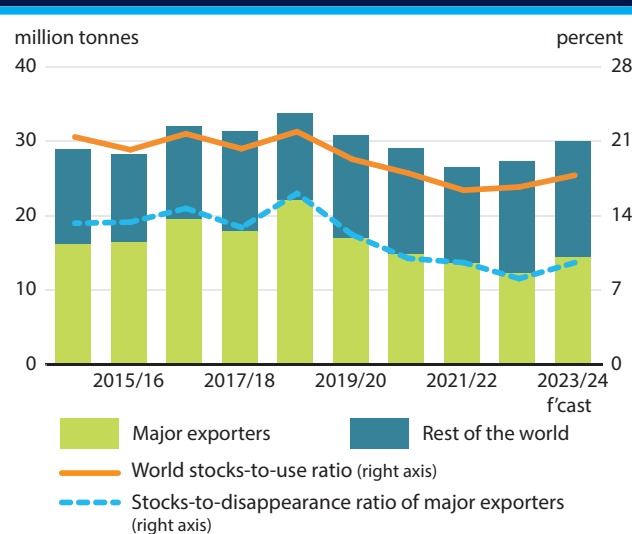


Figure 10. World stocks and ratios of meals/cakes (in protein equivalent and including the meal contained in seeds stored)



Further accumulation in global meals/cakes inventories expected in 2023/24

With global production of meals/cakes forecast to exceed utilization, ending stocks (including the meal contained in seed stocks) are set to build up to 30.1 million tonnes (expressed in protein equivalent) in 2023/24. In terms of individual commodities, a further rise in soymeal stocks is anticipated to more than compensate for expected drawdowns in rapeseed, sunflower and other meals.

Inventories in **Argentina**, **China**, the **European Union** and the **Russian Federation** are all forecast to scale up amid rising domestic supplies. In the **United States**, in spite of

Figure 11. Total meal/cake imports by region or major country (in protein equivalent and including the meal contained in seed imports)

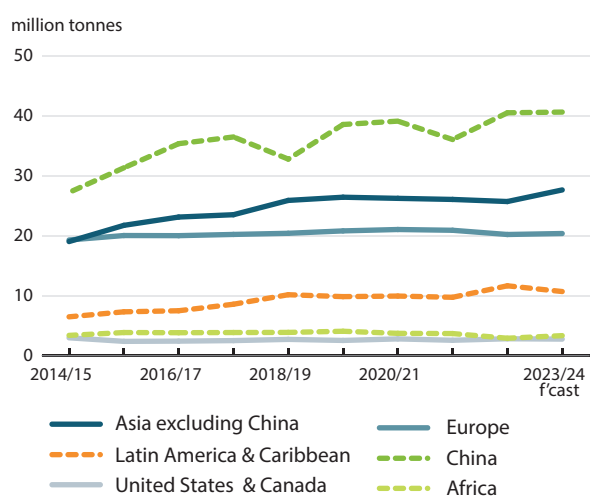
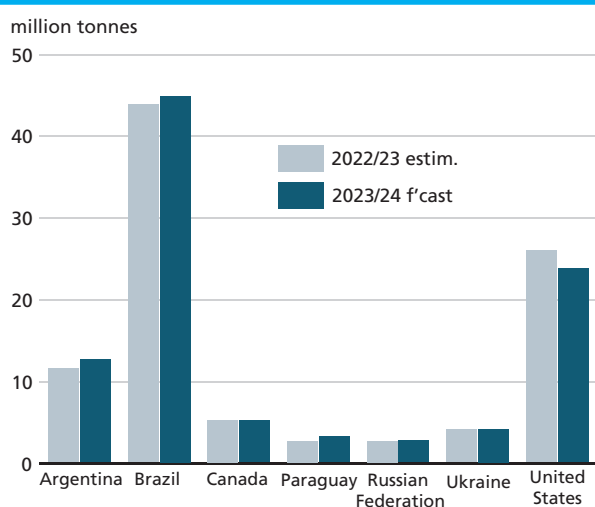


Figure 12. Meal/cake exports by major exporters (in protein equivalent and including the meal contained in seed exports)



lower outputs than the previous season, ending stocks could also accumulate due to subdued export prospects. By contrast, expectations of reduced oilseed production in **Brazil** and **India** are predicted to result in marked stock releases in respective countries.

Based on these projections, the global stocks-to-use ratio for meals/cakes is set to rise to a four-year high of 18.0 percent in 2023/24, and the major exporters' stocks-to-disappearance ratio could also register a second consecutive increase.⁷

⁷ The group of major exporting countries consists of Argentina, Brazil, Canada, India, Indonesia, Malaysia, Paraguay, the Russian Federation, Ukraine, the United States and Uruguay.

International trade in meals/cakes to expand marginally in 2023/24

Following a sizeable recovery in the previous season, global trade in meals/cakes (including the meal contained in traded oilseeds) is expected to expand marginally by 0.9 percent in 2023/24. Transactions of soy, sunflower and groundnut meals are forecast to grow, more than offsetting projected lower shipments of rapeseed and other meals.

With regard to imports, purchases by **China**, **Egypt**, the **European Union**, and **Thailand** are anticipated to increase to meet their rising domestic demand. In **Pakistan**, whose procurement is also forecast to recover, lingering uncertainties regarding the regulations on the importation of genetically modified crops could result in a below-average volume. Conversely, imports by **Argentina** are seen dropping significantly, due to a sharp increase of its domestic output.

As for exports, soymeal sales by **Argentina** and **Brazil** are forecast to expand, largely at the expense of lower shipments by the **United States**. Abundant sunflower meal supplies in the **Russian Federation** and **Ukraine** could also prompt higher exports from the Black Sea region. By contrast, **Australia** is expected to export less than the previous season due to lower rapeseed production in 2023/24.

EARLY PRODUCTION OUTLOOK FOR 2024/25

With the 2023/24 season still ongoing, it is rather early to make concrete world supply-and-demand forecasts for 2024/25. Currently, only limited information is available regarding the new crops in selected northern hemisphere countries, where plantings are underway. In the Southern hemisphere, sowing operations will not start until the last quarter of 2024. In general, with farming margins for oilseeds relatively higher than those for competing crops, particularly cereals, the total planted areas are likely to rise further. These expectations, combined with higher yield potentials – assuming normal growing conditions – would lead to a preliminary projection of record world oilseed production in 2024/25.

Regarding individual crops, expected increases in soybean, sunflower seed, groundnut and cotton seed production would more than offset a foreseen lower output of rapeseed. Global soybean production is forecast to continue expanding, potentially marking a new all-time high in 2024/25. In the **United States**, higher planting intentions coupled with assumed trend yield would translate into a near-record production. Similarly, outputs in **Argentina** and **Brazil** are also projected to increase, chiefly driven by further area gains. Nevertheless, production in

China could remain broadly stable year on year, reflecting expectations of stagnant plantings due to anticipated relatively low returns. World sunflower seed production is also predicted to increase, underpinned by forecast growth in **Argentina**, the **European Union** and **Ukraine**, outweighing a smaller harvest in the **Russian Federation**. By contrast, global rapeseed production could decline marginally in 2024/25, due to lower winter crop plantings across **Canada**, the **European Union** and **Ukraine**, offsetting higher forecasts in **Australia** and **China**.

These tentative crop projections would indicate a continued increase in oilmeal supplies in 2024/25, which

are expected to outpace a moderate growth in world consumption, assuming a rather sluggish global economic recovery preventing a stronger demand for meat and dairy. Therefore, a further inventory replenishment of oilmeals is foreseen. In the case of vegetable oils, while global output is also forecast to increase in line with higher oilseed production, the growth rate would be less buoyant, considering prospects of stagnating palm oil output. As a result, a modest expansion in utilization, particularly in view of rising demand from the biofuel industry, would exceed global supplies and lead to a further decline in vegetable oil ending stocks.

SUGAR



PRICES

International sugar prices under pressure from improved global supply prospects

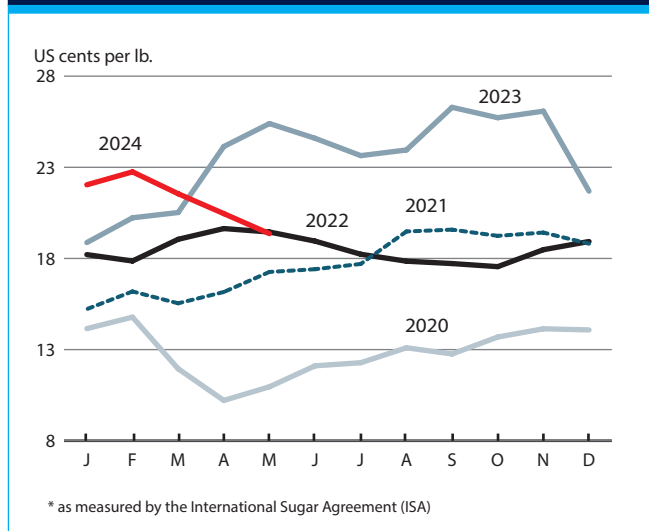
Since the release of the last issue of the Food Outlook report in November 2023, international sugar prices, as measured by the International Sugar Agreement's daily prices for raw sugar, have generally declined. Quotations dropped in December 2023, falling from US 25.7 cents per pound (USD 567.1 per tonne) in October 2023 to US 21.7 cents per pound (USD 478.2 per tonne) in December. After increasing in January and February 2024, prices resumed their downward trend in the following months, reaching

US 18.9 cents per pound (USD 417.2 per tonne) in May 2024, the lowest level since January 2023.

The strong pace of sugar production in Brazil since the start of the marketing season in October weighed on world sugar prices in the past months. The upward revision to the 2023/24 sugar production forecast in India and the improved pace of sugar production harvest in Thailand at the final stage of the season also contributed to the overall decline. On the other hand, international sugar prices are also influenced by movements in the Brazilian currency, which affects producer-selling decisions. The Brazilian real has generally depreciated against the United States dollar since the start of the season and has resulted in higher export volumes and lower world sugar prices. Another key element influencing world sugar prices are movements in international crude oil prices, which affect the demand for sugarcane-based ethanol. Despite the increase in international crude oil and ethanol price quotations in Brazil in the first months of 2024, current market conditions point to a higher profitability in producing sugar rather than ethanol. In general, global sugar prices remain above production costs for the majority of world producers, including in Brazil, where production costs are estimated at US 16 cents per pound (USD 352.7 per tonne), encouraging sugar production. Finally, slower-than-anticipated recovery in the global economic activity also negatively impacted prices by dampening industrial demand for sugar.

Preliminary forecasts for the 2024/25 season point to a consecutive year of global production surplus, although modest. The positive outlook for the current season in Brazil, combined with the expected global production surplus in 2024/25, should weigh on world sugar prices.

Figure 1. International sugar prices*



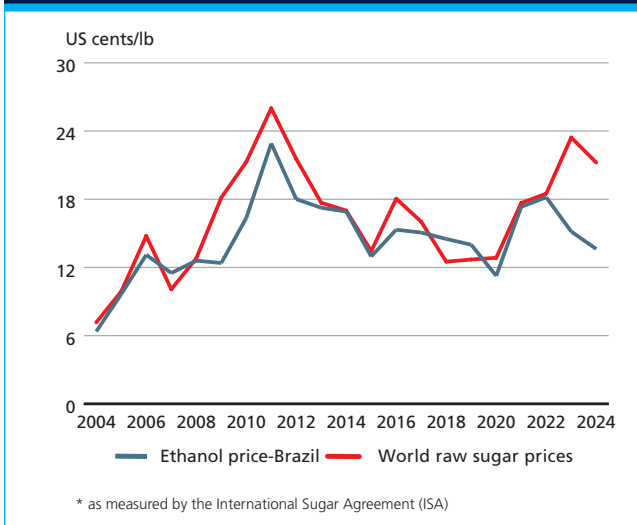
PRODUCTION

World sugar production in 2023/24 revised higher

World sugar production in 2023/24 (October/September) is forecast at 179.4 million tonnes, up 0.5 million tonnes, or 0.3 percent, from the 2022/23 outturn. This forecast is above FAO's preliminary expectations, presented in the November 2023 issue of Food Outlook, mainly due to a larger-than-anticipated output in **Brazil**.

In *South America*, latest indications point to a likely increase in the 2023/24 outturn, mostly on account of a bumper sugar output anticipated in **Brazil**, the world's largest producer and exporter of sugar. Production in **Brazil** is forecast to rise to 43.8 million tonnes, representing a 1.4 percent increase from the 2022/23 level. The improvement in the current season's production outlook was mainly driven by the bumper outturn of 9.8 million tonnes produced in the first half of the season in the centre-south key growing area. This amount marks the largest output recorded in the corresponding period in most recent years and stemmed from favourable market and weather conditions. In addition, despite concerns over dry conditions hampering crop yield prospects in key producing areas, the production outlook for the remainder of the season remains positive overall. Current market conditions indicate that diverting sugarcane crushing to sugar production rather than ethanol is more profitable. The ethanol parity price – the price of raw sugar below which it becomes more profitable to produce ethanol instead of sugar – is estimated at US 7.9 cents per pound (USD 173.6 per tonne), which is well below the current level of international raw sugar prices. Elsewhere in South America, sugar production is anticipated to remain

Figure 3. World sugar prices* and Brazil ethanol prices, in raw sugar equivalent



relatively stable in **Argentina**, while it is forecast to decline in **Colombia**, the region's second largest producer, mainly due to a decline in sugar recovery rates.

In *Central America and the Caribbean*, 2023/24 sugar production in **Mexico** is forecast to decline for the second consecutive year. Unfavourable weather conditions during the growing and harvest periods negatively affected both sugarcane yields and sugar recovery rates and led to successive downsizing of the production forecast. Similarly, in **Guatemala**, sugar output is also expected to decline for the second consecutive year due to unfavourable weather conditions. In **Cuba**, input shortages and logistical constraints are anticipated to negatively affect the 2023/24 sugar production.

Figure 2. World sugar production by region

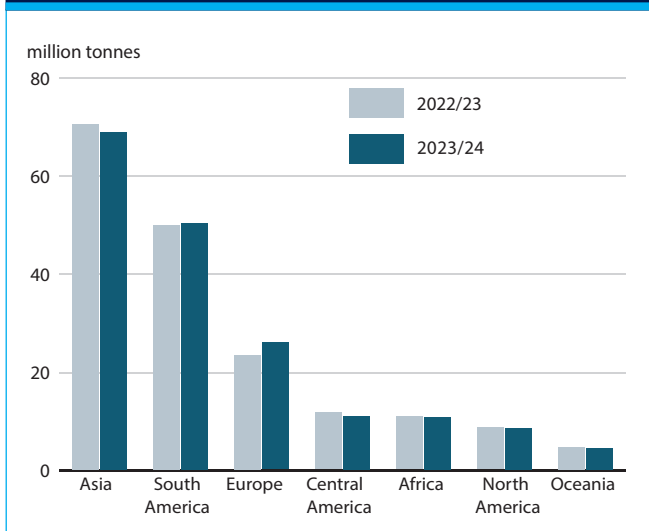


Figure 4. Sugar production in major producing countries

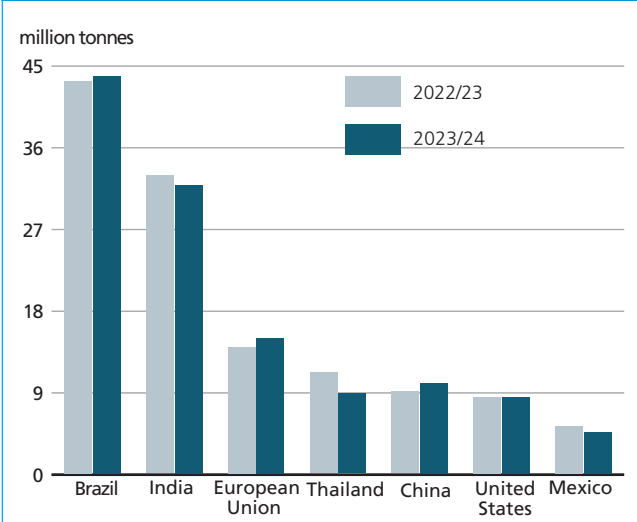


Table 1. World sugar market at a glance

	2021/22	2022/23 estim.	2023/24 f'cast	Change: 2023/24 over 2022/23
	million tonnes			%
WORLD BALANCE				
Production	174.6	178.8	179.4	0.29
Trade	62.4	62.7	63.3	0.97
Total utilization	173.8	174.9	177.4	1.43
Ending stocks	111.9	115.6	117.4	1.52
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/yr)	22.0	22.0	22.1	0.55
LIFDC (kg/yr)	12.4	12.5	12.5	0.40
World stocks-to-use ratio (%)	64.4	66.1	66.2	0.09
ISA DAILY PRICE AVERAGE (US cents/lb)				
	2022	2023	2024 Jan-May	Change: Jan/May 2024 over Jan/May 2023 %
	18.49	23.43	21.14	-3.16%

In *Africa*, total sugar production for 2023/24 is set to remain close to its level in 2022/23. A modest production recovery forecast in **Egypt**, the continent's largest producer, and a slight increase in **South Africa** will likely offset a decline in the **United Republic of Tanzania** and **Malawi**. The production recovery in **Egypt** mostly rests on a forecast of a larger output of sugarbeet boosted by remunerative prices, while sugarcane production is anticipated to remain relatively steady. The increase in outturn expected in **South Africa**, the continent's second largest producer, mainly reflects a slight increase in area and greater sugar recovery rates. By contrast, in the **United Republic of Tanzania**, a sharp drop in output is forecast due to heavy rainfall in late 2023, which affected harvesting operations. Similarly, unfavourable weather conditions affected crop prospects in **Malawi**.

In *Asia*, total sugar production in 2023/24 is forecast to decline for the second consecutive year. Most of the decrease stems from lower outputs foreseen in **India** and **Thailand**, which will more than offset an expected increase in **China** and **Türkiye**. In **India**, sugar production in 2023/24 is forecast to decline for the second consecutive year. This decline is attributed to a reduction in planted area and diminished sugarcane yields resulting from inadequate rainfall and depleted water reservoir levels. However, the decline is less than predicted because of a larger-than-expected sugarcane harvest in key growing areas, Maharashtra and Karnataka, coupled with a lower diversion to ethanol compared to 2022/23. In **Thailand**, the 2023/24 sugar

production is expected to turn sharply down from the highs of 2022/23, mainly due to the lack of rain affecting crop yields. Despite the improved pace of sugar production harvest at the final stage, the 2023/24 output is forecast to be down by 21.0 percent from the previous season. In **China**, sugar production is foreseen to recover from the reduced level in 2022/23, as a result of an increase in sugarcane area, driven by higher purchase prices and conducive weather conditions for crop development. A rebound in output is also anticipated in **Pakistan** after flooding affected crops in the 2022/23 season. In **Türkiye**, sugar production is forecast at a record level of 3.3 million tonnes, following favourable weather conditions during much of the growing season and a slight expansion in planted area in response to higher government purchasing prices.

In *Europe*, the latest forecast points to a 11 percent increase from last year mainly as a result of a production rebound in the **European Union**. Latest official estimates for the **European Union** indicate a nearly 8 percent increase in sugar output in 2023/24, driven by an increase in sugarbeet area in some countries and a recovery in crop yields. Similarly, in the **United Kingdom of Great Britain and Northern Ireland**, production in 2023/24 is anticipated to rebound from last year's reduced level, mainly as a result of higher yields. Production of sugar is set to expand in the **Russian Federation**, following increases in both plantings and the average sugarbeet yield, and in **Ukraine**, reflecting the recovery in area planted.

In the rest of the world, production in the **United States** is forecast to remain relatively steady. Production of sugar derived from sugarbeet will decline slightly due to lower sugar recovery rates, but it will be offset by an increase in sugar production from sugarcane. In **Australia**, the 2023/24 sugar production is anticipated to be slightly lower year on year, due to adverse weather conditions that hindered crop development.

UTILIZATION

Sugar consumption to increase in 2023/24

In 2023/24, global sugar consumption is forecast to reach 177.4 million tonnes, up 2.5 million tonnes, or 1.4 percent, from 2022/23. Consumption growth in Asia and Africa will be similar to last year's rate and is expected to continue as the main driver of the global increase. In addition, the anticipated rebound in Europe from the 2022/23 downturn is forecast to contribute to a stronger growth in world consumption compared to the previous season. Despite the expansion in global sugar intake, the upward revision to global production should result in a world sugar production surplus of 1.9 million tonnes in 2023/24.

In *Europe*, a 1.0 percent recovery in sugar intake is forecast in 2023/24. The year-on-year increase mostly stems from the expected rebound in the **European Union**, after the slowdown in economic growth and high world sugar prices affected sugar intake in 2022/23. Economic growth affects the demand for sugar because changes in economic conditions influence the beverage and food processing sectors, which account for the bulk of aggregate sugar. In **Ukraine**, a slight recovery in consumption is also forecast after the drop in 2022/23 due to the outflow of a large number of people from the country, coupled with the limited production capacity of the domestic food industry because of the impact of the war.

In *Asia*, sugar consumption in 2023/24 is expected to grow at a pace similar to 2022/23, mainly as a result of population and income growth. In **India**, the world's largest sugar consuming country, consumption is expected to increase by 2.3 percent to 28.5 million tonnes. This increase is supported by strong domestic demand, including from hotel, restaurant and catering service industries in general. In **China**, the world's second largest sugar consumer, sugar intake is forecast to rebound in 2023/24 – after the slowdown in 2022/23 – as a result of the post-COVID-19 rebounding industrial demand for sugar, particularly in the beverage industry.

In *Africa*, sugar consumption is projected to grow at a faster pace compared to the rest of the world, driven by population growth, rising incomes and urbanization. In **Egypt**, the continent's largest sugar consuming country, consumption is forecast to grow by over 2.0 percent in 2023/24 driven by an anticipated 2.0 percent population growth in 2024 and the expansion of the confectionary food products sector.

In *Latin America and the Caribbean*, sugar consumption in 2023/24 is foreseen to rise to a moderately higher level than in the past season, although the growth is anticipated

to be moderate due to a projected deceleration in economic growth in 2024.

In the *rest of the world*, consumption of sugar in the **United States** is forecast to decrease 0.2 percent from last year's record level, representing a flattening of the trend since the 2.5 percent surge in 2021/22 after COVID-19. On the other hand, consumption of high-fructose corn syrup (HFCS), used primarily in beverages as a substitute for sugar, is forecast to increase by 0.3 percent in 2023/24.

Several elements of uncertainty further characterize the prospects for sugar consumption. These relate to the future developments of geopolitical tensions, including the war in Ukraine and the conflict in Gaza, as well as persistently high core inflation, which could weigh on the global economic outlook. The extent of the global recovery also depends on policy measures implemented at country levels to boost economic growth. Changes in crude oil prices, a key element for the profitability of sugar crop-based ethanol production, could impact the amount of sugar available for consumption. Key drivers to monitor are developments in world and domestic sugar prices, movements in the value of currencies with respect to the United States dollar and public sugar policy initiatives aimed at curbing sugar intake.

TRADE

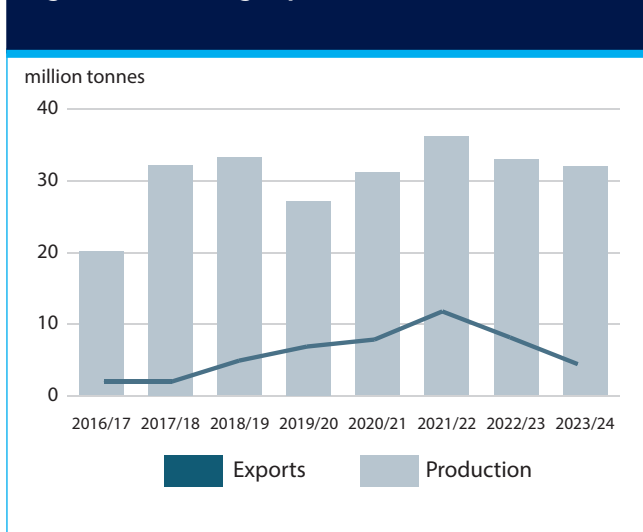
World sugar trade to expand slightly in 2023/24

FAO's forecast for world trade in sugar in 2023/24 (October/September) is currently pegged at 63.3 million tonnes, up 1.0 percent from the previous season. The anticipated expansion is mainly the result of larger exportable supplies from **Brazil** that will more than offset foreseen lower exports from **India** and **Thailand**.

Brazil's exports in 2023/24 are forecast to increase by 15.0 percent from the previous season's high level and reach 34 million tonnes, reflecting expectations of a bumper output. The country will account for over half of world sugar exports in 2023/24, consolidating its position as the world's largest sugar exporter. In the first six months of the current season, exports reached 19.2 million tonnes, 40.0 percent above the level exported in the corresponding period last year. Since the start of the season, the overall weakening of the Brazilian real against the United States dollar contributed to spur exports. The bulk of Brazilian sugar sales is in raw form, which, in the current season, has been mainly shipped to **China**, **India** and **Indonesia**. The large volume of exports since the beginning of the season has caused logistical difficulties at Brazil's main ports; the increase in vessel traffic and long waiting times for loading have caused shipment delays.

In **India**, concerns over a likely reduction in the 2023/24 sugar output have prompted the government to restrict

Figure 5. India sugar production and trade



exports, which are tentatively forecast at 4.5 million tonnes, nearly half the volume exported in 2022/23 and 60.0 percent below the record volume exported in 2021/22. The government has regulated sugar exports since June 2022 as a way to ensure sufficient availability for domestic consumption and to maintain stable domestic prices. As of February 2024, 1.7 million tonnes of sugar were exported since October 2023, mainly to East African countries, compared to 5.3 million tonnes in the corresponding period last year. Sugar exports from **Thailand** are forecast to fall 13.0 percent from 2022/23 due to expectations of a sharp production decline.

Shipments from **Australia**, the world's fourth largest raw sugar exporter, are forecast to increase in 2023/24, while those from **Mexico** are expected to fall slightly below the past season's low level due to a decrease of domestic availability. By contrast, the expected rebound in output in the **European Union** will likely result in a sharp year-on-year increase in sugar exports to a five-year high of 1.2 million tonnes in 2023/24. Sugar exports from **Ukraine** are anticipated to increase for the second consecutive season, with the bulk of the exports to the European Union. On 4 June 2022, the European Union adopted a regulation with Ukraine allowing for temporary full trade liberalization and the suspension of trade defence measures, which was extended for an additional year until 5 June 2024. A new regulation applies from 6 June 2024 until 5 June 2025 that foresees tariff-rate quotas if imports of sugar exceed the arithmetic mean of quantities imported in the second half of 2021, 2022 and 2023.

On the import side, purchases by Asian countries are forecast to increase by 2.4 percent in 2023/24, compared to 2022/23, mainly sustained by imports to **China** and **India**. In **China**, official forecasts point to a likely increase in imports, although domestic production is forecast to increase along with consumption. In the first six months of the season, the country's imports reached 3 million tonnes, 13.0 percent above the reduced import volume in the corresponding period in 2022/23. In **Indonesia**, the world's second largest sugar importer, purchases are forecast to remain broadly unchanged year on year.

Imports by African countries are also forecast to increase in 2023/24. This increase mainly reflects higher demand from **Nigeria**; after the government stopped imports of refined sugar in 2021 as part of its plan to boost the domestic industry, the country mainly imports raw sugar. Imports are forecast to remain strong in **Algeria** and **Morocco**, large importing countries, while a significant increase is expected in the **United Republic of Tanzania** due to the likely drop in production.

In **Europe**, imports by the **European Union** in 2023/24 are forecast sharply down year on year, after the increase

recorded last season, reflecting the likely rebound in production. In the first five months of the current season, the main import origins were **Brazil** followed by **Ukraine**.

In the rest of the world, purchases by the **United States** are forecast only slightly below last year's level. Lower volumes imported from **Mexico** will more than offset a year-on-year increase in imports outside the quota volume.

Figure 6. World sugar exports by region

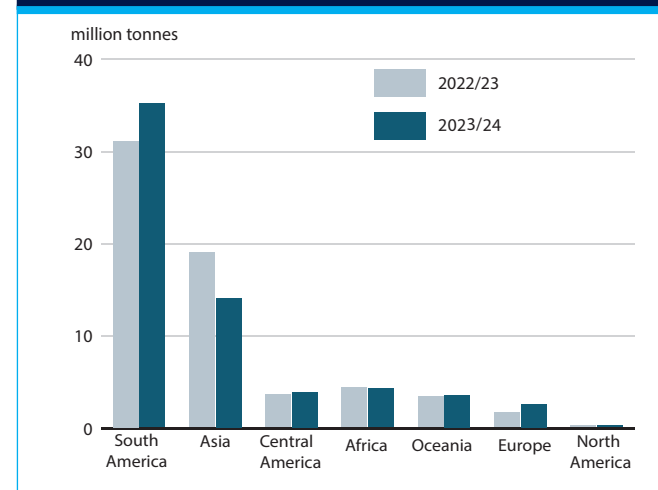


Figure 7. World sugar imports by region

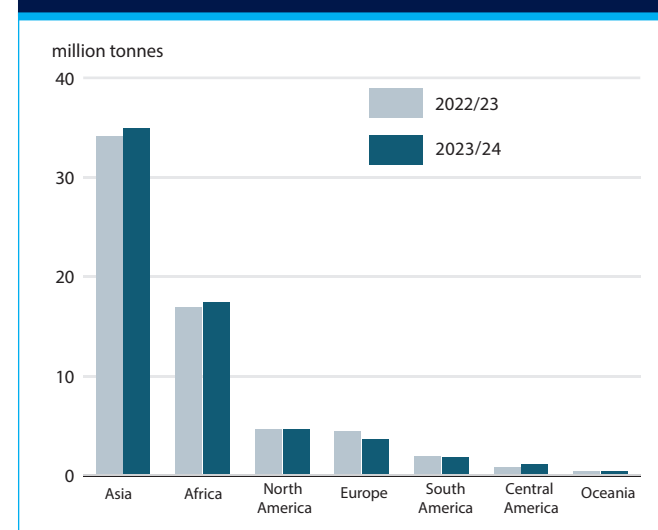


Table 1. World meat market at a glance

	2022	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change: 2024 over 2023
	<i>million tonnes (carcass weight equivalent)</i>			%
WORLD BALANCE				
Production	364.7	370.0	370.7	0.2
Bovine meat	75.8	76.7	77.2	0.7
Poultry meat	142.7	145.1	146.2	0.8
Pig meat	122.8	124.5	123.3	-0.9
Ovine meat	16.8	17.1	17.3	0.8
Trade	41.1	40.5	41.2	1.8
Bovine meat	11.7	11.9	12.1	1.9
Poultry meat	16.1	16.1	16.3	1.5
Pig meat	10.7	9.8	10.1	2.5
Ovine meat	1.1	1.2	1.3	3.5
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	45.5	45.8	45.5	-0.7
Trade - share of prod. (%)	11.3	10.9	11.1	1.6
FAO MEAT PRICE INDEX (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan/May 2024 over Jan/May 2023 %
	119	115	114.0	-0.7

OVERALL PRODUCTION AND TRADE

World meat output to expand slightly in 2024, led by poultry meat

In 2024, global meat production is projected to grow only marginally to 371 million tonnes (carcass weight equivalent). Anticipated expansions in output in **Brazil**, **India**, the **United States** and **Australia** will likely be counterbalanced by drops in **China**, **Argentina** and the **European Union**. Concerning meat categories, poultry production is forecast to drive the overall marginal meat output expansion, with a modest gain in bovine and ovine meats that will be partially offset by a decline in pig meat.

In **Brazil**, notwithstanding the slow pace of growth and the impact of floods on livestock in Rio Grande do Sul, overall meat output is forecast to expand by 1.7 percent to 31.9 million tonnes, reflecting anticipated increases, driven by the continued high number of female cattle that are slaughtered, reduced feed costs, effectiveness in controlling the spread of animal diseases, and robust international demand. Likewise, **India's** carabeef (buffalo meat) and poultry meat production will likely increase, driven by strong domestic and foreign demand. The anticipated

meat output expansion in the **United States** stems from an anticipated increase in the output of pig and poultry meats that will be partially offset by a production decline in the bovine meat sector due to low numbers of cattle and squeezed processor margins. Meanwhile, **Australia's** cattle and sheep production cycle is entering its high liquidation phase, and meat production could continue to increase.

China's anticipated drop in production rests on a possible decline in the production of pig meat and, to a lesser extent, poultry meat that will be partially mitigated by increases in bovine meat output. The possible decline in the pig meat sector in China reflects government efforts to reset production targets to control oversupply by limiting the sow population and swine stocks, decreasing domestic pig meat prices and reducing profit margins. In **Argentina**, the lingering effects of drought conditions continue to

Figure 3. FAO meat and feed price indices (2014-2016 = 100)

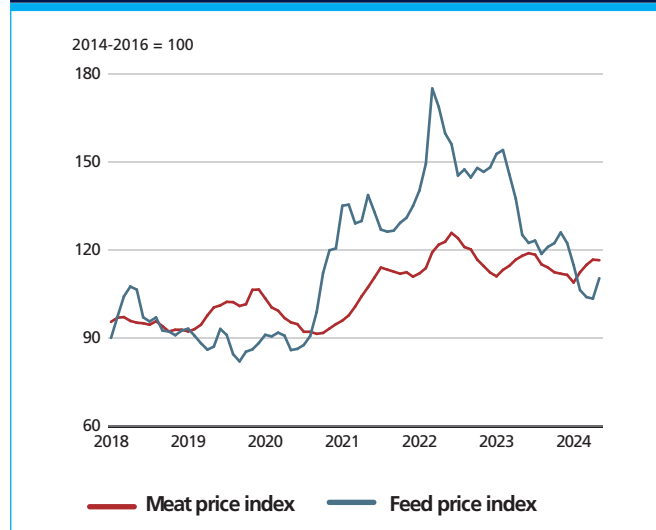
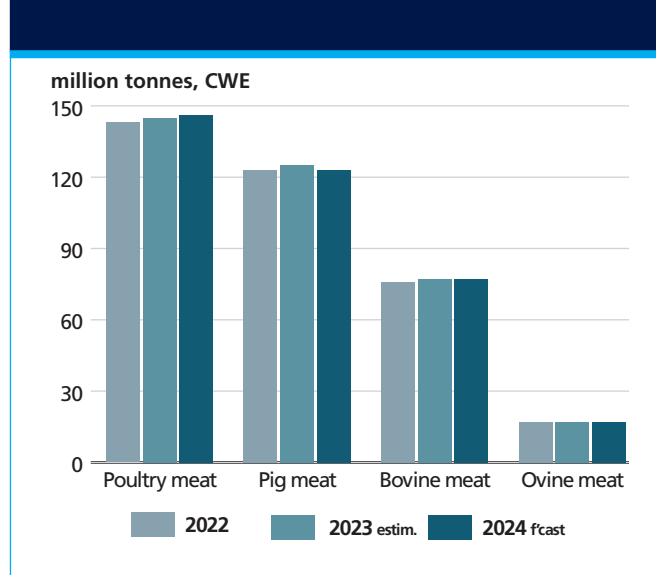


Figure 4. Global meat production by type



constrain fodder availabilities, potentially lowering meat production in 2024. In the **European Union**, total meat output could drop slightly, as a possible increase in poultry meat output will likely be offset by contractions in all other sectors. This principally reflects tighter supplies of slaughter-ready animals and the continued impact of limited export opportunities in Asian markets over animal disease concerns.

Global meat trade to rebound after two years of contraction

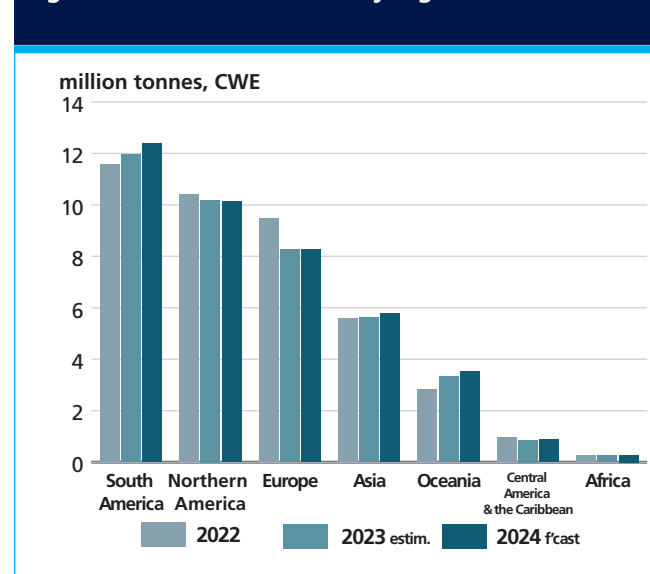
In 2024, global trade in meat and meat products is forecast to rebound after two consecutive years of contraction, reaching 41.2 million tonnes (carcass weight equivalent), up 1.8 percent from 2023. Import increases are expected in all regions, especially in Northern America, chiefly reflecting the tight availability of bovine meat from domestic sources. However, this positive outlook assumes that there will not be a further escalation of some critical influences, such as the spread of animal diseases, trade restrictions, geopolitical tensions and currency fluctuations. While constrained consumer purchasing power could lower demand for more expensive meat types, it could also induce poultry meat production and trade expansion, given its affordability.

Meat import growth is anticipated in the **United States**, especially of bovine meat, principally due to a projected drop in domestic production. **Mexico's** meat imports are forecast to surge, underpinned by a tariff exemption and easing administrative procedures for importing basic food products, including chicken meat, until the end of the year. Meanwhile, the extension of reduced tariffs on pig meat until the end of 2024 and increased demand for poultry and bovine meats will likely cause imports to grow in the **Philippines**. Rising demand is anticipated in the **United Arab Emirates** due to the continued bovine meat demand growth. Meanwhile, imports in the **United Kingdom of Great Britain and Northern Ireland (United Kingdom)** and **Malaysia** may increase to fill rising demand amid sluggish domestic production. These gains are expected to be partially offset by declines in the **Republic of Korea** due to rising domestic production and in **China**, reflecting higher stock levels and oversupply.

Among exporters, **Brazil** is expected to benefit the most from higher international demand and will remain the leading meat exporter by capturing almost 24.0 percent of total meat exports. **Australia** is anticipated to register another year of export growth, albeit slower, due to abundant supply availabilities and competitive export prices. Meanwhile, **India's** carabeef export expansion

will likely continue amid high demand from East Asia and Near Eastern countries. In **Argentina**, meat exports are forecast to grow as the country has resumed exporting specific beef cuts that were restricted to contain domestic price increases. By contrast, the **European Union's** meat exports are likely to decline due to tight export availabilities. Likewise, in the **United States**, meat exports are likely to fall slightly as an increase in pig meat exports could only partially counterbalance possible drops in all others.

Figure 5. Global meat trade by region



POULTRY MEAT

Poultry meat to lead global meat production expansion in 2024

Global poultry meat output is forecast to reach 146 million tonnes in 2024, up 0.8 percent year on year, principally driven by high international demand and lower feed costs, although HPAI outbreaks remain a challenge.

In the **European Union**, high internal demand is expected to drive output expansion, offsetting reductions due to ongoing HPAI outbreaks. In **Brazil**, lower costs and high international demand could lift poultry meat production. **India's** poultry meat production is forecast to expand due to rising internal demand and disposable incomes among urban consumers. In **Egypt**, poultry meat output will likely expand after producers faced heavy losses last year due to the shortage of hard currency, which led to a shortage of animal feed. In the **United States**, poultry meat production is forecast to grow marginally due to lower feed prices and increased domestic demand. In **Mexico**, poultry meat production is anticipated to expand due to solid investments in the sector and rising domestic demand.

By contrast, **China's** poultry meat production is forecast to fall for white and yellow broilers, reflecting a possible drop in the availability of genetic materials due to HPAI-related import restrictions and the closure of wet markets. In the **Islamic Republic of Iran**, production could fall due to the limited availability of feed supplies that in turn will reduce carcass weight.

Relative affordability to lift poultry import demand

Global poultry meat trade is forecast to rebound to 16.3 million tonnes in 2024, up 1.5 percent from 2023. Much of the import demand is expected from the **United States, Malaysia, Iraq, the Philippines, the European Union** and **South Africa** due to increasing domestic demand and relative affordability of poultry meat compared to other meats. **China** is expected to maintain a stable import demand. By contrast, import declines are anticipated for the **Russian Federation** and **Saudi Arabia**, in line with increasing domestic production.

Regarding exports, **Brazil** is expected to continue growing and to supply around 32.0 percent of the global poultry meat market, driven by its disease-free status and competitive prices. Weaker demand from some of its primary trading partners will be offset by agreements to expand trade with secondary destinations and by Brazil's climbing relevance in the halal market for cooked and raw chicken, especially in some Near Eastern countries.

Thailand is anticipated to expand poultry meat deliveries, driven by rebounding demand from the United Kingdom due to competitive prices; nevertheless, this expansion could be limited by relatively higher and less competitive export prices that are caused by the country's

dependency on imported feed ingredients. Poultry meat exports from **Chile** and **Türkiye** are expected to rebound after the disruptions caused by HPAI last year. Much of the anticipated growth in trade will be partially offset by the expected fall in exports from the **United States** and the **European Union**, where an HPAI-related ban and lower price competitiveness will drive the decline.

BOVINE MEAT

Increased availability of cattle supplies to lift global output, albeit at a slower pace

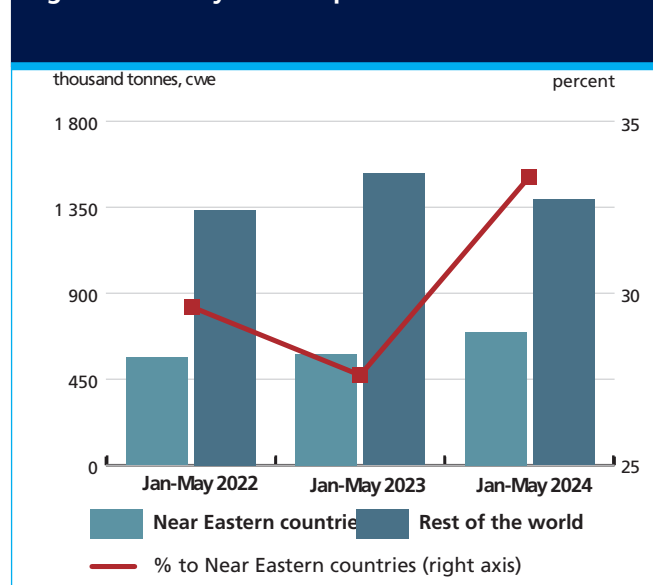
In 2024, world bovine meat production is forecast to reach 77 million tonnes, up marginally (0.7 percent) from last year. Globally, higher cattle supplies could induce more slaughter. However, production growth could be constrained by a decrease in global bovine meat consumption due to its relatively higher prices compared to other meats. Moreover, subdued economic growth, unemployment and real wage declines across many countries could pressure household incomes and lower demand for bovine meat.

Brazil, China, Australia and **India** are forecast to drive much of the bovine meat output expansion and will partially offset declines in the **United States, Argentina, the European Union** and **Canada**. In **Brazil**, bovine meat production could increase, reflecting higher slaughter availabilities. In **China**, production is forecast to grow by more than 2.0 percent, which is in line with the sector's growth and driven by the increased supplies of slaughter-ready cattle. In **Australia**, the country has reached the high point of its herd-rebuilding phase, and increasing herd inventory may lead to rising slaughter, resulting in increased bovine meat production this year despite an expected drop in carcass weight. In the meantime, in **India**, production is forecast to expand due to increased international demand for carabeef at competitive prices. By contrast, bovine meat output is projected to decline in the **United States, Argentina, the European Union** and **Canada** due to reduced cattle inventory and lower profitability.

Australia's higher exportable supplies to dominate world trade expansion

In 2024, world bovine meat trade is forecast at 12 million tonnes, up 1.9 percent year on year. The growth will be principally sustained by anticipated increases in imports by the **United States**, where tight supplies and consumers' tolerance towards higher prices could lead to a double-digit rise in import demand. However, anticipated drops in imports by **China** and **Egypt** will likely partially offset this increase. In **China**, bovine meat imports are

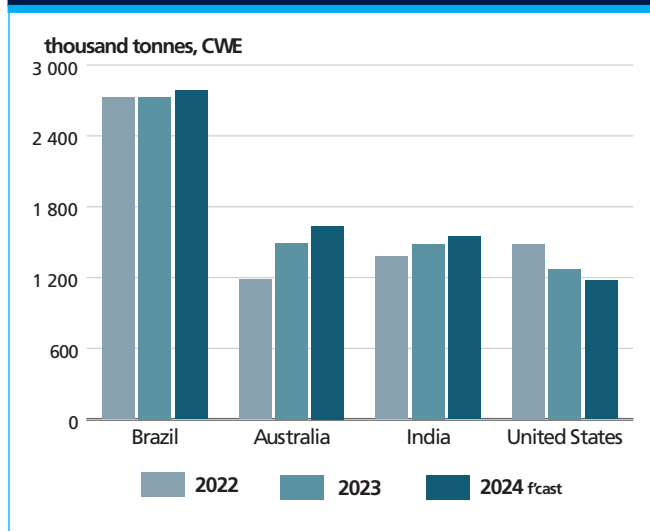
Figure 6. Poultry meat exports from Brazil



projected to fall; high stock levels, weaker-than-expected economic recovery, and subdued demand in the food-services sector could drive consumers away from high-priced beef to other meats. In **Egypt**, the likely drop in imports stems from national currency devaluation and reduced consumer purchasing power. Meanwhile, imports by leading importing countries in Asia, most notably **Japan** and the **Republic of Korea**, will likely remain broadly stable, as abundant stocks and high bovine meat prices may prevent significant increases.

Much of the import demand for bovine meat is expected to be met by higher shipments from **Australia**, driven by rising production levels and competitive prices. Meanwhile, **India's** carabeef exports could expand in line with the consolidation of the country's export markets in Asia and the Near East, primarily on account of export price competitiveness and market access under halal certifications. In **Brazil**, rising sales are forecast to stem from increasing bovine meat exportable availabilities. Despite an anticipated drop in production, **Argentina** resumed exporting beef cuts in January 2024 that were previously restricted to increase domestic availabilities, which could cause their shipments to grow. By contrast, deliveries from the **United States** and **Canada** are expected to contract due to tight domestic supplies.

Figure 7. Bovine meat exports by leading suppliers



PIG MEAT

Global production to contract amid efforts to reset production targets in China

In 2024, global pig meat production is anticipated to reach 123 million tonnes, a decline of 0.9 percent from 2023. Significant decreases are expected in Asia, especially **China**, which will offset output gains in the other regions. In **China**, the anticipated decline in pig meat output stems from government efforts to reduce the breeding sow numbers and adjust the target national swine stock from 41 million to 39 million head after oversupply plunged domestic pig meat prices, despite improving producer margins. In the **European Union**, after two consecutive years of sharp falls, pig meat production will likely decline marginally in 2024, given the possibility for the swine stock to stabilize amid improved producer margins.

By contrast, pig meat production volumes are anticipated to increase in the **United States**, **Viet Nam**, the **Russian Federation** and **Brazil**. Increasing hog supplies and continuing productivity improvements in the **United States** will likely raise pig meat output. Pig meat production in **Viet Nam** may grow, albeit slowly, which would reflect higher sow replenishment and the containment of the spread of the African Swine Fever (ASF) virus that results from improved biosafety arrangements. Likewise, pig meat production is projected to rise in the **Russian Federation**, driven by increasing demand from domestic consumers and higher export potential, especially with the opening of the Chinese market. Pig meat production is forecast to grow in **Brazil** because of high international demand, while domestic demand is anticipated to remain sluggish, although the rate of production growth may come under strain due to the impact of recent floods.

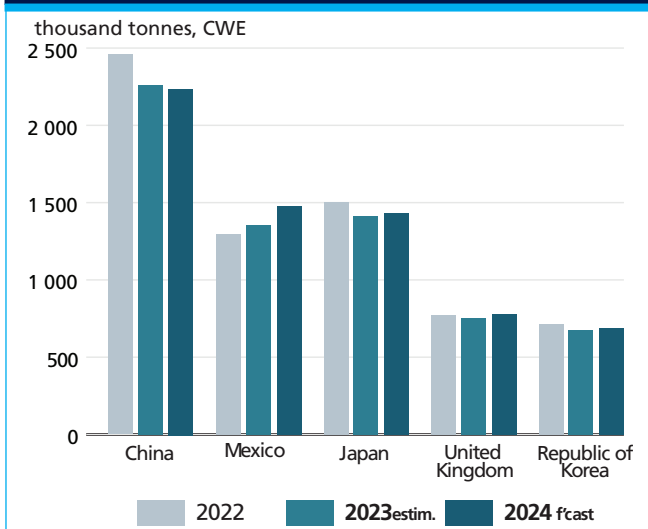
Global trade to remain buoyant despite an anticipated drop in imports by China

In 2024, global pig meat trade is forecast at just over 10 million tonnes, up 2.5 percent from 2023. The growth is principally due to possible increases in imports by **Mexico**, the **United States**, the **United Kingdom**, **Japan** and the **Republic of Korea** that will partially offset a likely marginal decline in imports by **China**. Despite the temporary suspension of pig meat imports from Brazil in late 2023, **Mexico's** purchases are pointing to an increase this year, especially from the United States, due to growing internal demand. Similarly, imports are forecast to increase in the **United States** and the **United Kingdom**, driven by higher internal demand and competitive international prices. **Japan** is projected to only slightly increase pig meat

imports to meet the domestic supply shortfall, especially after the first quarter of the year when tariffs were reduced based on trade agreements with the European Union and the United States. Likewise, the **Republic of Korea** is anticipated to register a limited purchase growth due to high inventories and a slight improvement in economic conditions and consumers' purchasing power. By contrast, pig meat imports in **China** are expected to trend downward for the fourth consecutive year, although more slowly, reflecting ample supply availabilities from domestic sources.

Regarding exports, sales by the **United States**, **Brazil** and the **Russian Federation** will likely expand. In the **United States**, abundant supplies are likely to foster higher shipments, especially to Mexico. In **Brazil**, shipments are anticipated to continue growing, facilitated by competitive prices and bilateral trading arrangements. For example, Brazil and the Philippines have established a pre-listing arrangement for animal-origin products, and companies qualified by Brazil's Federal Inspection System can apply for accreditation to export their products to the Philippine market. Deliveries by the **Russian Federation** are expected to ramp up, especially from the second half of the year, benefitting from the import approval authorized by China, which lifted the ban imposed in 2008 over ASF concerns. By contrast, the **European Union** is anticipated to continue its sales contraction due to lower demand from some major destinations, especially China.

Figure 8. Pig meat imports by leading importers



OVINE MEAT

Production prospects to remain solid

In 2024, global ovine meat output is forecast at 17 million tonnes, up 0.8 percent year on year. Production growth is expected in **Türkiye**, **Australia**, **China** and **Pakistan** and will be partially offset by anticipated declines in the **European Union**, **Ethiopia** and the **United Kingdom**. Meanwhile, ovine meat production will likely remain broadly stable in **New Zealand**.

In **Türkiye**, ovine meat production is anticipated to increase due to rising internal demand, while in **Australia**, higher slaughter availabilities following a herd-rebuilding phase and high international demand could lift production. In **China**, increasing domestic demand could stimulate production growth. In **Pakistan**, ovine meat production is foreseen to continue expanding, with smallholder families dominating goat and sheep production. Meanwhile, production in **New Zealand** is expected to remain broadly stable as increased slaughter could offset a slight reduction in carcass weights.

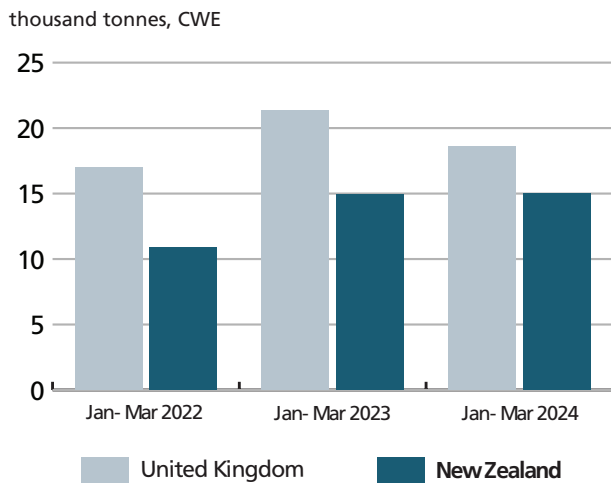
By contrast, in the **European Union**, ovine meat production is anticipated to drop, reflecting a lower number of sheep flocks that results from a higher culling of ewes due to recent high input costs. Similarly, in the **United Kingdom**, the continued shrinking of the sheep flock and lower carcass weight could depress ovine meat output further this year. Meanwhile, in **Ethiopia**, a second consecutive year of falling ovine meat production is anticipated, primarily reflecting the high livestock deaths in southern pastoral areas due to severe floods from October to December last year and poor pasture conditions in the northern pastoral areas that resulted from droughts.

Trade to likely expand

In 2024, after rising by over 12.0 percent in 2023, world ovine meat exports are forecast to increase by 3.5 percent to 1.3 million tonnes and will be underpinned by anticipated increases in imports by **China** and the **United States**. Despite subdued import demand for meat products, **China's** ovine meat imports could rise due to higher consumer demand from some market segments that prefer imported ovine meat. In the **United States**, higher consumer demand may lead to a rebound in ovine meat imports from a dip in 2023. Several other countries may also see some increases in import volumes, including the **Islamic Republic of Iran**, the **European Union** and **Malaysia**. While the **European Union** is likely to source much of its ovine meat from the United Kingdom, **New Zealand** could displace part of those imports, as the New Zealand-European Union free trade agreement came into force on 1 May 2024.

Australia is forecast to supply nearly all the increased import demand for ovine meat in 2024, although at a slower pace of growth compared to the previous year. This supply will be fuelled by higher exportable availabilities and the potential to sustain competitive prices. **New Zealand** is also forecast to increase ovine meat deliveries, especially to Europe and Northern America, accounting for over 30.0 percent of global exports. By contrast, deliveries are forecast to decline from **Uruguay** and the **European Union** – due to weak competition – and from **Ethiopia** – owing to domestic supply shortfalls.

Figure 9. Main suppliers of Ovine meat to the European Union



MILK AND MILK PRODUCTS



PRICES

Global dairy imports to remain buoyant, lifting international dairy prices moderately

International dairy prices, as measured by the FAO Dairy Price Index (DPI), averaged 126 points in May, up 6.2 percent from January this year. This increase was principally due to higher international prices of butter and cheese, together with a moderate increase in whole milk powder (WMP) prices, which were partially offset by a decrease in skim milk powder prices (SMP).

From January to May, international butter price quotations rose by 12.4 percent, reflecting robust demand for medium-term deliveries amid lighter inventories in Western Europe and seasonally declining production in Oceania. Meanwhile, cheese prices increased by 8.2 percent during the same period, due to higher purchases by leading global importers, strengthened retail sales and improved food service demand in the northern hemisphere in anticipation of spring and summer holidays. Seasonally diminishing production in Oceania also supported cheese prices. Meanwhile, WMP prices increased moderately (2.0 percent) from January to May, as purchases by leading importers in the Near East and North Africa region remained robust despite a slowdown in the pace of imports by China – the world’s largest WMP importer. Seasonally declining milk production in Oceania also supported WMP prices. By contrast, SMP prices fell by 4.0 percent from January to May 2024. The fall

Figure 1. FAO monthly dairy price index (2014-2016=100)

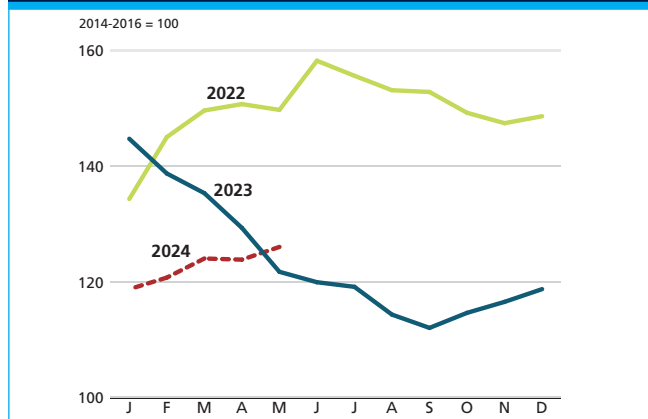
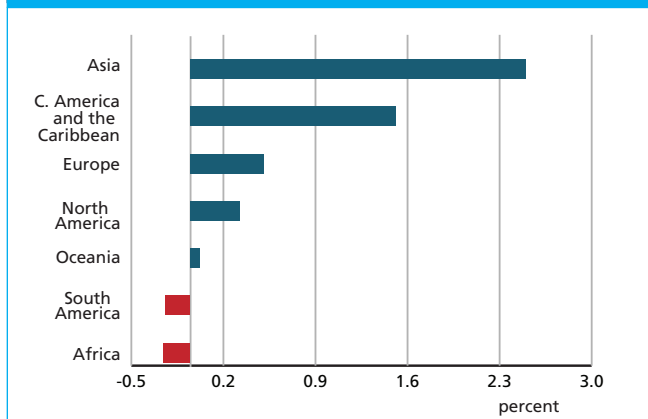


Figure 2. World milk production by region (percentage change)



reflected a slow pace of imports as most leading importing countries, including China, had much of their short-term needs covered. In addition, challenges navigating the Red Sea and Bab al-Mandeb made shipping to Asian markets less attractive, exerting downward pressure on Western European supplies.

PRODUCTION

Global milk production to moderately expand

World milk production is forecast to increase by 1.4 percent to nearly 979 million tonnes in 2024, following a similar increase last year. This increase is sustained by a notable volume expansion expected in Asia, supplemented by Europe, North America, Central America, the Caribbean, and Oceania. This overall increase is anticipated to be partially compensated by moderate to small contractions in South America and Africa.

Table 1. World dairy market at a glance

	2022	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change: 2024 over 2023
	<i>million tonnes, milk equiv.</i>			<i>%</i>
WORLD BALANCE				
Total milk production	951.6	965.2	978.5	1.4
Total trade	85.6	84.7	85.4	0.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
World (kg/year)	119.4	120.0	120.6	0.4
Trade - share of prod. (%)	9.0	8.8	8.7	-0.5
FAO DAIRY PRICE INDEX (2014-2016=100)				
	2022	2023	2024 <i>Jan-May</i>	Change: Jan-May 2024 over Jan-May 2023 <i>%</i>
	150	124	123	-8.4

In Asia, milk output is pegged at nearly 458 million tonnes, up 2.6 percent from 2023. This growth is mainly sustained by expansions in **India**, **China**, and **Pakistan**, the three largest milk producers in the region. **India's** milk output is projected to increase to 243 million tonnes, up 2.8 percent, or just over 6 million tonnes from 2023, assuming the average growth rate in milk cow numbers, normal monsoon rains and fodder availability and considering a 60.0 percent chance of La Niña developing by June–August 2024. **China's** milk output is forecast at 45.5 million tonnes, up 4.8 percent year on year. This rise originates in more efficient and large-scale dairy farms with rising milk yields but is partially counterbalanced by a possible drop in contributions

by small-scale dairy farms as they exit due to financial constraints. **Pakistan's** milk output is anticipated to expand by 2.5 percent in line with last year's growth performance and is driven mainly by rising milk cow numbers, especially given the recent ban on female cattle slaughter. In addition, several countries are anticipated to sustain moderate milk output expansions in 2024, including **Türkiye**, **Bangladesh**, **Uzbekistan** and the **Islamic Republic of Iran**, among others, mainly because of rising dairy cow numbers and productivity gains despite still high dairy retail prices and farm operational costs. Meanwhile, milk output in **Japan** may decrease partially, reflecting labour shortages and rising costs of importing concentrated feed.

In Europe, milk output is forecast at nearly 235 million tonnes, up marginally (0.6 percent) from 2023. This rise reflects expected output increases in the **Russian Federation**, the **European Union** and **Belarus**, but partially offset by possible drops in **Ukraine** and **Serbia**. In the **Russian Federation**, milk output is forecast to increase slightly, driven by modernized, large-scale dairy farms and a recovery in consumer purchasing power. In the **European Union**, higher milk yields and a rise in fodder availability will likely increase milk output marginally (0.4 percent) and will compensate for falling milk cow numbers and the rising costs to restructure farms to comply with the new Common Agricultural Policy. Milk output in **Belarus** will likely expand further, albeit more slowly, due to rising milk cattle numbers, higher yields and stable conditions offered by access to the market in the Russian Federation. In the **United Kingdom of Great Britain and Northern Ireland (United Kingdom)**, milk output is likely to remain nearly stable, given that positive gains from an increase in milking cows could be slightly balanced by higher input costs and delays in grazing due to excessive rains earlier this year. By contrast, milk output in **Ukraine** will fall further due to the war-related losses of dairy infrastructure.

In North America, milk output is forecast at 113 million tonnes in 2024, up 0.4 percent from the previous year. In the **United States of America (United States)**, while milk output could increase along with higher milk yields, the expected growth may partially be offset by lower dairy cow numbers, elevated feed costs, and low farm gate prices. In **Canada**, milk output is forecast to remain broadly stable, considering constant farm gate prices and the supply-managed production system.

In Central America and the Caribbean, milk output is forecast at nearly 21 million tonnes in 2024, up 1.6 percent from 2023. This increase is driven primarily by higher production in **Mexico**, which accounts for 70.0 percent of the region's milk output. The country's output growth reflects a decade-long positive momentum because of

favourable weather conditions, buoyant internal demand, and improved herd management practices. Elsewhere in the region, milk output is forecast to remain broadly stable.

In *Oceania*, milk production is forecast to remain stable at 29.8 million tonnes, as a possible marginal decline in output in **New Zealand** might be compensated by an increase in **Australia**. In **New Zealand**, milk output is pegged at 21 million tonnes, even after considering the possibility of production dropping marginally as the prevailing drier-than-normal weather conditions may lower water tables, leading to irrigation restrictions and compromised fodder quality and availability. Sluggish demand from China amid rising production and less-vigorous growth prospects may also dent import demand and further erode production incentives despite the current forecast of higher farm gate prices. A positive production environment in **Australia** is anticipated because of the above-average rainfall in leading producing regions. However, in many other areas, drier conditions have led to higher demand for supplementary feed and raised grain prices, signaling constrained production.

In *South America*, milk output is forecast at 68 million tonnes in 2024, marginally lower than in 2023. This anticipated decline reflects an expected output drop in **Argentina** due to limited feed availability on the back of drier conditions and the depreciation of the national currency. Similar challenges may also reduce milk production in **Colombia** and **Chile**. By contrast, **Brazil's** milk output is forecast to increase, assuming feed availability, robust consumer demand and generally favourable weather conditions, despite the fallouts of the floods in Rio Grande do Sul.

In *Africa*, milk production is pegged at slightly under 54 million tonnes, marginally down from 2023. This possible drop reflects notable declines that are expected in **Ethiopia**, **South Sudan** and **Egypt**, which are caused by higher domestic animal feed costs, drier conditions, and conflicts. However, in several countries – notably **Kenya**, **Algeria**, and the **United Republic of Tanzania** – favourable weather conditions, investment in dairy infrastructure and the establishment of modern farms could raise output partially counterbalancing the declines.

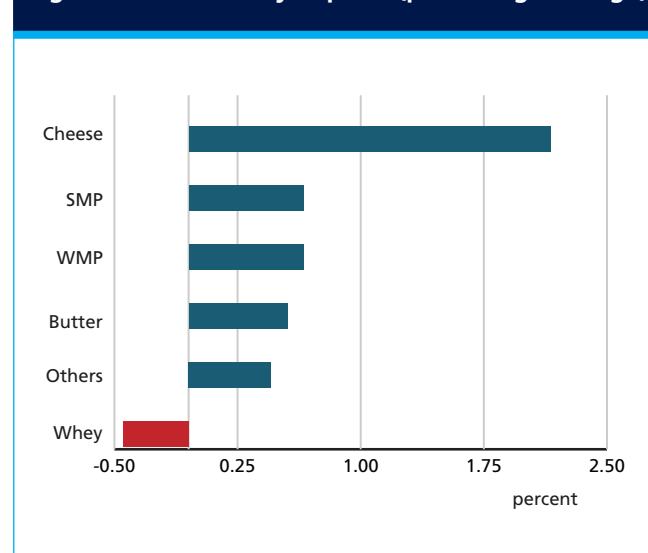
TRADE

Demand recovery to signal a possible rebound in the global dairy trade

World trade in dairy products is forecast to reach just over 85 million tonnes (in milk equivalents) in 2024, up 0.8 percent from 2023. This relatively positive trade outlook is mainly driven by anticipated demand recovery induced

by relatively lower international dairy prices compared to the previous two years. Additionally, food services sales are expected to improve in several leading dairy-importing countries, notably **Mexico**, the **Philippines**, **Saudi Arabia**, the **United States**, **Algeria**, and **Japan**. In contrast, following two years of steep declines, **China's** dairy imports will likely fall again in 2024, although the drop will be moderate compared to the previous two years. Rising supplies from internal sources and inventories could more than offset possible increases in cheese imports catering to high-income households. Likewise, following record-high imports in 2023, **Brazil's** dairy imports may fall, albeit moderately, due to higher supplies from domestic sources and policies introduced in 2023 to discourage dairy imports.

Figure 3. Global dairy exports (percentage change)



Regarding exports, dairy shipments will likely increase from **Australia**, the **United States**, **New Zealand** and **Argentina**, mainly benefitting from bilateral and regional trading arrangements. In **New Zealand**, dairy exports are forecast to increase by 0.6 percent, as an anticipated increase in shipments to the Near East and North Africa (NENA) region will likely compensate for a possible decline to China. Prospects for higher exportable availabilities may allow the **Islamic Republic of Iran** and **Belarus** to ship more dairy products in 2024. As for the **European Union**, dairy exports will likely remain stable, as possible increases in cheese and whey powder may be offset by drops in WMP, SMP and butter. By contrast, dairy exports may drop from **Uruguay** and **Ukraine**.

Concerning dairy products, world trade in cheese will likely increase significantly. SMP, WMP and butter will likely rise moderately, while whey trade may decrease slightly.

Whole milk powder

A demand recovery to facilitate a rebound in global WMP trade

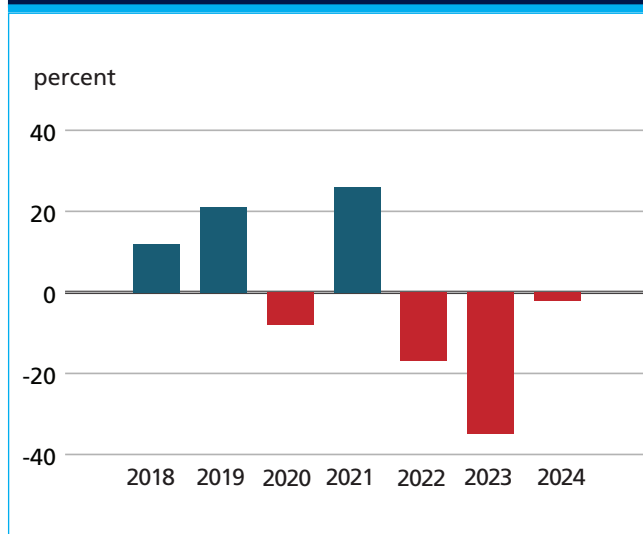
Global WMP exports are forecast at nearly 2.5 million tonnes (product weight) in 2024, up 0.7 percent from 2023. This increase reflects anticipated higher imports, notably by **Saudi Arabia, Algeria, Oman** and **Sri Lanka**, which are likely to be partially counterbalanced by drops from **Brazil, China**, and **Australia**.

In **Saudi Arabia** and **Algeria**, WMP purchases are forecast to increase due to growing demand and competitive international prices offered by the countries' main trading partners. In **Sri Lanka**, imports may increase, given the country's relative economic stability and national currency appreciation. By contrast, **Brazil's** anticipated drop in imports is primarily attributable to an adjustment to trade after it doubled in 2023. The drop will also be impacted by the government's efforts to limit dairy imports and promote the country's production and consumption. In **China**, WMP imports are forecast to remain under 500 000 tonnes

Table 3. Trade in dairy products: Principal exporting countries

	Average 2020-22	2023 <i>estim.</i>	2024 <i>f'cast</i>	Change 2024 over 2024
	<i>thousand tonnes (product weight)</i>			
WHOLE MILK POWDER				
World	2 712	2 437	2 453	0.7
New Zealand	1 517	1 388	1 416	2.0
European Union	292	262	258	-1.6
Uruguay	138	160	149	-6.8
Argentina	149	111	125	12.7
SKIM MILK POWDER				
World	2 624	2 672	2 692	0.7
United States	844	810	826	2.0
European Union	776	780	757	-3.0
New Zealand	351	459	456	-0.7
Australia	146	133	137	3.0
BUTTER				
World	1 091	1 115	1 122	0.6
New Zealand	449	499	503	0.9
European Union	276	289	286	-0.8
Belarus	86	90	92	2.0
United Kingdom	54	54	58	6.6
United States	55	37	39	4.2
CHEESE				
World	3 535	3 610	3 688	2.2
European Union	1 380	1 389	1 410	1.5
United States	405	438	455	4.0
New Zealand	356	389	378	-2.8
Belarus	292	310	313	0.8
United Kingdom	173	179	182	1.3

Figure 4. WMP imports by China (annual percentage change)



after falling from the average of 800 000 tonnes that was sustained between 2020 and 2022, reflecting increased availability from domestic sources and less buoyant demand from the hotel, restaurant and institutional (HRI) sector amid the restrained economic growth expected this year.

Regarding exports, WMP shipments by **New Zealand** may increase for the second consecutive year, albeit more slowly, and remain 14.0 percent below the all-time high volume shipped in 2021. This increase will be driven by higher imports by some countries in the NENA region, mainly **Algeria** and **Nigeria**, and will compensate for a possible decline in imports by **China**. Dairy exports from **Argentina**, the **United States** and **Australia** will likely rebound from their lower levels in 2023, mainly facilitated by higher imports from their neighbouring countries and higher export availabilities. **Belarus** may also increase shipments slightly, principally to the Russian Federation. By contrast, exports from **Uruguay, China** and the **European Union** may decline moderately due to heavy competition from other exporters.

Skim milk powder

Growth to slowdown in global SMP trade

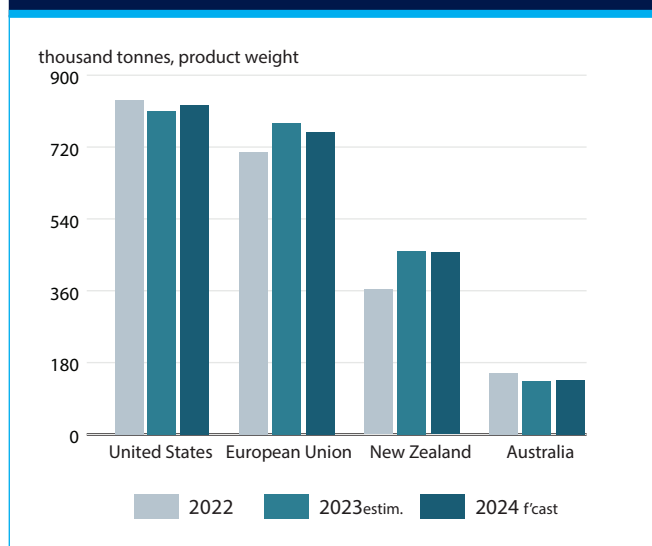
In 2024, world trade in SMP is pegged at nearly 2.7 million tonnes, up 0.7 percent year on year. This moderate increase in 2024, compared to a 2.3 percent increase in 2023, reflects the impact of possible drops in imports by some leading importers, such as **China** and the **Russian Federation**, which will counterbalance anticipated increases in imports, particularly the **Philippines, Mexico, Algeria, Indonesia** and **Viet Nam**.

The anticipated decline in imports by **China** and the **Russian Federation** reflects rising domestic supplies.

Relatively moderate economic growth prospects, which may constrain demand in the food services sector, may deter SMP imports in **China**. By contrast, more positive demand prospects are expected in the **Philippines** and **Indonesia**, especially after last year's drops, induced by higher demand from the food processing and services sectors and relatively lower international SMP prices. **Mexico** may also import more SMP, driven by competitive international prices and more robust demand from the food processing sector. After falling to a ten-year low in 2023, **Malaysia's** SMP imports may rebound because of growing internal requirements for processed foods, beverages and local cuisine.

Regarding exports, noticeable expansions in SMP shipments are forecast for the **United States**, **India**, **Argentina** and the **United Kingdom**, mainly due to higher import demand from neighbouring countries and competitive export prices. By contrast, SMP exports are forecast to drop, most notably from the **European Union**, with some declines from **New Zealand**, **Ukraine** and **Uruguay**. In the **European Union**, lower demand from China and high competition from other exporting countries are behind the anticipated drop by 3.0 percent in 2024. After rising by 26.0 percent in 2023, SMP exports from **New Zealand** may fall slightly but will remain elevated compared to historical levels, and in **Ukraine**, exports are forecast to drop due to sustained damage to dairy infrastructure.

Figure 5. SMP exports by leading suppliers



Butter

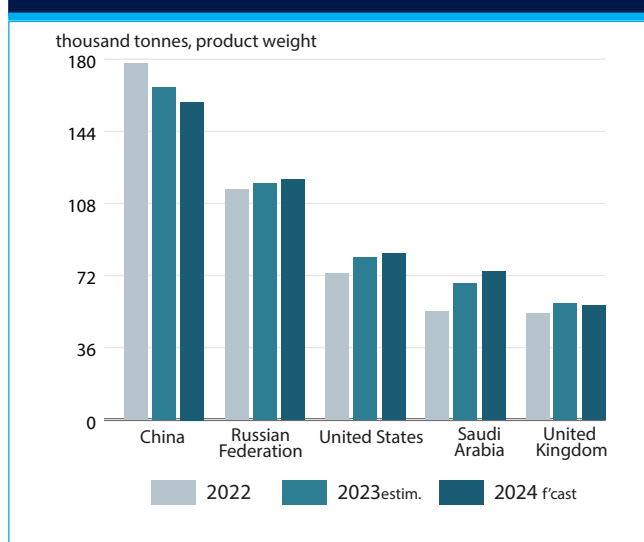
World butter trade likely to rebound slightly

After dropping by 3.3 percent in 2023, global butter trade is heading for a moderate recovery, rising by 0.6 percent to 1.1 million tonnes in 2024. The predicted increase is principally due to expected import expansions in **Saudi Arabia**, **Mexico**, the **European Union**, the **United States** and the **United Arab Emirates**. However, these increases will likely be counterbalanced by import declines in several countries, particularly **China**, the **Philippines**, and the **United Kingdom**.

In **Saudi Arabia** and the **United Arab Emirates**, a livelier demand from the hospitality and tourism sector may boost butter imports. In **Mexico**, the growing tourism sector and stronger local currency may increase butter imports by as much as 22.0 percent. In the **European Union**, a possibly lower butter production may induce higher imports, notably from the United Kingdom. In **Australia**, butter imports will likely continue to grow as consumption demand exceeds domestic supplies. By contrast, in **China**, the world's largest butter importer, a modest decrease in butter imports is expected due to limited economic growth and efforts by food processors to control costs.

This slight recovery in demand for butter could lift exports, notably from **India**, **New Zealand**, the **United Kingdom** and **Belarus**, reflecting higher exportable availabilities. By contrast, butter shipments are forecast to drop from **Argentina**, **Uruguay**, **Ukraine**, and the **European Union**, principally due to lower production and subdued demand from leading trading partners.

Figure 6. Butter imports by leading importers



Cheese

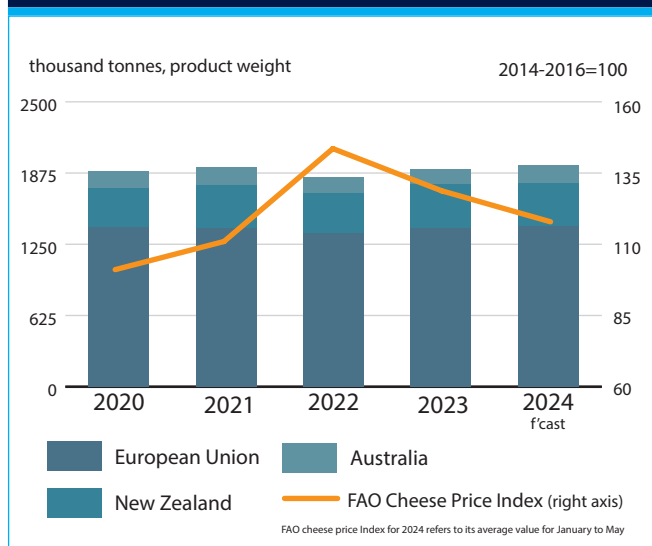
Buoyant demand likely to lift world cheese trade

World cheese trade is forecast to reach nearly 3.7 million tonnes in 2024, rising by 2.2 percent, underpinned by significant import increases in the **United States, Japan, Saudi Arabia**, the **United Kingdom** and the **European Union**.

The **United States's** cheese imports will likely expand again in 2024, mainly on account of rising demand for European cheese products and their competitiveness. A lively internal demand and the appetite for more processed and packaged products from countries within the Near East, especially **Kuwait**, the **United Arab Emirates** and **Oman**, could lift cheese imports by **Saudi Arabia**. In **Japan** inflationary pressure caused imports to drop in 2023; however, in 2024, cheese imports may recover slightly due to rising demand from the HRI sector for European cheese and the duty-free quota that came into force on 1 April 2023. Meanwhile, imports into **Australia** will likely contract due to rising national production. In **China**, cheese purchases may decline slightly as drops in retail sales may offset some increases from the HRI sector.

Regarding exports in 2024, **Australia**, the **European Union** and the **United States** will likely see significant expansions in cheese exports, driven by solid import demand from leading importers but somewhat constrained by the strong United States dollar. Similarly, cheese exports from the **European Union** may continue to increase, but they will be negatively impacted by the United Kingdom border checks that came into operation on 30 April 2024.

Figure 7. Cheese exports by the European Union and Oceania



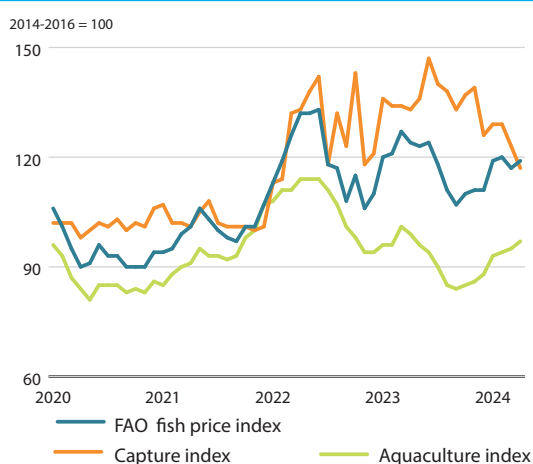
FISH AND FISHERY PRODUCTS



In 2024, global fisheries and aquaculture production is forecast at 191 million tonnes, with aquaculture output expected to exceed 100 million tonnes for the first time. Landings from capture fisheries will remain at about 90 million tonnes.

In 2024, global capture fisheries production is expected to remain stable, with a modest 1.1 percent increase over 2023 levels. Waning El Niño weather conditions from early 2024 onwards have eased pressure on key stocks. For instance, quotas of the Peruvian anchoveta, at times the largest fishery in the world, have returned to normal, adding several million tonnes to potential global catches.

Figure 1. FAO Fish Price Index (2014-2016=100)



Source of the raw data for the FAO Fish Price Index (see table in the adjacent column).

Table 1. World fish market at a glance

	2022	2023 <i>estim.</i>	2024 <i>f' cast</i>	Change: 2024 over 2023
	million tonnes (live weight)			%
WORLD BALANCE				
Production	185.4	187.2	191.4	2.2
Capture fisheries	91.0	89.6	90.6	1.1
Aquaculture	94.4	97.6	100.8	3.3
Trade value (exports USD billion)	192.2	185.2	183.3	-1.0
Trade volume (live weight)	70.0	68.5	68.3	-0.3
Total utilization	185.4	187.2	191.4	2.2
Food	164.6	167.3	170.8	2.1
Feed	17.2	16.2	16.7	3.3
Other uses	3.6	3.7	3.8	2.8
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	20.7	20.8	21.0	1.2
From capture fisheries (kg/year)	8.8	8.7	8.6	-0.4
From aquaculture (kg/year)	11.8	12.1	12.4	2.3
FAO FISH PRICE INDEX (2014-2016=100)	2022	2023	2024 <i>Jan-May</i>	Change: Jan-Apr 2024 over Jan-Apr 2023 %
	119.0	117.3	118.7	-3.6

Sources: EUMOFA. 2024. EUMOFA database of international prices. [Accessed on 5 May 2024]. <https://eumofa.eu/international-prices/>; INFOFISH. 2024. INFOFISH Trade News. Series 4/2024. Kuala Lumpur, INFOFISH. Issue 4/2024. <https://infofish.org/v4/media/attachments/2024/04/23/in-4-2024.pdf>; INFOPESCA. 2024. Revista Infopesca Internacional. Series 71. Montevideo, INFOPESCA. <https://www.infopesca.org/center/revista-infopesca-internacional-110-71-0>; Norwegian Directorate of Fisheries. 2024. Directorate of Fisheries' statistics bank. [Accessed on 5 May 2024]. <https://statistikbanken.fiskeridir.no/Px/Web/nyweb/no/Fiskeridir/statistik/>; and Danish Fisheries Agency. 2024. Danish fishing auctions. [Accessed on 5 May 2024]. <https://fiskestatistik.fiskeristyrelsen.dk/SAS/visualAnalytics/reportUrl=%2Freports%2Freports%2F39d5f1f-eb88-46bc-b1ab-793afd7d9fac&so> provided the raw data for the FAO Fish Price Index.

Catches of Alaska pollock, the second largest fishery by volume, are expected to reach a ten-year high in 2024. The increased catches from the above developments are expected to be counterbalanced by reduced quotas for other major fisheries, particularly cod and tuna.

Aquaculture harvests are expected to increase by 3.3 percent to 100.8 million tonnes, supported chiefly by increased volumes of farmed shrimp and modest gains for oysters, carp and tilapia. Low prices for aquaculture products and elevated production costs continue to impact the profitability of many farmers. Lower anchoveta catches, which are vital components of many feed formulations, have pushed prices for fishmeal and fish oil far higher than previous levels.

Many economies experienced their highest rates of inflation in decades between 2021 and 2023. While economic prospects have now greatly improved, these events left a strong impression on consumer sentiment in the **United States** and the **European Union**, the two largest markets. Despite slowing inflation rates, higher-than-expected gross domestic product (GDP) growth and lower than anticipated unemployment rates, consumers appear wary of eroded purchasing power and limit consumption. Luxury aquatic products have been particularly impacted, with demand for lobster and oysters failing to recover to prepandemic levels.

The FAO Fish Price Index (FPI) has remained stable, standing at 119 points in April 2024 compared with 124 points at the same time last year. This stability reflects the interplay of two opposing trends: elevated overall prices for capture fishery products and lower average prices for aquaculture products. For instance, farmed shrimp have fallen considerably over the past couple of years, standing at 70 points in April 2024, compared with 90 points two years ago.

Lower prices for aquaculture products have translated into falling global trade values, which are predicted to decline by 1.0 percent in 2024 to USD 183.3 billion. Trade volumes are almost flat year on year, with forecasts pointing to a 0.3 percent decline compared with 2023 levels.

BIVALVES

In 2024, supplies of bivalves are expected to decline, following a slight increase in 2023. Emerging sanitary issues threaten to undermine production this year, while reduced consumer spending has limited demand in key markets.

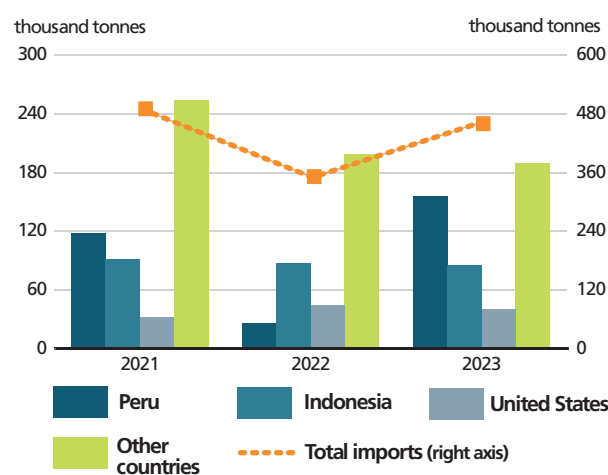
Supplies of scallops have experienced a significant drop, particularly in **China**, due to sanitary and regulatory issues. Chinese imports fell from 100 000 tonnes in 2022 to 54 600 tonnes in 2023. Prices have risen in all major markets

due to declining production, a trend expected to continue into the rest of the year.

In 2024, world trade in oysters could record a second year of decline, primarily due to sanitary issues limiting supply and therefore export availability. French oyster farmers saw a number of norovirus outbreaks that led to the closure of several production areas in early 2024. There was an 8 percent decline in trade volumes in 2023, primarily due to reduced consumer spending in the United States. French exports remained stable at around 16 700 tonnes.

In 2024, global imports of mussels should remain at about 300 000 tonnes. **Chile** continues as the top supplier and returned to 2021 levels with approximately 100 000 tonnes of exports in 2023. Demand in France and Italy, the largest importers, remains stable at around 50 000 tonnes each, while the United States, the third largest market, imports some 38 000 tonnes annually.

Figure 2. China imports of squid and cuttlefish



CEPHALOPODS

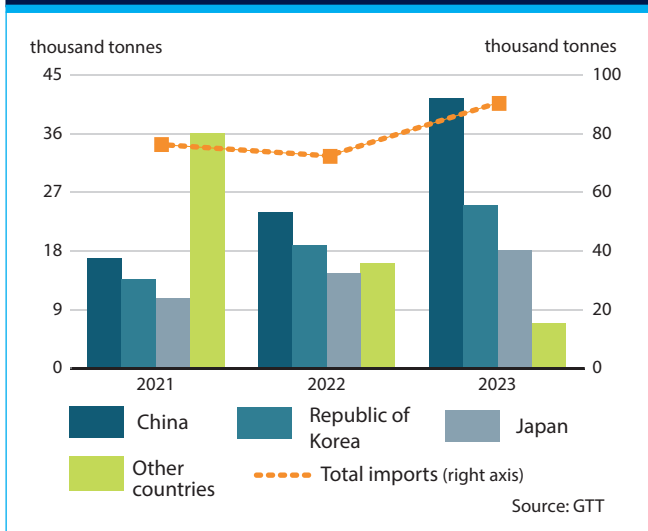
Octopus supplies remain low, and continued scarcity is expected through 2024. Landings in the first quarter of 2024 stayed below previous levels, particularly in southern **Morocco**, where adverse weather conditions limited fishing. In 2024, the Moroccan quota for octopus was increased to 25 200 tonnes, but fishing was halted in April due to concerns for the stock's health. Limited supplies from **Morocco** and **Viet Nam** will further impact Japanese imports, which fell by 5 percent in 2023. Lower supply and high demand in major markets such as **Spain** and **Italy** have

driven prices up, with expectations for further price increases during the summer of 2024. The availability of

octopus is expected to remain limited, and further price increases are expected.

Squid catches were lower than usual throughout 2023, however promising early-year landings have helped to stabilize prices in the near term. Unregulated fishing remains a serious concern, with key stocks off the southern coast of South America currently facing acute fishing pressure. Squid landings in **Peru** increased and hit a record high in 2023, driven by surging demand in **China** and the **Republic of Korea**. The Argentine squid season is off to a disappointing start, with the 65 000 tonnes of illex squid (*Illex argentinus*) landed within the first three months of the year being considerably below the same period in previous years. The world market is expected to tighten due to limited supplies from other regions, and prices will rise as a consequence. **China** will maintain its position as the largest importer and exporter, despite a decline in its share of trade.

Figure 3. Russian Federation exports of crab



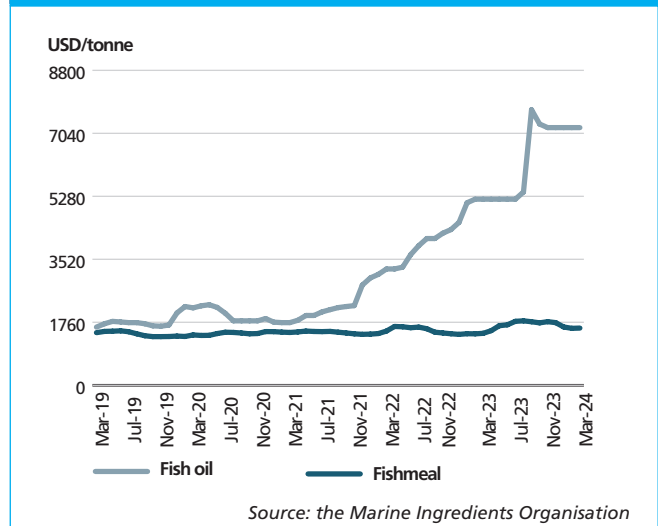
CRAB

While global crab imports rose by 7 percent in 2023, low quotas for 2024, combined with trade restrictions, will keep the market tight. The **Russian Federation**, previously a major exporter of king crab and snow crab to the **United States** and **Canada**, redirected exports as a result of import restrictions. Much of the excess supply has found its way to Asia, particularly **China**, the **Republic of Korea** and **Japan**. The sudden glut in these markets has pushed down domestic prices considerably.

FISHMEAL AND FISH OIL

Supplies of fishmeal and fish oil are set to ease with a high quota set for the first of **Peru's** two fishing seasons in 2024. The first four months of the year saw robust landings of anchoveta in Peru, one of the major global sources of both fishmeal and fish oil. Close to half of the 2 475 000 tonnes quota set in March 2024 was landed within 23 days of the season's opening, which yielded 187 000 tonnes of fishmeal and 20 500 tonnes of fish oil. These catches will help ease pressure on supplies, which remain limited following a 20 percent decline in Peruvian catches between 2021 and 2022 and a further 50 percent decline between 2022 and 2023. Fish oil remains critically limited after the 2023–2024 El Niño weather phenomenon caused high catch rates of juveniles that drove down oil yields.

Figure 4. Prices for fishmeal and fish oil (Peru FOB)



Increased demand from other sectors, particularly the pharmaceutical industry, has squeezed already tight supplies, with demand showing a remarkable price inelasticity in the face of extraordinary price hikes. Prices for all major grades of fish oil remain far above previous levels. In March 2024, high omega-3 content fish oil sold for USD 10 000 per tonne, a 280 percent increase from a year before. Feed-grade oil stood at USD 7 200 per tonne, a 300 percent increase.¹ Demand in the largest markets has fallen, as evidenced by a 6.3 percent decline in Norwegian imports of fish oil in 2023, while Chinese imports of fishmeal fell by 9.3 percent.

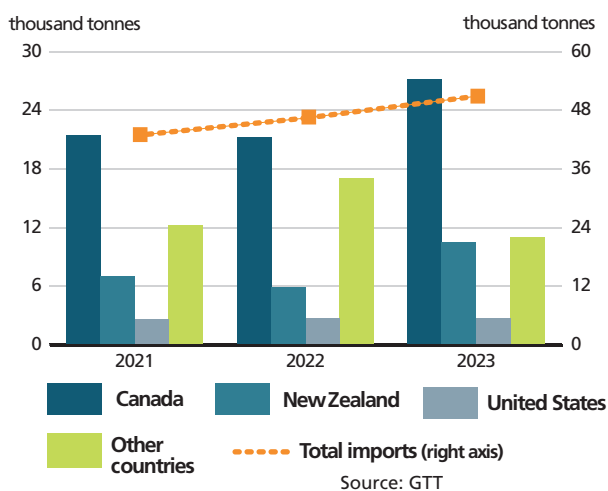
¹ Prices for free on board (FOB) Peru.

GROUND FISH

Following eight years of declining landings, supplies of Atlantic cod will continue to tighten. Catches are expected to fall from 1.3 million tonnes in 2023 to 1.1 million tonnes in 2024, with a 20 percent reduction in the Barents Sea quota. Consistent reductions to Atlantic cod quotas caused these limited supplies and, in turn, significantly raised prices. These trends have encouraged a shift among processors and retailers towards more readily available wild-caught species, such as Pacific cod and Alaska pollock, as well as farmed species such as tilapia.

In 2024, landings of Alaska pollock are set to increase significantly, as catches are expected to top 3.7 million tonnes. Prices of Alaska pollock from the **Russian Federation** in late April already fell by about 20 percent since the start of the year (free on board [FOB] prices), and Alaska pollock prices now undercut both pangasius and tilapia.

Figure 5. China imports of lobster

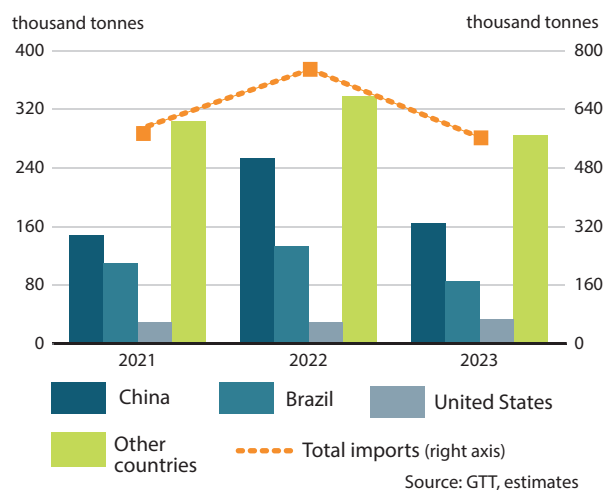


LOBSTER

Supplies of lobster will remain tight, and at the same time rising prices have reduced demand in the **European Union** and North American markets, a situation that is expected to continue into the rest of 2024. In the first quarter of 2024, cold waters and bad weather hampered US lobster catches and resulted in low landings. In early 2024, limited supply prompted Canadian lobster prices to surge by 31 percent, while US first-sale prices increased by 18 percent. These high prices caused global lobster trade to decline by 8.6 percent in 2023. The largest reductions were seen in the **European Union**, where imports fell by 20 percent, and the **United**

States, which saw a 7 percent reduction. Conversely, Chinese imports showed robust growth. Imports rose by 10 percent year on year and demonstrated that this major import market is not as impacted by high pricing on some luxury products.

Figure 6. Viet Nam exports of pangasius



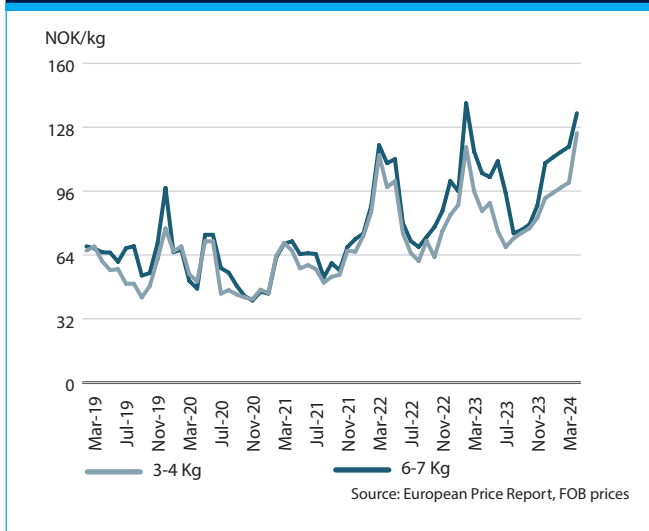
PANGASIOUS

Stagnant prices, rising costs and environmental factors are expected to moderate production growth of pangasius in the near term. Trade remains depressed, and global pangasius exports fell by 23 percent between 2022 and 2023. Despite promising production growth, weak and volatile demand in the US and Chinese markets saw trade volumes fall off in the latter part of 2023. **Viet Nam**, the largest producer of pangasius, saw output reach 1.6 million tonnes in 2023, a volume which is expected to rise to 1.7 million tonnes in 2024. In contrast to the export-oriented industry in **Viet Nam**, harvests by secondary producers, including **Bangladesh, China, India** and **Indonesia**, are almost entirely destined for local consumption. In spite of rising production costs, farmers in these countries are expected to see consistent, albeit low, rates of production growth.

SALMON

Increased taxes for Norwegian salmon producers led many to cut back on new investments, slowing production growth in the country. Producers in **Chile** and **Scotland** were negatively impacted by algal blooms and elevated levels of sea lice, respectively. The challenges these major producers have faced has prompted a slowdown in global

Figure 7. Salmon prices (Norwegian export)



output, and Atlantic salmon production fell by 1.6 percent in 2023. This decline followed years of consistent growth and expansion for the industry. Yet demand remains robust, with prices rising consistently each year.

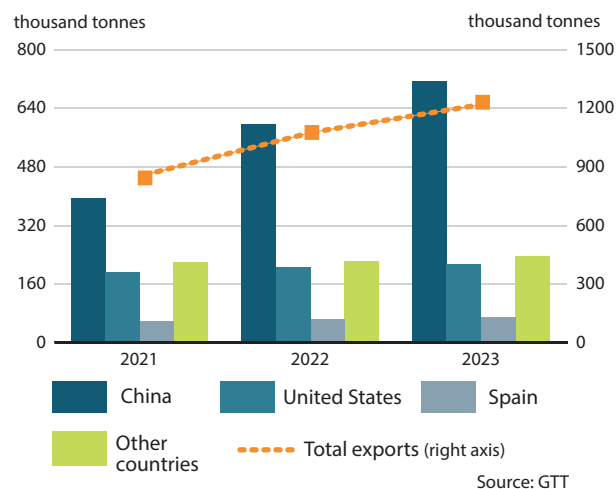
EUROPEAN SEABASS AND GILTHEAD SEABREAM

Although production and demand across key regions vary, limited supply of seabass and seabream has caused the market to tighten, even as demand remains sluggish. Overall, seabass production saw a slight decline in 2023, while seabream output grew by 3 percent to reach 312 000 tonnes. Italy, the main market for both species, saw imports of seabass decrease by 6 percent, while imports of seabream increased by 9 percent. In contrast, **Spain** saw a strong recovery of domestic supplies, prompting imports to fall overall. **Türkiye** solidified its position as the top exporter of seabass and seabream, with exports of both species rising by 2.4 percent to 150 000 tonnes.

SHRIMP

Global shrimp exports fell to a three-year low in 2023 due to weak international prices, which prompted Asian producers to reduce pond stocking densities for harvest in 2024. Shrimp prices remain at a multiyear low, a fact that continues to be of primary concern for shrimp producers. Global farmed production was estimated at 6 million tonnes for 2023, with a value of USD 60 billion. Vastly increased supplies from **Ecuador** constituted the lion's share of growth; in recent years the country has grown to be the third-largest producer and the largest exporter of

Figure 8. Ecuador shrimp exports



shrimp. In 2024, global production is expected to remain stable as producers in **India** and **China** respond to low prices and production in **Ecuador** has been impacted by El Niño-induced power and water shortages.

TILAPIA

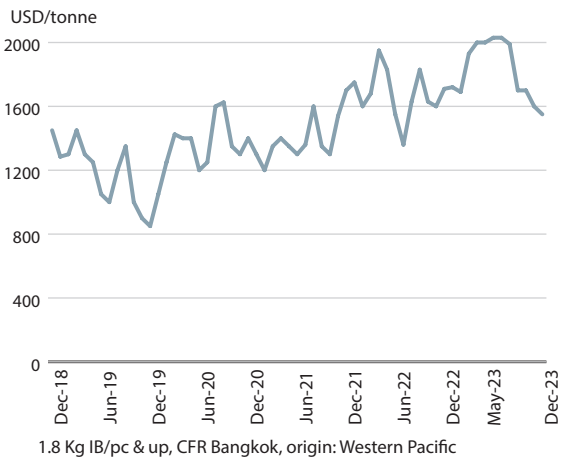
In 2024, harvest volumes of tilapia are expected to decline, as poor weather conditions and elevated input costs weigh on production. An unexpected cold snap in **China's** main production regions led to early die-offs, while rising prices for fishmeal have reduced profitability. Production growth is expected to continue for secondary producers, with harvests from **Egypt's** tilapia sector projected to grow by 5.2 percent in 2024, while Indonesian production is expected to increase by 3.7 percent. Significant increases are also expected in **Ghana, Nigeria, Uganda, Zambia** and **Zimbabwe**.

TUNA

In 2023, international tuna trade experienced a notable decline, with a 13 percent reduction in volume and a 10 percent fall in value that were largely driven by decreasing demand for canned tuna. Prices dropped considerably from previous highs, with the tuna component of the FAO Fish Price Index showing a 20-point reduction between June 2023 and February 2024. While demand for fresh tuna remained stable, processed tuna suffered from reduced consumption. Tuna canners and processors worldwide imported nearly 1.7 million tonnes of frozen tuna in 2023, a 13 percent decrease from 2022. Global imports of non-canned tuna, declined to 275 000 tonnes,

a decrease of 12 percent year on year. In **Japan** in 2023, imports of air-flown tuna reached a record low of 5 100 tonnes, principally as a result of increased domestic supplies.

Figure 9. Skipjack tuna prices (Thailand FOB)



Source: INFOFISH Trade News

SPECIAL FEATURES

Focus on fertilizers

Contributed by:
Maria Antip

Fertilizers, both mineral and organic, are widely used agricultural inputs. Their application contributes to global food security and nutrition, as well as farmers' livelihoods. Fertilizers help to nourish and sustain the world population by increasing the availability of nutrients for crop development, and they directly and indirectly contribute to 95 percent of global food production (FAO, 2019). The focus of this feature article is the primary nutrients contained in mineral fertilizers, namely nitrogen, phosphorus and potassium.

After providing background information, this feature article focuses on a comprehensive review of global fertilizer trade between 2021 and 2023 and provides a short-term market outlook for 2024/25.

In its May 2024 "[Introduction to fertilizers](#)", the Agricultural Market Information System (AMIS) defines the primary nutrients as follows:

- Nitrogen (N) enables plants to grow, develop and reach full yield potential. Over 100 million tonnes are used globally each year in the form of urea, ammonium nitrate, ammonium sulphate and other compounds.
- Phosphorus (P₂O₅) facilitates root development and improves resistance to drought. Close to 50 million nutrient tonnes are applied annually in the form of monoammonium phosphate (MAP), diammonium phosphate (DAP), triple superphosphates (TSP) and blends.
- Potassium (K₂O) aids photosynthesis, with 40 million nutrient tonnes applied globally in the form of muriate of potash (MOP) and sulphate of potash (SOP).

Introduction

Since 2021, fertilizer production, distribution and trade have been subject to a vast array of economic, environmental and geopolitical risks. Developments in the energy markets, the main input of the most frequently applied nitrogen fertilizer, are among the main drivers. According to the risk scenario identified in FAO's June 2022 information note on "The importance of Ukraine and the Russian Federation for global agricultural market and the risks associated with the war in Ukraine", rising prices of energy and fertilizers translated

into higher production costs and led to lower use of inputs in some regions.

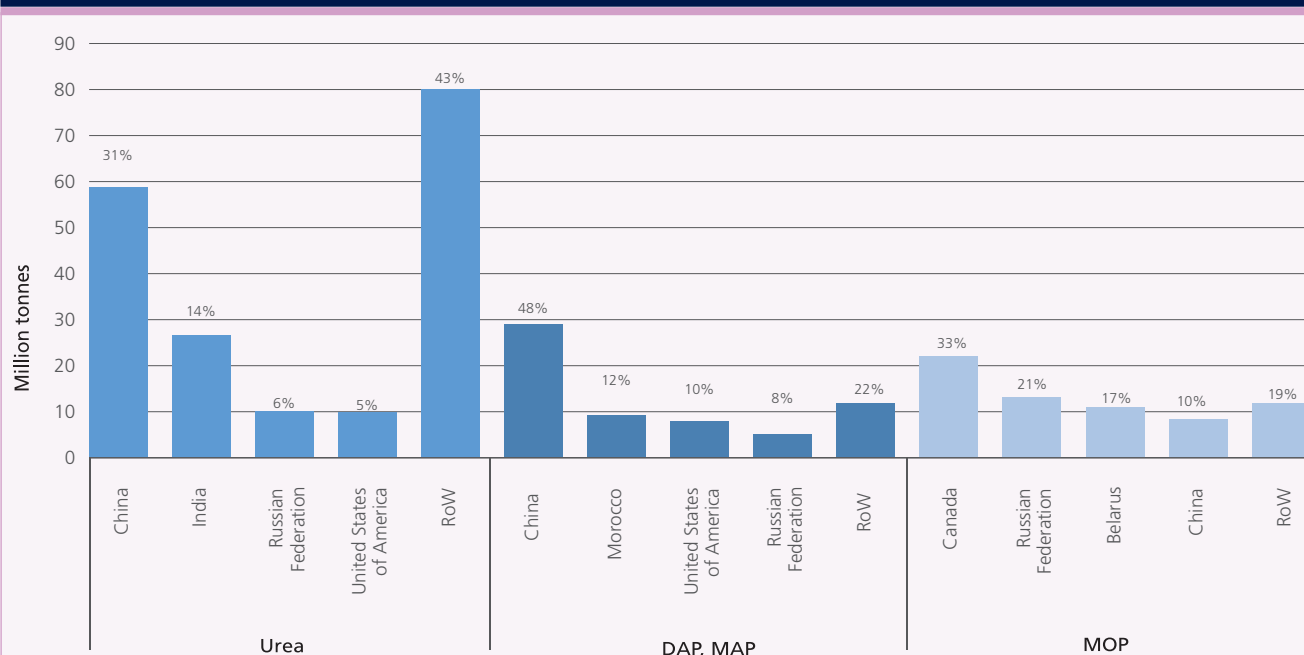
The fertilizer market landscape also underwent structural readjustments. In the second half of 2021 and in 2022, several production plants in Europe closed as a consequence of high feedstock costs. The Dutch natural gas Title Transfer Facility (TTF) index reached a historical high of above EUR 300/megawatt-hour and displayed pronounced volatility. These issues were reflected in the prices of ammonia, urea and DAP, which all exceeded USD 1 000/tonne, levels more than three times higher than historical ten-year averages.

Figure 1. TTF daily price movement, 2021-2023



The succession of additional disruptors reshaped global fertilizer trade to varying extents. Governments imposed several measures pertaining to fertilizers, including export controls and import duties. In addition, various foreign currency controls and conservative lending policies, reflected by high interest rates, impacted global and regional fertilizer trade over the 2021-23 period by limiting import capacity for some low- and middle-income countries.

Other actors along the fertilizer supply chains, such as shipowners, operators, freight and insurance, also responded to the rising geopolitical risks by commanding higher freights and insurance premiums to transport fertilizers, altering trade routes and patterns and adding additional voyage days. Consequently, the average

Figure 2. Production quantities and share of total by country, 2021

Source: AMIS

transportation cost increased by USD 25-50/tonne globally and up to USD 70/tonne in sub-Saharan Africa in 2022 (IFDC, 2022).

Production of fertilizers was also reshaped by new paradigms following the energy cost rally of 2021-2022. The graph above illustrates the production and share by country of the main fertilizer types across nitrogen, phosphorus and potassium, which are urea, DAP, MAP and MOP (AMIS, 2024).

A survey conducted by the International Fertilizer Association (IFA) (2024) revealed that, in 2023, nitrogen production increased (up 3 percent for ammonia and 7 percent for urea), and the increase was mainly driven by China, India and the Russian Federation. Phosphate production was up 5 percent in 2023; lower production in Africa, especially Morocco, was offset by increases in the Near East and East Asia. Potash production rebounded by 10 percent in 2023, largely on account of increases in the Russian Federation and Belarus, as well as ramping up of capacity in the Lao People's Democratic Republic.

On the demand side, the European Union, Brazil and Türkiye increased their urea imports in 2023, while India's purchases decreased significantly, down by 15 percent, as the country continues to pursue boosting domestic production. For phosphate, the United States of America, the European Union and Brazil increased their MAP and DAP imports, encouraged by more favorable pricing.

India once again decreased its imports by 8 percent compared to 2022, due to the reduced subsidy support for distributing phosphates to farmers. For potash, China and Brazil exhibited the highest increases in imports between 2022 and 2023, at 47.0 percent to 12 million tonnes and 14.0 percent to 13.5 million tonnes, respectively.

As showcased earlier, the reduction in energy prices spurred fertilizer production and led to an increase in available fertilizer supplies that helped to ease prices, which in turn fuelled a rebound in demand and traded volumes. In April 2024, fertilizer prices, as presented by a basket of nitrogen, phosphorus and potassium price series, averaged USD 327/tonne, compared to USD 815/tonne in April 2022.

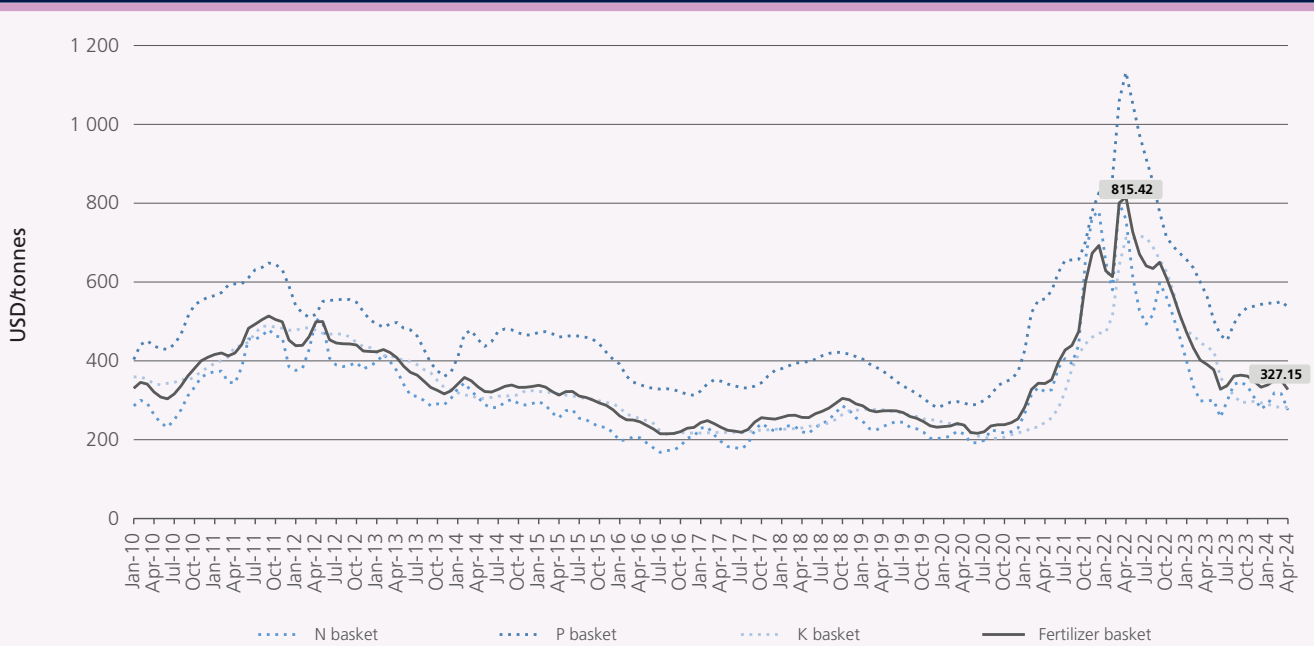
The fertilizer basket includes 26 price series under the nitrogen, phosphorus and potassium umbrellas. These include 10 benchmark prices for nitrogen fertilizers, 11 benchmark prices for phosphorus fertilizers and 5 benchmark prices for potassium fertilizers.

Global fertilizer trade

Elevated prices triggered an affordability crisis that led to global fertilizer trade contracting by 18 million tonnes between 2021 and 2022.

According to the Global Trade Tracker (2024), in 2023 mineral fertilizer trade increased by 7 percent year on year in volume terms but did not return to the 2019–2021

Figure 3. Fertilizer basket price



Source: Own elaboration basis CRU Fertilizer Week

levels. Fertilizer trade totalled 162 million tonnes in 2023, up from the prior year but still below the 2019–2021 average of 167 million tonnes.

In 2023, the value of total fertilizer trade declined by 35 percent compared to 2022 to USD 53 billion. The decrease happened on account of lower world prices of all fertilizer products and feedstocks compared to 2022, which was the peak year. The growth in trade volumes was driven by a demand rebound in key importing markets

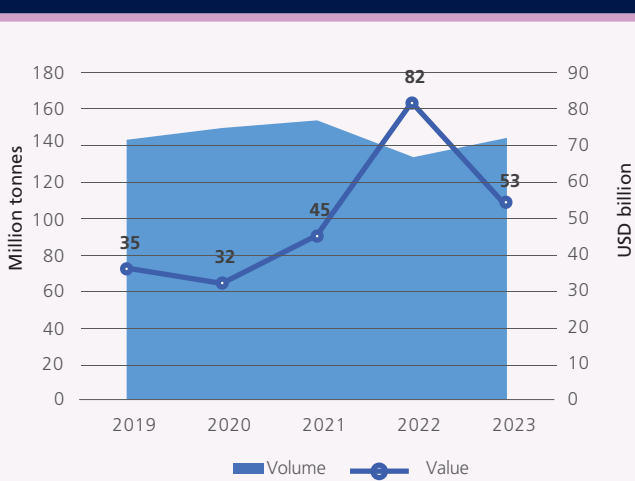
such as Türkiye, mid-sized Latin American markets – such as Mexico, Colombia and Chile, where import demand increased between 14.0 and 53.0 percent – and mid-sized Southeast Asian countries – such as the Philippines, Thailand and Viet Nam, where rebound growth was between 9 and 17 percent. These Asian countries had been the hardest hit by the high prices and unfavorable exchange rates that resulted from domestic currency depreciation.

Furthermore, trade flows were influenced by policies. In 2023, these policies included the resumption of the European Union’s import duties on ammonia and urea, the implementation of the United States’s countervailing duties on phosphates imports from Morocco and the Russian Federation, and the enforcement of temporary and seasonal export control measures in China, the Russian Federation, Türkiye and Indonesia. Freight increases and logistical disruptions in the Black Sea and Near East also impacted trade flows.

Global Nitrogen trade (including urea and nitrates) showed a 1.3 percent year-on-year increase to 75.7 million tonnes in 2023.

This soft rebound can be attributed to the fact that nitrogen trade contraction in 2022 was less than those of phosphorus and potassium. Nitrogen is a key yield-enhancing input that, depending on soil conditions, usually needs to be applied annually. Additionally, the prices of cereals decreased, meaning farmers had less disposable

Figure 4. Global fertilizer trade (2019-2023)



Source: Global Trade Tracker

income to purchase agricultural inputs such as fertilizers.

On a regional basis, in 2023, lower European natural gas prices were more favorable to domestic fertilizer production, particularly nitrates, which lowered the region's import bill compared to the record year 2022 when nitrogenous imports into Europe displayed a triple digit percentage growth rate.

In 2023, Qatar and the Russian Federation topped the exporters' list for urea, with Egypt and China also showing a rebound in comparison to 2022. On the import front, India drastically reduced its imports by 2 million tonnes in 2023 on account of a robust domestic production. A recovery of over 1.2 million tonnes was registered in Southeast Asia and was buoyed by currency appreciation vis-à-vis the United States dollar, especially for the Indonesian rupiah, the Philippine peso and the Vietnamese dong, all of which appreciated by an average of 6 percent in 2023 (ADB, 2023).

Global Phosphate trade rebounded by 1 million tonne in 2023, representing a 3 percent year-on-year increase to 30.4 million tonnes; however, it remained more than 4 million tonnes below the 2021 levels. Key exporting countries, apart from China, saw little change to their export volumes, largely due to a muted global demand because of high prices.

China experienced a rebound in phosphate exports in 2023, though they remained well below prior peaks, with the government using export restrictions to safeguard the domestic market. On the import side, India imported less in 2023, due to lower subsidies and a subsidy policy more favorable to nitrogen.

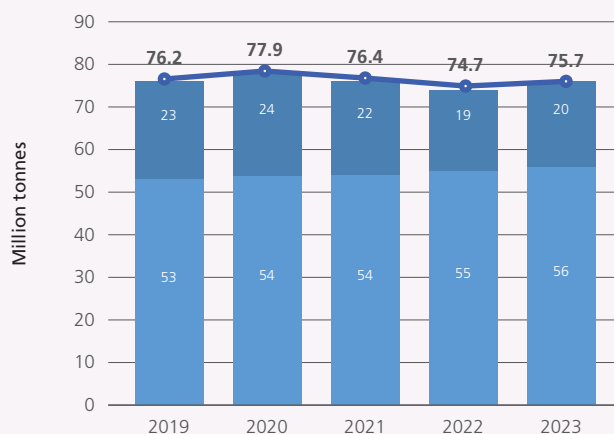
Global Potash trade increased to 55.7 million in 2023, up 17 percent from 2022, due to an increase in imports by major markets like China, Brazil, the United States and India.

In 2022, potash trade declined from 2021 levels, mainly due to a supply shortfall brought about by reductions in Belarusian and Russian exports, as well as reduced demand induced by increased potash prices.

Together, Canada, the Russian Federation and Belarus account for more than 60 percent of the global primary potash capacity. As such, Canada's share of global potash trade increased significantly in 2021-2022, while Belarus's and Russian Federation's shares declined.

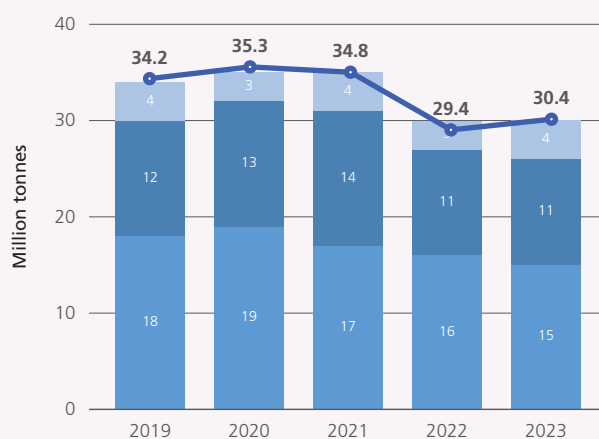
In 2023, the Russian Federation and Belarus exported more potash via new rail trade routes (to China and India). Higher exports from Canada, Jordan and Lao People's Democratic Republic also contributed to an ample supply, which in turn allowed for improved affordability. Consequently, in 2023, imports increased in key countries such as China, Brazil and Indonesia, Malaysia and Thailand.

Figure 5. Global nitrogen trade (gross product)



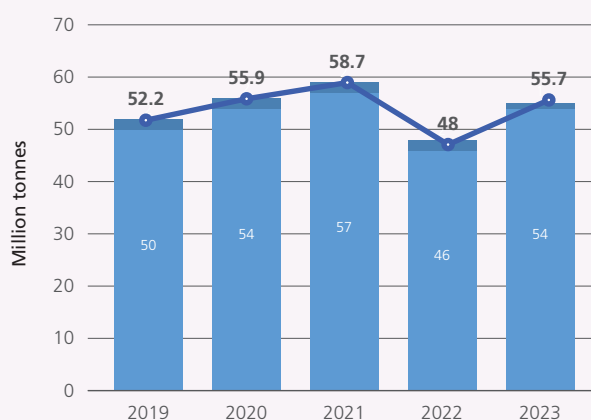
Source: Global Trade Tracker

Figure 6. Global phosphate trade (gross product)



Source: Global Trade Tracker

Figure 7. Global potash trade (gross product)



Source: Global Trade Tracker

In conclusion, during the price hike in 2022, fertilizer trade volumes declined by close to 11 percent. This contraction, while driven by high prices and reduced affordability, was also exacerbated by regional logistical challenges, such as those in the Black Sea and the Gulf of Aden. Additionally, countries responded by enforcing protectionist trade policies that sought to safeguard domestic supplies on the one hand and, on the other, to ban products based on origin, such as potash from Belarus.

While trade rebounded in 2023 with the easing of global prices, it has not yet returned to pre-2021 levels, and access to fertilizer continues to remain a challenge that disproportionately affects regions that already suffer from low agricultural productivity.

Short-term outlook

Overall, the short-term outlook for fertilizers suggests stability over the next six months, with improved availability and affordability across nitrogen, phosphorus and potassium. However, geopolitical and weather risks, combined with macroeconomic and trade policies imposed by governments, will continue to play a role, possibly introducing temporary price and volume volatility. Still, the amplitude and geographical scope of any such shocks are likely to be determined by the presence or absence of shocks to energy markets and costs.

Focusing on specific nutrients, the Russian Federation's new ammonia export terminal at Taman on the Black Sea is expected to become operational in the latter half of the year. It will facilitate the return to the global market of over 1 million tonnes of ammonia, which was previously exported via pipeline through Ukraine, and will provide ample feedstock to nitrogen and phosphate production.

Urea prices are expected to remain soft as the peak demand in the northern hemisphere for the spring season has passed and India is unlikely to tender for urea before July, as it relies on robust domestic production. Weather risks can also affect urea demand. For example, the recent flooding in the south of Brazil had devastating effects on both arable land and infrastructure and could hamper planting and demand. It could also pose difficulties for input deliveries, thus affecting supply availability for the 2024/25 season in the region.

Phosphate prices are expected to decline in the coming months with increased seasonal supply from China. However, the United States's countervailing duties on Russian and Moroccan DAP and MAP are likely to result in higher prices in the United States, while they may boost availability in nearby markets, such as Brazil, as exporters redirect trade flows. Stocks in Brazil are reported lower than prior years, which is

likely to keep some upward pressure on prices. Indian import demand is expected to improve under the Kharif-season subsidy following the recent slump.

Potash availability is robust, and prices are expected to remain flat to soft because of weakening palm oil prices that may suppress demand in Southeast Asia. China delayed the settlement of its new potash contract until July on account of high in-country stocks, which could further add to the downward price momentum.

References

- ADB (Asian Development Bank).** 2023. Asian Development Outlook. Manila, ADB. <http://dx.doi.org/10.22617/FLS230112-3>
- AMIS (Agriculture Market Information System).** 2024. Introduction to fertilizers. AMIS fertilizer series, 1/2024. Rome, FAO. https://www.amis-outlook.org/fileadmin/user_upload/amis/docs/resources/Fertilizer%20series%20Intro%20to%20fertilizers.pdf
- AMIS.** 2024. Production of mineral fertilizers. AMIS fertilizer series, 2/2024. Rome, FAO. https://www.amis-outlook.org/fileadmin/user_upload/amis/docs/resources/1_AMIS%20Fertilizer%20series%20-%20Fertilizer%20production.pdf
- Fertilizer Week.** 2024. London, CRU. [Cited 28 May 2024]. <https://www.crugroup.com/prices/>
- Global Trade Tracker.** 2024. Kehrsatz, GTT. [Cited 28 May 2024]. <https://www.globaltradetracker.com/>
- IFA (International Fertilizer Association).** 2024. Fertilizer Market Update. Paris, IFA. https://member.fertilizer.org/member/resources/publication_detail.aspx?SEQN=6300&PUBKEY=3D3622A5-9CCB-40E8-A015-1616F6DDFD2A
- IFDC (International Fertilizer Development Center).** 2022. Fertilizer Logistics in East Africa. In: IFDC Insights. Nairobi, IFDC. [Cited 28 May 2024]. https://ifdc.org/2022/08/05/fertilizer_logistics_in_east_africa/
- FAO.** 2019. The international Code of Conduct for the sustainable use and management of fertilizers. Rome, FAO. <https://openknowledge.fao.org/handle/20.500.14283/ca5253en>
- FAO.** 2022. The importance of Ukraine and the Russian Federation for global agricultural markets and the risks associated with the war in Ukraine. Rome, FAO. <https://openknowledge.fao.org/handle/20.500.14283/cc3317en>



Dynamic effects of shocks to shipping costs on the food import bill

Contributed by:
Emiliano Magrini, ElMamoun Amrouk

Introduction

International trade continues to play a crucial role in supporting global food security by linking food surplus with deficit areas and enabling access to basic food products through imports (FAO, 2022). The latest FAO estimates show that the global food import bill (FIB) reached almost USD 2 trillion in 2023 and will likely hit a new record in 2024.¹ However, the high degrees of interconnection among countries and regions contribute to the spread of trade disruptions (Wassénus *et al.*, 2023). Concerns about the capacity of international markets to guarantee access to food and agricultural products also arise when macroeconomic, geopolitical, or climate shocks strike.

Recently, global trade has faced pressure from shipping restrictions in the Panama Canal and shipping disruptions related to attacks on commercial vessels in the Red Sea (IMF, 2024). These events came on top of the interruptions to maritime transportation due to the war in Ukraine that impacted transit at the Black Sea ports. These disruptions led to shipping companies rerouting ships through longer routes and increasing sailing speeds and fuel consumption, thus impacting carbon emissions (UNCTAD, 2024).

Another direct consequence of these events was the impact on the cost of importing food and agricultural products. Maritime shipping accounts for the largest share of transportation costs, and more than 80 percent of global trade in grains and oilseeds occurs by sea (OECD, 2022). Moreover, the cost of trading food and agricultural products, relative to the value of the shipped goods, is high compared to other sectors (Beghin and Schweizer, 2021) and reaches 20 to 30 percent of the value of imported products for the least-developed countries (Korinek and Sourdin, 2010).

This feature article aims to examine the dynamic effects of shocks to shipping costs and focuses on the impact on the FIB due to changes in ocean freight rates in the short term, i.e. relying on data sampled monthly. Given the inelastic nature of agrifood import demand in the short run, the use of monthly information on trade and ocean freight

rates provides policymakers with timely insights for assessing the consequences of increased shipping costs for the levels of current account and foreign reserves. The analysis distinguishes between modes of maritime transportation - dry bulk and container - and examines how these shocks affect net food-importing developing countries (NFIDCs)².

Data and methodology

The variable of interest in this analysis is the total value of the FIB in nominal terms, constructed by aggregating trade flows of over 900 agricultural and food items at the Harmonized System six (HS-6) digits level for each country. Monthly import data from the Trade Data Monitor (2023) is used for the calculation. Regarding ocean freight rates, the analysis uses the Baltic Dry Index for dry bulk shipping and the Harper-Petersen Charter Rates Index (Harpex) for container shipping. These indices provide weighted averages of freight rates for significant sea routes worldwide³.

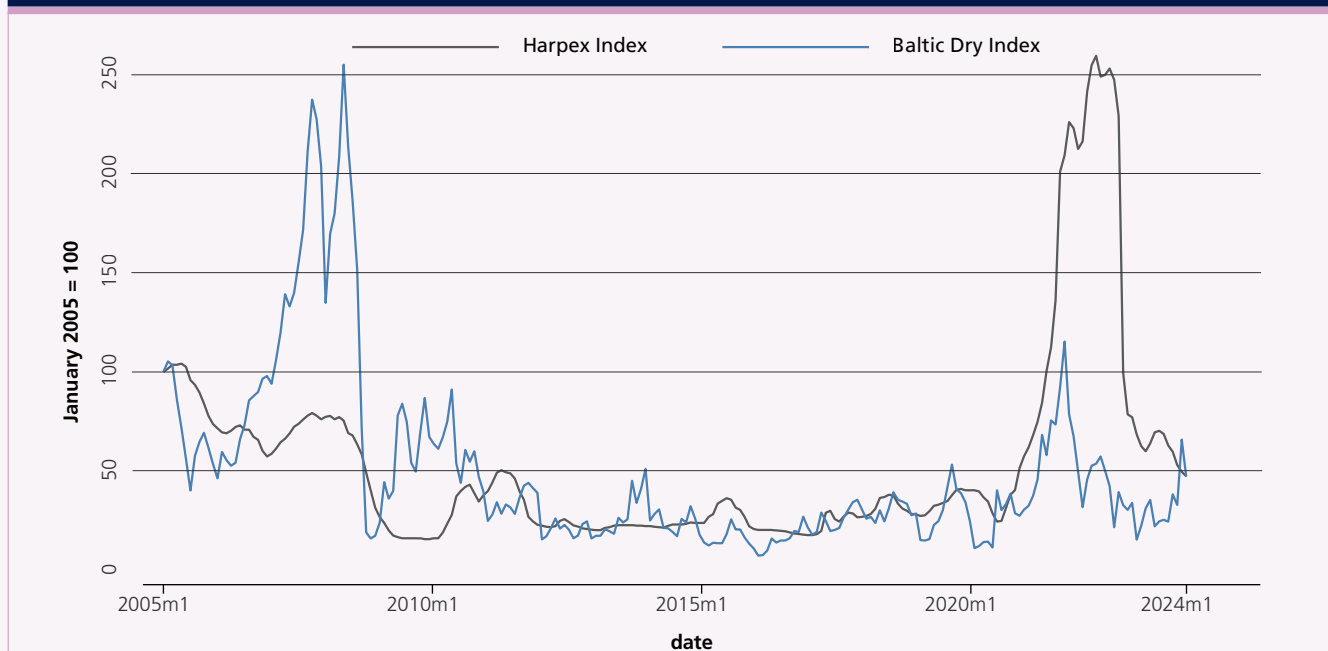
The analysis distinguishes between container and bulk transportation costs for two reasons. First, both modes are important for products in the FIB, at least in terms of total value. Dry bulk is crucial for grains, oilseeds and sugar, which are typically shipped in vessels chartered for point-to-point routes, while other products travel by container liner shipping (Wellesley *et al.*, 2017). The choice of the shipping modality also depends on the size and port infrastructure available at the destination. Second, the two transportation modes seem to react differently to demand, supply and disruption shocks from the global economy, and they impact the FIB differently. Figure 1 displays the two freight rates, indexed to January 2005. While their paths are similar, the magnitude and duration of the response to major events in international markets over recent years appear quite different. For example, the Baltic Dry Index reacted more

² Net food-importing developing countries (NFIDCs) are included in a list of countries maintained by the World Trade Organization's (WTO) Committee on Agriculture (2024). The selection criteria and the list of countries can be found at https://www.wto.org/english/tratop_e/agric_e/ag_intro06_netfood_e.htm.

³ The analysis focuses on the impact of an overall change in the freight rates. It does not identify the specific causes of the rate shift, such as, for example, supply and demand factors, specific components of the shipping costs (e.g. insurance premiums), weather (e.g. drought in Panama Canal) or geopolitical (e.g. attacks in the Red Sea) disruptions, and/or policy interventions (e.g. trade restrictions).

¹ For details please refer to the section on the "Global food import bill" on page 86.

Figure 1. Dry-bulk and container freight rates



Source: Refinitiv Eikon and author's calculations.

strongly during the 2007-2008 financial crisis, whereas the opposite was true during the post-COVID-19 pandemic period from 2021 to 2022.

The analysis includes additional variables to control for other factors that influence the FIB values beyond the shipping costs. It uses the West Texas Intermediate (WTI) price as a proxy for fuel costs and the Agricultural Price Index from the World Bank's commodity price data to control for the value of agricultural products. For global demand, it employs the World Industrial Production index developed by Baumesteir and Hamilton (2019).

The dynamic effect of shipping costs on the FIB is estimated using an econometric technique called panel local projections (Jordà, 2005). Specifically, the technique estimates the cumulative percentage change of the FIB over a period of 20 months after the shock to the shipping costs. For each period, it regresses the cumulated monthly changes of the FIB on the contemporary percentage changes of the freight rate and other control variables.⁴ Separate regressions are used for the two transportation modes.

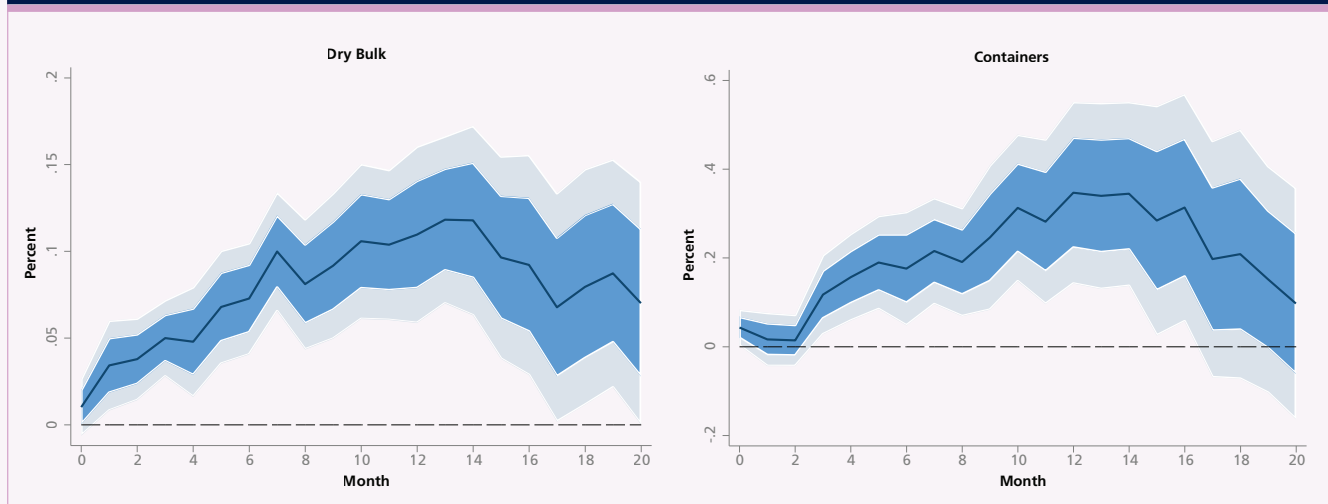
⁴ Local projections have recently become an appealing alternative to the standard structural vector autoregression (SVAR) approach to estimate causal dynamic effects, because they allow direct identification of the variables' response to shocks by using univariate methods without the need to impose structural restrictions (Jordà, 2023). Moreover, the flexibility of the local projections allow using panel data, handling nonlinearities and increasing the tolerance to functional misspecifications with respect to SVAR. For this analysis, these advantages are convenient since the relationship between the FIB at country level and the shocks to shipping costs is an empirical question without a robust theoretical framework that would help to identify the relationship between the different aggregates of interest in a SVAR framework.

The dynamic effects of shipping on the FIB

Figure 2 illustrates the cumulative impact of a 1 percent increase in shipping costs on the total value of the FIB using data for 192 countries or territories and distinguishing between dry bulk (left panel) and container (right panel) shocks. In both cases, the impact is positive and statistically significant. In the left panel, the cumulative effect of a 1 percent shock to the Baltic Dry Index reaches its maximum level of 0.12 percent after thirteen months before reverting towards zero. By contrast, in the right panel, the cumulative effect of a 1 percent increase in the Harpex Index peaks at 0.34 percent after 12 months. More than half of the changes in the FIB occur within the first six months from the shocks, emphasizing the need for policymakers to focus on short-term effects due to the fast propagation of trade disruptions across maritime transportation routes.

It is important to note that the results are expressed in terms of the total value of the FIB. This means that the cumulative response to a 1 percent increase in ocean freight rates represents the net impact of the positive effect induced by an import price increase and the negative effect due to the reduction in traded volumes. The results suggest that the import demand for food and agricultural goods does not, at least in the short run, react enough to the price shocks that are induced by changes in the shipping costs. The increase in the overall expenditures triggered by higher import prices is not compensated by the reduction in traded volumes, highlighting the relative inelastic nature of food demand. The results also mean that, following an

Figure 2. The dynamic effects of shipping costs on the FIB



Note: The figure shows the cumulative impact of a 1.0 percent increase in shipping costs on the value of the FIB.

Source: Refinitiv Eikon and author's calculations.

increase in shipping costs due to a shock, countries spend more on food supplies from the global market, at least in the short run.

In other words, during the first months following the shocks, the change in the FIB is primarily driven by the price effect. These results are important for several reasons. First, the consequences of a shock for maritime transportation costs may quickly affect importing economies by increasing the value of the FIB and potentially influencing domestic prices and inflation, as demonstrated by Carrière-Swallow *et al.* (2023). Second, the overall effects of import price shocks on the current account component of the balance of payments may put pressure on the domestic economy, especially in net-food importing developing countries. Third, an increase in the total value of the FIB translates into a loss of foreign currency, which can pose a significant constraint to accessing imports and other intermediate goods for many low- and middle-income countries.

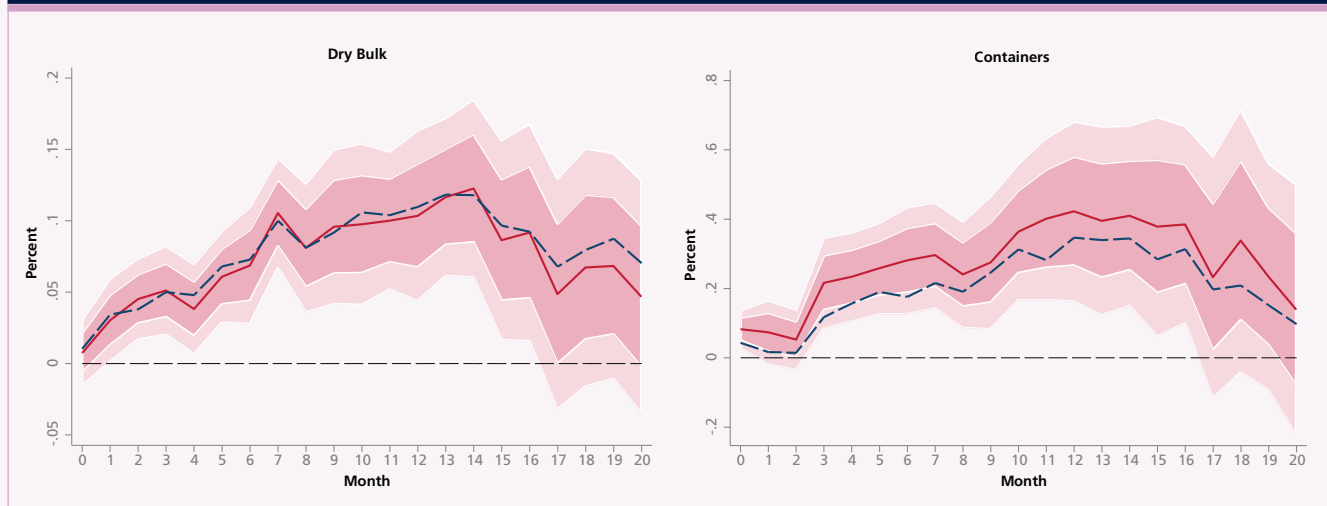
Regarding the substantial difference between the impacts of shocks to container (0.34) versus dry bulk (0.12) costs, two possible explanations were identified. First, the share of containerized agrifood products grew significantly in recent years. While bulk transportation still dominates by volume, the value traded using container shipping is higher (Del Rosal, 2024a, 2024b). Second, there are market-specific factors. Bulk shipments typically serve single point-to-point voyages and usually return almost empty to the origin, while container deliveries are handled by liner shipping companies traveling on predetermined routes that visit several ports (Rojon *et al.*, 2021; Wellesley *et al.*, 2017). If trade imbalances are significant, meaning ships travel fully loaded towards importing countries but return with empty containers, companies charge higher prices to compensate

for losses incurred on the return journey (OECD and WTO, 2017). Consequently, the impact to the FIB of the initial shock to container freight rates may be amplified by the round-trip effect due to backhaul problems (Wong, 2022).

Finally, the analysis investigates whether maritime transportation shocks affect countries differently based on their level of food import dependency by isolating the response of net food importing developing countries (NFIDCs). Figure 3 shows an interesting pattern. For dry bulk costs, there are no substantial differences between the NFIDCs' cumulative response (solid red line) and the baseline estimate using the full dataset (dashed blue line). Conversely, a 1 percent shock to container shipping costs increases the NFIDCs' food import bill by 0.43 percent after 12 months, with over half of the total cumulative effect occurring in just three months.

These results can be explained by three factors. First, food and agricultural products in NFIDCs are necessities with a few substitutes (Adam, 2011), making the reactions to import price shocks more inelastic in the short run compared to the full sample of countries. Second, NFIDCs have high trade imbalances and need to compensate backhaul problems with liner shipping companies (Rojon *et al.*, 2021), which exacerbates the effect of the shock on container costs. Third, importing agrifood products by sea is relatively more costly for NFIDCs than for other countries, as the transport costs represent a higher share of the FIB for these countries (OECD, 2022). They also pay more due to geographic and economic remoteness (Korinek and Sourdin, 2010). NFIDCs are physically more distant from major exporters, served by fewer shipping routes, and marginalized by the global shipping network (Rojon *et al.*, 2021; Fugazza and Hoffmann, 2017). Consequently,

Figure 3. The dynamic effects of shipping costs on the FIB of the NFIDCs



Note: The figure shows the cumulative impact of a 1.0 percent increase in shipping costs on the value of the FIB.
Source: Refinitiv Eikon and author's calculations.

NFIDCs are more exposed, in the short run, to disruptions in the maritime transportation system and increases in shipping costs.

Conclusion

Recent restrictions and disruptions to maritime transportation have added pressure on the capacity of international trade to contribute to global food security.

The results of this study have several policy implications. First, as shipping costs positively impact the FIB in the short term, substantial increases like those observed recently may burden countries with current account deficits and those at risk of foreign currency depletion. To mitigate these short-term consequences, tailored policy instruments are needed to limit potential damages to the country's macroeconomic framework. For example, countries should avoid loose monetary policies which may exacerbate the effects of the shocks on the current account while they may provide temporary and well-targeted fiscal support to the most exposed segments of the population. In the longer term, coordinated international actions are necessary to lower trade costs through more efficient and secure shipping routes and networks.

Second, since not all shocks are the same, national authorities must consider the extent of increases to dry bulk and container transportation costs. Countries highly dependent on container shipping for their imports are more vulnerable to cost increases. This vulnerability is even higher for NFIDCs, making it essential for these countries to address transportation shocks. Potential solutions include national and international actions. Nationally, authorities should invest in infrastructure and logistics to develop

sustainable systems that better integrate countries into major shipping routes. According to the Organisation for Economic Co-operation and Development (OECD) and the World Trade Organization (WTO) (2017), this solution would not necessarily require large and expensive interventions in all national ports, but rather deeper integration into existing regional hubs, the development of new multimodal transportation corridors, and improved logistics services to reduce time and operational costs. Internationally, coordinated investment and policies would increase collaboration between countries and create efficient regional systems based on hub-and-spoke models.

References

- Adam, C.** 2011. On the Macroeconomic Management of Food Price Shocks in Low-income Countries. *Journal of African Economies*, 20(suppl_1): i63–i99. Oxford, UK, Oxford University Press. <https://doi.org/10.1093/jae/ejr008>
- Baumeister, C. & Hamilton, J.D.** 2019. Structural Interpretation of Vector Autoregressions with Incomplete Identification: Revisiting the Role of Oil Supply and Demand Shocks. *American Economic Review*, 109(5): 1873–1910. Pittsburgh, USA, The American Economic Association. <https://doi.org/10.1257/aer.20151569>
- Beghin, J.C. & Schweizer, H.** 2021. Agricultural Trade Costs. *Applied Economic Perspectives and Policy*, 43(2): 500–530. Milwaukee, USA, Agricultural & Applied Economics Association. <https://doi.org/10.1002/aapp.13124>

- Carrière-Swallow, Y., Deb, P., Furceri, D., Jiménez, D. & Ostry, J.D.** 2023. Shipping costs and inflation. *Journal of International Money and Finance*, 130: 102771. Amsterdam, Elsevier. <https://doi.org/10.1016/j.jimonfin.2022.102771>
- Del Rosal, I.** 2024a. Maritime connectivity and agricultural trade. *Journal of Agricultural Economics*, 75(1): 153–168. Oxfordshire, UK, Agricultural Economics Society. <https://doi.org/10.1111/1477-9552.12548>
- Del Rosal, I.** 2024b. Does containerisation reduce the constraints imposed by distance in seaborne trade? *Maritime Policy & Management*, 51(1): 35–49. London, Taylor & Francis. <https://doi.org/10.1080/03088839.2022.2115572>
- FAO.** 2022. The geography of food and agricultural trade: policy approaches for sustainable development. The state of agricultural commodity markets 2022. Rome, FAO. <https://doi.org/10.4060/cc0471en>
- Fugazza, M. & Hoffmann, J.** 2017. Liner shipping connectivity as determinant of trade. *Journal of Shipping and Trade*, 2(1): 1. Berlin, Springer Nature. <https://doi.org/10.1186/s41072-017-0019-5>
- IMF (International Monetary Fund).** 2024. Red Sea Attacks Disrupt Global Trade. In: IMF. Washington, DC. [Cited 5 April 2024]. <https://www.imf.org/en/Blogs/Articles/2024/03/07/Red-Sea-Attacks-Disrupt-Global-Trade>
- Jordà, Ò.** 2005. Estimation and Inference of Impulse Responses by Local Projections. *American Economic Review*, 95(1): 161–182. Pittsburgh, USA, The American Economic Association. <https://doi.org/10.1257/0002828053828518>
- Jordà, Ò.** 2023. Local Projections for Applied Economics. *Annual Review of Economics*, 15: 607–631. San Mateo, USA, Annual Reviews. <https://doi.org/10.1146/annurev-economics-082222-065846>
- Korinek, J. & Sourdin, P.** 2010. Clarifying Trade Costs: Maritime Transport and Its Effect on Agricultural Trade. *Applied Economic Perspectives and Policy*, 32(3): 417–435. Milwaukee, USA, Agricultural & Applied Economics Association. <https://doi.org/10.1093/aapp/ppq007>
- OECD (Organisation for Economic Co-operation and Development).** 2022. *Maritime Transportation Costs in the Grains and Oilseeds Sector: Trends, Determinants and Network Analysis*. OECD Food, Agriculture and Fisheries Papers 179. Paris, OECD Publishing. <https://doi.org/10.1787/b1cdf6b7-en>
- OECD & WTO (World Trade Organization).** 2017. Aid for Trade at a Glance 2017: Promoting Trade, Inclusiveness and Connectivity for Sustainable Development. Aid for Trade at a Glance. Paris, OECD Publishing. https://doi.org/10.1787/aid_glance-2017-en
- Rojon, I., Lazarou, N.-J., Rehmatulla, N. & Smith, T.** 2021. The impacts of carbon pricing on maritime transport costs and their implications for developing economies. *Marine Policy*, 132: 104653. Amsterdam, Elsevier. <https://doi.org/10.1016/j.marpol.2021.104653>
- Trade Data Monitor** (2023). Retrieved from <https://tradedatamonitor.com/> on 1st December 2023.
- Wassénus, E., Porkka, M., Nyström, M. & Sogaard Jørgensen, P.** 2023. A global analysis of potential self-sufficiency and diversity displays diverse supply risks. *Global Food Security*, 37: 100673. Amsterdam, Elsevier. <https://doi.org/10.1016/j.gfs.2023.100673>
- Wellesley, L., Preston, F., Lehne, J. & Bailey, R.** 2017. Chokepoints in global food trade: Assessing the risk. *Research in Transportation Business & Management*, 25: 15–28. Amsterdam, Elsevier. <https://doi.org/10.1016/j.rtbm.2017.07.007>
- UNCTAD (United Nations Conference on Trade and Development).** 2024. Navigating Troubled Waters: Impact to Global Trade of Disruption of Shipping Routes in the Red Sea, Black Sea and Panama Canal: UNCTAD Rapid Assessment. UNCTAD Policy Briefs. Geneva, Switzerland, UNCTAD. <https://doi.org/10.18356/27082822-114A>
- Wong, W.F.** 2022. The Round Trip Effect: Endogenous Transport Costs and International Trade. *American Economic Journal: Applied Economics*, 14(4): 127–166. Pittsburgh, USA, The American Economic Association. <https://doi.org/10.1257/app.20190721>
- WTO.** 2024. Net-food importing developing countries. In: WTO. Geneva, Switzerland. [Cited 29 May 2024]. https://www.wto.org/english/tratop_e/agric_e/ag_intro06_netfood_e.htm



MARKET INDICATORS

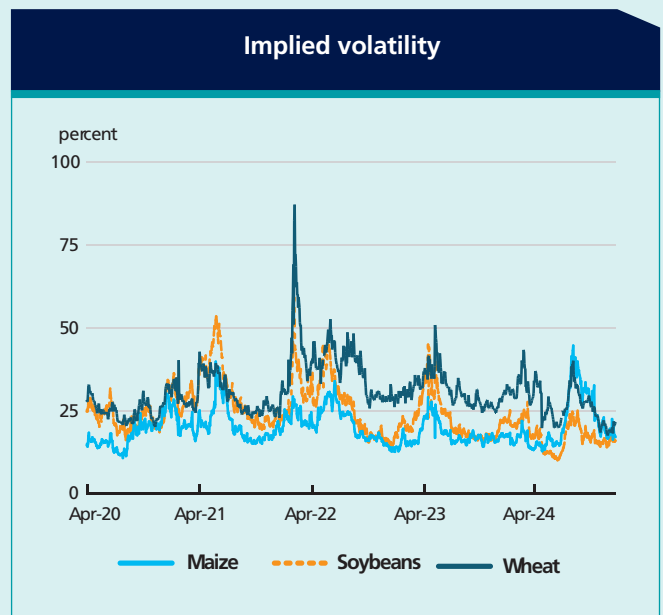
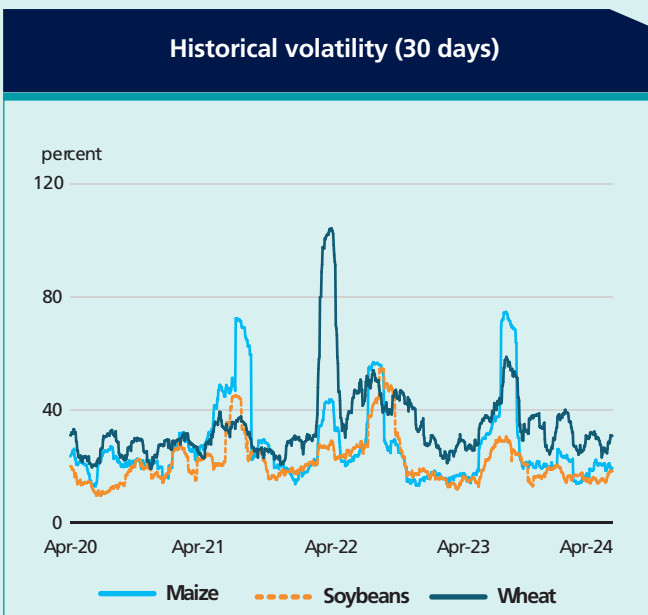
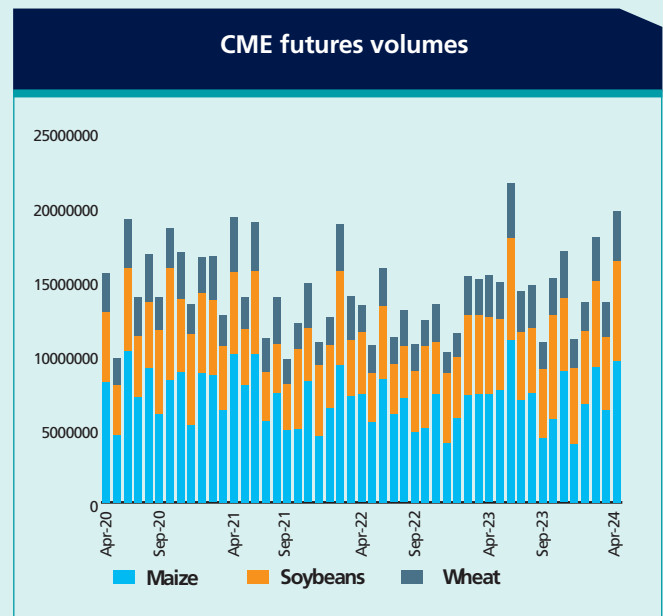
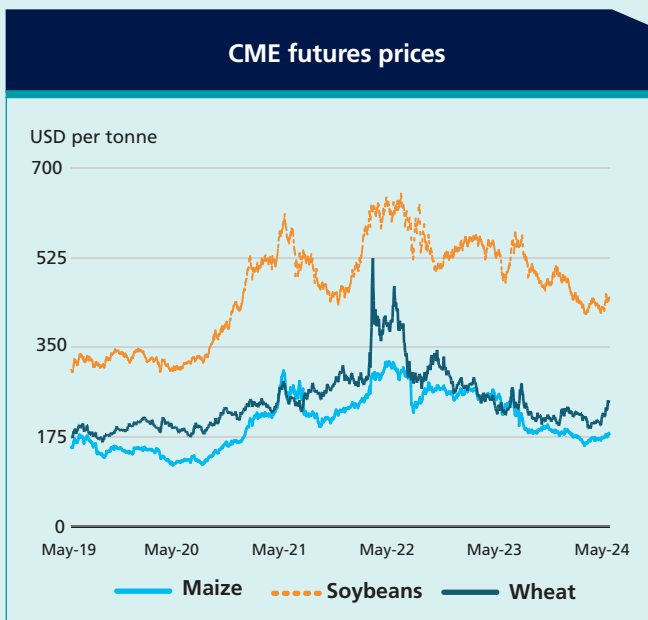
Futures markets

Alexis Poullain

PRICES

Since January 2024, a narrowing trading range has been observed in wheat, maize and soybean futures markets, suggesting price stabilization following the record high in wheat and near-record highs in soybean and maize futures in 2022 and the gradual decline throughout 2023. Between August 2023 and March 2024, Chicago Mercantile Exchange (CME) and Euronext wheat futures have consistently traded below USD 230/tonne. The primary factor behind this rate has been the ample export availabilities of competitively priced wheat from the Black Sea region, which has contributed to the perceptions of a global surplus despite

diminishing ending stocks in 2023/24. However, unfavourable weather conditions in April 2024, impacting the northern hemisphere's major wheat exporters, have tempered expectations of a significant stock recovery for the 2024/25 marketing season, and drove futures prices to peak levels of nearly USD 250/tonne, which were last observed in July 2023. Nonetheless, the potential recovery of CME and Euronext futures remains constrained because wheat originating from the United States of America and Europe is not competitive. Additionally, elevated wheat prices relative to maize may incentivize feed use substitution, further eroding wheat demand.



Maize futures prices have exhibited relative stability, fluctuating within the range of USD 160-200/tonne. Following three and a half years of low levels until the end of February, maize futures rebounded on the CME throughout March and April, buoyed by a weather premium due to delayed planting in the United States and adverse harvesting conditions in Brazil. However, the United States Department of Agriculture's (USDA) initial 2024/25 global crop estimates released in March suggest that prospects of adequate supply should mitigate the upward price risk, barring any major adverse weather developments.

Soybean futures prices have trended downward since November 2023. They experienced a brief resurgence in May but are largely maintaining levels of around USD 440/tonne, which is reminiscent of November 2021 levels from before the outbreak of the war in Ukraine. Persistent concerns about subdued Chinese demand for soybeans that originate from the United States and competitive pricing from Brazil have suppressed CME futures prices. A floor for soybean futures above USD 400/tonne has been established by a robust biofuel demand and driven by firm crude oil and palm oil prices. However, projections of a sluggish Chinese demand for the new soybean crop from the United States temper any price rebound potential in the near term.

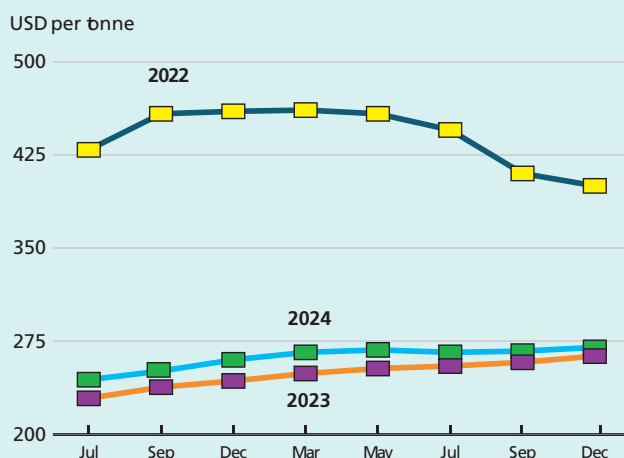
Overall financial market conditions have not added much momentum since January 2024. The surge in oil prices during the first quarter of 2024 and the stronger-than-expected economic expansion in the United States have maintained inflation concerns heightened, prompting many central banks to uphold elevated interest rates. The resulting strength of the United States dollar index has contributed to providing an upper bound to CME agricultural commodity prices.

VOLATILITY

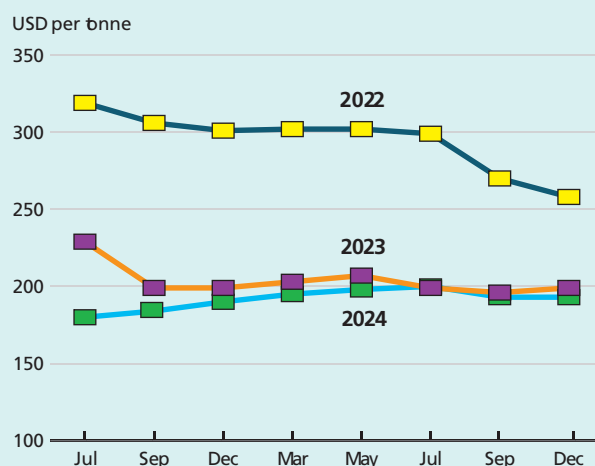
Futures prices returned to more stable levels, with 30-day historical volatility below 20 percent for maize and soybeans and below 30 percent for wheat, which were close to the 10-year average levels on CME contracts. Low volatility levels are typical at the beginning of the calendar year for these contracts, as this period corresponds to a low level of criticality in the crop development cycle. Nevertheless, it is worth noting that implied volatility, measured by option prices, exhibited bursts in wheat prices since mid-April, with levels exceeding 40 percent, above the 10-year average but not in the upper range. This indicates that market participants were pricing in a

Forward curves snapshots as of May 2022, 2023 and 2024

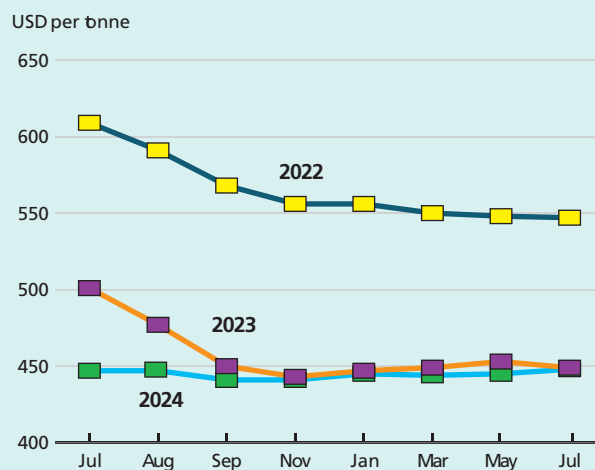
Wheat



Maize



Soybeans



risk premium, suggesting that the current price equilibrium is likely to be highly unstable. Potential outbursts of grain price variance warrant monitoring from May to July, especially for maize. During this period, maize price volatility tends to increase as potential adverse weather impacts on crops become more significant.

VOLUMES AND OPEN INTEREST

Trading activity in CME agricultural markets has increased since the beginning of 2024, with year-to-date futures volumes up by 13 percent compared to the same period in the previous year. The average daily traded volume (of futures and options) in the first quarter of 2024 for the CME agricultural segment reached 1.46 million contracts, reflecting higher liquidity, which enhances price discovery and reduces transaction costs. However, this higher traded volume is combined with lower open interest, which decreased by 11 percent compared to last year, suggesting that market participants are engaging in more frequent, shorter-duration trades rather than committing to long-term hedging positions.

Notably, traded volumes and open interest were high on Euronext wheat, which recorded a new all-time high monthly volume in April. The European wheat futures market is increasingly used for price discovery, being considered the most relevant benchmark for Black Sea markets. Indeed, the prices established in the Black Sea region have been setting the global marginal price – the most competitive wheat available on the market – for most of the season. This influence on global wheat prices has led to a preference for the adjacent European Euronext futures over the United States based CME wheat.

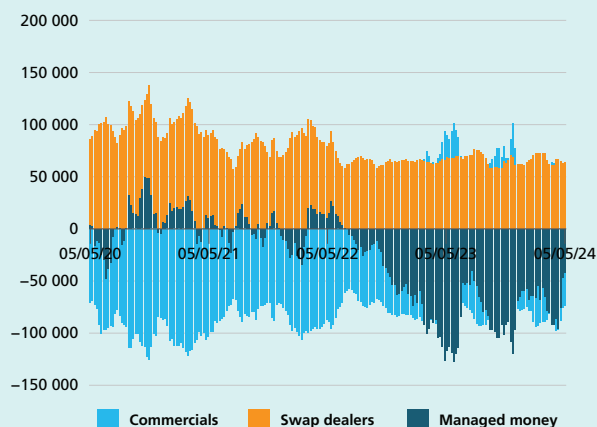
FORWARD CURVES

CME wheat and maize forward curves are in contango (or carry), where prices for succeeding delivery months are higher than those for spot months. This market structure incentivizes participants to store and profit from higher prices in later-month contracts over immediate sale on relatively depressed nearby contracts. Thus, limited short-term demand from international importers for wheat and maize originating from the United States is reflected in the forward curve's adjustment to more contango.

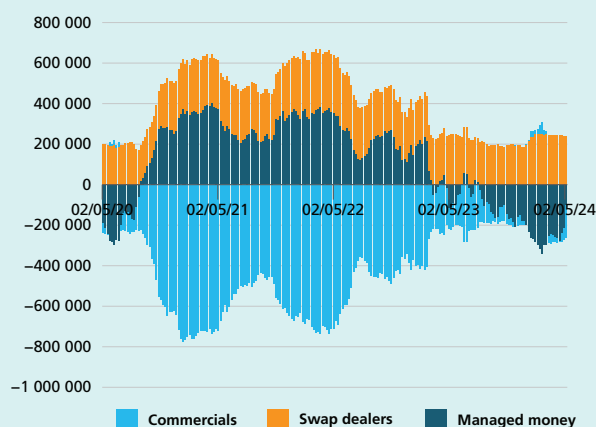
By contrast, CME soybean futures showed backwardation (or inverse) in May after being in contango most of the season. This shift appears more technical than fundamental, as soybean balance sheets currently do not show any signs of shortage. As the May contract

CME net-length in lots (May 2020 - May 2024)

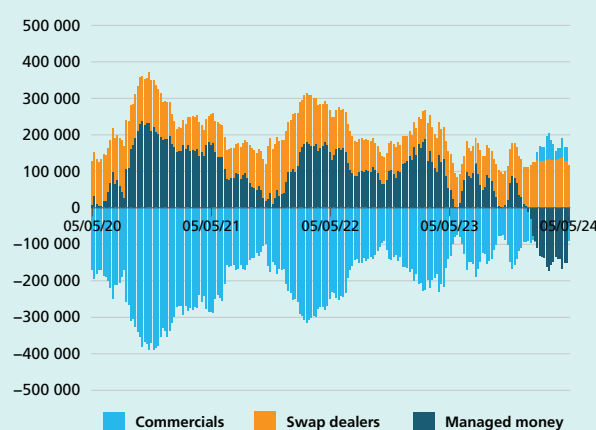
Wheat



Maize



Soybeans



Source: Chicago Mercantile Exchange (CME)

approached its expiration, money managers covered large short positions that resulted in buying the May contract and pushing its price up, while simultaneously shorting the July contract and pulling its price down.

INVESTMENT FLOWS

While managed money held a near-record net short, combined position in wheat, maize and soybeans until mid-April on CME, they covered half of their positions in the last two weeks of April. As of mid-May, money managers still held a net short position, reflecting a bearish leaning on CME markets amid perceived ample supplies, subdued demand and a strong United States dollar. However, the funds' bearish sentiment seems to be gradually shifting to a more neutral outlook as weather-related risks mount for the new crop. Prices remained capped despite that half of

the funds' net short positions were bought back, indicating that short liquidation was not a key price driver and that other fundamental factors played a more prominent role.

The buying spree since mid-April was the largest inflow in agricultural derivatives traded on CME in three and a half years and underscores the trend-following nature of money managers, who swiftly reverse position when price trends shift. The risk of erratic changes of position, especially during the growing season, should thus be closely monitored to provide insights into how investment funds perceive the directional trend of the grains and oilseeds markets.

On Euronext wheat, money managers flipped from net short to net long in a swift mid-April buying spree amid unseasonal frosts and dryness concerns that may impact yields in the Russian Federation. However, this buying spree by funds was absorbed by commercial participants with a limited impact on prices.

Ocean freight rates

International Grains Council (IGC)

OCEAN FREIGHT MARKET (NOV 2023 – MAY 2024)

Timecharter rates in the dry bulk freight complex have generally strengthened over the past six months, though with mixed trends observed throughout the period. Movements in the Baltic Dry Index (BDI) – a benchmark measure for the main bulk carrier sizes – were often influenced by price swings in the notoriously volatile Capesize segment, which primarily carries heavy raw materials such as coal and iron ore. After spiking in late 2023 due to perceived strong demand fundamentals in China, the BDI subsequently dropped but rebounded more recently, partly bolstered by the start of South America's grains and soybeans export season. While the BDI increased by a modest 2.0 percent since late November 2023, rates were up by around one-third compared to one year earlier as of late May.

Despite uncertainty surrounding economic prospects in China, particularly regarding the domestic property and construction sectors, the country's recent stimulus initiatives buoyed freight market sentiment in the early part of the year. Additionally, an uptick in exports of certain goods, most notably steel, underpinned China's industrial output and imports of raw materials in recent months.

Overall support in the grains and oilseeds carrying sectors came from robust dispatches from Ukraine via a new seaborne corridor established in August 2023.

Summary of dry bulk freight markets

	24 May 2023	Changes	
		6 months	y/y
		%	
Baltic Dry Index (BDI)*	1829	+ 2%	+ 34%
<i>Sub-indices:</i>			
Capesize	2655	+ 3%	+ 29%
Panamax	1822	- 7%	+ 49%
Supramax	1382	+ 12%	+ 30%
<i>Baltic Handysize Index (BHSI)**</i>	688	+ 12%	+ 13%
IGC Grains and Oilseeds Freight Index (GOFI)***	155	- 7%	+ 15%

Source: Baltic Exchange, IGC. * 4 January 1985 = 1000. ** 23 May 2006 = 1000. *** 1 January 2013 = 100.

Average Low Sulphur Oil (LSFO) prices May 2023 – May 2024



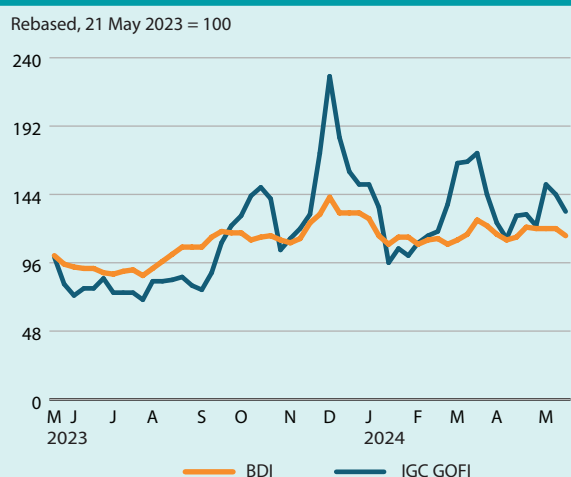
Source: Refinitiv Eikon, IGC calculations.

Elevated insurance premiums and conflict-related safety concerns caused a slow start to shipments through the channel, but deliveries accelerated as security worries abated, with both grain and non-grain cargoes utilizing the route. Recent trade statistics showed that Ukraine's grains and oilseeds shipments from December 2023 to March 2024 exceeded total volumes achieved under the Black Sea Grain Initiative (July 2022–July 2023) and approached preconflict levels.

On the logistics front, the attention of the freight market has been focused on drought-induced traffic restrictions at the Panama Canal, a crucial maritime chokepoint responsible for around 7 percent of global seaborne flows of grains and oilseeds. Following the reduction of daily reservation slots for transits in the second half of 2023, average waiting times for bulk grain vessels at the Canal reportedly rose to about 20 days in December, compared to the typical three to five days. Conditions started to improve in March 2024, although transits were still below average as of mid-May. While there are plans to increase the number of daily reservations, freight analysts do not anticipate any major change for dry bulk flows in the near term, with the new shipping slots expected to be taken by vessel categories with a higher cargo value, which are deemed more capable of competing for capacity.

The disruption at the Panama Canal was compounded by developments in the Red Sea, particularly the attacks

BDI and IGC GOFI 21 May 2023– 21 May 2024



Note: IGC Grains and Oilseeds Freight Index, constructed based on nominal freight rates on major grains/oilseeds routes using trade-weighted approach. Source: Baltic Exchange, IGC

on cargo vessels that started in October 2023. The initial impact was centred on the container sector and included rice shipments from Asia to Europe. However, with risks subsequently expanding to dry bulk vessels, shipping data indicated an increasing volume of bulk carriers being diverted via southern Africa, including soybeans from the United States of America, wheat from Europe to Asia, and canola from Australia to Europe. However, Black Sea exporters continued to use the Suez Canal, and January to April 2024 grain volumes from that region to Asia were broadly unchanged year on year.

According to industry sources, diversions of shipments from the American Gulf Coast to Asia via southern Africa add up to an extra 22 days of journey time compared to deliveries via the Panama Canal, and extra costs vary greatly, from USD 3/tonne to USD 16/tonne. The cost of diversions for shipments originating in Western Europe was estimated to be smaller, at USD 2/tonne to USD 3/tonne, and around eight days of additional journey time. Longer delivery periods constrained global fleet capacity and provided underlying support to dry bulk freight prices. However, recent increases in voyage freight rates, including on affected routes, were capped by softer average marine fuel prices, which are estimated to have declined by around 6 percent since late November. The International Grains Council (IGC) Grains and Oilseeds Freight Index (GOFI) gauges total voyage costs on major grains and oilseeds routes and eased by 7.0 percent over the past six months, partly reflecting the dynamics of bunker costs. There were markedly smaller losses in the southern hemisphere markets amid a seasonal increase in dispatches, and solid gains were recorded in rates from Australia.

Baltic Capesize Index 21 May 2023– 21 May 2023



Source: Baltic Exchange

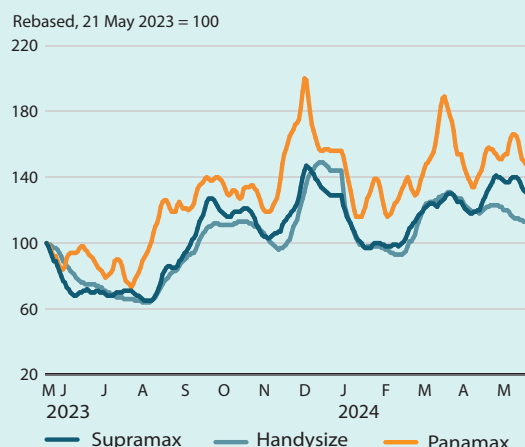
While the outlook for dry bulk shipping markets is clouded by persistent global economic headwinds and ongoing hostilities in some regions, extended journey times resulting from the Red Sea crisis and Panama Canal transit limitations are expected to remain supportive for freight rates in the near term. Although private forecasts suggest that freight market fundamentals may weaken over the coming year, with vessel availability likely to exceed shipment demand, much depends on the situation at these critical chokepoints.

Capesize vessel earnings were notably volatile over the past six months. Initial support for timecharter values stemmed from a perceived strong demand for iron ore from China. However, the market reversed course in early December as economic statistics from China fell short of expectations, and a seasonal slowdown in trading activity further dampened sentiment.

Demand for iron ore deliveries was sustained and included shipments from Brazil to China and coal dispatches from Australia. This demand contributed to an upsurge in Capesize rates in early 2024 as activity picked up following seasonal festivities in Asia. Yet, more recently, the market came under pressure from rising vessel supply in the Atlantic, partly due to a collapsed bridge at the Port of Baltimore that disrupted coal loadings. Despite these challenges, average rates in the Capesize segment were up by a net 3.0 percent compared to six months earlier.

Panamax rates initially received support from an elevated demand for transatlantic and fronthaul voyages to Asia, alongside robust coal dispatches from Indonesia. However, the market experienced a decline towards the end of the year due to a general slowdown in activity and

Grains and oilseeds carrying sectors: Panamax and Supramax sub-Indices and Handysize Index 21 May 2023– 21 May 2024



Source: Baltic Exchange

a rise in tonnage in the Atlantic. Nevertheless, a seasonal increase in shipments of grains and oilseeds from South America has more recently provided some support and has limited the net loss in average rates over the past six months to 7.0 percent.

Rates for smaller bulk carriers performed relatively better, with average **Supramax** values increasing by a net 12.0 percent since November of last year. The Baltic sub-Index edged lower in late 2023, as buoyant trading in the Indian Ocean and solid demand for deliveries from the American Gulf Coast did not fully offset slow activity in Asia. The subsequent upturn in prices was partly attributed to robust coal trading out of Indonesia, a seasonal rise in soybean dispatches from Brazil, and increased shipments from the Black Sea region owing to improved weather conditions.

Average **Handysize** rates also recorded moderate gains over the past six months. Following a similar pattern to the Supramax segment, the Handysize market began the calendar year on a subdued note amid limited activity in key loading regions. Nonetheless, steady demand in Asia and improving sentiment in Europe and the Mediterranean helped to lift average rates.

Summary of freight rates on selected routes

USD/t	Cargo / Discharge	21 May 2024	Changes		
			6 months	y/y %	
United States of America (Gulf) to:					
	China (Dalian)	66 000 / 8 000	56	-4	20
	European Union (Rotterdam)	66 000 / 10 000	27	-25	18
	Japan (Yokohama)	66 000 / 8 000	53	-4	19
Canada (St. Lawrence) to:					
	China (Dalian)	66 000 / 8 000	54	-4	21
	European Union (Rotterdam)	66 000 / 10 000	19	-28	21
	Japan (Yokohama)	66 000 / 8 000	51	-4	20
Argentina (Up river) to:					
	Algeria (Belaja)	25 500 / 2 500	39	2	-1
	Egypt (Alexandria)	49 000 / 6 000	37	3	5
	European Union (Rotterdam)	66 000 / 10 000	33	-26	19
Brazil (Santos) to:					
	China (Dalian)	66 000 / 8 000	51	-4	23
	European Union (Rotterdam)	66 000 / 10 000	27	-28	21
	Republic of Korea (Inchon)	66 000 / 7 250	51	-4	24
European Union (France, Rouen) to:					
	Algeria (Belaja)	25 500 / 2 500	19	-29	-8
	Egypt (Alexandria)	49 000 / 6 000	19	-35	-9
	Morocco (Casablanca)	25 500 / 3 000	17	-28	-8
Russian Federation (Novorossiysk) to:					
	Egypt (Alexandria)	49 000 / 6 000	17	-29	-4
	Morocco (Casablanca)	25 500 / 3 000	21	-30	-6
	Tunisia (Bizerte)	25 500 / 2 500	18	-32	-8
Australia (Kwinana) to:					
	China (Dalian)	66 000 / 8 000	25	10	42
	Indonesia (Jakarta)	49 000 / 8 000	21	26	36
	Republic of Korea (Inchon)	66 000 / 7 250	25	10	44

Note: Nominal ocean freight rates for HSS (heavy grains, soyabeans, sorghum) cargoes. Values do not represent market fixtures.

Source: IGC

Global food import bill

Fabio Palmeri, Emiliano Magrini, Bing Qiao and ElMamoun Amrouk

Global food import bill climbed to an all-time high in 2023 but experienced a marked slowdown in annual growth.

FAO's latest estimates indicate that the global food import bill (FIB) reached nearly USD 2 trillion in 2023, representing a slight uptick of 0.4 percent, or USD 8.6 billion, over its 2022 level and marking a record high. The increase mostly stemmed from higher import bills for fruits and vegetables, sugar and beverages, which more than offset declines in the import bills of animal and vegetable oils, fats, cereals and fishery products (Figure 1 and Table 1). In particular, import expenditures on sugar and fruits and vegetables increased by 12.7 percent and 6.5 percent, respectively, largely driven by a surge in their international quotations. On the other hand, the import bill of animal and vegetable oils and fats fell by 12.2 percent as a result of a substantial drop in their world prices. The year-on-year growth of the FIB represented a significant deceleration compared to the 11.0 percent increase registered in 2022 and the 18.0 percent rise in 2021. The slowdown mainly reflects declines in the import bills for cereals and cereal preparations, animal and vegetable oils and fats, followed by fishery products and meat, against significant increases in 2022. The FIB growth in 2023 was lower across all food groups, with fruits and vegetables being the main exception (Table 1).

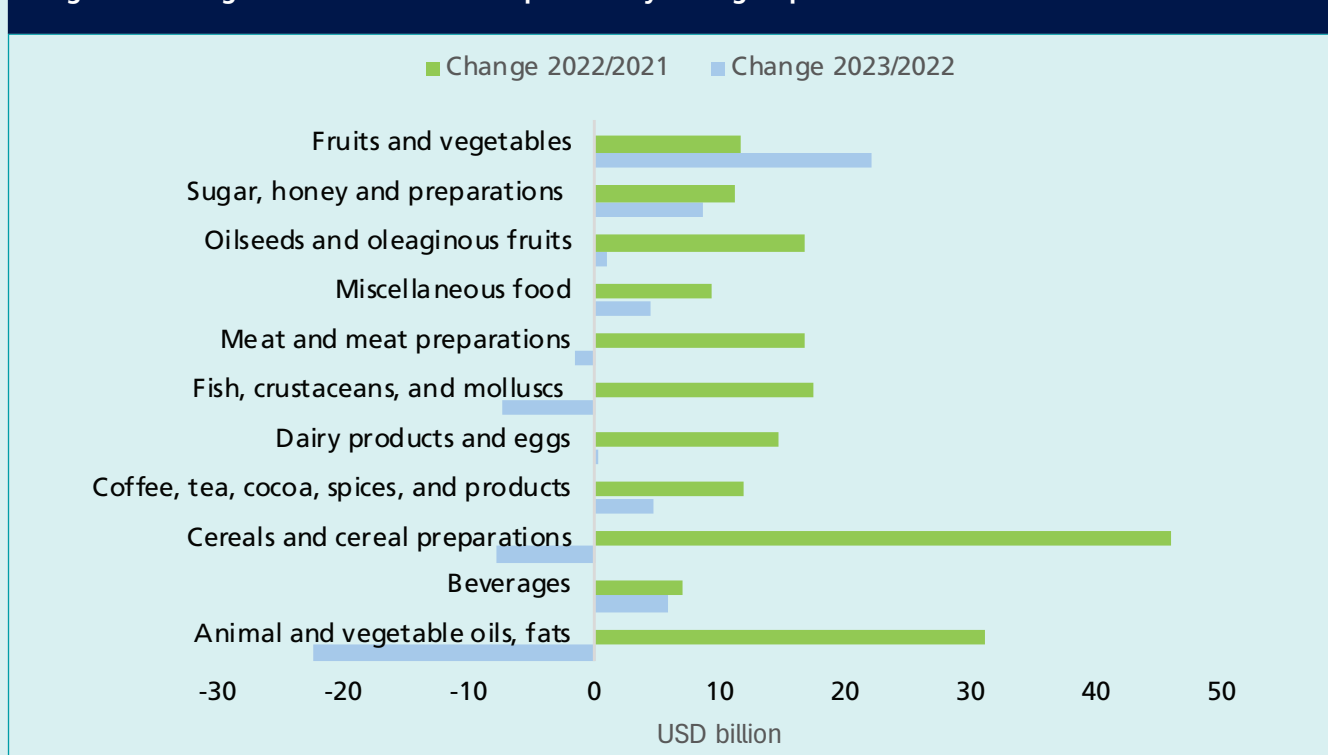
Among country income groups, high-income countries (HICs) represented over half of the global FIB in 2023, with a 62 percent share, followed by upper-middle-income countries (UMICs), with a 25 percent share. HICs and UMICs drove the

global increase in the FIB in 2023 and more than offset the year-on-year contractions in lower-middle-income countries (LMICs) and low-income countries (LICs), which were helped by lower international cereal prices. Overall, HICs and UMICs import a wide range of food products, while staple foods dominate the imports of LMICs and LICs. In addition, the share of imported higher-value foods in the total FIB generally drops with lower income levels. In 2023, fruits and vegetables, meat, fishery products, coffee, tea, cocoa and spices, and beverages together accounted for 61 percent, 43.0 percent, 30.0 percent and 21.0 percent of the total FIBs of HICs, UMICs, LMICs and LICs, respectively.

Looking ahead to 2024, based on a preliminary analysis, the FIB is projected to rise by about 2.5 percent and exceed USD 2 trillion. The projections are driven mostly by relatively favourable macroeconomic conditions, including a steady global economic growth, and lower food commodity prices. According to the World Economic Outlook of the International Monetary Fund (IMF), global economic growth in 2024 is projected to remain steady at 3.2 percent, while the April 2024 edition of the World Bank's Commodity Markets Outlook predicts that the prices of energy and agricultural commodities – including food products – will decline from 2023. The combination of these factors should sustain incomes and stimulate food import demand across the world, which, according to FAO's estimates, could make the global FIB grow by more than USD 50 billion in 2024.¹ However, the projections can be impacted by several risk factors, such as an escalation of geopolitical tensions, climate-related shocks hitting agricultural production, economic setbacks, supply chain disruptions such as the recent surge in maritime transportation costs, and the use of trade restrictions.

¹ Projections for 2024 were obtained by estimating a monthly vector autoregressive (VAR) model in first differences with 12 lags and four variables. The total value of the FIB is expressed in USD, the oil price and the agricultural price indices are from the World Bank Pink Sheet Data, and the world industrial production index is based on the methodology developed by Baumeister and Hamilton (2019). The in-sample period covers January 2005 to September 2023, while the out-of-sample projections for the FIB were estimated using the results of the VAR and the actual (from October to April 2024) and forecasted values (from May to December 2024) of the other three endogenous variables in the system.

Figure 1. Changes in the world food import bill by food group



Note: Forecasts are based on data from January 2023 to September 2023.
Source: Trade Data Monitor (TDM), 2023, and authors' calculations.

Table 1. Import bills of total food and food products by region (USD billion)

	World				LDCs				NFIDCs				SSA			
	2020	2021	2022	2023*	2020	2021	2022	2023*	2020	2021	2022	2023*	2020	2021	2022	2023*
Animal and vegetable oils, fats	104.5	151.8	183.0	160.6	6.0	9.2	10.3	8.5	13.2	19.9	22.9	19.8	6.3	9.1	10.2	8.6
Beverages	114.4	134.5	141.6	147.5	1.5	1.7	1.9	1.9	3.2	4.1	5.0	5.2	2.1	2.8	3.2	3.3
Cereals and cereal preparations	208.8	259.9	305.9	298.2	14.0	18.2	19.1	16.5	35.3	42.8	50.8	46.2	16.3	20.8	22.0	21.8
Coffee, tea, cocoa, spices, and products	113.0	127.1	139.1	143.8	1.5	1.5	1.5	1.6	5.1	6.2	5.8	5.8	1.4	1.7	1.7	1.8
Dairy products and eggs	97.5	109.5	124.1	124.4	1.9	2.0	2.2	2.0	5.8	6.3	7.3	6.8	2.4	2.7	2.7	2.3
Fish, crustaceans, and molluscs	153.7	178.0	195.4	188.1	1.3	1.6	1.7	1.5	5.0	5.4	5.8	5.4	3.9	4.6	4.9	4.5
Meat and meat preparations	159.9	178.1	195.0	193.5	1.7	2.2	2.6	2.3	5.8	6.6	7.7	7.2	2.5	3.2	3.7	3.3
Miscellaneous food	103.9	116.0	125.3	129.8	3.5	4.1	4.4	4.3	7.7	9.0	9.8	10.0	4.2	4.9	5.0	5.1
Oilseeds and oleaginous fruits	103.0	135.1	151.9	152.9	1.4	1.8	1.8	1.5	7.7	10.3	9.8	7.8	0.3	0.4	0.4	0.4
Sugar, honey and preparations	50.2	58.1	69.3	78.1	4.1	4.9	6.3	6.2	7.1	8.7	10.4	11.5	3.7	4.9	5.5	5.6
Fruits and vegetables	296.3	327.7	339.4	361.6	4.8	5.1	4.5	4.4	11.7	12.7	12.6	12.6	3.3	3.8	3.8	4.0
Total	1 505.2	1 775.7	1 969.9	1 978.5	41.7	52.3	56.3	50.6	107.6	132.1	148.0	138.2	46.4	58.9	63.2	60.7
	HIC				UMIC				LMIC				LIC			
	2020	2021	2022	2023*	2020	2021	2022	2023*	2020	2021	2022	2023*	2020	2021	2022	2023*
Animal and vegetable oils, fats	51.2	70.0	90.8	81.3	25.1	36.0	38.6	33.4	25.2	41.3	48.5	41.6	3.0	4.5	5.0	4.3
Beverages	92.6	107.3	113.0	115.6	16.4	20.6	21.0	23.6	4.8	5.9	6.7	7.5	0.6	0.8	0.9	0.8
Cereals and cereal preparations	104.5	119.7	147.4	148.3	49.6	71.4	77.2	76.2	47.0	59.6	70.6	64.2	7.7	9.3	10.7	9.5
Coffee, tea, cocoa, spices, and products	86.2	95.5	107.0	109.0	16.9	20.0	20.4	23.0	9.1	10.8	10.8	10.9	0.8	0.8	0.9	0.9
Dairy products and eggs	66.3	73.3	85.5	87.7	21.8	25.8	26.8	26.0	8.5	9.4	10.8	9.6	1.0	1.0	1.1	1.0
Fish, crustaceans, and molluscs	116.7	135.7	145.9	138.1	28.0	31.8	38.8	39.9	8.3	9.6	9.9	9.4	0.7	0.8	0.9	0.7
Meat and meat preparations	106.8	118.1	131.7	133.5	44.9	50.1	51.6	49.3	7.5	8.8	10.6	9.7	0.8	1.0	1.1	1.0
Miscellaneous food	65.4	72.6	78.8	82.7	26.9	29.4	31.7	32.5	9.7	11.6	12.3	12.2	2.0	2.3	2.5	2.5
Oilseeds and oleaginous fruits	31.2	39.3	48.1	41.9	59.5	79.2	86.6	94.9	12.1	16.3	16.9	15.8	0.1	0.2	0.3	0.2
Sugar, honey and preparations	27.0	30.9	36.2	42.4	11.4	13.4	16.8	16.6	9.3	10.8	12.8	15.6	2.5	3.0	3.6	3.4
Fruits and vegetables	217.4	233.9	239.6	253.7	53.5	62.2	66.2	73.8	23.1	29.3	31.6	32.1	2.2	2.3	2.0	2.0
Total	965.2	1 096.4	1 223.9	1 234.2	353.9	440.0	475.6	489.2	164.7	213.3	241.5	228.7	21.3	25.9	28.9	26.4

Note: Forecasts are based on data from January 2023 to September 2023.
Source: Trade Data Monitor (TDM), 2023, and authors' calculations.

Food price indices

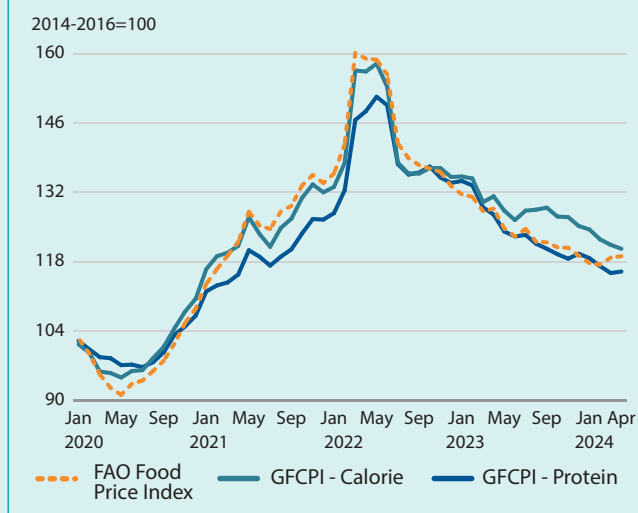
The FAO Global Food Consumption Price Indices¹

The **FAO Global Food Consumption Price Indices (FGFCPIs)**² track monthly changes in the international prices of a basket of food commodities. The FGFCPIs include the five food commodity groups that comprise the FAO Food Price Index (FFPI), as well as oilseeds and fish. Aside from a broader commodity coverage, the FGFCPIs differ from the FFPI in that they weigh the individual commodity groups that compose them by their respective contributions to average global caloric intake (Calorie-base FGFCPI) or to average protein uptake (Protein-base FGFCPI) during the 2014–2016 base period. These weights are derived from the FAO food balance sheets (FBS) (<http://www.fao.org/faostat/en/#data/FBS>).

The relative firmness exhibited by the **Calorie-base FGFCPI** during the third quarter of 2023 proved to be short lived, as the index took a downturn in October 2023 and has fallen almost continuously since then. This resulted in the index averaging 120.6 points in April 2024, down 6.5 percent from its September 2023 level and representing a 37-month low. Given the dominant contribution that cereals make to global energy intake, the movements of the Calorie-base FGFCPI were highly influenced by cereal prices. International wheat and coarse grain quotations dropped by 13.9 and 14.9 percent from their respective values between September 2023 and April 2024. Contrary to other cereals, international rice prices registered steady and steep increases over the course of 2023, and yet they too have partially retreated during this period by 4.3 percent. An even steeper correction took place in the sugar market, with April 2024 quotations of sugar standing 21.6 percent below their September 2023 level. Given its magnitude, this decline tended to obfuscate increases in quotations of other commodity groups, most notably vegetable oils, whose prices have increased by 8.3 percent since September.

Given that cereals also contribute more than half of the world's protein intake, the decline in their prices has also led to the April 2024 value of the **Protein-base FGFCPI** falling to 116.0 points. However, standing at 3.8 percent below its September 2023 level, the Protein-base FGFCPI suggests a less accelerated rate of international food price falls than the Calorie-base Index. This is largely due to the

The FAO Global Food Consumption and Food Price Indices



counterbalancing effects that increases in quotations of other commodities with important protein content have had during this period. These effects have impacted meat prices, which rose by 2.0 percent since September, as well as those of dairy products and fish, which increased by 10.5 percent each. The recent firmness of the world meat and dairy prices was also behind the diverging directions that the Protein-base FGFCPI and the FFPI exhibited in recent months, with these prices underpinning the stable to mildly upward streak that the FFPI has registered since February 2024. This is because the FFPI is a trade value-based index. Therefore, it attributes even higher weights (a combined 47 percent weight) to high-valued meat and dairy products relative to lower-priced foods such as cereals and relative to these livestock products' contribution to global diets (a combined 35 percent for protein and 17.0 percent for calories).

Recent developments in international food prices

The downward trend of international food commodity prices that began in mid-2022 continued unabated until February 2024, followed by a series of smaller, yet steady monthly increases since March 2024. The latest reading of

¹ All changes referred to in this section, in absolute or percentage terms, are calculated based on unrounded figures.

² The FAO Global Food Consumption Price Indices are published twice a year in *Food Outlook*.

³ The FAO food price index and its sub-indices are updated on a monthly basis and are available on: <http://www.fao.org/worldfoodsituation>

the **FAO Food Price Index**³ (FFPI) in May 2024 stood at 120.4 points, up 0.9 percent from its revised April level, as increases in the price indices for cereals and dairy products slightly more than offset decreases in those for sugar and vegetable oils, while the meat price index was almost unchanged. Although it registered a third consecutive monthly uptick, the FFPI remained down 3.4 percent from its corresponding value one year ago and 24.9 percent below the peak of 160.2 points reached in March 2022. Overall, despite slight increases in the recent months, the FFPI remained at the levels of early 2021.

Among commodity indices covered by the analysis (cereals, vegetable oils, dairy products, meat and sugar), the **FAO Sugar Price Index** experienced the most significant adjustments, which generally drove the direction of the overall changes of the FFPI. After reaching a 12-year high of 162.7 points in September 2023 due to concerns over a tighter global supply outlook in the 2023/24 season, the sugar price index generally declined in the following months, averaging 117.1 points in May 2024, its lowest level since January 2023. This decline was mainly the result of an overall improvement in world supply prospects, mostly stemming from the strong pace of production in Brazil and larger-than-previously-anticipated outputs in India and Thailand. In addition, the overall weakening of the Brazilian real against the United States dollar since the start of the season resulted in higher export volumes for the country and contributed to lowering world sugar prices.

The **FAO Cereal Price Index** eased between October 2023 and March 2024, decreasing by 12.5 percent over the period. For wheat in particular, the decline was mostly driven by continued strong competition among exporters and the arrival of newly harvested supplies in the southern hemisphere countries. Similarly, for maize, ample availabilities placed downward pressure on prices. The direction changed in April due to concerns about unfavourable wheat conditions for the 2024 harvests, which could possibly constrain yields in some main producing areas of several major exporting countries, including in parts of Europe, Northern America and the Black Sea region. Additionally, damage to the Black Sea shipping infrastructure exacerbated the upward pressure on prices. Maize export prices also increased, reflecting production concerns in both Argentina (due to crop damage from the spread of Spiroplasma disease) and Brazil (due to unfavourable weather), along with limited farmer selling activity in Ukraine, amidst seasonally tightening supplies and a strong global demand. Spillover effects from the wheat markets also affected maize prices. As for rice, according to the **FAO All Rice Price**

Index, international prices declined by 2.7 percent since the close of 2023, while remaining 7.5 percent above their year-earlier level.

Vegetable Oil, Meat and Dairy Price indices all trended upwards since the last edition of the Food Outlook report in November. The **FAO Vegetable Oil Price Index** increased by almost 10.0 percent between October 2023 and April 2024, before easing slightly in May. The developments varied among the different types of oils, with higher global palm, sunflower and rapeseed oil prices more than offsetting lower soy oil quotations. For palm oil, seasonally lower outputs in major producing countries until February, coupled with corresponding declining inventories, exerted upward pressure on world prices. On the other hand, rising production since March and a protracted subdued global import demand contained further price increases and contributed to the moderate decline in May. Meanwhile, world sunflower and rapeseed oil prices rose on account, respectively, of firm global import demand and prospects of lower supplies in the 2024/25 season. By contrast, lower international soy oil prices largely reflected expectations of a solid soybean harvest in South America, although unexpected floodings in the southern part of Brazil supported the prices in May.

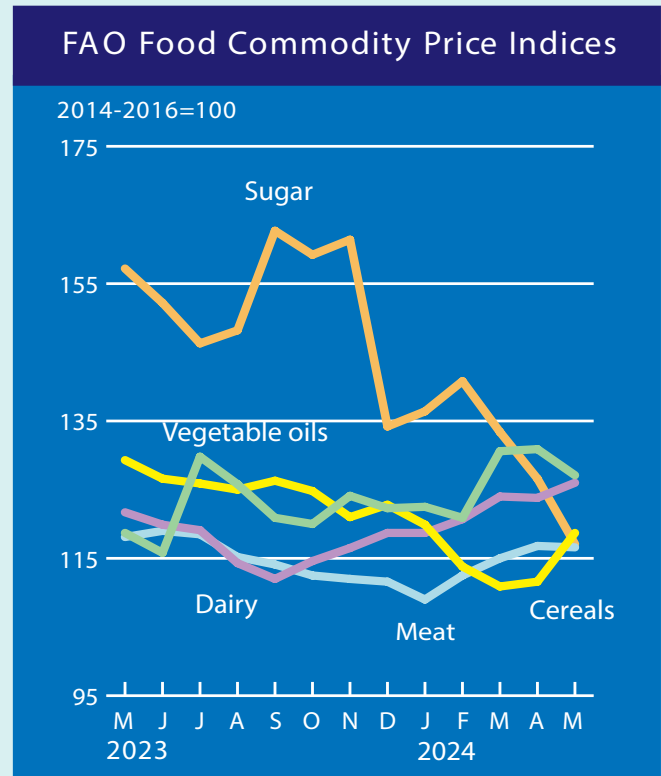
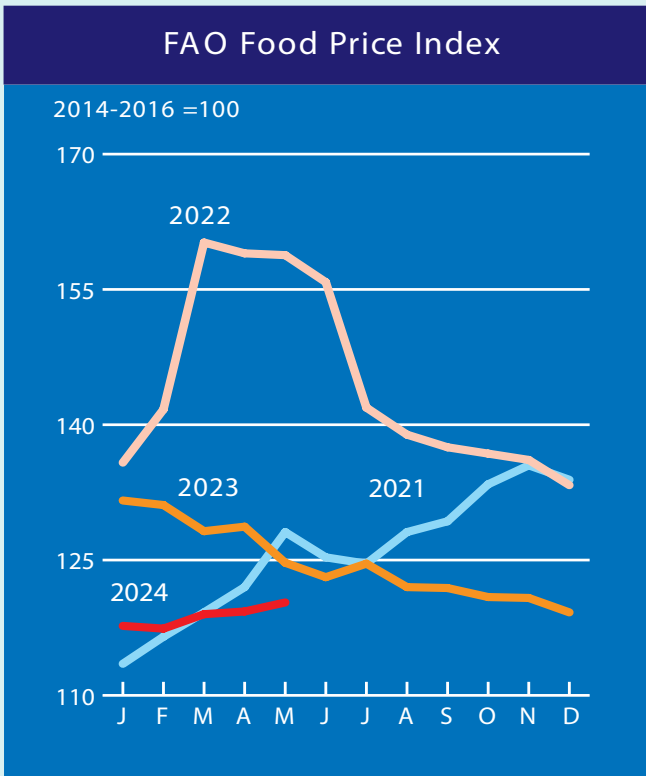
Although dairy and meat price indices were observed trending upwards, after diverging between October 2023 and January 2024, they have essentially moved in parallel since then. International dairy prices, as measured by the **FAO Dairy Price Index**, increased by 10 percent between October 2023 and May this year, pushing the index 3.5 percent above its value a year ago. During the five months, world butter and cheese prices increased significantly, reflecting a steady global import demand, coupled with improved retail and food services sales and somewhat tighter inventories in leading producing regions, especially Europe. Meanwhile, whole milk powder prices increased moderately, as purchases by leading importers in the Near East and North Africa region remained robust despite a slowdown in the pace of imports by China. By contrast, world prices of skim milk powder fell due to a sluggish global import demand.

As measured by the **FAO Meat Price Index**⁴, international meat prices declined by 3.2 percent between October 2023 and January 2024, but rebounded since then, increasing by 7.0 percent between January and May 2024. Nevertheless, the index remained 1.3 percent below its corresponding value a year ago. This rise reflects increases

⁴ Unlike for other commodity groups, most prices utilized in the calculation of the FAO Meat Price Index are not available when the FAO Food Price Index is computed and published; therefore, the value of the Meat Price Index for the most recent months is derived from a mixture of projected and observed prices. This can, at times, require significant revisions in the final value of the FAO Meat Price Index which could in turn influence the value of the FAO Food Price Index.

across bovine (9.6 percent), pig (7.3 percent) and poultry (4.8 percent) meat prices, while ovine meat prices decreased. The rise in international bovine meat prices between January and May was mainly driven by the continued robust demand from major importers, especially the United States of America and some countries in the Near East, notwithstanding increased supplies from a few leading exporters, especially Australia and Brazil. International poultry meat prices rose and were underpinned by high global demand for poultry meat as an affordable product. At the same time, there have

been persistent challenges to production, principally due to highly pathogenic avian influenza (HPAI) outbreaks in leading producing countries. Meanwhile, international pig meat prices rose, reflecting an increased import demand and higher domestic sales to cover food services sector needs, especially in the European Union. By contrast, international ovine meat prices dropped, mainly due to ample exportable supplies in Oceania, the world's largest supplier, as slaughter availabilities rose to a multiyear high with the rise in sheep and goat flocks.



FAO Food Price Indices

		Food Price Index ¹	Meat ²	Dairy ³	Cereals ⁴	Vegetable Oils ⁵	Sugar ⁶
2006		72.6	70.5	73.1	71.2	70.5	91.4
2007		94.3	76.9	122.4	100.9	107.3	62.4
2008		117.5	90.2	132.3	137.6	141.1	79.2
2009		91.7	81.2	91.4	97.2	94.4	112.2
2010		106.7	91.0	111.9	107.5	122.0	131.7
2011		131.9	105.3	129.9	142.2	156.5	160.9
2012		122.8	105.0	111.7	137.4	138.3	133.3
2013		120.1	106.2	140.9	129.1	119.5	109.5
2014		115.0	112.2	130.2	115.8	110.6	105.2
2015		93.0	96.7	87.1	95.9	89.9	83.2
2016		91.9	91.0	82.6	88.3	99.4	111.6
2017		98.0	97.7	108.0	91.0	101.9	99.1
2018		95.9	94.9	107.3	100.8	87.8	77.4
2019		95.1	100.0	102.8	96.6	83.2	78.6
2020		98.1	95.5	101.8	103.1	99.4	79.5
2021		125.8	107.7	119.6	131.2	164.9	109.3
2022		144.7	118.8	149.5	154.7	187.8	114.5
2023		124.7	114.7	123.7	130.9	126.3	145.0
2023	May	124.7	118.1	121.7	129.3	118.7	157.2
	June	123.1	119.0	119.9	126.6	115.8	152.2
	July	124.6	118.5	119.1	125.9	129.8	146.3
	August	122.0	115.2	114.3	125.0	125.8	148.2
	September	121.9	114.1	112.0	126.3	120.9	162.7
	October	120.9	112.5	114.6	124.8	120.0	159.2
	November	120.8	112.0	116.5	121.0	124.1	161.4
	December	119.2	111.6	118.7	122.8	122.3	134.2
2024	January	117.7	109.0	118.7	119.9	122.5	136.4
	February	117.4	112.5	120.7	113.8	120.9	140.8
	March	119.0	115.0	124.0	110.9	130.6	133.4
	April	119.3	116.8	123.8	111.6	130.9	126.6
	May	120.4	116.6	126.0	118.7	127.8	117.1

1 Food Price Index: Consists of the average of 5 commodity group price indices mentioned above, weighted with the average export shares of each of the groups for 2014-2016: in total 95 price quotations considered by FAO commodity specialists as representing the international prices of the food commodities are included in the overall index. Each sub-index is a weighted average of the price relatives of the commodities included in the group, with the base period price consisting of the averages for the years 2014-2016.

2 Meat Price Index: Based on 35 average export unit values/market prices of four meat types (bovine, pig, poultry and ovine) from 10 representative markets. Within each meat type, export unit values/prices are weighted by the trade shares of their respective markets, while the meat types are weighted by their average global export trade shares for 2014-2016. Quotations for the two most recent months may consist of estimates and be subject to revision..

3 Dairy Price Index: Computed using 8 price quotations of four dairy products (butter, cheese, SMP and WMP) from two representative markets. Within each dairy product, prices are weighted by the trade shares of their respective markets, while the dairy products are weighted by their average export shares for 2014-2016.

4 Cereals Price Index: Compiled using the International Grains Council (IGC) wheat price index (an average of 10 different wheat price quotations), the IGC maize price index (an average of 4 different maize price quotations), the IGC barley price index (an average of 5 different barley price quotations), 1 sorghum export quotation and the FAO All Rice Price Index. The FAO All Rice Price Index is based on 21 rice export quotations, combined into four groups consisting of Indica, Aromatic, Japonica and Glutinous rice varieties. Within each varietal group, a simple average of the relative prices of appropriate quotations is calculated; then the average relative prices of each of the four rice varieties are combined by weighting them with their (fixed) trade shares for 2014-2016. The Cereal Price Index combines the relative prices of sorghum, the IGC wheat, maize and barley price indices (re-based to 2014-2016) and the FAO All Rice Price Index by weighing each commodity with its average export trade share for 2014-2016.

5 Vegetable Oils Price Index: Consists of an average of 10 different oils, weighted with average export trade shares of each oil product for 2014-2016.

6 Sugar Price Index: Index form of the International Sugar Agreement prices with 2014-2016 as the base period.

Statistical appendix tables

Appendix Table 1 (A & B): Cereal statistics	94–95
Appendix Table 2 (A & B): Wheat statistics	96–97
Appendix Table 3 (A & B): Coarse grain statistics	98–99
Appendix Table 4 (A & B): Maize statistics	100–101
Appendix Table 5 (A & B): Barley statistics	102–103
Appendix Table 6 (A & B): Sorghum statistics	104–105
Appendix Table 7 (A & B): Other coarse grain statistics	104–105
Appendix Table 8 (A & B): Rice statistics	106–107
Appendix Table 9: Cereal supply and utilization in main exporting countries	108
Appendix Table 10: Total oilcrops statistics	109
Appendix Table 11: Total oils and fats statistics	110
Appendix Table 12: Total meals and cakes statistics	111
Appendix Table 13: Sugar statistics	112
Appendix Table 14: Total meat statistics	113
Appendix Table 15: Bovine meat statistics	114
Appendix Table 16: Ovine meat statistics	115
Appendix Table 17: Pig meat statistics	116
Appendix Table 18: Poultry meat statistics	117
Appendix Table 19: Milk and milk products statistics	118
Appendix Table 20: Fish and fishery products statistics	119
Appendix Table 21: Selected international prices for wheat and coarse grains	120
Appendix Table 22: Wheat and maize futures prices	120
Appendix Table 23: Selected international prices for rice and price indices	121
Appendix Table 24: Selected international prices for oilcrop products and price indices	122
Appendix Table 25: Selected international prices for sugar and sugar price index	123
Appendix Table 26: Selected international prices for milk products and dairy price indices	124
Appendix Table 27: Selected international meat prices	125
Appendix Table 28: Selected international meat prices and FAO meat price index	112
Appendix Table 29: Fish price indices	126
Appendix Table 30: Selected international commodity prices	127

GENERAL

- FAO estimates and forecasts are based on official and unofficial sources.
- Unless otherwise stated - all charts and tables refer to FAO data as source.
- Estimates of world imports and exports may not always match - mainly because shipments and deliveries do not necessarily occur in the same marketing year.
- Tonnes refer to metric tonnes.
- All totals are computed from unrounded data.
- Regional totals may include estimates for countries not listed. The countries shown in the tables were chosen based on their importance of either production or trade in each region. The totals shown for Central America include countries in the Caribbean.
- Estimates for China also include those for the Taiwan Province of China - Hong Kong SAR and Macao SAR - unless otherwise stated.
- Up to 2019/20 the European Union includes 28 member states. From 2020/21 the European Union includes 27 member states.
- Information provided by the Russian Federation includes statistical data for the Autonomous Republic of Crimea and the city of Sevastopol, Ukraine, temporarily occupied by the Russian Federation and is presented without prejudice to relevant UN General Assembly and UN Security Council resolutions, including UN General Assembly resolution 68/262 of 27 March 2014 and UN Security Council resolution 2202 (2015) of 17 February 2015, which reaffirm the territorial integrity of Ukraine.
- Information provided by Ukraine excludes statistical data concerning

the Autonomous Republic of Crimea, the city of Sevastopol and certain areas of the Donetsk and Luhansk regions. The information is presented without prejudice to relevant UN General Assembly and UN Security Council resolutions, including UN General Assembly resolution 68/262 of 27 March 2014 and UN Security Council resolution 2202 (2015) of 17 February 2015, which reaffirm the territorial integrity of Ukraine.

- '-' means nil or negligible.
- Cereals include wheat - rice and coarse grains. Coarse grains include maize - barley - sorghum - millet - rye - oats and NES (not elsewhere specified).

Production

- **Cereals:** Data refer to the calendar year in which the whole harvest or bulk of harvest takes place.

Utilization

- **Cereals:** Data are on individual country's marketing year basis.

Trade

- Trade between **European Union** member states is excluded - unless otherwise stated.
- **Wheat:** Trade data include wheat flour in wheat grain equivalent. The time reference period is July/June - unless otherwise stated.
- **Coarse grains:** The time reference period is July/June - unless otherwise stated.
- **Rice, dairy meat and fish products:** The time reference period is January/December.
- **Oilseeds, oils/fats and meals:** The time reference period is October/September - unless otherwise stated.

Stocks

- **Cereals:** Data refer to carry-overs at the close of national crop seasons ending in the year shown.

Price indices

- The FAO price indices are calculated using the Laspeyres formula; the weights used are based on the average export value of each commodity for the 2014-2016 period.

COUNTRY CLASSIFICATION

In the presentation of statistical material, references are made to special country groupings: Low-Income Food-Deficit Countries (LIFDCs) - Least Developed Countries (LDCs). The LIFDCs include 51 countries that are net importers of basic foodstuffs with per caput income below the level used by the World Bank to determine eligibility for International Development Aid (IDA) assistance (i.e. USD 1 945 in 2011). The LDCs group currently includes 47 countries with low income as well as weak human resources and low level of economic diversification. The list is reviewed every three years by the Economic and Social Council of the United Nations.

DISCLAIMER

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country - territory - city or area or of its authorities - or concerning the delimitation of its frontiers or boundaries.

APPENDIX TABLE 1(A): CEREAL STATISTICS

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>								
ASIA	1 240.8	1 281.9	1 291.0	262.4	264.4	255.2	76.3	74.8	70.5
Bangladesh	43.1	44.8	45.6	9.7	7.5	7.7	0.1	-	-
China	562.4	577.9	583.1	64.3	71.1	59.4	2.5	2.4	2.4
India	291.4	299.7	304.9	0.1	0.3	2.0	29.4	17.3	19.0
Indonesia	54.1	57.6	56.9	12.8	16.0	13.6	0.1	0.2	0.2
Iran (Islamic Republic of)	18.1	19.8	20.1	17.7	14.9	15.3	0.0	0.1	0.1
Iraq	5.6	4.6	5.3	4.9	6.1	6.3	-	-	-
Japan	8.7	8.5	8.5	22.7	22.6	23.1	0.3	0.3	0.3
Kazakhstan	19.0	17.0	17.7	1.3	1.0	1.0	9.7	10.2	9.0
Myanmar	18.9	19.7	19.4	0.4	0.4	0.4	3.5	3.7	3.9
Pakistan	44.9	48.8	49.6	3.0	2.2	2.2	5.2	6.8	7.5
Philippines	21.3	21.3	21.7	10.5	11.1	11.1	0.1	0.1	0.1
Republic of Korea	4.0	4.0	3.9	16.5	17.2	16.9	0.1	0.2	0.2
Saudi Arabia	0.9	1.4	1.7	14.0	11.8	12.3	-	-	-
Thailand	26.7	26.6	26.9	5.2	5.3	5.1	7.6	8.6	7.5
Türkiye	35.5	41.8	37.0	14.9	11.4	13.8	5.2	11.1	6.7
Viet Nam	32.5	32.6	32.2	16.7	17.0	16.7	7.8	8.3	8.0
AFRICA	202.3	198.1	193.0	95.3	95.6	102.7	8.5	7.7	6.0
Algeria	3.8	3.6	3.5	12.9	14.0	14.1	-	-	-
Egypt	22.1	21.9	21.8	21.1	19.9	20.4	0.5	1.0	0.1
Ethiopia	28.6	28.8	28.9	1.9	2.0	2.2	1.3	1.1	1.0
Morocco	5.7	5.5	3.3	8.2	10.2	11.7	0.1	0.1	-
Nigeria	26.5	24.5	26.3	8.2	8.0	8.7	-	-	-
South Africa	19.2	19.0	16.5	2.6	2.6	2.7	3.7	3.6	2.9
Sudan	6.9	4.2	4.1	2.4	2.7	2.7	0.1	-	-
CENTRAL AMERICA & THE CARIBBEAN	42.7	41.2	39.1	37.5	40.0	40.3	1.1	0.9	0.7
Mexico	36.3	35.0	33.0	24.4	26.5	26.8	0.9	0.8	0.5
SOUTH AMERICA	236.2	246.6	244.3	33.0	32.4	32.7	94.9	107.3	104.8
Argentina	85.8	65.6	81.5	0.1	0.1	0.1	49.8	43.2	54.2
Brazil	120.7	153.0	134.3	9.8	8.9	9.3	38.9	56.5	44.0
Chile	2.7	2.5	2.4	4.1	3.9	4.0	0.0	0.1	0.1
Colombia	3.4	3.5	3.4	8.5	8.8	8.8	-	-	-
Peru	4.4	4.3	4.3	5.9	5.9	5.9	0.0	0.1	0.1
Venezuela (Bolivarian Republic of)	2.1	2.1	2.3	2.4	2.3	2.3	-	-	-
NORTHERN AMERICA	487.2	518.7	512.9	10.5	10.2	10.0	120.7	108.6	117.9
Canada	59.3	59.2	63.2	4.4	2.8	2.6	29.7	29.8	31.6
United States of America	427.9	459.5	449.7	6.1	7.4	7.3	91.0	78.8	86.4
EUROPE	533.2	518.4	519.4	38.9	42.7	38.3	143.8	157.2	149.9
European Union	284.1	273.6	282.5	29.9	33.2	29.0	42.9	43.4	44.6
Russian Federation	133.1	136.7	135.9	0.6	0.6	0.6	46.9	64.8	62.8
Ukraine	68.6	60.5	54.2	0.2	0.2	0.2	47.4	43.8	38.1
OCEANIA	55.8	42.6	46.5	2.3	2.2	2.1	36.2	30.9	31.5
Australia	54.8	41.5	45.5	0.4	0.3	0.3	36.2	30.9	31.5
WORLD	2 798.2	2 847.4	2 846.3	479.9	487.4	481.3	481.6	487.4	481.3
LIFDC	141.9	141.4	140.4	48.7	47.8	50.6	4.5	3.7	3.7
LDC	194.0	196.1	195.4	44.6	41.4	45.1	10.1	9.7	9.9

APPENDIX TABLE 1(B): CEREAL STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2021-2023 average	2024 <i>estim.</i>	2025 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>						<i>(..... Kg/year.....)</i>		
ASIA	1 417.4	1 458.7	1 465.7	582.1	594.8	606.0	156.9	158.3	158.9
Bangladesh	52.8	52.1	53.4	8.4	8.0	8.2	220.4	221.7	223.6
China	618.8	631.4	631.2	396.8	414.0	423.3	155.6	155.1	154.6
India	261.4	282.1	284.3	66.2	65.5	68.9	146.7	151.3	152.8
Indonesia	66.8	72.1	73.1	6.9	8.6	8.0	171.8	173.7	175.0
Iran (Islamic Republic of)	35.3	36.0	35.4	11.3	11.8	11.8	202.5	201.8	202.5
Iraq	10.4	10.6	11.5	2.8	2.0	2.1	187.7	188.3	189.7
Japan	31.3	30.8	30.8	6.8	6.2	6.4	92.1	91.4	90.4
Kazakhstan	10.0	10.1	10.1	4.8	3.4	2.2	156.1	155.5	155.6
Myanmar	15.8	16.3	16.1	3.4	3.8	3.6	204.8	206.6	208.7
Pakistan	42.0	43.9	44.6	5.2	4.9	4.8	137.4	138.4	139.0
Philippines	31.5	33.0	32.7	4.4	3.6	3.6	165.9	167.1	167.3
Republic of Korea	20.4	21.1	21.0	4.7	4.5	4.3	121.9	121.8	120.9
Saudi Arabia	14.3	12.2	13.0	5.6	7.8	8.8	131.3	135.3	136.1
Thailand	23.7	23.3	23.7	11.6	11.2	11.9	118.8	118.6	120.5
Türkiye	44.2	45.4	44.9	10.8	10.2	9.3	243.0	244.0	244.1
Viet Nam	41.1	40.6	40.7	5.9	6.1	6.0	168.4	163.5	162.3
AFRICA	290.0	291.0	294.7	61.6	56.5	52.7	149.7	149.0	148.3
Algeria	17.1	17.4	18.1	5.5	5.5	5.0	229.1	229.5	228.5
Egypt	43.4	41.5	42.0	5.3	3.5	3.5	257.2	254.8	255.1
Ethiopia	29.4	30.4	30.3	6.9	6.0	5.7	187.2	193.4	190.1
Morocco	14.5	14.7	14.8	4.4	4.9	5.0	241.2	241.4	240.4
Nigeria	34.7	32.6	33.9	2.3	1.2	1.9	128.2	125.7	126.0
South Africa	17.5	18.4	18.1	4.5	4.8	2.9	163.0	161.4	160.5
Sudan	9.7	9.4	9.0	3.5	2.4	1.9	174.2	172.0	170.6
CENTRAL AMERICA & THE CARIBBEAN	79.3	81.3	79.9	10.0	9.5	8.5	161.5	160.4	160.5
Mexico	59.9	61.3	60.3	7.6	7.7	6.6	199.4	198.8	198.8
SOUTH AMERICA	174.8	183.6	186.1	34.3	22.4	24.6	114.2	114.1	114.3
Argentina	32.8	32.3	31.4	10.8	7.5	8.3	121.9	121.5	121.8
Brazil	95.1	104.5	108.5	14.1	9.3	11.4	110.8	110.1	110.4
Chile	6.7	6.4	6.3	0.6	0.4	0.4	143.5	142.0	141.6
Colombia	12.1	12.5	12.3	1.4	1.1	1.0	100.9	100.9	100.8
Peru	10.5	10.3	10.3	1.0	0.5	0.4	147.5	147.0	147.4
Venezuela (Bolivarian Republic of)	4.5	4.4	4.6	0.6	0.7	0.7	102.2	108.6	108.9
NORTHERN AMERICA	388.4	395.7	398.2	64.5	81.4	87.2	109.4	109.2	109.3
Canada	33.8	32.6	33.0	8.2	7.4	8.5	96.6	99.6	99.7
United States of America	354.6	363.1	365.2	56.4	74.1	78.7	110.9	110.3	110.4
EUROPE	413.3	406.3	408.3	96.1	112.1	111.3	131.6	132.1	132.6
European Union	267.9	265.8	266.6	41.7	43.4	43.7	137.0	137.3	138.1
Russian Federation	78.0	75.0	77.0	25.3	37.7	34.3	126.2	126.5	127.0
Ukraine	19.4	17.6	17.3	13.5	10.8	9.8	144.2	148.3	147.0
OCEANIA	18.2	19.3	18.1	8.6	7.4	6.9	94.6	94.0	93.9
Australia	15.3	16.3	15.2	7.8	6.6	6.2	104.5	104.1	104.2
WORLD	2 781.5	2 835.9	2 851.0	857.3	884.0	897.2	148.4	149.2	149.4
LIFDC	186.2	190.0	191.0	48.9	44.2	41.7	142.4	142.5	141.8
LDC	228.7	232.0	234.3	50.1	45.4	43.5	156.0	155.9	155.4

APPENDIX TABLE 2(A): WHEAT STATISTICS

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>								
ASIA	343.9	351.5	353.5	105.6	104.1	104.5	21.2	21.0	18.3
Bangladesh	1.1	1.2	1.2	6.2	6.1	6.2	-	-	-
China	136.3	136.6	137.7	13.2	12.4	10.9	0.2	0.3	0.3
China (mainland)	136.3	136.6	137.7	11.3	10.7	9.0	0.2	0.3	0.3
Taiwan Province of China	-	-	-	1.3	1.2	1.4	-	-	-
India	108.4	110.6	112.0	-	0.1	1.5	5.3	0.5	0.5
Indonesia	-	-	-	10.2	11.8	11.4	0.1	0.1	0.1
Iran (Islamic Republic of)	12.4	13.5	13.5	4.6	2.0	3.0	0.0	-	-
Iraq	4.4	4.2	4.2	2.3	2.7	2.8	-	-	-
Japan	1.0	1.0	1.1	5.2	5.0	5.3	0.2	0.2	0.2
Kazakhstan	14.2	12.1	13.0	1.2	0.9	0.9	8.7	9.0	8.2
Pakistan	26.3	28.2	28.5	2.8	2.0	2.0	0.3	0.5	0.5
Philippines	-	-	-	6.1	6.0	6.1	0.1	-	-
Republic of Korea	-	0.1	0.1	4.3	4.8	4.7	0.1	-	-
Saudi Arabia	0.7	1.2	1.5	3.7	4.0	3.5	-	-	-
Thailand	-	-	-	2.9	3.1	3.0	-	-	-
Türkiye	19.3	22.0	20.0	10.0	9.0	10.0	4.5	8.0	6.0
AFRICA	27.4	26.4	25.6	51.8	54.4	55.6	1.2	1.4	0.5
Algeria	2.8	2.5	2.5	8.0	8.7	8.4	-	-	-
Egypt	9.5	9.8	9.8	11.6	12.0	12.2	0.5	1.0	0.1
Ethiopia	5.7	5.8	5.8	1.4	1.7	1.7	-	-	-
Morocco	4.3	4.1	2.5	5.3	6.3	7.5	-	-	-
Nigeria	0.1	0.1	0.1	5.9	6.0	6.0	-	-	-
South Africa	2.2	2.0	2.1	1.6	1.6	1.6	0.3	0.1	0.1
Tunisia	1.1	0.4	1.2	2.0	2.2	2.2	-	-	-
CENTRAL AMERICA & THE CARIBBEAN	3.3	3.5	3.0	9.0	9.0	9.0	0.7	0.5	0.4
Cuba	-	-	-	0.6	0.4	0.5	-	-	-
Mexico	3.3	3.5	3.0	4.9	5.0	5.0	0.6	0.4	0.3
SOUTH AMERICA	29.4	27.8	29.3	13.9	13.2	13.3	13.7	12.9	13.6
Argentina	17.4	15.9	16.5	-	-	-	10.6	8.5	9.5
Brazil	8.2	8.1	9.1	5.9	5.5	5.5	2.2	3.1	2.8
Chile	1.3	1.3	1.2	1.3	1.2	1.2	-	-	-
Colombia	-	-	-	2.0	1.8	1.9	-	-	-
Peru	0.2	0.2	0.2	2.0	2.0	2.0	-	-	-
Venezuela (Bolivarian Republic of)	-	-	-	0.9	1.0	1.0	-	-	-
NORTHERN AMERICA	77.2	81.3	85.2	2.3	3.1	3.1	45.3	42.5	46.2
Canada	30.7	32.0	34.6	0.2	0.1	0.1	22.6	23.0	25.2
United States of America	46.5	49.3	50.6	2.1	3.0	3.0	22.7	19.5	21.0
EUROPE	269.1	270.9	260.3	11.0	15.4	11.4	87.8	101.7	97.0
European Union	133.0	133.7	128.1	6.8	11.0	6.9	30.5	31.6	31.9
Russian Federation	88.7	92.8	92.0	0.3	0.3	0.3	37.6	51.5	49.5
Ukraine	25.9	22.5	20.0	0.0	-	-	17.5	16.5	13.8
United Kingdom of Great Britain and Northern Ireland	13.1	14.0	12.0	1.9	2.0	2.0	0.8	0.4	0.3
OCEANIA	36.7	26.4	29.9	1.2	1.2	1.0	26.0	20.4	22.0
Australia	36.2	26.0	29.5	0.1	-	-	26.0	20.4	22.0
WORLD	787.0	787.7	786.7	194.7	200.4	198.0	196.0	200.4	198.0
LIFDC	23.0	23.6	23.7	28.1	28.8	28.2	0.8	1.2	1.2
LDC	14.5	14.4	14.2	25.1	25.7	26.1	0.1	0.1	0.1

APPENDIX TABLE 2(B): WHEAT STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	20/21-22/23 average	2023/24 estim.	2024/25 f'cast	2021-2023 average	2024 estim.	2025 f'cast	20/21-22/23 average	2023/24 estim.	2024/25 f'cast
	million tonnes						Kg/year		
ASIA	422.9	442.6	436.1	210.7	205.9	208.3	66.8	68.1	68.3
Bangladesh	7.7	7.2	7.3	1.6	0.8	0.9	34.3	35.3	35.5
China	143.9	149.8	144.8	135.7	140.9	144.3	66.0	66.6	66.6
China (mainland)	142.1	148.0	143.0	135.3	140.5	143.9	66.4	67.0	67.0
Taiwan Province of China	1.3	1.3	1.3	0.4	0.3	0.4	45.5	45.6	45.5
India	105.3	114.1	111.2	23.5	14.5	16.0	60.2	62.7	63.0
Indonesia	10.4	11.2	11.5	1.3	1.6	1.6	28.5	29.5	29.5
Iran (Islamic Republic of)	16.1	16.4	16.5	7.7	8.8	8.8	162.6	162.6	162.6
Iraq	6.6	6.8	7.0	1.6	1.2	1.2	144.1	143.3	143.2
Japan	6.2	6.1	6.0	0.9	0.4	0.6	40.9	41.0	41.0
Kazakhstan	6.3	6.4	6.4	3.9	2.3	0.8	141.2	141.3	141.2
Pakistan	27.9	29.8	30.1	3.3	3.4	3.2	113.0	113.9	114.0
Philippines	6.1	6.4	6.0	1.7	1.1	1.1	28.0	28.5	28.5
Republic of Korea	4.5	4.8	4.8	1.0	1.2	1.2	47.2	47.4	47.4
Saudi Arabia	3.9	4.0	4.1	3.2	5.4	6.3	96.3	98.5	98.7
Thailand	3.0	3.1	3.1	1.4	1.4	1.3	15.4	14.9	15.5
Türkiye	24.3	24.5	24.6	7.0	6.9	6.3	214.7	215.6	215.6
AFRICA	79.7	80.7	81.7	16.3	13.2	12.9	50.8	50.4	49.7
Algeria	11.1	11.3	11.4	3.7	3.5	3.0	211.3	211.6	210.7
Egypt	21.2	21.6	21.9	3.1	1.7	1.7	179.7	179.7	179.9
Ethiopia	7.2	7.6	7.6	0.6	0.3	0.3	50.4	54.5	53.0
Morocco	10.0	9.6	9.6	2.8	3.2	3.5	208.8	209.3	208.1
Nigeria	5.8	5.6	5.7	0.7	0.4	0.4	25.3	24.6	24.3
South Africa	3.5	3.6	3.5	0.5	0.6	0.6	56.3	54.8	53.9
Tunisia	3.1	2.8	3.2	0.5	0.4	0.6	205.8	206.3	206.9
CENTRAL AMERICA & THE CARIBBEAN	11.3	11.9	11.7	2.0	2.3	2.2	44.7	44.2	44.1
Cuba	0.6	0.5	0.5	0.1	-	-	53.2	42.0	42.1
Mexico	7.5	7.9	7.8	1.4	1.9	1.8	52.1	52.2	52.2
SOUTH AMERICA	29.2	30.5	30.5	6.5	5.4	5.5	57.1	57.4	57.4
Argentina	6.5	7.2	7.3	2.5	2.8	2.8	103.7	104.0	104.2
Brazil	12.2	12.4	12.5	1.2	0.4	1.0	54.1	54.8	54.9
Chile	2.5	2.5	2.4	0.4	0.2	0.2	107.0	106.3	106.3
Colombia	1.9	2.0	2.0	0.5	0.3	0.2	32.7	32.9	32.9
Peru	2.3	2.1	2.2	0.2	0.2	0.1	59.6	59.6	59.6
Venezuela (Bolivarian Republic of)	0.9	1.0	1.0	0.1	0.1	0.1	31.1	32.3	32.4
NORTHERN AMERICA	39.6	39.0	39.9	23.3	22.3	25.3	81.8	81.4	81.4
Canada	9.2	8.6	9.3	4.4	3.6	4.4	80.6	80.5	80.5
United States of America	30.4	30.4	30.6	19.0	18.7	20.9	82.0	81.5	81.5
EUROPE	180.2	185.9	184.9	42.1	58.8	48.5	104.7	104.9	105.3
European Union	106.1	112.1	112.2	16.1	21.5	12.4	109.8	110.1	110.7
Russian Federation	43.7	43.6	43.6	16.9	27.6	26.8	99.8	99.9	100.2
Ukraine	8.0	7.1	6.8	3.6	1.8	1.2	111.8	111.6	111.4
United Kingdom of Great Britain and Northern Ireland	14.4	14.9	14.1	1.7	2.6	2.2	74.6	74.7	74.4
OCEANIA	9.0	9.7	9.2	4.4	3.9	4.2	66.6	66.0	65.8
Australia	7.5	8.1	7.7	3.9	3.5	3.8	82.4	82.1	82.2
WORLD	771.9	800.3	794.0	305.4	311.8	306.8	67.1	67.7	67.6
LIFDC	50.8	52.5	53.1	13.6	10.8	9.1	41.6	41.7	41.3
LDC	40.3	41.3	41.7	9.2	6.0	5.4	31.9	32.4	32.1

APPENDIX TABLE 3(A): COARSE GRAIN STATISTICS

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>								
ASIA	426.6	454.6	458.6	131.3	135.0	127.5	9.0	10.1	7.4
China	280.3	298.6	301.8	46.0	55.2	45.1	-	0.1	0.1
China (mainland)	280.1	298.4	301.6	41.4	50.6	40.4	-	0.1	0.1
Taiwan Province of China	0.2	0.2	0.2	4.5	4.4	4.6	-	-	-
India	53.2	53.8	56.2	0.1	0.2	0.5	3.9	1.5	1.5
Indonesia	19.2	23.0	23.2	1.1	1.3	1.3	0.0	0.1	0.1
Iran (Islamic Republic of)	3.3	4.1	4.0	11.8	11.6	11.0	-	-	-
Japan	0.3	0.3	0.3	16.8	17.0	17.1	-	-	-
Malaysia	0.1	0.1	0.1	3.7	3.7	3.7	-	-	-
Pakistan	10.3	10.8	11.0	0.2	0.2	0.2	0.6	1.4	1.4
Philippines	8.2	8.3	8.4	0.8	1.0	1.0	-	-	-
Republic of Korea	0.2	0.2	0.2	11.8	11.8	11.8	-	-	-
Saudi Arabia	0.3	0.2	0.2	9.0	6.5	7.5	-	-	-
Thailand	5.0	5.1	5.0	2.1	2.0	1.9	0.0	-	-
Türkiye	15.6	19.3	16.4	4.6	2.1	3.5	0.6	3.1	0.7
Viet Nam	4.5	4.4	4.4	10.5	9.9	10.1	0.4	0.4	0.4
AFRICA	149.3	144.4	139.1	25.4	25.7	28.5	6.4	5.6	4.7
Algeria	1.0	1.1	1.0	4.8	5.1	5.6	-	-	-
Egypt	8.8	8.0	8.0	9.0	7.6	7.9	-	-	-
Ethiopia	22.8	22.8	22.9	-	-	-	1.3	1.1	1.0
Morocco	1.4	1.4	0.7	2.8	3.8	4.2	-	-	-
Nigeria	21.4	19.1	20.9	0.1	-	-	-	-	-
South Africa	17.0	17.0	14.5	0.0	0.1	0.2	3.4	3.5	2.8
Sudan	6.3	3.8	3.7	0.3	0.4	0.4	0.1	-	-
United Republic of Tanzania	7.9	7.2	7.6	-	-	-	0.3	0.1	0.1
CENTRAL AMERICA & THE CARIBBEAN	37.6	36.2	34.5	26.1	28.3	28.4	0.3	0.4	0.2
Mexico	32.8	31.4	29.8	18.8	20.7	21.0	0.3	0.4	0.2
SOUTH AMERICA	189.8	202.7	198.7	17.4	17.2	17.2	77.6	91.1	87.2
Argentina	67.5	48.9	64.1	0.1	0.1	0.1	38.8	34.3	44.2
Brazil	105.0	138.1	118.2	3.0	2.2	2.7	35.6	52.5	40.0
Chile	1.4	1.1	1.1	2.6	2.5	2.6	0.0	0.1	0.1
Colombia	1.5	1.6	1.5	6.5	6.8	6.7	-	-	-
Peru	1.8	1.9	1.9	3.6	3.6	3.6	-	-	-
Venezuela (Bolivarian Republic of)	1.6	1.5	1.5	1.0	1.0	1.0	-	-	-
NORTHERN AMERICA	403.9	430.5	420.7	6.3	5.3	5.0	72.9	63.0	68.7
Canada	28.5	27.2	28.6	3.5	2.4	2.1	7.0	6.8	6.4
United States of America	375.3	403.2	392.1	2.8	3.0	2.9	65.9	56.2	62.4
EUROPE	261.7	245.4	256.8	24.6	23.8	23.1	55.5	55.2	52.5
European Union	149.6	138.5	152.9	20.9	19.9	19.6	12.1	11.4	12.2
Russian Federation	43.7	43.2	43.1	0.1	0.1	0.1	9.3	13.3	13.3
Serbia	6.8	7.3	7.2	0.1	0.1	0.1	2.1	1.6	1.1
Ukraine	42.6	38.0	34.2	0.1	0.1	0.1	29.9	27.3	24.3
United Kingdom of Great Britain and Northern Ireland	8.8	8.1	9.0	2.6	2.6	2.4	1.3	1.2	1.1
OCEANIA	18.9	15.8	16.2	0.3	0.2	0.2	10.0	10.3	9.3
Australia	18.3	15.2	15.6	-	-	-	10.0	10.3	9.3
WORLD	1 487.8	1 529.6	1 524.6	231.3	235.6	229.9	231.8	235.6	229.9
LIFDC	97.8	95.7	93.3	7.2	7.7	9.0	2.9	1.9	1.8
LDC	97.1	95.8	93.7	6.2	5.1	6.6	5.2	4.2	4.1

APPENDIX TABLE 3(B): COARSE GRAIN STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2021-2023 average	2024 <i>estim.</i>	2025 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	million tonnes						Kg/year		
ASIA	547.4	565.0	574.6	188.3	200.6	204.2	14.0	14.0	14.0
China	324.4	337.8	343.8	159.5	173.7	176.7	13.0	13.0	13.0
China (mainland)	319.6	332.9	338.9	159.0	173.2	176.2	13.1	13.1	13.1
Taiwan Province of China	4.7	4.8	4.8	0.5	0.5	0.5	6.9	6.9	6.9
India	49.6	53.0	54.8	2.8	3.0	3.2	17.0	16.9	17.1
Indonesia	20.4	24.1	24.6	0.7	1.3	1.1	27.4	27.6	27.6
Iran (Islamic Republic of)	15.3	15.9	15.0	3.0	2.5	2.5	1.2	1.1	1.1
Japan	17.0	16.8	17.1	2.6	2.8	2.8	3.5	3.6	3.6
Malaysia	3.8	3.8	3.8	0.2	0.2	0.2	5.9	6.1	6.1
Pakistan	9.9	9.8	9.8	1.1	0.8	0.8	10.5	10.3	10.5
Philippines	9.1	9.4	9.5	0.7	0.5	0.4	18.5	18.5	18.5
Republic of Korea	11.8	12.1	12.1	2.6	2.4	2.3	3.5	3.5	3.5
Saudi Arabia	9.3	6.9	7.6	1.9	1.7	1.9	2.7	2.6	2.6
Thailand	7.1	6.9	7.0	0.7	0.8	0.7	2.6	2.6	2.6
Türkiye	19.1	20.0	19.4	3.7	3.0	2.8	19.3	19.1	19.0
Viet Nam	14.7	13.8	14.0	0.7	0.4	0.4	8.6	8.6	8.8
AFRICA	168.1	167.1	168.0	38.8	37.2	33.7	72.6	72.9	72.4
Algeria	6.0	5.9	6.6	1.8	2.0	2.0	14.5	14.0	13.8
Egypt	18.0	15.7	15.8	1.5	1.1	1.2	41.9	40.8	40.1
Ethiopia	21.5	22.2	22.1	6.1	5.6	5.4	131.5	135.0	133.0
Morocco	4.3	5.0	5.1	1.5	1.7	1.5	29.9	29.6	29.8
Nigeria	21.6	19.7	20.5	1.1	0.4	0.8	73.5	73.0	72.4
South Africa	13.0	13.8	13.6	3.8	4.0	2.2	91.3	91.1	91.1
Sudan	6.7	6.2	5.9	2.7	2.0	1.7	108.9	107.0	107.4
United Republic of Tanzania	7.7	7.5	7.5	1.0	0.3	0.3	90.8	90.6	88.2
CENTRAL AMERICA & THE CARIBBEAN	63.7	65.2	63.9	7.4	6.6	5.6	98.8	98.4	98.2
Mexico	51.5	52.5	51.6	6.1	5.7	4.7	140.3	139.7	139.5
SOUTH AMERICA	130.4	138.2	140.6	25.0	15.0	17.1	25.8	26.1	26.0
Argentina	25.7	24.6	23.6	8.3	4.7	5.5	7.3	7.2	7.1
Brazil	75.7	85.3	89.1	12.4	8.5	9.7	25.6	25.5	25.5
Chile	3.9	3.7	3.6	0.1	0.1	0.1	24.6	24.4	24.4
Colombia	8.0	8.4	8.2	0.4	0.3	0.3	30.7	30.9	30.8
Peru	5.7	5.7	5.6	0.3	0.2	0.2	20.9	20.8	21.1
Venezuela (Bolivarian Republic of)	2.6	2.5	2.6	0.3	0.3	0.3	44.1	49.1	48.1
NORTHERN AMERICA	343.7	351.1	352.7	39.9	57.5	60.4	17.7	17.5	17.4
Canada	24.3	23.4	23.1	3.8	3.4	4.0	4.5	4.4	4.4
United States of America	319.4	327.7	329.6	36.2	54.1	56.4	19.2	19.0	18.9
EUROPE	228.0	215.4	218.0	53.3	52.5	61.9	21.2	21.4	21.4
European Union	158.5	150.5	150.9	25.1	21.4	30.8	21.0	21.1	21.2
Russian Federation	33.5	30.5	32.5	8.3	9.9	7.3	21.1	21.2	21.3
Serbia	4.8	4.8	4.8	1.2	1.9	3.2	21.9	22.2	22.4
Ukraine	11.3	10.4	10.4	10.0	9.0	8.6	30.0	34.0	32.8
United Kingdom of Great Britain and Northern Ireland	10.2	9.4	9.7	1.4	1.5	2.1	13.3	13.4	13.3
OCEANIA	8.3	8.6	7.9	3.9	3.1	2.4	7.7	7.5	7.4
Australia	7.4	7.8	7.1	3.7	2.9	2.2	9.6	9.5	9.4
WORLD	1 489.6	1 510.7	1 525.6	356.6	372.5	385.3	28.2	28.5	28.6
LIFDC	102.3	103.5	102.8	30.1	28.9	28.1	72.2	72.6	72.0
LDC	98.1	98.9	99.1	24.1	22.8	21.4	59.3	60.0	59.8

APPENDIX TABLE 4(A): MAIZE STATISTICS

	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
<i>million tonnes</i>									
ASIA	376.8	404.1	408.1	97.0	101.2	94.1	7.7	8.8	6.3
China	270.4	289.0	292.2	27.8	33.0	24.6	-	-	-
China (mainland)	270.2	288.8	292.0	23.3	28.5	20.0	-	-	-
Taiwan Province of China	0.2	0.2	0.2	4.5	4.4	4.5	-	-	-
India	34.5	35.5	37.0	-	-	0.4	3.7	1.3	1.3
Indonesia	19.2	23.0	23.2	1.0	1.2	1.2	0.0	0.1	0.1
Iran (Islamic Republic of)	0.3	1.1	1.0	9.3	9.0	8.5	-	-	-
Japan	-	-	-	15.2	15.5	15.5	-	-	-
Malaysia	0.1	0.1	0.1	3.7	3.7	3.7	-	-	-
Pakistan	9.8	10.3	10.5	-	-	-	0.6	1.4	1.4
Philippines	8.2	8.3	8.4	0.7	1.0	1.0	-	-	-
Republic of Korea	0.1	0.1	0.1	11.6	11.7	11.7	-	-	-
Thailand	4.8	4.9	4.8	1.5	1.5	1.4	0.0	-	-
Türkiye	7.3	9.0	7.5	2.6	1.8	2.5	0.4	3.0	0.5
Viet Nam	4.5	4.4	4.4	10.4	9.8	10.0	0.4	0.4	0.4
AFRICA	94.9	93.0	87.9	21.0	20.6	23.1	5.7	5.1	4.2
Algeria	-	-	-	3.9	4.6	4.7	-	-	-
Egypt	7.7	7.0	7.0	9.0	7.6	7.8	-	-	-
Ethiopia	10.6	10.6	10.6	-	-	-	1.0	0.9	0.9
Kenya	3.3	3.2	3.4	1.6	1.8	1.8	-	-	-
Morocco	-	-	0.1	2.3	2.4	2.6	-	-	-
Nigeria	12.6	11.1	12.4	0.1	-	-	-	-	-
South Africa	16.4	16.4	14.0	-	-	-	3.4	3.5	2.8
United Republic of Tanzania	6.5	5.9	6.2	-	-	-	0.3	0.1	0.1
CENTRAL AMERICA & THE CARIBBEAN	31.7	30.4	29.0	25.2	27.6	27.5	0.3	0.4	0.2
Mexico	27.2	25.8	24.5	17.9	20.0	20.0	0.3	0.4	0.2
SOUTH AMERICA	174.2	185.9	180.9	16.0	15.8	16.0	73.0	86.9	82.6
Argentina	59.3	41.4	56.0	-	-	-	34.4	30.5	40.0
Brazil	100.9	131.9	111.6	2.3	1.6	2.2	35.6	52.5	40.0
Chile	0.7	0.5	0.5	2.4	2.4	2.5	-	-	-
Colombia	1.5	1.6	1.5	6.1	6.4	6.4	-	-	-
Peru	1.5	1.6	1.6	3.5	3.5	3.5	-	-	-
Venezuela (Bolivarian Republic of)	1.5	1.4	1.5	1.0	1.0	1.0	-	-	-
NORTHERN AMERICA	376.3	404.8	392.4	4.0	3.0	2.7	61.9	51.6	57.0
Canada	14.2	15.1	14.9	3.3	2.2	2.0	2.1	1.6	1.5
United States of America	362.0	389.7	377.5	0.7	0.8	0.7	59.8	50.0	55.5
EUROPE	123.9	119.5	123.1	22.0	20.6	20.3	37.0	36.0	33.3
European Union	64.8	62.5	69.3	18.9	17.5	17.4	4.6	4.5	4.8
Russian Federation	15.0	15.0	15.0	-	-	-	4.3	5.0	5.0
Serbia	6.1	6.7	6.5	-	-	-	1.9	1.5	1.0
Ukraine	33.4	30.5	27.5	-	-	-	25.4	24.5	22.0
OCEANIA	0.5	0.6	0.6	0.1	0.1	0.1	0.1	0.1	0.1
WORLD	1 178.3	1 238.2	1 222.0	185.3	188.9	183.7	185.7	188.9	183.7
LIFDC	54.9	54.8	52.7	6.0	6.3	7.6	2.1	1.4	1.3
LDC	57.9	58.5	56.7	5.2	4.1	5.6	4.4	3.8	3.6

APPENDIX TABLE 4(B): MAIZE STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2021-2023 average	2024 <i>estim.</i>	2025 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	million tonnes						Kg/year		
ASIA	464.5	483.1	491.5	173.1	186.9	190.7	9.1	9.1	9.1
China	296.2	308.2	313.2	155.6	169.2	172.8	9.9	10.0	10.0
China (mainland)	291.5	303.4	308.4	155.0	168.7	172.3	10.1	10.1	10.1
Taiwan Province of China	4.6	4.7	4.7	0.5	0.5	0.5	5.4	5.4	5.4
India	31.1	34.4	35.7	1.4	1.6	1.8	5.7	5.7	5.7
Indonesia	20.4	24.1	24.5	0.7	1.3	1.1	27.1	27.4	27.3
Iran (Islamic Republic of)	9.7	10.1	9.5	1.7	1.5	1.5	0.9	0.8	0.8
Japan	15.1	15.0	15.2	2.3	2.5	2.5	1.0	1.0	1.0
Malaysia	3.8	3.8	3.8	0.2	0.2	0.2	5.9	6.1	6.1
Pakistan	9.3	9.1	9.2	1.1	0.8	0.8	8.8	8.7	8.9
Philippines	9.1	9.4	9.5	0.7	0.5	0.4	18.5	18.5	18.5
Republic of Korea	11.5	11.9	11.9	2.6	2.4	2.2	2.0	2.0	2.0
Thailand	6.4	6.3	6.3	0.7	0.8	0.7	1.2	1.2	1.2
Türkiye	9.3	9.3	9.5	1.4	0.7	0.7	15.9	15.7	15.7
Viet Nam	14.6	13.7	13.9	0.7	0.4	0.4	8.6	8.6	8.7
AFRICA	109.5	108.6	109.6	21.5	21.1	18.4	41.5	41.8	41.7
Algeria	4.0	4.3	4.7	1.1	1.4	1.4	3.2	3.1	3.0
Egypt	16.9	14.6	14.7	1.4	1.0	1.1	39.2	38.1	37.6
Ethiopia	9.3	10.0	10.0	2.3	2.3	2.1	49.6	52.2	52.0
Kenya	5.1	5.2	5.2	0.3	-	-	85.5	86.4	84.6
Morocco	2.3	2.3	2.7	1.2	1.4	1.4	10.4	10.2	10.1
Nigeria	12.8	11.1	11.8	0.3	0.1	0.6	35.1	35.8	35.8
South Africa	12.3	13.2	12.9	3.5	3.8	2.0	88.7	88.6	88.5
United Republic of Tanzania	6.4	6.1	6.1	0.8	-	0.1	71.4	71.3	69.2
CENTRAL AMERICA & THE CARIBBEAN	57.0	58.4	57.4	6.7	5.9	4.9	98.2	97.9	97.7
Mexico	45.0	45.9	45.3	5.5	5.0	4.0	139.9	139.3	139.1
SOUTH AMERICA	118.2	124.7	126.6	23.6	13.6	15.2	24.2	24.5	24.4
Argentina	22.0	21.2	20.0	7.5	4.0	4.5	7.1	7.0	6.9
Brazil	71.1	78.6	82.1	12.0	8.0	9.0	24.2	24.1	24.1
Chile	3.2	3.0	2.9	0.1	0.1	0.1	20.8	20.6	20.6
Colombia	7.7	8.1	7.9	0.4	0.3	0.3	30.3	30.5	30.4
Peru	5.2	5.3	5.2	0.3	0.2	0.2	15.0	15.0	14.9
Venezuela (Bolivarian Republic of)	2.5	2.4	2.5	0.3	0.3	0.3	43.5	48.5	47.6
NORTHERN AMERICA	325.8	334.9	335.3	35.8	53.3	55.6	14.6	14.4	14.3
Canada	15.8	16.0	15.1	2.2	1.9	2.2	3.1	3.0	3.0
United States of America	310.0	318.9	320.2	33.7	51.4	53.4	15.9	15.7	15.7
EUROPE	107.3	100.9	103.1	31.7	32.7	39.6	8.2	8.4	8.4
European Union	79.4	76.5	76.8	14.7	13.5	18.5	10.5	10.5	10.6
Russian Federation	10.9	8.0	10.0	2.4	3.5	3.5	1.4	1.4	1.4
Serbia	4.3	4.3	4.3	0.9	1.3	2.6	20.3	20.7	20.8
Ukraine	6.4	5.9	5.9	8.3	7.3	7.0	11.6	13.5	13.0
OCEANIA	0.5	0.6	0.5	0.1	0.1	0.1	2.1	2.1	2.0
WORLD	1 183.0	1 211.2	1 224.1	292.5	313.5	324.5	18.3	18.5	18.5
LIFDC	58.6	59.7	59.4	13.2	13.1	12.7	38.7	39.0	38.8
LDC	58.4	59.0	59.6	9.7	9.0	8.0	30.5	30.9	31.0

APPENDIX TABLE 5(A): BARLEY STATISTICS

	Production			Imports			Exports		
	2020-2022 average	2023 estim.	2024 f'cast	20/21-22/23 average	2023/24 estim.	2024/25 f'cast	20/21-22/23 average	2023/24 estim.	2024/25 f'cast
	<i>million tonnes</i>								
ASIA	21.6	22.8	22.3	24.9	24.8	24.0	1.0	1.1	0.8
China	2.0	1.9	1.9	9.8	14.0	12.0	-	-	-
India	1.6	1.9	2.2	0.1	0.1	0.1	-	-	-
Iran (Islamic Republic of)	2.9	3.0	3.0	2.5	2.5	2.5	-	-	-
Iraq	0.7	0.1	0.6	0.2	0.8	0.8	-	-	-
Japan	0.2	0.2	0.2	1.2	1.2	1.2	-	-	-
Kazakhstan	3.1	3.0	2.9	0.1	-	-	0.9	1.0	0.6
Saudi Arabia	-	-	-	5.5	2.5	3.0	-	-	-
Syrian Arab Republic	1.0	1.0	1.0	-	-	-	-	-	-
Türkiye	7.5	9.2	8.0	1.9	0.3	1.0	0.2	0.1	0.2
AFRICA	5.6	5.3	5.0	3.3	3.8	4.1	-	-	-
Algeria	0.9	1.0	0.9	0.8	0.5	0.8	-	-	-
Ethiopia	2.1	2.1	2.1	-	-	-	-	-	-
Libya	0.1	0.1	0.1	1.0	1.0	1.0	-	-	-
Morocco	1.4	1.4	0.6	0.5	1.4	1.5	-	-	-
Tunisia	0.5	0.1	0.6	0.8	0.8	0.7	-	-	-
CENTRAL AMERICA & THE CARIBBEAN	1.0	0.8	0.6	0.4	0.4	0.5	-	-	-
Mexico	1.0	0.8	0.6	0.4	0.4	0.5	-	-	-
SOUTH AMERICA	6.5	6.8	6.4	1.1	1.1	1.0	3.2	3.2	3.2
Argentina	4.7	5.1	4.6	-	-	-	3.0	3.0	3.0
NORTHERN AMERICA	12.6	12.9	13.0	0.5	0.4	0.4	3.1	2.9	2.9
Canada	9.2	8.9	9.5	0.2	0.1	-	2.9	2.8	2.8
United States of America	3.4	4.0	3.5	0.3	0.4	0.4	0.1	0.1	0.1
EUROPE	91.4	84.1	89.7	1.8	2.2	2.0	17.3	18.1	18.1
Belarus	1.2	1.2	1.3	0.1	0.1	0.1	-	-	-
European Union	52.7	47.9	54.1	1.4	1.7	1.6	7.1	6.5	7.0
Russian Federation	20.8	20.5	20.0	-	-	-	4.8	8.0	8.0
Ukraine	7.5	5.9	5.0	-	-	-	4.2	2.5	2.0
United Kingdom of Great Britain and Northern Ireland	7.5	7.0	7.6	0.1	0.2	0.1	1.1	0.9	0.9
OCEANIA	14.7	11.2	11.9	-	-	-	7.5	7.5	7.0
Australia	14.4	10.8	11.6	-	-	-	7.5	7.5	7.0
WORLD	153.4	143.8	148.9	32.0	32.8	32.0	32.2	32.8	32.0
LIFDC	4.2	4.2	4.3	0.2	0.2	0.2	-	-	-
LDC	2.3	2.3	2.4	-	-	-	-	-	-

APPENDIX TABLE 5(B): BARLEY STATISTICS

	Total Utilization			Stocks ending in			Per caput food use		
	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2021-2023 average	2024 <i>estim.</i>	2025 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	million tonnes						(..... Kg/year.....)		
ASIA	45.3	45.7	45.7	11.9	10.5	10.3	0.7	0.7	0.8
China	11.6	14.4	14.4	2.5	3.0	2.5	0.4	0.4	0.4
India	1.7	2.0	2.2	-	-	0.1	0.9	1.1	1.3
Iran (Islamic Republic of)	5.5	5.8	5.5	1.3	1.0	1.0	0.3	0.3	0.3
Iraq	1.1	0.9	1.4	0.8	0.3	0.3	3.2	3.1	3.0
Japan	1.4	1.4	1.4	0.2	0.2	0.2	2.4	2.4	2.4
Kazakhstan	2.3	2.3	2.3	0.3	-	0.1	1.0	1.0	1.0
Saudi Arabia	5.6	2.7	2.8	1.5	1.2	1.4	0.8	0.8	0.7
Syrian Arab Republic	1.3	1.1	1.1	0.8	-	-	13.1	12.1	11.5
Türkiye	8.9	9.6	9.0	2.2	2.2	2.0	1.0	1.0	1.0
AFRICA	9.1	9.0	9.3	1.7	1.4	1.3	2.5	2.4	2.4
Algeria	1.8	1.5	1.7	0.6	0.5	0.5	11.3	11.0	10.8
Ethiopia	2.1	2.1	2.1	-	-	-	16.2	16.1	16.2
Libya	1.1	1.1	1.1	-	-	-	12.8	12.5	12.3
Morocco	2.0	2.6	2.4	0.3	0.4	0.2	19.4	19.3	19.6
Tunisia	1.4	0.9	1.2	0.4	0.3	0.4	7.3	7.2	7.2
CENTRAL AMERICA & THE CARIBBEAN	1.4	1.3	1.1	0.1	0.1	0.1	-	0.0	0.0
Mexico	1.4	1.3	1.1	0.1	0.1	0.1	-	0.0	0.0
SOUTH AMERICA	4.3	4.3	4.3	0.7	0.7	0.7	0.5	0.5	0.5
Argentina	1.8	1.9	1.8	0.6	0.6	0.6	-	0.0	0.0
NORTHERN AMERICA	9.6	10.0	10.2	1.9	2.7	3.0	0.5	0.5	0.5
Canada	5.9	5.9	6.5	0.6	1.0	1.3	0.3	0.3	0.3
United States of America	3.7	4.0	3.7	1.3	1.7	1.7	0.6	0.6	0.6
EUROPE	74.4	71.6	72.0	11.6	11.9	13.5	1.2	1.2	1.2
Belarus	1.4	1.4	1.4	0.3	-	-	-	0.0	0.0
European Union	46.6	44.5	44.9	4.8	4.3	8.1	0.8	0.8	0.8
Russian Federation	14.8	14.7	14.7	3.6	4.4	1.8	1.8	1.8	1.8
Ukraine	3.6	3.2	3.2	1.2	1.1	0.9	2.7	3.2	3.1
United Kingdom of Great Britain and Northern Ireland	6.5	6.2	6.3	1.1	1.3	1.8	1.5	1.5	1.5
OCEANIA	6.0	6.4	5.7	2.7	2.1	1.5	0.1	0.1	0.1
Australia	5.6	6.0	5.3	2.7	2.0	1.5	0.2	0.2	0.2
WORLD	150.1	148.3	148.2	30.7	29.4	30.4	1.0	1.0	1.1
LIFDC	4.5	4.3	4.3	2.2	1.7	1.8	2.4	2.4	2.4
LDC	2.4	2.3	2.4	0.1	0.1	0.1	1.8	1.9	1.9

APPENDIX TABLE 6(A): SORGHUM STATISTICS

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>								
ASIA	8.2	8.0	8.1	8.5	8.0	8.5	0.1	0.1	0.1
China	3.2	3.2	3.1	8.1	7.7	8.1	-	-	-
India	4.3	4.0	4.2	-	-	-	0.0	-	-
Japan	-	-	-	0.3	0.2	0.3	-	-	-
AFRICA	28.1	26.0	26.2	1.0	1.1	1.1	0.6	0.3	0.3
Burkina Faso	1.8	1.8	1.8	-	-	-	-	-	-
Ethiopia	3.6	3.6	3.6	-	-	-	0.4	0.2	0.1
Nigeria	6.7	6.4	6.6	-	-	-	-	-	-
Sudan	4.6	3.1	3.0	0.3	0.4	0.4	0.1	-	-
CENTRAL AMERICA & THE CARIBBEAN	4.9	5.0	4.8	0.2	0.1	0.3	-	-	-
Mexico	4.6	4.8	4.6	0.2	0.1	0.2	-	-	-
SOUTH AMERICA	6.5	7.5	8.7	-	0.1	-	1.4	0.8	1.2
Argentina	2.6	1.6	2.6	-	-	-	1.4	0.8	1.2
Brazil	2.5	4.8	4.9	-	-	-	-	-	-
Venezuela (Bolivarian Republic of)	0.1	-	-	-	-	-	-	-	-
NORTHERN AMERICA	8.6	8.1	9.9	-	-	-	5.8	5.9	6.6
United States of America	8.6	8.1	9.9	-	-	-	5.8	5.9	6.6
EUROPE	1.0	1.1	1.0	0.1	0.1	0.1	0.1	0.1	0.1
European Union	0.8	0.9	0.8	0.1	0.1	0.1	-	-	-
OCEANIA	1.5	2.6	2.0	0.0	-	-	1.9	2.3	1.8
Australia	1.5	2.6	2.0	-	-	-	1.9	2.3	1.8
WORLD	58.7	58.3	60.7	9.9	9.4	10.0	9.7	9.4	10.0
LIFDC	20.1	18.4	18.3	1.0	1.1	1.1	0.5	0.2	0.2
LDC	18.6	16.9	16.9	0.8	0.9	0.9	0.5	0.2	0.2

APPENDIX TABLE 7(A): OTHER COARSE GRAIN STATISTICS: MILLET - RYE
- OATS AND OTHER GRAINS

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>								
ASIA	20.1	19.7	20.1	0.9	1.0	0.9	0.1	0.1	0.2
AFRICA	20.7	20.1	20.0	0.2	0.2	0.2	0.2	0.2	0.2
CENTRAL AMERICA & THE CARIBBEAN	0.1	-	0.1	0.2	0.3	0.1	-	-	-
SOUTH AMERICA	2.6	2.5	2.7	0.2	0.3	0.2	0.1	0.2	0.2
NORTHERN AMERICA	6.4	4.7	5.4	1.8	1.9	1.9	2.1	2.6	2.2
EUROPE	45.3	40.7	43.0	0.7	0.9	0.7	1.1	1.0	1.0
OCEANIA	2.1	1.4	1.7	0.2	0.1	0.1	0.5	0.4	0.5
WORLD	97.4	89.3	93.0	4.1	4.5	4.2	4.2	4.5	4.2

APPENDIX TABLE 6(B): SORGHUM STATISTICS

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>								
ASIA	8.2	8.0	8.1	8.5	8.0	8.5	0.1	0.1	0.1
China	3.2	3.2	3.1	8.1	7.7	8.1	-	-	-
India	4.3	4.0	4.2	-	-	-	0.0	-	-
Japan	-	-	-	0.3	0.2	0.3	-	-	-
AFRICA	28.1	26.0	26.2	1.0	1.1	1.1	0.6	0.3	0.3
Burkina Faso	1.8	1.8	1.8	-	-	-	-	-	-
Ethiopia	3.6	3.6	3.6	-	-	-	0.4	0.2	0.1
Nigeria	6.7	6.4	6.6	-	-	-	-	-	-
Sudan	4.6	3.1	3.0	0.3	0.4	0.4	0.1	-	-
CENTRAL AMERICA & THE CARIBBEAN	4.9	5.0	4.8	0.2	0.1	0.3	-	-	-
Mexico	4.6	4.8	4.6	0.2	0.1	0.2	-	-	-
SOUTH AMERICA	6.5	7.5	8.7	-	0.1	-	1.4	0.8	1.2
Argentina	2.6	1.6	2.6	-	-	-	1.4	0.8	1.2
Brazil	2.5	4.8	4.9	-	-	-	-	-	-
Venezuela (Bolivarian Republic of)	0.1	-	-	-	-	-	-	-	-
NORTHERN AMERICA	8.6	8.1	9.9	-	-	-	5.8	5.9	6.6
United States of America	8.6	8.1	9.9	-	-	-	5.8	5.9	6.6
EUROPE	1.0	1.1	1.0	0.1	0.1	0.1	0.1	0.1	0.1
European Union	0.8	0.9	0.8	0.1	0.1	0.1	-	-	-
OCEANIA	1.5	2.6	2.0	0.0	-	-	1.9	2.3	1.8
Australia	1.5	2.6	2.0	-	-	-	1.9	2.3	1.8
WORLD	58.7	58.3	60.7	9.9	9.4	10.0	9.7	9.4	10.0
LIFDC	20.1	18.4	18.3	1.0	1.1	1.1	0.5	0.2	0.2
LDC	18.6	16.9	16.9	0.8	0.9	0.9	0.5	0.2	0.2

APPENDIX TABLE 7(B): OTHER COARSE GRAIN STATISTICS: MILLET - RYE - OATS AND OTHER GRAINS

	Total Utilization			Stocks ending in			Per caput food use		
	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2021-2023 average	2024 <i>estim.</i>	2025 <i>f'cast</i>	20/21-22/23 average	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>
	<i>million tonnes</i>						<i>(..... Kg/year.....)</i>		
ASIA	20.8	21.0	20.9	2.1	1.9	1.9	3.1	3.2	3.1
AFRICA	20.5	20.5	20.3	11.8	11.5	11.1	11.4	11.6	11.4
CENTRAL AMERICA & THE CARIBBEAN	0.3	0.4	0.3	-	-	-	0.2	0.2	0.2
SOUTH AMERICA	2.8	2.7	2.9	0.2	0.2	0.2	1.1	1.1	1.1
NORTHERN AMERICA	5.5	4.3	4.3	1.4	0.9	0.9	2.5	2.5	2.5
EUROPE	44.8	41.5	41.7	9.0	7.6	8.6	11.6	11.6	11.6
OCEANIA	1.6	1.4	1.4	0.7	0.4	0.4	5.3	5.1	5.1
WORLD	96.1	92.0	91.7	25.2	22.5	23.0	5.2	5.3	5.3

APPENDIX TABLE 8(A): RICE STATISTICS

	Production			Imports			Exports		
	20/21-22/23 average	2023/24 f'cast	2024/25 f'cast	2020-2022 average	2023 estim.	2024 f'cast	2020-2022 average	2023 estim.	2024 f'cast
	<i>million tonnes, milled equivalent</i>								
ASIA	470.3	475.8	478.9	23.5	25.2	25.3	43.4	45.5	43.7
Bangladesh	37.9	39.0	39.5	1.2	0.4	0.4	-	-	-
China	145.8	142.7	143.6	5.2	3.2	3.5	2.5	1.7	2.0
China (mainland)	144.6	141.5	142.3	4.8	2.8	3.0	2.3	1.6	1.9
Taiwan Province of China	1.2	1.1	1.2	0.1	0.1	0.1	0.2	0.1	0.1
India	129.9	135.3	136.7	-	-	-	19.3	17.7	15.4
Indonesia	35.0	34.6	33.7	0.5	3.4	2.9	-	-	-
Iran (Islamic Republic of)	2.4	2.2	2.6	1.3	1.2	1.3	-	-	-
Iraq	0.3	-	0.2	1.5	1.8	1.8	-	-	-
Japan	7.4	7.2	7.2	0.7	0.7	0.7	0.1	0.1	0.1
Malaysia	1.6	1.5	1.5	1.3	1.4	1.6	-	0.1	-
Myanmar	16.4	17.1	16.7	-	-	-	2.0	1.6	2.1
Pakistan	8.3	9.9	10.1	-	-	-	4.1	4.5	4.9
Philippines	13.0	13.0	13.3	3.1	3.9	4.1	-	-	-
Republic of Korea	3.7	3.7	3.6	0.4	0.3	0.5	0.1	0.1	0.1
Saudi Arabia	-	-	-	1.3	1.5	1.2	-	-	-
Sri Lanka	3.1	3.0	3.0	0.3	-	0.1	-	-	-
Thailand	21.7	21.6	21.8	0.2	0.2	0.2	6.6	8.8	8.6
Viet Nam	28.0	28.2	27.8	1.5	2.3	2.1	6.7	8.4	7.8
AFRICA	25.6	27.3	28.4	17.8	16.9	15.4	0.9	0.6	0.7
Cote d'Ivoire	1.0	1.2	1.1	1.7	1.5	1.7	-	-	-
Egypt	3.8	4.0	4.0	0.4	0.4	0.3	-	-	-
Madagascar	3.0	3.2	3.3	0.6	0.4	0.4	-	-	-
Nigeria	5.0	5.3	5.3	2.1	2.1	2.0	-	-	-
Senegal	0.9	1.1	1.1	1.5	1.6	1.4	0.1	0.1	-
South Africa	-	-	-	0.9	1.1	0.9	-	-	-
United Republic of Tanzania	2.8	2.3	2.9	0.2	0.4	0.1	0.5	0.3	0.4
CENTRAL AMERICA & THE CARIBBEAN	1.8	1.6	1.7	2.5	2.5	2.7	0.1	-	-
Cuba	0.2	0.1	0.1	0.5	0.5	0.5	-	-	-
Mexico	0.2	0.1	0.2	0.7	0.6	0.8	-	-	-
SOUTH AMERICA	17.0	16.1	16.3	1.9	1.8	2.1	3.7	3.8	3.4
Argentina	0.9	0.8	0.9	-	-	-	0.4	0.3	0.4
Brazil	7.6	6.8	7.0	0.8	1.0	1.2	1.1	1.2	0.9
Peru	2.3	2.2	2.3	0.2	0.1	0.2	0.0	-	-
Uruguay	0.9	1.0	0.8	-	-	-	0.9	1.0	0.8
NORTHERN AMERICA	6.1	6.9	7.0	1.6	2.3	1.7	2.7	2.4	3.1
Canada	-	-	-	0.5	0.9	0.3	-	-	-
United States of America	6.1	6.9	7.0	1.2	1.4	1.4	2.7	2.4	3.1
EUROPE	2.3	2.1	2.3	3.3	3.3	3.4	0.5	0.4	0.4
European Union	1.5	1.4	1.5	2.1	2.2	2.3	0.4	0.4	0.4
Russian Federation	0.7	0.7	0.8	0.2	0.2	0.2	0.1	-	-
United Kingdom of Great Britain and Northern Ireland	-	-	-	0.6	0.6	0.7	-	-	-
OCEANIA	0.4	0.4	0.4	0.9	0.9	0.8	0.1	0.3	0.3
Australia	0.4	0.3	0.4	0.2	0.2	0.2	0.1	0.3	0.3
WORLD	523.3	530.1	534.9	51.5	52.9	51.4	51.5	52.9	51.4
LIFDC	21.1	22.1	23.5	13.3	12.2	11.3	0.9	0.6	0.7
LDC	82.3	85.9	87.5	13.5	11.2	10.5	4.8	4.6	5.4

APPENDIX TABLE 8(B): RICE STATISTICS

	Total Utilization			Closing stocks			Per caput food use		
	20/21-22/23 average	2023/24 f'cast	2024/25 f'cast	20/21-22/23 average	2023/24 f'cast	2024/25 f'cast	20/21-22/23 average	2023/24 f'cast	2024/25 f'cast
	million tonnes, milled equivalent						Kg/year		
ASIA	447.1	451.2	455.0	183.0	188.2	193.5	76.0	76.3	76.5
Bangladesh	38.8	39.3	40.0	6.8	7.1	7.3	182.8	183.4	184.9
China	150.6	143.8	142.6	101.6	99.4	102.3	76.6	75.6	75.0
China (mainland)	149.0	142.3	141.1	101.1	99.0	101.8	77.4	76.3	75.7
Taiwan Province of China	1.2	1.2	1.2	0.5	0.4	0.4	45.1	44.9	45.0
India	106.5	115.1	118.3	39.9	48.0	49.7	69.4	71.7	72.7
Indonesia	36.0	36.7	37.0	4.9	5.6	5.3	116.0	116.6	117.9
Iran (Islamic Republic of)	3.8	3.7	3.9	0.7	0.5	0.5	38.7	38.0	38.8
Iraq	1.7	1.9	2.0	0.5	0.6	0.6	38.1	39.8	41.5
Japan	8.1	7.9	7.7	3.2	2.9	3.0	47.7	46.8	45.9
Malaysia	2.9	2.9	3.0	0.3	0.2	0.3	79.9	79.2	80.3
Myanmar	14.4	14.9	14.7	3.3	3.8	3.5	189.6	191.3	193.2
Pakistan	4.3	4.3	4.7	0.8	0.6	0.7	13.9	14.2	14.6
Philippines	16.3	17.2	17.2	2.0	2.0	2.1	119.5	120.1	120.2
Republic of Korea	4.1	4.2	4.1	1.0	0.9	0.8	71.2	70.9	70.0
Saudi Arabia	1.2	1.3	1.4	0.5	0.7	0.6	32.3	34.2	34.8
Sri Lanka	3.3	3.2	3.2	0.7	0.4	0.3	126.7	127.3	127.4
Thailand	13.6	13.3	13.6	9.4	9.0	9.9	100.8	101.2	102.4
Viet Nam	22.6	22.4	22.3	3.8	3.5	3.4	142.5	137.0	135.5
AFRICA	42.3	43.2	44.9	6.5	6.1	6.1	26.2	25.7	26.3
Cote d'Ivoire	2.8	2.8	2.9	0.5	0.5	0.5	88.9	85.2	86.0
Egypt	4.3	4.3	4.4	0.8	0.6	0.6	35.5	34.4	35.0
Madagascar	3.4	3.7	3.8	0.6	0.7	0.6	102.4	105.3	105.4
Nigeria	7.3	7.3	7.7	0.5	0.4	0.6	29.4	28.1	29.3
Senegal	2.4	2.5	2.6	0.5	0.5	0.5	124.5	124.9	126.0
South Africa	0.9	1.0	1.0	0.2	0.2	0.1	15.3	15.5	15.6
United Republic of Tanzania	2.4	2.5	2.6	0.5	0.4	0.4	30.8	31.4	31.6
CENTRAL AMERICA & THE CARIBBEAN	4.2	4.2	4.3	0.6	0.6	0.7	17.9	17.8	18.2
Cuba	0.6	0.6	0.6	0.1	-	-	54.4	51.2	52.4
Mexico	0.9	0.9	0.9	0.1	0.1	0.1	7.0	6.9	7.2
SOUTH AMERICA	15.2	14.9	15.0	2.7	2.0	2.0	31.2	30.6	30.8
Argentina	0.6	0.5	0.5	0.1	-	-	10.8	10.3	10.4
Brazil	7.2	6.9	7.0	0.6	0.4	0.6	31.1	29.8	30.0
Peru	2.5	2.5	2.5	0.4	0.2	0.2	67.0	66.7	66.7
Uruguay	0.1	-	-	0.1	-	-	7.2	6.6	6.6
NORTHERN AMERICA	5.2	5.6	5.7	1.3	1.7	1.5	9.9	10.3	10.5
Canada	0.4	0.6	0.6	0.1	0.4	0.1	11.5	14.7	14.8
United States of America	4.7	5.0	5.1	1.2	1.3	1.4	9.7	9.8	10.0
EUROPE	5.1	5.0	5.4	0.8	0.8	0.8	5.7	5.8	5.9
European Union	3.3	3.2	3.5	0.4	0.4	0.5	6.1	6.2	6.3
Russian Federation	0.8	0.9	0.9	0.1	0.2	0.2	5.2	5.4	5.5
United Kingdom of Great Britain and Northern Ireland	0.6	0.7	0.7	0.1	0.1	0.1	6.8	7.1	7.2
OCEANIA	1.0	1.0	1.0	0.3	0.4	0.3	20.3	20.5	20.7
Australia	0.4	0.4	0.4	0.1	0.2	0.2	12.4	12.5	12.6
WORLD	519.9	525.0	531.4	195.2	199.7	205.1	53.0	53.0	53.3
LIFDC	33.0	34.0	35.1	5.2	4.5	4.5	28.6	28.2	28.5
LDC	90.2	91.8	93.6	16.9	16.6	16.8	64.7	63.4	63.5

Note: Totals and percentage change computed from unrounded data.

APPENDIX TABLE 9: CEREAL SUPPLY AND UTILIZATION IN SELECTED EXPORTERS (*million tonnes*)

	Wheat ¹			Coarse Grains ²			Rice (milled basis)		
	2022/23	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2022/23	2023/24 <i>estim.</i>	2024/25 <i>f'cast</i>	2022/23	2023/24 <i>f'cast</i>	2024/25 <i>f'cast</i>
	UNITED STATES of AMERICA (Jun/May)			UNITED STATES of AMERICA			UNITED STATES of AMERICA (Aug/Jul)		
Opening Stocks	18.4	15.5	18.7	37.5	37.1	54.1	1.3	1.0	1.3
Production	44.9	49.3	50.6	356.7	403.2	392.1	5.1	6.9	7.0
Imports	3.3	3.8	3.3	3.3	2.6	2.5	1.3	1.4	1.4
Total Supply	66.6	68.6	72.6	397.5	442.9	448.7	7.7	9.3	9.7
Domestic use	30.4	30.4	30.6	315.2	327.7	329.6	4.6	5.0	5.1
Exports	20.6	19.5	21.1	45.1	61.1	62.8	2.0	3.0	3.2
Closing stocks	15.5	18.7	20.9	37.1	54.1	56.4	1.0	1.3	1.4
	CANADA (August/July)			CANADA			THAILAND (Aug/July)		
Opening Stocks	3.7	3.5	3.6	3.8	3.8	3.4	9.5	9.8	9.0
Production	34.3	32.0	34.6	30.6	27.2	28.6	22.3	21.6	21.8
Imports	0.1	0.1	0.1	2.3	3.1	2.2	0.2	0.2	0.2
Total Supply	38.1	35.6	38.3	36.7	34.1	34.2	32.0	31.6	31.0
Domestic use	8.9	8.6	9.3	23.2	23.4	23.1	13.8	13.3	13.6
Exports	25.7	23.4	24.6	9.8	7.4	7.2	8.3	9.3	7.5
Closing stocks	3.5	3.6	4.4	3.8	3.4	4.0	9.8	9.0	9.9
	ARGENTINA (Dec./Nov.)			ARGENTINA			INDIA (Oct./Sept.)		
Opening Stocks	1.2	3.6	2.8	6.8	9.8	4.7	39.0	43.0	48.0
Production	12.6	15.9	16.5	67.0	48.9	64.1	135.8	135.3	136.7
Imports	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Total Supply	13.8	19.5	19.3	73.9	58.8	68.9	174.8	178.3	184.7
Domestic use	6.8	7.2	7.3	25.2	24.6	23.6	111.6	115.1	118.3
Exports	3.4	9.5	9.2	38.8	29.4	39.7	20.2	15.2	16.7
Closing stocks	3.6	2.8	2.8	9.8	4.7	5.5	43.0	48.0	49.7
	AUSTRALIA (Oct./Sept.)			AUSTRALIA			PAKISTAN (Sept./Aug.)		
Opening Stocks	4.1	5.1	3.5	3.7	4.6	2.9	0.9	0.4	0.6
Production	40.5	26.0	29.5	19.1	15.2	15.6	7.3	9.9	10.1
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Supply	44.6	31.1	33.0	22.8	19.8	18.5	8.2	10.3	10.7
Domestic use	7.8	8.1	7.7	7.5	7.8	7.1	4.3	4.3	4.7
Exports	31.8	19.5	21.5	10.6	9.2	9.2	3.5	5.3	5.4
Closing stocks	5.1	3.5	3.8	4.6	2.9	2.2	0.4	0.6	0.7
	EUROPEAN UNION (July/June)			EUROPEAN UNION			VIET NAM (Jan./Dec.)		
Opening Stocks	16.9	20.6	21.5	25.6	24.9	21.4	4.2	3.7	3.5
Production	134.3	133.7	128.1	134.8	138.5	152.9	27.7	28.2	27.8
Imports	11.7	11.0	6.9	28.6	19.9	19.6	1.9	2.3	2.1
Total Supply	162.9	165.3	156.5	189.0	183.3	193.9	33.8	34.2	33.4
Domestic use	108.8	112.1	112.2	153.0	150.5	150.9	22.9	22.4	22.3
Exports	33.6	31.6	31.9	11.1	11.4	12.2	7.2	8.4	7.8
Closing stocks	20.6	21.5	12.4	24.9	21.4	30.8	3.7	3.5	3.4
	TOTAL OF ABOVE			TOTAL OF ABOVE			TOTAL OF ABOVE		
Opening Stocks	44.3	48.3	50.1	77.4	80.2	86.5	54.9	57.9	62.4
Production	266.6	256.9	259.3	608.2	633.0	653.3	198.2	201.9	203.4
Imports	15.1	14.9	10.3	34.3	25.7	24.4	3.4	3.9	3.7
Total Supply	326.0	320.1	319.7	719.9	738.9	764.2	256.5	263.7	269.5
Domestic use	162.7	166.4	167.1	524.1	534.0	534.3	157.2	160.1	164.0
Exports	115.1	103.5	108.3	115.4	118.5	131.1	41.2	41.2	40.6
Closing stocks	48.3	50.1	44.3	80.2	86.5	98.9	57.9	62.4	65.1

¹ Trade data include wheat flour in wheat grain equivalent. For the EU semolina is also included

² **Argentina** (December/November) for rye, barley and oats, (March/February) for maize and sorghum. **Australia** (November/October) for rye, barley and oats, (March/February) for maize and sorghum. **Canada** (August/July), **EU** (July/June), **United States** (June/May) for rye, barley and oats, (September/August) for maize and sorghum

APPENDIX TABLE 10: TOTAL OILCROPS STATISTICS (million tonnes)

	Production ¹			Imports			Exports		
	19/20-21/22 average	2022/23 estim.	2023/24 f'cast	19/20-21/22 average	2022/23 estim.	2023/24 f'cast	19/20-21/22 average	2022/23 estim.	2023/24 f'cast
ASIA	152.0	162.1	160.1	139.5	145.1	146.4	3.8	3.7	3.2
China	65.0	68.6	70.5	103.5	111.5	110.3	1.0	0.9	1.0
China (mainland)	64.9	68.5	70.5	100.8	108.7	107.4	1.0	0.9	1.0
Taiwan Province of China	0.1	0.1	0.1	2.8	2.8	2.8	-	-	-
India	47.5	52.9	49.2	0.7	0.9	1.1	1.4	1.4	1.1
Indonesia	13.1	14.1	14.1	2.9	2.7	2.9	0.1	0.1	0.1
Iran (Islamic Republic of)	0.9	0.9	0.9	2.2	2.5	2.7	-	0.1	0.1
Japan	0.3	0.3	0.3	5.9	5.7	6.0	-	-	-
Malaysia	0.2	0.2	0.2	1.6	1.6	1.6	-	-	-
Pakistan	4.8	4.7	4.7	1.0	1.0	1.1	-	-	-
Republic of Korea	3.4	2.9	3.6	3.3	1.7	2.4	-	-	-
Thailand	1.2	1.2	1.2	3.8	3.5	4.0	-	-	-
Türkiye	3.4	3.6	2.9	4.0	4.0	3.9	0.1	0.1	-
AFRICA	24.0	26.0	25.6	6.4	4.3	5.3	2.1	2.3	3.0
Nigeria	5.7	6.2	6.3	0.1	-	0.2	0.1	0.2	0.4
CENTRAL AMERICA & THE CARIBBEAN	2.0	2.0	1.9	8.6	9.2	9.2	0.2	0.2	0.2
Mexico	1.3	1.2	1.2	7.8	8.4	8.4	-	-	-
SOUTH AMERICA	203.1	212.5	230.9	6.7	10.7	7.3	99.7	107.5	112.2
Argentina	51.7	31.6	56.2	4.5	9.1	5.5	6.9	4.7	5.5
Brazil	135.3	163.8	155.6	0.7	0.2	0.2	84.7	95.9	97.6
Paraguay	9.0	10.4	10.6	-	-	-	5.2	5.4	6.1
Uruguay	2.7	1.3	3.3	-	-	-	2.7	1.2	2.6
NORTHERN AMERICA	146.8	152.8	149.5	2.2	2.4	2.2	69.6	69.0	60.1
Canada	25.3	26.5	26.6	0.8	0.8	0.9	13.5	13.2	12.1
United States of America	121.5	126.3	122.9	1.4	1.5	1.3	56.1	55.8	48.0
EUROPE	78.7	84.8	92.1	28.6	28.2	26.4	9.5	12.9	12.5
European Union	30.3	32.1	33.5	23.8	23.3	21.5	1.1	1.5	1.4
Russian Federation	22.1	27.4	29.5	2.3	1.8	1.2	2.5	2.7	2.9
Ukraine	22.4	20.6	24.3	-	-	-	5.1	8.2	7.4
OCEANIA	6.0	10.3	7.4	-	-	-	3.9	7.0	5.6
Australia	5.5	9.9	7.0	-	-	-	3.7	6.8	5.5
WORLD	612.6	650.6	667.6	192.0	199.9	196.9	188.8	202.6	196.9
LIFDC	16.2	15.5	15.9	1.9	1.5	1.6	1.9	1.9	2.3
LDC	15.4	15.9	16.3	3.6	2.7	3.3	1.8	1.8	2.2

¹ The split years bring together northern hemisphere annual crops harvested in the latter part of the first year shown, with southern hemisphere annual crops harvested in the early part of the second year shown; for tree crops which are produced throughout the year, calendar year production for the second year shown is used.

APPENDIX TABLE 11: TOTAL OILS AND FATS STATISTICS¹ (million tonnes)

	Imports			Exports			Utilization		
	19/20-21/22 average	2022/23 estim.	2023/24 f'cast	19/20-21/22 average	2022/23 estim.	2023/24 f'cast	19/20-21/22 average	2022/23 estim.	2023/24 f'cast
ASIA	52.3	56.5	53.8	52.9	56.5	53.4	132.9	140.2	142.9
Bangladesh	2.3	2.2	2.3	-	-	-	3.0	2.8	2.9
China	13.1	13.9	13.1	0.6	0.6	0.6	44.3	45.5	46.4
China (mainland)	12.7	13.4	12.6	0.5	0.6	0.6	43.3	44.5	45.4
Taiwan Province of China	0.5	0.5	0.5	-	-	-	1.0	1.0	1.0
India	14.6	17.7	16.0	0.3	0.4	0.3	26.9	29.6	30.5
Indonesia	0.2	0.1	0.1	29.6	33.0	30.1	20.6	23.7	24.0
Iran (Islamic Republic of)	1.6	1.5	1.3	0.1	-	-	2.3	2.4	2.3
Japan	1.3	1.3	1.3	-	-	-	3.3	3.1	3.2
Malaysia	1.4	1.4	1.5	-	-	-	1.8	1.8	1.9
Pakistan	2.0	1.7	1.4	17.6	16.7	16.9	5.2	6.0	6.1
Philippines	3.4	3.6	3.4	0.1	-	-	5.3	5.0	5.1
Republic of Korea	1.3	1.2	1.3	1.0	1.1	1.0	2.3	2.1	2.2
Singapore	0.9	0.9	1.1	0.2	0.3	0.4	0.7	0.7	0.7
Türkiye	2.0	2.5	2.3	0.9	1.3	1.0	3.3	3.4	3.5
AFRICA	11.6	11.9	11.9	2.2	2.1	2.1	20.1	20.3	20.5
Algeria	1.0	1.0	1.0	0.1	0.1	0.1	1.1	1.1	1.1
Egypt	1.8	2.0	2.1	0.2	0.1	0.1	2.7	2.5	2.5
Nigeria	1.2	1.3	1.2	0.1	0.1	0.1	3.7	3.8	3.9
South Africa	0.8	0.8	0.9	-	-	0.1	1.6	1.6	1.6
CENTRAL AMERICA & THE CARIBBEAN	2.7	2.8	2.8	1.7	1.9	1.9	5.8	5.9	6.0
Mexico	1.6	1.7	1.7	-	-	-	3.9	4.0	4.1
SOUTH AMERICA	3.6	3.2	3.4	11.0	11.1	10.8	19.5	19.5	21.1
Argentina	0.1	0.1	0.1	6.6	5.5	6.3	3.8	3.7	3.8
Brazil	0.8	0.7	0.8	2.1	3.5	2.2	10.3	10.5	11.8
Paraguay	-	-	-	0.6	0.4	0.6	0.2	0.2	0.2
Uruguay	0.1	0.1	0.1	-	-	-	0.1	0.2	0.2
NORTHERN AMERICA	5.8	7.1	7.5	7.3	6.8	6.6	23.8	26.6	27.4
Canada	0.4	0.5	0.5	3.9	4.2	4.1	2.0	2.5	2.6
United States of America	5.3	6.6	7.0	3.4	2.6	2.5	21.8	24.2	24.8
EUROPE	16.7	16.2	15.6	15.6	17.8	18.9	41.3	40.7	40.3
European Union	13.3	12.9	12.4	4.1	4.5	4.2	33.2	31.9	31.7
Russian Federation	1.6	1.3	1.2	4.7	6.4	7.1	4.6	4.7	4.6
Ukraine	0.3	0.3	0.3	5.9	6.0	6.6	1.0	0.9	0.8
OCEANIA	0.8	0.8	0.8	2.0	2.2	2.1	1.5	1.5	1.6
Australia	0.7	0.7	0.7	0.8	0.8	0.8	1.1	1.1	1.2
WORLD	93.4	98.4	95.8	92.8	98.5	95.8	245.0	254.7	259.9
LIFDC	7.6	6.8	6.9	1.0	0.8	0.8	11.8	10.6	10.6
LDC	8.3	8.2	8.2	0.8	0.8	0.8	12.3	12.1	12.3

¹ Includes oils and fats of vegetable, marine and animal origin.

APPENDIX TABLE 12: TOTAL MEALS AND CAKES STATISTICS¹ (million tonnes)

	Imports			Exports			Utilization		
	19/20-21/22 average	2022/23 <i>estim.</i>	2023/24 <i>f'cast</i>	19/20-21/22 average	2022/23 <i>estim.</i>	2023/24 <i>f'cast</i>	19/20-21/22 average	2022/23 <i>estim.</i>	2023/24 <i>f'cast</i>
ASIA	45.2	47.1	50.5	14.4	16.5	16.0	191.4	197.3	206.1
China	6.9	7.9	8.3	1.2	1.1	1.2	103.9	108.6	113.5
China (mainland)	6.4	7.4	7.8	1.2	1.1	1.2	101.2	105.9	110.8
Taiwan Province of China	0.5	0.5	0.5	-	-	-	2.7	2.7	2.7
India	0.8	0.6	0.8	2.8	4.7	4.1	19.6	21.2	21.9
Indonesia	5.5	5.8	6.1	5.5	5.8	5.8	6.0	6.5	6.7
Iran (Islamic Republic of)	2.1	1.8	2.4	-	-	-	4.4	4.0	4.7
Japan	2.4	2.1	2.4	-	-	-	6.6	6.4	6.6
Malaysia	3.5	3.3	3.4	0.1	-	0.1	4.8	4.6	4.7
Pakistan	1.5	1.6	1.6	2.4	2.3	2.3	2.5	2.6	2.7
Philippines	0.5	0.6	0.9	0.1	0.1	-	4.2	2.9	3.8
Republic of Korea	3.1	3.0	3.4	0.4	0.4	0.4	3.9	3.9	4.1
Saudi Arabia	1.5	1.4	1.5	-	-	-	2.2	2.1	2.1
Thailand	3.4	4.1	4.3	0.2	0.2	0.2	7.2	7.5	8.0
Türkiye	2.3	2.8	3.3	0.2	0.2	0.3	6.7	7.1	7.4
Viet Nam	6.1	6.3	6.4	0.3	0.2	0.3	7.9	8.0	8.2
AFRICA	3.9	3.6	3.5	1.3	1.4	1.4	15.2	13.9	14.0
Egypt	0.5	0.5	0.5	-	-	-	4.0	2.6	2.8
South Africa	0.7	0.6	0.4	0.1	0.1	0.1	2.5	2.5	2.2
CENTRAL AMERICA & THE CARIBBEAN	4.0	4.0	4.1	0.2	0.2	0.2	11.1	11.4	11.5
Mexico	2.2	2.1	2.3	0.1	0.1	0.1	8.5	8.7	8.8
SOUTH AMERICA	6.7	7.0	7.2	52.3	48.7	52.3	35.1	36.1	36.2
Argentina	-	-	-	28.5	22.1	24.0	7.6	8.4	7.8
Bolivia (Plurinational State of)	-	-	-	2.1	2.2	2.1	0.4	0.6	0.5
Brazil	-	-	-	18.3	21.5	22.5	17.9	17.5	18.0
Chile	1.2	1.2	1.2	0.3	0.3	0.3	1.5	1.6	1.6
Paraguay	-	-	-	2.0	1.5	2.1	0.9	0.9	0.9
Peru	1.5	1.5	1.5	1.1	0.9	1.0	1.9	2.0	2.0
Uruguay	0.2	0.2	0.2	-	-	-	0.2	0.3	0.3
Venezuela (Bolivarian Republic of)	0.6	0.6	0.6	-	-	-	0.8	0.7	0.7
NORTHERN AMERICA	5.5	5.9	5.8	18.9	20.3	21.6	44.0	44.5	45.1
Canada	1.3	1.3	1.3	5.9	6.4	6.4	3.3	3.3	3.2
United States of America	4.2	4.6	4.5	13.0	14.0	15.2	40.7	41.2	41.9
EUROPE	29.5	29.0	30.0	10.3	12.1	12.8	72.8	73.4	74.9
European Union	25.9	24.8	25.6	1.9	2.1	2.3	57.1	55.5	56.0
Russian Federation	0.1	0.1	0.1	2.9	4.3	4.5	7.5	8.3	9.1
Ukraine	-	-	-	4.8	4.7	5.1	2.1	2.3	2.3
OCEANIA	3.8	3.9	3.9	0.3	0.4	0.4	4.6	4.7	4.7
Australia	1.5	1.6	1.6	0.1	0.2	0.3	2.2	2.3	2.3
WORLD	98.6	100.4	104.9	97.7	99.7	104.9	374.1	381.3	392.6
LIFDC	1.9	1.5	1.5	0.8	0.8	0.8	6.2	6.2	6.2
LDC	1.7	1.9	1.9	0.6	0.7	0.7	8.2	8.2	8.3

¹ Expressed in product weight; includes meals and cakes derived from oilcrops as well as fish meal and other meals from animal origin.

APPENDIX TABLE 13: SUGAR STATISTICS

(million tonnes - raw value)

	Production		Imports		Exports		Utilization	
	2022/23 estim.	2023/24 f'cast	2022/23 estim.	2023/24 f'cast	2022/23 estim.	2023/24 f'cast	2022/23 estim.	2023/24 f'cast
ASIA	70.4	68.8	34.0	34.8	18.9	14.0	88.2	89.7
China	9.0	10.0	4.6	5.7	0.2	0.2	16.1	16.5
India	32.8	31.8	1.4	2.0	8.3	4.5	27.9	28.5
Indonesia	2.3	2.1	4.8	4.8	0.2	0.2	7.7	7.8
Japan	0.7	0.6	1.1	1.2	-	-	1.8	1.8
Malaysia	-	-	2.0	2.0	0.2	0.2	1.9	1.9
Pakistan	6.6	6.8	-	-	0.3	0.3	6.2	6.3
Philippines	1.8	1.9	0.9	0.3	-	-	2.2	2.2
Republic of Korea	-	-	1.7	1.8	0.3	0.3	1.6	1.6
Thailand	11.1	8.8	0.2	0.2	6.7	5.8	2.8	2.8
Türkiye	2.8	3.3	0.5	0.4	0.1	0.1	3.1	3.1
Viet Nam	0.9	1.0	1.5	1.6	0.1	0.1	2.3	2.3
AFRICA	10.8	10.7	16.8	17.3	4.3	4.2	21.9	22.5
Algeria	-	-	2.0	2.0	0.1	0.1	1.9	1.9
Egypt	2.8	2.8	0.8	0.8	0.6	0.6	3.4	3.5
Eswatini	0.6	0.7	-	-	0.5	0.5	0.1	0.1
Ethiopia	0.4	0.4	0.9	1.0	-	-	1.3	1.3
Kenya	0.7	0.7	0.5	0.5	-	-	1.1	1.2
Morocco	0.2	0.2	1.6	1.7	0.6	0.6	1.2	1.3
Mozambique	0.3	0.3	-	-	0.1	0.1	0.2	0.2
Nigeria	-	-	1.7	1.8	-	-	1.8	1.8
South Africa	2.0	2.1	0.4	0.4	0.7	0.8	1.8	1.8
Sudan	0.3	0.3	1.6	1.6	-	-	1.6	1.6
United Republic of Tanzania	0.5	0.4	0.2	0.3	-	-	0.6	0.6
Zambia	0.4	0.4	-	-	0.2	0.2	0.2	0.2
CENTRAL AMERICA & THE CARIBBEAN	11.6	10.9	0.7	1.0	3.5	3.8	7.8	7.8
Cuba	0.4	0.3	0.1	0.1	-	-	0.5	0.5
Dominican Republic	0.5	0.6	-	-	0.2	0.2	0.4	0.4
Guatemala	2.6	2.5	-	-	1.4	1.6	1.0	1.0
Mexico	5.2	4.6	0.3	0.6	0.5	0.5	4.2	4.2
SOUTH AMERICA	49.8	50.3	1.8	1.7	31.0	35.1	17.3	17.4
Argentina	1.7	1.7	-	-	0.1	0.1	1.4	1.4
Brazil	43.2	43.8	-	-	29.7	34.0	10.2	10.3
Colombia	2.0	2.0	0.2	0.2	0.6	0.6	1.7	1.7
Peru	1.1	1.1	0.3	0.3	0.2	0.2	1.4	1.4
Venezuela (Bolivarian Republic of)	0.3	0.3	0.4	0.3	-	-	0.6	0.6
NORTHERN AMERICA	8.5	8.5	4.5	4.5	0.2	0.2	12.5	12.5
Canada	0.1	0.1	1.4	1.4	0.1	0.1	1.2	1.2
United States of America	8.4	8.4	3.1	3.1	0.1	0.2	11.3	11.3
EUROPE	23.3	25.9	4.3	3.5	1.6	2.5	25.8	26.0
European Union	13.9	14.9	2.8	2.1	0.7	1.2	15.4	15.7
Russian Federation	6.1	6.8	-	-	0.1	0.2	6.2	6.2
Ukraine	1.3	1.8	-	-	0.4	0.6	1.0	1.0
United Kingdom of Great Britain and Northern Ireland	0.8	1.1	0.9	0.9	0.1	0.1	1.7	1.7
OCEANIA	4.5	4.3	0.3	0.3	3.3	3.5	1.5	1.5
Australia	4.3	4.2	-	-	3.1	3.3	1.1	1.1
Fiji	0.2	0.2	-	-	0.1	0.1	-	-
WORLD	178.8	179.4	62.5	63.2	62.7	63.3	174.9	177.4
LIFDC	5.1	5.0	10.7	10.9	1.7	1.6	12.8	13.2
LDC	4.3	4.1	12.6	12.8	1.8	1.6	13.2	13.6

APPENDIX TABLE 14: TOTAL MEAT STATISTICS^{1,2} (thousand tonnes - carcass weight equivalent)

	Production		Imports		Exports		Utilization	
	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>
ASIA	163 678	162 372	21 237	21 388	5 615	5 786	179 346	178 096
China	98 681	96 365	8 215	8 170	1 017	1 037	105 878	103 498
India	10 719	11 017	1	1	1 498	1 563	9 222	9 455
Indonesia	5 198	5 230	315	310	3	4	5 509	5 537
Iran (Islamic Republic of)	2 660	2 631	147	174	39	41	2 768	2 764
Japan	4 187	4 195	3 442	3 473	20	20	7 662	7 677
Malaysia	1 891	1 879	630	669	80	74	2 440	2 474
Pakistan	5 129	5 215	1	1	91	92	5 039	5 123
Philippines	2 986	3 055	1 045	1 090	7	7	4 054	4 166
Republic of Korea	2 753	2 781	1 601	1 536	71	76	4 268	4 297
Saudi Arabia	1 335	1 401	868	872	111	113	2 092	2 160
Thailand	4 902	4 948	46	45	1 520	1 572	3 407	3 429
Türkiye	4 761	4 931	109	111	629	667	4 242	4 375
Viet Nam	6 224	6 410	761	786	51	54	6 934	7 142
AFRICA	21 987	22 314	3 109	3 180	270	276	24 826	25 218
Algeria	800	797	12	39	-	-	812	835
Angola	389	399	298	292	-	-	687	691
Egypt	2 868	3 050	370	348	2	1	3 236	3 396
Nigeria	1 648	1 644	9	10	-	-	1 657	1 654
South Africa	3 451	3 512	445	470	137	140	3 759	3 842
CENTRAL AMERICA & THE CARIBBEAN	11 435	11 651	4 364	4 497	856	876	14 943	15 272
Cuba	247	215	398	388	-	-	645	603
Mexico	8 063	8 246	2 759	2 881	609	632	10 213	10 495
SOUTH AMERICA	49 132	49 733	1 270	1 317	11 949	12 338	38 453	38 712
Argentina	6 455	6 414	29	31	1 077	1 135	5 406	5 310
Brazil	31 384	31 917	62	61	9 422	9 720	22 024	22 259
Chile	1 547	1 567	601	624	426	458	1 722	1 733
Colombia	3 096	3 121	222	231	36	36	3 283	3 315
Uruguay	722	711	122	125	500	492	343	344
NORTHERN AMERICA	54 060	54 361	3 334	3 627	10 189	10 138	47 288	47 928
Canada	5 174	5 185	776	781	2 057	2 066	3 897	3 921
United States of America	48 885	49 177	2 559	2 846	8 131	8 072	43 391	44 007
EUROPE	62 646	62 917	5 270	5 297	8 270	8 276	59 646	59 939
Belarus	1 227	1 247	103	102	401	405	929	944
European Union	41 378	41 349	1 481	1 506	5 999	5 929	36 860	36 926
Russian Federation	11 940	12 151	551	513	659	702	11 832	11 962
Ukraine	2 234	2 273	92	88	468	483	1 858	1 878
United Kingdom of Great Britain and Northern Ireland	4 088	4 107	2 509	2 551	660	675	5 936	5 984
OCEANIA	7 089	7 341	498	511	3 316	3 513	4 270	4 339
Australia	5 011	5 257	220	231	2 203	2 390	3 028	3 097
New Zealand	1 479	1 477	82	82	1 110	1 120	451	439
WORLD	370 026	370 690	39 081	39 816	40 465	41 204	368 772	369 503
LIFDC	14 260	14 339	1 684	1 684	210	211	15 733	15 812
LDC	12 941	13 013	1 611	1 625	41	39	14 511	14 598

¹ Includes bovine, ovine, pig, poultry and other meats all expressed in carcass weight equivalents

² Meat aggregates in this edition will differ slightly from the previous editions as we have adjusted how we calculate meat aggregates. In particular, the HS code 160100, consisting of sausages and similar products of meat, meat offal, blood or insect, and food preparation based on these products, has been removed from Bovine and Pig meat aggregates and added to Other Meat.

APPENDIX TABLE 15: BOVINE MEAT STATISTICS (thousand tonnes - carcass weight equivalent)

	Production		Imports		Exports		Utilization	
	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>
ASIA	22 673	23 146	7 328	7 369	1 725	1 782	28 311	28 760
China	7 541	7 731	3 757	3 718	13	13	11 285	11 436
India	4 470	4 602	-	-	1 483	1 548	2 987	3 054
Indonesia	527	528	304	299	-	-	831	828
Iran (Islamic Republic of)	304	300	79	95	1	1	382	394
Japan	508	501	667	669	12	12	1 199	1 186
Malaysia	34	34	264	264	22	19	276	279
Pakistan	2 544	2 627	1	1	76	77	2 468	2 551
Philippines	182	182	192	205	3	3	371	385
Republic of Korea	345	361	575	570	-	-	919	931
AFRICA	7 037	7 098	498	493	72	74	7 463	7 517
Algeria	146	144	12	39	-	-	158	183
Angola	115	120	23	20	-	-	138	140
Egypt	625	663	303	270	1	1	927	933
South Africa	1 028	1 033	3	4	42	44	989	993
CENTRAL AMERICA & THE CARIBBEAN	3 039	3 076	355	354	521	540	2 873	2 890
Mexico	2 219	2 265	194	185	327	349	2 086	2 101
SOUTH AMERICA	17 347	17 466	475	481	4 613	4 710	13 209	13 237
Argentina	3 286	3 126	3	2	895	935	2 394	2 193
Brazil	10 950	11 215	53	52	2 731	2 785	8 272	8 482
Chile	188	185	339	341	25	24	501	502
Colombia	719	720	8	8	33	33	694	694
Uruguay	600	592	45	46	470	462	176	176
NORTHERN AMERICA	13 627	13 417	1 823	2 012	1 819	1 711	13 677	13 743
Canada	1 341	1 302	220	219	545	534	1 021	988
United States of America	12 286	12 115	1 604	1 793	1 273	1 177	12 655	12 755
EUROPE	9 981	9 844	1 057	1 049	964	982	10 074	9 912
European Union	6 457	6 304	340	343	580	592	6 217	6 055
Russian Federation	1 638	1 654	261	244	45	45	1 854	1 853
Ukraine	257	250	3	3	27	27	233	226
United Kingdom of Great Britain and Northern Ireland	901	903	348	357	132	133	1 116	1 127
OCEANIA	2 986	3 146	55	55	2 169	2 314	872	887
Australia	2 224	2 388	15	15	1 494	1 635	745	768
New Zealand	748	744	12	12	674	677	87	79
WORLD	76 690	77 193	11 591	11 813	11 882	12 112	76 479	76 947
LIFDC	6 021	6 035	114	79	155	154	5 981	5 960
LDC	4 668	4 688	98	96	7	7	4 758	4 776

APPENDIX TABLE 16: OVINE MEAT STATISTICS (thousand tonnes - carcass weight equivalent)

	Production		Imports		Exports		Utilization	
	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>
ASIA	10 648	10 780	803	826	38	40	11 412	11 566
Bangladesh	229	232	1	1	-	-	230	233
China	5 312	5 341	461	475	2	2	5 770	5 815
India	832	833	-	-	10	10	822	823
Iran (Islamic Republic of)	298	303	37	45	-	-	335	349
Pakistan	799	816	-	-	6	6	793	810
Saudi Arabia	156	158	33	34	2	2	187	190
Türkiye	698	762	1	1	-	-	698	762
AFRICA	3 433	3 429	16	17	51	52	3 399	3 394
Algeria	363	363	-	-	-	-	363	363
Nigeria	426	425	-	-	-	-	426	425
South Africa	159	158	3	3	6	7	156	155
CENTRAL AMERICA & THE CARIBBEAN	142	143	12	12	-	-	153	155
Mexico	110	111	2	2	-	-	111	113
SOUTH AMERICA	328	329	4	5	30	29	302	305
Brazil	148	148	4	4	-	-	152	152
NORTHERN AMERICA	87	89	150	161	3	2	234	248
United States of America	70	72	124	135	3	2	191	205
EUROPE	1 165	1 134	200	206	121	120	1 243	1 220
European Union	553	526	143	146	31	30	665	642
Russian Federation	211	211	-	-	1	1	210	210
United Kingdom of Great Britain and Northern Ireland	286	282	50	52	85	84	251	250
OCEANIA	1 327	1 361	43	44	1 003	1 047	367	358
Australia	883	915	1	1	603	642	282	274
New Zealand	443	446	3	3	400	405	46	44
WORLD	17 129	17 266	1 228	1 271	1 246	1 290	17 110	17 248
LIFDC	2 900	2 906	5	5	44	45	2 861	2 866
LDC	2 568	2 569	5	5	18	17	2 556	2 558

APPENDIX TABLE 17: PIG MEAT STATISTICS (thousand tonnes - carcass weight equivalent)

	Production		Imports		Exports		Utilization	
	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>
ASIA	68 875	67 064	5 179	5 207	163	168	73 944	72 161
China	58 839	56 885	2 261	2 241	97	101	61 003	59 024
India	315	313	1	1	-	-	316	314
Indonesia	265	267	6	6	-	-	271	273
Japan	1 294	1 295	1 413	1 430	3	2	2 722	2 725
Malaysia	196	195	86	87	1	1	280	281
Philippines	1 251	1 283	388	393	1	1	1 662	1 708
Republic of Korea	1 435	1 430	675	689	10	11	2 110	2 130
Thailand	794	771	-	-	7	7	788	765
Viet Nam	3 551	3 686	108	110	22	22	3 637	3 774
AFRICA	2 098	2 118	204	210	19	19	2 283	2 309
Madagascar	26	27	-	-	-	-	27	27
Nigeria	359	357	-	-	-	-	359	357
South Africa	347	358	26	28	15	15	357	370
Uganda	130	131	-	-	-	-	130	131
CENTRAL AMERICA & THE CARIBBEAN	2 220	2 245	1 738	1 879	261	264	3 697	3 860
Cuba	158	135	21	21	-	-	179	156
Mexico	1 771	1 811	1 353	1 477	258	261	2 867	3 027
SOUTH AMERICA	7 923	8 084	412	426	1 690	1 753	6 645	6 756
Argentina	762	800	18	22	3	5	777	817
Brazil	5 292	5 382	2	2	1 413	1 472	3 881	3 912
Chile	583	590	142	145	262	264	462	471
Colombia	551	563	160	161	2	2	709	722
NORTHERN AMERICA	14 608	14 967	871	903	4 117	4 334	11 378	11 574
Canada	2 217	2 225	260	259	1 323	1 335	1 155	1 169
United States of America	12 391	12 742	611	644	2 795	2 999	10 222	10 405
EUROPE	28 179	28 244	1 126	1 144	3 549	3 503	25 756	25 885
Belarus	349	360	66	65	8	8	407	418
European Union	20 852	20 777	108	101	3 127	3 055	17 833	17 823
Russian Federation	4 637	4 752	15	12	200	225	4 452	4 539
Serbia	295	294	61	64	7	6	350	352
Ukraine	638	648	19	18	1	1	656	665
United Kingdom of Great Britain and Northern Ireland	926	930	753	779	191	192	1 489	1 517
OCEANIA	611	619	271	282	48	50	835	850
Australia	467	475	194	205	46	48	615	631
Papua New Guinea	83	84	7	7	-	-	90	91
WORLD	124 514	123 340	9 802	10 051	9 847	10 091	124 538	123 395
LIFDC	1 470	1 481	113	115	1	1	1 582	1 595
LDC	1 942	1 950	102	104	2	2	2 042	2 052

APPENDIX TABLE 18: POULTRY MEAT STATISTICS (thousand tonnes - carcass weight equivalent)

	Production		Imports		Exports		Utilization	
	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>	2023 <i>estim.</i>	2024 <i>f'cast</i>
ASIA	57 966	57 817	7 587	7 655	3 290	3 402	62 221	62 107
China	26 389	25 819	1 656	1 661	824	839	27 221	26 640
India	5 102	5 269	-	-	5	5	5 097	5 264
Indonesia	4 284	4 312	-	-	1	1	4 283	4 311
Iran (Islamic Republic of)	2 051	2 022	31	33	35	36	2 048	2 019
Japan	2 379	2 393	1 300	1 313	5	6	3 674	3 701
Kuwait	68	70	154	160	2	2	221	229
Malaysia	1 658	1 646	237	273	54	50	1 841	1 869
Republic of Korea	970	987	296	222	57	62	1 184	1 182
Saudi Arabia	1 050	1 100	580	563	61	63	1 569	1 600
Thailand	1 996	2 023	3	3	1 384	1 436	594	599
Türkiye	2 376	2 425	68	63	589	624	1 856	1 864
AFRICA	7 600	7 827	2 275	2 346	109	110	9 766	10 063
Angola	69	71	211	208	-	-	280	280
South Africa	1 860	1 905	413	435	59	60	2 214	2 280
CENTRAL AMERICA & THE CARIBBEAN	5 946	6 099	2 097	2 088	39	38	8 003	8 150
Cuba	20	21	320	309	-	-	340	330
Mexico	3 886	3 982	1 164	1 169	7	6	5 043	5 146
SOUTH AMERICA	23 379	23 703	349	376	5 287	5 527	18 440	18 553
Argentina	2 287	2 370	8	6	161	176	2 134	2 200
Brazil	14 971	15 150	2	2	4 976	5 168	9 997	9 984
Chile	760	775	116	134	132	164	744	746
NORTHERN AMERICA	25 427	25 575	406	467	4 059	3 900	21 797	22 158
Canada	1 577	1 618	223	230	165	172	1 633	1 676
United States of America	23 850	23 957	183	236	3 894	3 728	20 164	20 482
EUROPE	23 083	23 465	2 382	2 395	3 222	3 259	22 243	22 600
European Union	13 371	13 598	674	698	1 970	1 960	12 076	12 336
Russian Federation	5 393	5 474	240	223	355	374	5 278	5 323
Ukraine	1 318	1 359	65	61	438	452	945	967
United Kingdom of Great Britain and Northern Ireland	1 967	1 984	1 154	1 161	244	256	2 877	2 889
OCEANIA	1 679	1 725	115	116	71	76	1 723	1 765
Australia	1 413	1 456	6	6	53	57	1 366	1 405
New Zealand	228	231	2	2	17	18	213	215
WORLD	145 081	146 212	15 210	15 442	16 078	16 312	144 193	145 395
LIFDC	2 573	2 600	1 362	1 393	7	7	3 929	3 987
LDC	2 893	2 927	1 300	1 313	13	12	4 181	4 228

APPENDIX TABLE 19: MILK AND MILK PRODUCTS STATISTICS (thousand tonnes - milk equivalent)

	Production			Imports			Exports		
	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>	2020-2022 average	2023 <i>estim.</i>	2024 <i>f'cast</i>
ASIA	420 264	446 361	457 747	50 115	47 881	48 031	9 352	8 600	8 697
China	38 243	43 445	45 516	18 360	15 870	15 331	100	178	133
India ¹	220 870	236 350	242 960	96	185	193	475	251	358
Indonesia	1 586	1 611	1 620	3 395	3 238	3 265	61	49	49
Iran (Islamic Republic of)	8 500	8 760	8 850	116	168	172	1 408	2 079	2 125
Japan	7 549	7 298	7 260	1 992	1 701	1 780	52	65	61
Malaysia	45	45	45	2 395	2 313	2 358	473	442	445
Pakistan	60 619	64 335	65 940	315	207	211	11	11	12
Philippines	28	30	30	2 653	2 323	2 490	89	28	26
Republic of Korea	2 041	1 938	1 920	1 443	1 482	1 497	40	48	49
Saudi Arabia	2 892	2 890	2 914	2 647	3 001	3 135	1 422	1 373	1 380
Singapore	-	-	-	1 461	1 257	1 254	409	401	392
Thailand	1 278	1 210	1 185	1 692	1 833	1 845	304	338	344
Türkiye	22 756	21 482	21 820	112	133	141	1 107	567	588
AFRICA	54 355	53 852	53 746	10 436	9 705	9 865	1 183	959	970
Algeria	3 313	3 326	3 350	3 182	3 376	3 461	2	-	-
Egypt	5 908	5 910	5 880	1 163	995	999	337	216	219
Kenya	5 751	5 780	5 840	163	160	170	4	7	7
South Africa	3 816	3 747	3 740	354	283	265	391	393	397
Tunisia	1 423	1 407	1 425	105	183	166	48	37	36
CENTRAL AMERICA & THE CARIBBEAN	19 824	20 371	20 690	6 033	6 292	6 515	776	614	623
Costa Rica	1 218	1 230	1 235	65	70	71	128	92	93
Mexico	13 458	13 998	14 320	3 791	4 036	4 206	260	140	145
SOUTH AMERICA	67 940	68 293	68 165	3 210	4 005	3 907	4 470	4 210	4 231
Argentina	11 750	11 665	11 410	21	27	25	2 322	2 016	2 119
Brazil	36 380	36 617	36 840	1 072	1 920	1 773	112	84	84
Colombia	7 277	7 370	7 290	502	513	518	30	25	24
Uruguay	2 294	2 294	2 340	28	31	32	1 527	1 544	1 440
NORTHERN AMERICA	111 941	112 798	113 225	3 028	3 165	3 275	14 209	13 284	13 439
Canada	9 721	9 877	9 895	876	957	955	848	728	739
United States of America	102 220	102 921	103 330	2 143	2 198	2 311	13 361	12 556	12 700
EUROPE	233 930	233 828	235 116	12 347	11 722	11 865	34 423	33 876	33 999
Belarus	7 818	8 331	8 540	72	78	80	4 426	4 457	4 487
European Union	159 799	159 821	160 460	3 341	3 063	3 103	24 880	24 463	24 472
Russian Federation	32 516	33 500	34 170	3 740	3 596	3 640	387	443	460
Ukraine	8 582	7 430	7 207	327	220	216	507	472	464
United Kingdom of Great Britain and Northern Ireland	15 632	15 547	15 505	3 624	3 504	3 533	3 136	3 192	3 258
OCEANIA	30 477	29 742	29 764	1 718	1 811	1 792	23 125	23 113	23 391
Australia	8 852	8 473	8 555	1 225	1 352	1 327	2 962	2 560	2 710
New Zealand	21 603	21 245	21 185	241	210	217	20 159	20 549	20 677
WORLD	938 730	965 245	978 453	86 888	84 580	85 249	87 538	84 655	85 351
LIFDC	58 409	59 145	59 311	3 790	3 547	3 547	667	550	559
LDC	49 145	50 805	50 941	4 813	4 335	4 365	333	244	250

¹ For production, the annual dairy cycle starting in April is applied

Note: Trade values that refer to milk equivalents were derived by applying the following weights: butter (6.60), cheese (4.40), skim/whole milk powder (7.60), whole condensed/evaporated milk (2.10), yoghurt (1.0), cream (3.60), casein (7.40), skim milk (0.70), liquid milk (1.0), whey dry (7.6). The conversion factors cited refer to the solids content method. Refer to IDF Bulletin No. 390 (March 2004)

APPENDIX TABLE 20: FISH AND FISHERY PRODUCTS STATISTICS¹

	Capture fisheries production		Aquaculture fisheries production		Exports			Imports		
	2021	2022	2021	2022	2022	2023	2024	2022	2023	2024
	<i>Million tonnes (live weight equivalent)</i>				<i>USD billion</i>			<i>USD billion</i>		
					<i>estim.</i>	<i>f'cast</i>		<i>estim.</i>	<i>f'cast</i>	
ASIA²	46.8	47.1	80.5	83.4	68.2	63.5	62.2	67.0	64.1	62.8
China	12.9	13.0	51.2	52.9	24.6	22.3	21.8	28.3	28.3	28.1
China, Hong Kong SAR	0.1	0.1	-	-	0.6	0.9	0.9	3.4	3.6	3.4
Taiwan Province of China	0.7	0.6	0.3	0.3	1.7	1.6	1.6	2.1	1.9	1.9
India	5.0	5.5	9.4	10.2	7.9	7.6	7.4	0.2	0.2	0.2
Indonesia	7.1	7.3	5.5	5.4	5.5	5.0	5.2	0.6	0.6	0.5
Japan	3.2	2.9	0.6	0.6	2.6	2.3	2.1	15.1	13.6	13.0
Philippines	1.8	1.8	0.9	0.8	0.9	0.8	0.9	0.8	0.8	0.8
Republic of Korea	1.4	1.3	0.6	0.6	2.4	2.1	2.0	6.6	6.1	5.8
Thailand	1.4	1.4	1.0	1.0	5.8	5.3	5.5	4.4	4.0	3.9
Viet Nam	3.5	3.6	4.7	5.2	11.2	11.1	10.4	2.7	2.6	2.5
AFRICA	10.4	10.6	2.3	2.3	8.6	8.5	8.3	6.1	5.5	5.4
Egypt	0.4	0.4	1.6	1.6	-	-	-	0.8	0.6	0.6
Morocco	1.4	1.6	-	-	2.9	3.0	2.8	0.3	0.3	0.3
Namibia	0.4	0.4	-	-	0.8	0.8	0.7	0.1	0.1	0.1
Nigeria	0.8	0.8	0.3	0.3	0.1	0.1	0.1	0.9	0.7	0.7
Senegal	0.5	0.5	-	-	0.6	0.5	0.5	0.1	0.1	0.1
South Africa	0.5	0.5	-	-	0.7	0.6	0.6	0.5	0.4	0.4
CENTRAL AMERICA & THE CARIBBEAN	2.4	2.4	0.4	0.5	3.1	3.2	3.1	2.7	2.5	2.6
Mexico	1.7	1.7	0.2	0.3	1.5	1.7	1.7	1.4	1.3	1.3
Panama	0.2	0.2	-	-	0.2	0.2	0.2	0.1	0.1	0.1
SOUTH AMERICA	11.6	10.4	3.4	3.8	25.5	24.3	24.5	3.5	3.7	3.7
Argentina	0.9	0.8	-	-	1.7	1.7	1.8	0.2	0.2	0.2
Brazil	0.8	0.8	0.6	0.7	0.4	0.4	0.5	1.5	1.5	1.6
Chile	2.0	2.2	1.4	1.5	8.5	8.6	8.6	0.5	0.7	0.7
Ecuador	0.9	0.7	0.9	1.1	10.1	9.9	9.7	0.3	0.3	0.2
Peru	6.5	5.3	0.2	0.1	3.9	2.8	3.0	0.3	0.3	0.3
NORTHERN AMERICA	5.3	5.3	0.7	0.6	13.2	12.1	12.0	36.0	31.3	30.7
Canada	0.7	0.7	0.2	0.2	6.5	5.6	5.6	3.9	3.3	3.3
United States of America	4.3	4.3	0.5	0.5	5.8	5.5	5.5	32.1	27.9	27.4
EUROPE	13.6	13.7	3.6	3.5	70.3	70.3	69.9	74.7	75.4	74.5
European Union ²	3.6	3.6	1.1	1.1	39.8	41.0	40.9	62.7	62.9	61.8
of which extra-EU	-	-	-	-	8.7	8.9	8.6	33.4	32.4	32.3
Iceland	1.2	1.4	0.1	0.1	2.9	2.9	2.9	0.1	0.2	0.2
Norway	2.4	2.4	1.7	1.6	15.5	16.0	15.7	1.6	2.0	2.1
Russian Federation	5.2	5.0	0.3	0.3	7.4	5.9	5.8	2.8	3.1	3.0
OCEANIA	1.5	1.6	0.2	0.2	3.3	3.3	3.3	2.4	2.1	2.1
Australia	0.2	0.2	0.1	0.1	0.9	1.0	1.0	1.9	1.7	1.7
New Zealand	0.3	0.3	0.1	0.1	1.2	1.3	1.3	0.2	0.2	0.2
WORLD³	91.6	91.0	91.1	94.4	192.2	185.2	183.3	192.4	184.6	181.9
Excl. intra-EU	-	-	-	-	161.2	153.0	151.0	163.0	154.1	152.4
LIFDC	5.8	5.8	0.6	0.6	3.8	3.6	3.5	2.6	2.6	2.6
LDC	10.1	10.3	4.7	4.8	4.3	4.0	3.9	1.5	1.5	1.4

¹ Production and trade data exclude whales, seals, other aquatic mammals and aquatic plants. Trade data include fishmeal and fish oil

² EU-27. Including intra-trade. Cyprus is included in Asia as well as in the European Union

³ For capture fisheries production, the aggregate includes also 36 530 tonnes in 2021 and 40 498 tonnes in 2022 of not-identified countries these data are not included in any other aggregates. Totals may not match due to rounding

APPENDIX TABLE 21: SELECTED INTERNATIONAL PRICES FOR WHEAT AND COARSE GRAINS

Period	Wheat			Maize		Barley		Sorghum
	US No. 2 Hard Red Winter Ord. Prot. ¹	US Soft Red Winter No. 2 ²	Argentina Trigo Pan ³	US No. 2 Yellow ²	Argentina ³	France feed Rouen	Australia feed Southern States	US No. 2 Yellow ²
..... (USD/tonne)								
Annual (July/June)								
2013/14	317	265	335	217	218	243	241	244
2014/15	266	220	254	173	177	205	243	247
2015/16	211	194	208	167	170	174	185	192
2016/17	197	170	190	156	173	159	162	172
2017/18	230	188	204	159	165	193	222	192
2018/19	232	210	233	166	166	219	265	183
2019/20	220	219	231	163	163	184	215	190
2020/21	269	254	263	219	224	242	218	308
2021/22	400	343	349	288	275	329	295	345
2022/23	389	306	385	299	288	289	291	343
2023/24	295	240	272	207	213	223	245	257
2023 – May	365	249	366	268	254	238	255	307
2023 – June	346	257	360	267	237	239	232	292
2023 – July	345	252	335	237	228	248	234	277
2023 – August	316	235	322	208	220	234	243	243
2023 – September	315	231	313	224	237	235	257	247
2023 – October	297	237	303	225	246	230	258	268
2023 – November	284	241	258	209	213	223	252	271
2023 – December	290	256	247	204	217	226	255	269
2024 – January	284	248	245	197	208	216	249	255
2024 – February	279	246	233	189	191	203	236	239
2024 – March	274	221	222	190	190	200	229	252
2024 – April	272	222	243	191	194	208	236	251
2024 – May	286	250	275	197	200	232	247	254

¹ Delivered United States f.o.b Gulf; ² Delivered United States Gulf; ³ Up River f.o.b.

Sources: International Grains Council. 2024. Export Prices. [Accessed on 5 June 2024]. <https://www.igc.int/en/markets/marketinfo-prices.aspx>;

United States Department of Agriculture. 2024. Louisiana and Texas Export Bids. [Accessed on 5 June 2024]. <https://mymarketnews.ams.usda.gov/viewReport/3147>.

APPENDIX TABLE 22: TOTAL WHEAT AND MAIZE FUTURES PRICES

	July		September		December		March	
	July 2023	July 2022	Sept 2023	Sept 2022	Dec 2023	Dec 2022	Mar 2024	Mar 2023
..... (USD/tonne)								
Wheat								
April 19	208	255	215	259	224	264	239	268
April 26	229	236	236	240	245	247	254	251
May 4	229	237	236	241	246	248	259	252
May 10	244	236	251	240	259	246	268	250
May 17	239	230	247	234	256	241	265	246
May 24	256	223	263	227	271	234	273	239
Maize								
April 19	174	251	178	224	184	222	189	225
April 26	177	237	181	215	186	214	192	218
May 4	181	232	185	208	190	208	195	212
May 10	185	234	189	206	194	205	198	209
May 17	178	221	182	196	188	196	193	201
May 24	182	231	186	203	192	205	196	208

Source: United States Department of Agriculture. 2024. Louisiana and Texas Export Bids. [Accessed on 5 June 2024]. <https://mymarketnews.ams.usda.gov/viewReport/3147>.

APPENDIX TABLE 23: SELECTED INTERNATIONAL PRICES FOR RICE AND PRICE INDICES

Period	International prices				FAO indices				
	Thai 100% B ¹	Thai broken ²	US long grain ³	Pakistan Basmati ⁴	FAO All Rice Price Index	Indica	Japonica	Aromatic	Glutinous
Annual (Jan/Dec)(USD per tonne) (2014-2016=100)				
2017	415	334	456	1131	99	100	80	101	88
2018	445	365	531	1023	106	108	91	108	89
2019	435	385	500	982	101	101	80	106	124
2020	515	431	597	970	110	114	90	98	124
2021	476	415	570	778	106	112	101	87	87
2022	451	405	649	1068	109	110	129	102	88
2023	567	462	721	1204	132	138	137	114	103
Monthly									
2023 – May	524	446	715	1372	128	131	147	117	98
2023 – June	528	435	716	1244	126	130	141	113	97
2023 - July	562	448	712	1125	130	135	140	111	100
2023 - August	645	486	708	1109	142	151	140	115	114
2023 – September	640	475	722	1102	142	152	124	113	119
2023 – October	604	469	725	1103	139	149	113	113	113
2023 – November	602	482	732	984	139	150	111	110	105
2023 – December	658	495	728	956	141	154	110	107	105
2024 – January	675	489	732	1017	143	156	110	108	107
2024 - February	646	491	764	974	141	154	110	105	105
2024 - March	630	485	793	959	138	152	105	104	102
2024 – April	606	468	780	947	136	148	103	103	102
2024 – May	642	476	782	907	137	151	104	103	104

¹ White rice - 100% second grade - f.o.b. Bangkok - indicative traded prices.

² A1 super - f.o.b. Bangkok - indicative traded prices.

³ US No.2 - 4% broken f.o.b.

⁴ Super Kernel White Basmati Rice 2%.

Note: The FAO Rice Price Index is based on 21 rice export quotations. 'Quality' is defined by the percentage of broken kernels, with higher (lower) quality referring to rice with less (equal to or more) than 15 percent broken. The sub-index for Aromatic Rice follows movements in prices of Basmati and Fragrant rice.

Sources: FAO for indices. Rice prices: Creed Rice Market Report, Livericeindex.com, Thai Department of Foreign Trade (DFT), Viettraders and other public sources

APPENDIX TABLE 24: SELECTED INTERNATIONAL PRICES FOR OILCROP PRODUCTS AND PRICE INDICES

Period	International prices ¹					FAO indices ⁸		
	Soybeans ²	Soybean oil ³	Palm oil ⁴	Soybean cake ⁵	Rapeseed meal ⁶	Oilseeds	Vegetable oils	Oilcakes/meals
 (USD per tonne) (2014-2016=100)		
Annual (Oct/Sep)								
2013/14	521	949	867	534	324	120	116	128
2014/15	407	777	658	406	270	95	93	99
2015/16	396	773	655	351	232	93	95	85
2016/17	404	806	729	336	225	95	103	81
2017/18	402	820	648	381	258	94	94	93
2018/19	370	744	523	328	247	88	80	81
2019/20	379	783	668	338	243	90	93	84
2020/21	561	1272	1075	464	347	133	149	115
2021/22	641	1671	1423	520	405	156	196	129
2022/23	589	1231	994	530	348	134	133	127
Monthly								
2023 - May	518	963	935	480	298	117	119	116
2023 - Jun	521	994	893	476	312	118	116	115
2023 - Jul	567	1141	983	517	336	128	130	124
2023 - Aug	556	1127	956	495	321	126	126	119
2023 - Sep	559	1100	920	489	301	125	121	117
2023 - Oct	532	1140	890	506	290	119	120	120
2023 - Nov	557	1121	948	578	330	125	124	136
2023 - Dec	545	1070	941	528	327	123	122	126
2024 - Jan	530	1029	956	485	313	121	122	117
2024 - Feb	507	920	966	456	298	115	121	110
2024 - Mar	489	991	1051	428	310	113	131	104
2024 - Apr	485	971	1039	406	314	112	131	100
2024 - May ⁷	494	989	974	451	323	115	128	110

¹ Spot prices for nearest forward shipment

² Soybeans: US, No.2 yellow, c.i.f. Rotterdam

³ Soybean oil: Dutch, fob ex-mill

⁴ Palm oil: Crude, c.i.f. Northwest Europe

⁵ Soybean cake: Pellets, 44/45 percent, Argentina, c.i.f. Rotterdam

⁶ Rapeseed meal: 34 percent, Hamburg, f.o.b. ex-mill

⁷ The international prices shown represent averages for four out of five quotations for the month.

⁸ The FAO indices are based on the international prices of five selected seeds, ten selected oils and five selected cakes and meals. The indices are calculated using the Laspeyres formula; the weights used are derived from the export values of each commodity for the 2014–2016 period.

Sources: FAO and Oil World.

APPENDIX TABLE 25: SELECTED INTERNATIONAL PRICES FOR SUGAR AND SUGAR PRICE INDEX

Annual (Jan/Dec)	I.S.A. daily price average ¹	FAO Sugar Price Index (2014/16 = 100)
	Raw sugar	
	(US Cents/lb)	(2014/16=100)
2011	26	160.9
2012	21.5	133.3
2013	17.7	109.5
2014	17	105.2
2015	13.4	83.2
2016	18	111.6
2017	16	99.1
2018	12.5	77.4
2019	12.7	78.6
2020	12.9	79.5
2021	17.7	109.3
2022	18.5	114.5
2023	23.4	145.0
Monthly		
2022 - May	19.5	120.4
2022 - June	19.0	117.3
2022 - July	18.2	112.8
2022 - August	17.9	110.5
2022 - September	17.7	109.7
2022 - October	17.5	108.6
2022 - November	18.5	114.4
2022 - December	18.9	117.2
2023 - January	18.9	116.8
2023 - February	20.2	125.2
2023 - March	20.5	127.0
2023 - April	24.1	149.4
2023 - May	25.4	157.2
2023 - June	24.6	152.2
2023 - July	23.6	146.3
2023 - August	23.9	148.2
2023 - September	26.3	162.7
2023 - October	25.7	159.2
2023 - November	26.1	161.4
2023 - December	21.7	134.2
2024 - January	22.0	136.4
2024 - February	22.7	140.8
2024 - March	21.5	133.4
2024 - April	20.5	126.6
2024 - May	18.9	117.1

¹ International Sugar Agreement (ISA) prices: simple average of the closing quotes for the first three future positions of the New York Intercontinental Exchange (ICE) Sugar Contract No. 11.

Source: International Sugar Organization (ISO). FAO for the sugar index.

APPENDIX TABLE 26: SELECTED INTERNATIONAL PRICES FOR MILK PRODUCTS AND DAIRY PRICE INDEX

Period	International prices				FAO dairy price index
	Butter ¹	Skim milk powder ²	Whole milk powder ³	Cheddar cheese ⁴	
Annual (Jan/Dec) (USD per tonne) (2014-2016=100) ...
2013	4 784	4 148	4 730	4 563	141
2014	4 278	3 606	3 854	4 542	130
2015	3 306	2 089	2 537	3 076	87
2016	3 473	1 986	2 481	2 807	83
2017	5 641	2 011	3 163	3 664	108
2018	5 587	1 834	3 060	3 736	107
2019	4 443	2 440	3 186	3 435	103
2020	3 844	2 606	3 041	3 506	102
2021	4 995	3 181	3 855	3 850	120
2022	6 608	3 865	4 253	4 998	150
2023	5 100	2 693	3 327	4 486	124
Monthly					
2023 – May	5 058	2 731	3 423	4 312	122
2023 – June	5 167	2 730	3 402	4 177	120
2023 – July	5 062	2 607	3 418	4 191	119
2023 – August	4 825	2 470	3 090	4 121	114
2023 – September	4 736	2 430	2 995	4 040	112
2023 – October	4 994	2 642	3 229	3 976	115
2023 – November	5 412	2 778	3 324	3 913	116
2023 – December	5 644	2 773	3 418	3 968	119
2024 – January	5 827	2 714	3 507	3 911	119
2024 – February	6 078	2 721	3 556	3 961	121
2024 – March	6 233	2 632	3 435	4 223	124
2024 – April	6 312	2 568	3 459	4 202	124
2024 – May	6 549	2 605	3 577	4 232	126

¹ Butter - 82% butterfat - f.o.b. Oceania and EU; average indicative traded prices.

² Skim Milk Powder - 1.25% butterfat - f.o.b. Oceania and EU - averaged indicative traded prices.

³ Whole Milk Powder - 26% butterfat - f.o.b. Oceania and EU - average indicative traded prices.

⁴ Cheddar Cheese, 39% max. moisture, f.o.b. Oceania and EU, indicative traded prices

Note: The FAO Dairy Price Index is derived from a trade-weighted average of a selection of representative internationally-traded dairy products from the European Union and Oceania.

APPENDIX TABLE 27: SELECTED INTERNATIONAL MEAT PRICES

Period	Bovine meat prices			Ovine meat price		Pig meat prices			Poultry meat prices	
	Australia	United States of America	Brazil	New Zealand	Australia	United States of America	Brazil	Germany	United States of America	Brazil
Annual (Jan/Dec) (USD per tonne)									
2013	4 009	6 314	4 527	4 130	4 132	2 981	2 797	2 311	1 229	1 972
2014	5 016	7 361	4 712	4 701	4 686	3 233	3 411	2 106	1 205	1 886
2015	4 699	7 195	4 320	3 643	4 042	2 669	2 482	1 582	1 002	1 604
2016	4 171	6 390	4 053	3 578	3 978	2 648	2 129	1 682	914	1 501
2017	4 463	6 676	4 196	4 488	4 710	2 687	2 475	1 871	1 000	1 631
2018	4 198	7 118	4 045	5 244	4 979	2 587	1 959	1 728	970	1 537
2019	4 873	7 119	4 119	5 127	5 097	2 626	2 245	1 989	972	1 618
2020	4 676	6 898	4 336	4 561	5 071	2 569	2 370	1 834	962	1 407
2021	5 544	8 313	5 032	5 643	5 898	2 756	2 432	1 655	1 164	1 626
2022	5 795	8 853	5 905	5 616	5 151	2 852	2 363	1 979	1 338	1 985
2023	5 135	8 748	4 748	5 745	3 664	2 826	2 419	2 553	1 251	1 856
Monthly										
2023-May	5 334	8 628	5 096	6 025	3 892	2 800	2 587	2 660	1 281	1 949
2023-June	5 128	8 934	5 054	5 842	3 510	2 845	2 556	2 754	1 335	1 948
2023-July	5 034	8 901	4 740	5 881	3 331	2 955	2 478	2 871	1 307	1 914
2023-August	5 023	9 078	4 511	5 493	3 144	2 910	2 379	2 667	1 257	1 843
2023-September	5 173	9 130	4 537	5 583	3 161	2 931	2 322	2 546	1 255	1 750
2023-October	5 136	9 258	4 597	5 406	2 674	2 814	2 287	2 363	1 291	1 762
2023-November	5 037	9 103	4 592	5 162	2 635	2 891	2 287	2 383	1 243	1 768
2023-December	4 931	9 105	4 547	5 661	2 858	2 881	2 228	2 406	1 225	1 738
2024-January	4 978	8 764	4 523	5 526	3 043	2 759	2 182	2 345	1 233	1 658
2024-February	5 289	9 197	4 527	5 403	2 834	2 787	2 260	2 417	1 286	1 734
2024-March	5 634	9 363	4 529	5 344	2 647	2 901	2 273	2 511	1 267	1 752
2024-April	6 022	9 455	4 532	5 178	2 771	2 953	2 301	2 475	1 254	1 806
2024-May	5 855	9 581	4 517	5 285	2 796	2 992	2 295	2 499	1 239	1 770

Notes:

Bovine meat prices:

Australia: Cow 90CL export prices to the USA (FAS)

United States of America: Meat of bovine (fresh, chilled or frozen), export unit value

Brazil: Meat of bovine (fresh, chilled or frozen), export unit value

Ovine meat prices:

New Zealand: Medium trade lamb 17.5kg

Australia: Medium trade lamb 18-20kg

Pig meat prices:

United States of America: Meat of Swine (fresh, chilled or frozen), export unit value

Brazil: Meat of Swine (fresh, chilled or frozen), export unit value

Germany: Monthly market price for pig carcass grade E

Poultry meat prices:

United States of America: Chicken Cuts and Edible Offal (fresh, chilled or frozen), export unit value

Brazil: Meat and Edible Offal of Poultry (fresh, chilled or frozen), export unit value

Prices for the two most recent months may be estimates and subject to revision.

APPENDIX TABLE 28: SELECTED INTERNATIONAL MEAT PRICES AND FAO MEAT PRICE INDICES

FAO indices

Period	Total meat	Poultry meat	Pig meat	Bovine meat	Ovine meat
Annual (Jan/Dec) (2014-2016=100)				
2013	106	118	113	93	101
2014	112	114	117	107	114
2015	97	96	92	102	94
2016	91	90	92	91	92
2017	98	98	98	96	112
2018	95	93	91	96	124
2019	100	96	98	101	124
2020	96	87	94	100	117
2021	108	102	94	118	141
2022	119	122	102	128	131
2023	115	114	113	116	114
Monthly					
2023-May	118	119	116	119	121
2023-June	119	120	118	119	114
2023-July	118	118	122	117	112
2023-August	115	114	117	116	105
2023-September	114	109	115	118	106
2023-October	113	111	109	119	98
2023-November	112	110	111	117	95
2023-December	112	108	111	116	103
2024-January	109	105	107	114	104
2024-February	113	110	109	119	100
2024-March	115	110	113	122	97
2024-April	117	112	114	126	97
2024-May	117	110	115	125	98

Notes:

The **FAO Meat Price Indices** consist of 2 poultry meat product quotations (the average weighted by assumed fixed trade weights), 3 bovine meat product quotations (average weighted by assumed fixed trade weights), 3 pig meat product quotations (average weighted by assumed fixed trade weights), 2 ovine meat product quotation (average weighted by assumed fixed trade weights): the four meat group average prices are weighted by world average export trade shares for 2014/2016.

Prices for the two most recent months may be estimates and subject to revision.

APPENDIX TABLE 29: FISH PRICE INDICES

Period	Total	Whitefish	Salmon	Shrimp	Pelagic excl. tuna	Tuna
Annual (Jan/Dec) (2014-2016=100)					
2013	104	104	99	99	107	119
2014	107	105	102	113	100	108
2015	92	97	84	92	99	91
2016	102	97	114	94	101	101
2017	106	108	117	96	92	112
2018	106	118	119	88	96	105
2019	102	121	108	86	92	100
2020	94	107	97	83	92	93
2021	100	117	109	84	99	87
2022	119	157	134	86	107	102
2023	117	140	143	72	103	129
Monthly						
2022 - January	113	135	127	90	101	106
2022 - February	119	141	146	91	91	106
2022 - March	126	176	147	90	93	97
2022 - April	132	177	170	90	100	93
2022 - May	132	176	163	88	112	101
2022 - June	133	184	158	88	119	99
2022 - July	118	157	135	87	99	94
2022 - August	117	159	116	87	125	104
2022 - September	108	156	98	83	96	105
2022 - October	115	145	107	82	162	114
2022 - November	106	141	112	78	93	101
2022 - December	110	141	128	76	92	106
2023 - January	120	144	148	75	97	130
2023 - February	121	144	156	74	100	124
2023 - March	127	140	180	74	97	133
2023 - April	124	138	171	74	99	131
2023 - May	123	141	162	73	96	134
2023 - June	124	141	151	73	125	140
2023 - July	118	140	143	71	110	131
2023 - August	111	137	121	71	101	133
2023 - September	107	136	114	71	103	121
2023 - October	110	136	120	71	108	127
2023 - November	111	144	119	70	103	127
2023 - December	111	134	135	69	97	115
2024 - January	119	136	162	69	108	115
2024 - February	120	138	163	70	97	120
2024 - March	117	138	161	70	99	106
2024 - April	119	137	172	70	95	99

Source of the raw data for the FAO Fish Price Index: EUMOFA, INFOFISH, INFOPECSA, Statistics Norway, Danish Fisheries Agency.

APPENDIX TABLE 30: SELECTED INTERNATIONAL COMMODITY PRICES

	Currency and unit	Effective date	Latest quotation	One month ago	One year ago	Average 2019-2023
Sugar (ISA daily price)	US cents per lb	23-05-24	18.36	20.46	25.40	17.03
Coffee (ICO daily price)	US cents per lb	22-05-24	218.62	216.89	175.48	143.12
Cocoa (ICCO daily price)	US cents per lb	23-05-24	353.62	458.63	133.8	116.22
Tea (FAO Tea Composite Price)	USD per kg	28-04-24	2.63	2.64	2.64	2.55
Cotton (COTLOOK A index)	US cents per lb	23-04-24	90.30	99.74	95.16	95.19
Jute "BTB" (Fob Bangladesh Port)	USD per tonne	28-04-24	840.00	780.00	950.00	1036.42

NEW RELEASES!



The **Meat Market Review** summarizes the salient trends and drivers of market developments and significant public policy changes in 2023. The review shows that world meat production increased in 2023, reflecting production increases across all meat types, driven by favourable production conditions in some producing regions.

Published: April 2024

The report is available at:

<https://openknowledge.fao.org/handle/20.500.14283/cd0465en>



The **Dairy Market Review** summarizes the salient trends and drivers of market developments in 2023. The review finds that international dairy prices weakened significantly in 2023. Additionally, global milk production expanded at a slightly faster pace in 2023 and international dairy trade contracted for the second consecutive year, albeit slower than the previous year.

Published: April 2024

The report is available at:

<https://openknowledge.fao.org/handle/20.500.14283/cd0443en>

Food Outlook is published by the Markets and Trade Division of FAO under the Global Information and Early Warning System (GIEWS). It is a biannual publication focusing on developments affecting global food and feed markets. Each report provides comprehensive assessments and short term forecasts for production, utilization, trade, stocks and prices on a commodity by commodity basis and includes feature articles on topical issues. Food Outlook maintains a close synergy with another major GIEWS publication, Crop Prospects and Food Situation, especially with regard to the coverage of cereals. Food Outlook is available in English. The summary section is also available in Arabic, Chinese, French, Russian and Spanish.

Food Outlook and other GIEWS reports are available on the internet as part of the FAO world wide web (<http://www.fao.org/>) at the following URL address: <http://www.fao.org/giews/>. Other relevant studies on markets and global food situation can be found at <http://www.fao.org/worldfoodsituation>.

This report is based on information available up to late May 2024.

For enquiries or further information contact:

Markets and Trade – Economic and Social Development

Markets-Trade@fao.org

giews1@fao.org

Food and Agriculture Organization of the United Nations

Rome, Italy

ISBN 978-92-5-138860-0 ISSN 0251-1959



9 789251 388600

CD1158EN/1/06.23