



Market Monitor



No. 111 September 2023

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Markets at a glance

	FROM PREVIOUS FORECASTS	FROM PREVIOUS SEASON
WHEAT	Neutral	Tightening
MAIZE	Easing	Easing
RICE	Tightening	Tightening
SOYBEANS	Neutral	Easing

The war in Ukraine and India's export restrictions on rice have dominated commodity news in recent weeks. In late July, India announced a ban on non-Basmati rice exports and has since then imposed further restrictions on Basmati and parboiled rice exports. Those restrictions, combined with El Niño-related concerns over rice production in the region, have roiled rice markets, with Thai prices rising 20 percent since last month. Wheat prices are still under pressure from abundant Black Sea exports at competitive prices, but markets remain volatile as the termination of the Black Sea Grain Initiative and Russian attacks on Ukraine export facilities have heightened uncertainty. Global soybean and maize production prospects are improved this year with some stock rebuilding anticipated despite dryness in North America, Argentina and parts of Europe.

The **Market Monitor** is a product of the Agricultural Market Information System (AMIS). It covers international markets for wheat, maize, rice and soybeans, giving a synopsis of major market developments and the policy and other market drivers behind them. The analysis is a collective assessment of the market situation and outlook by the ten international organizations and entities that form the AMIS Secretariat.



Food and Agriculture
Organization of
the United Nations



IFAD
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to overcome poverty



WORLD TRADE
ORGANIZATION

GEOGLAM
Global Agricultural Monitoring

Feature article

Fuelling food prices: the role of fertilizer prices

The surge in agricultural input prices experienced over the last two years, especially those relying on energy derived from fossil fuels such as mineral fertilizers, has raised concerns about global food security. Mineral fertilizers play an important role in the agri-food sector by providing essential nutrients (nitrogen (N), phosphorus (P), and potassium (K)) for maintaining agricultural crop yield and quality. The production of mineral fertilizers depends on the availability of natural resources for raw material and energy to power the synthesis process, so only a few countries supply the market, making these heavily traded commodities sensitive to shocks at global scale.

Mineral fertilizer prices rose sharply in 2021 on account of rising energy and transport costs following the COVID-19 pandemic and the EU/US's ban for Belarusian fertilizer exports. Prices climbed further due to the war in Ukraine and the subsequent sanctions imposed on shipments from the Russian Federation, a major fertilizer exporter, with some quotations increasing up to threefold compared to spring 2021.

A scenario analysis in this year's OECD-FAO Agricultural Outlook demonstrates how rising fertilizer costs can lead to higher food prices: for each hypothetical 1 percent increase in N-, P- and K-based fertilizer prices, agricultural commodity prices are estimated to increase by 0.2 percent (Figure 1), regardless of the initial level of prices. The impact is reflected more severely on crops that use fertilizers as direct inputs. However, even crops with lower fertilizing needs (such as soybean that naturally fixes nitrogen) would experience price increases due to substitution effects.

The mixed price effect within livestock products is explained by the difference in feeding across animals. On average, poultry and pigmeat would be the most impacted because their production relies heavily on compound feed manufactured from fertilizer-intensive crops.

The fertilizer module of the Outlook helps quantify the impacts of fertilizer price variations on crop commodities markets. As such, it will provide a welcome basis for discussions around food security in potential future fertilizer market crises. It will also help refine the baseline scenario of the Outlook, where global food consumption is currently expected to increase by a relatively modest 1.4 percent per year over the next decade on account of slower population and per capita income growth. Global production is also expected to grow slower than in previous decades due to a weakening of expected gross returns for producers, with a yearly rate of 1.1 percent over the next decade mostly driven by low- and middle-income countries.

High prices should subsist in the short-term for most agricultural commodities in view of continued economic risks, uncertainty, and high inputs prices. However, in the medium- and long-term growing demand for agricultural commodities is expected to be matched by increased production and improved productivity, leading to flat or slightly declining prices in real terms. To maintain this long-term trend, sustained investments in raising yields and improved farm management remain essential.

Including fertilizers in the model is also relevant from an environmental perspective. Under a business-as-usual scenario, the anticipated growth in agricultural production will result in a 7.5 percent increase in direct global greenhouse gas emissions over the next decade, with mineral fertilizers accounting for 11 percent of the overall increase. Making agriculture less dependent on mineral fertilizers through the adoption of better farming practices (e.g., crop rotation, better allocation of fertilizers over the season, use of enhanced technologies, integration of organic fertilizer, limitation on the quantities applied) will contribute to global efforts to mitigate climate change and help alleviate pressure on food security.

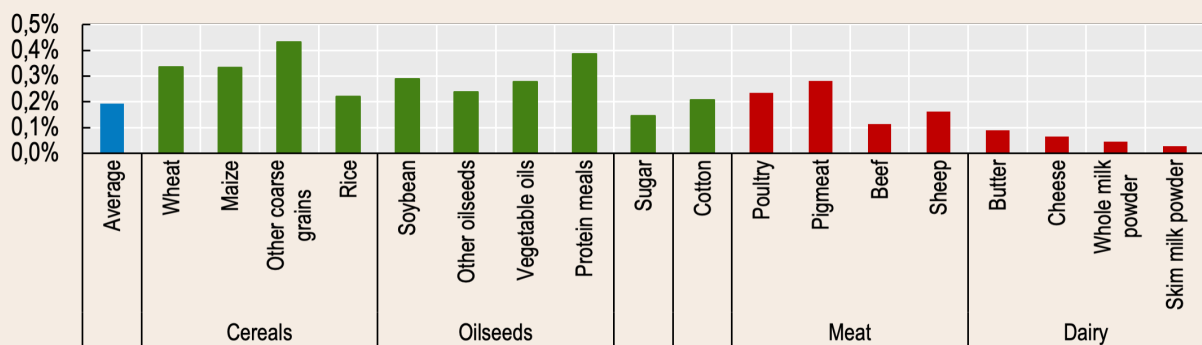


Figure 1. Change in agricultural commodity prices due to 1 percent increase in N, P, K fertilizer prices

Source: OECD/FAO (2023), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-outl-data-en>

World supply-demand outlook

WHEAT production in 2023 now falling by 2.6 percent below last year's level following a downward revision m/m on downgraded prospects in Canada and the EU owing to dry conditions, and in China due to heavy rains.

Utilization in 2023/24 lifted m/m, mostly reflecting higher utilization in India stemming from higher production prospects, and still rising slightly above the 2022/23 level.

Trade in 2023/24 (July/June) lowered this month and still heading for a decline from 2022/23 with a fall in shipments from Australia and Ukraine outweighing an increase in exports from Argentina and the Russian Federation.

Stocks (ending in 2024) raised slightly on upward revisions to inventories in the Russian Federation, Türkiye, Ukraine, and the US.

Wheat	FAO-AMIS			USDA		IGC	
	2022/23 est	2023/24 f'cast		2022/23 est	2023/24 f'cast	2022/23 est	2023/24 f'cast
		6 Jul	7 Sep				
Prod.	802.1	783.3	781.1	790.0	793.4	803.3	784.1
	664.4	645.3	644.5	652.2	656.4	665.6	647.6
Supply	1097.2	1094.4	1095.5	1062.6	1061.7	1076.9	1065.6
	825.6	814.9	817.4	788.1	785.9	807.3	789.9
Utiliz.	780.6	782.7	784.9	794.3	796.1	795.3	804.7
	637.9	639.7	641.9	646.3	644.1	652.5	655.3
Trade	200.2	195.3	193.3	214.0	211.8	206.6	197.2
	186.7	185.3	183.3	200.7	199.8	193.0	185.0
Stocks	314.4	313.9	315.2	268.3	265.6	281.6	260.9
	172.9	167.9	170.6	129.5	130.7	141.2	122.5

IN MILLION TONNES

MAIZE production forecast for 2023 raised this month, with larger outputs expected in Brazil, India, and Ukraine, and now rising by 4.2 percent above last year's output.

Utilization in 2023/24 virtually unchanged m/m and forecast to increase by 1.6 percent largely on growth in feed use.

Trade in 2023/24 (July/June) lowered this month, mostly reflecting smaller sales expected for Ukraine and the US, and lower import demand in Asia, and now pointing to a 1.7 percent decline from 2022/23.

Stocks (ending in 2024) lifted m/m, on higher inventories in Brazil and Ukraine, and now expected to increase by 6.3 percent above opening levels.

Maize	FAO-AMIS			USDA		IGC	
	2022/23 est	2023/24 f'cast		2022/23 est	2023/24 f'cast	2022/23 est	2023/24 f'cast
		6 Jul	7 Sep				
Prod.	1165.4	1211.3	1214.9	1151.8	1213.5	1160.4	1220.8
	888.2	930.3	933.9	874.6	936.5	883.2	943.4
Supply	1472.9	1499.7	1501.3	1462.0	1511.4	1446.3	1495.0
	1039.0	1064.2	1065.9	975.7	1029.1	980.9	1041.6
Utiliz.	1185.2	1202.9	1203.1	1164.1	1200.4	1172.1	1207.2
	887.8	900.5	900.7	865.1	896.4	863.6	901.8
Trade	180.9	179.3	177.9	178.1	194.1	179.6	171.5
	161.9	159.3	157.9	160.1	171.1	160.5	149.5
Stocks	286.5	300.9	304.5	297.9	311.0	274.2	287.7
	132.0	148.9	152.4	92.6	109.8	98.2	117.8

IN MILLION TONNES

RICE production in 2023/24 trimmed, as downgrades for Indonesia and Thailand, alongside somewhat lower output expectations for China and various other countries, outweighed increases primarily for Cambodia, Iran, Nigeria and the US.

Utilization in 2023/24 raised on greater food and industrial use expectations for India, which overshadowed a host of other revisions.

Trade in 2023 and 2024 lowered, with shipments in 2024 now seen recovering only modestly from the 2023 depressed level, especially if India's export restrictions prove protracted.

Stocks (2023/24 carry-outs) little changed from July, with carryovers in the major rice exporters seen expanding even more than previously envisaged, and largely driven by India, while aggregate reserves held by importers remain close to the eight-year low of 2022/23.

Rice	FAO-AMIS			USDA		IGC	
	2022/23 est	2023/24 f'cast		2022/23 est	2023/24 f'cast	2022/23 est	2023/24 f'cast
		6 Jul	7 Sep				
Prod.	517.5	523.7	523.2	512.8	520.9	514.3	523.3
	374.7	380.3	380.1	366.9	371.9	368.4	374.3
Supply	714.6	718.8	718.5	695.3	694.7	690.6	692.7
	471.2	476.0	475.8	436.3	439.1	438.4	440.8
Utiliz.	520.6	520.0	520.9	521.5	523.0	521.1	522.5
	373.7	374.7	376.1	366.5	371.0	369.7	371.5
Trade	52.4	56.4	53.3	53.8	52.9	52.5	51.2
	48.4	52.1	49.0	49.8	48.9	48.0	47.2
Stocks	195.3	198.5	198.1	173.8	171.8	169.5	170.2
	95.7	98.3	97.9	67.2	66.2	64.3	65.3

IN MILLION TONNES

SOYBEAN 2023/24 production lowered marginally from July forecasts, primarily reflecting reduced prospects in the US amid lingering hot and dry weather conditions.

Utilization in 2023/24 trimmed, chiefly driven by a downward adjustment for Brazil, while global consumption is still anticipated to increase by 6 percent y/y.

Trade in 2023/24 (Oct/Sep) downscaled on smaller export supplies from the US, while import forecasts are lowered for Egypt, the EU and Viet Nam.

Stocks (2023/24 carry-out) virtually unchanged since July, confirming expectations of a marked recovery from opening levels.

Soybean	FAO-AMIS			USDA		IGC	
	2022/23 est	2023/24 f'cast		2022/23 est	2023/24 f'cast	2022/23 est	2023/24 f'cast
		6 Jul	7 Sep				
Prod.	370.9	403.0	400.0	369.7	402.8	367.7	398.0
	350.6	382.0	379.0	349.5	382.3	347.4	376.5
Supply	414.3	448.4	445.7	468.9	505.9	413.3	451.9
	375.0	406.4	403.7	418.3	448.6	365.0	397.1
Utiliz.	368.2	391.4	389.5	363.3	383.9	359.4	388.0
	253.4	273.0	271.1	249.6	265.9	245.4	269.6
Trade	167.3	170.1	168.9	169.0	168.8	167.8	170.9
	70.7	70.6	69.4	69.0	69.8	68.8	70.9
Stocks	45.7	53.0	52.9	103.1	119.4	53.9	63.9
	24.7	30.0	29.9	66.3	81.2	20.5	27.6

IN MILLION TONNES

+i World Balances

Data shown in the second rows refer to world aggregates without China; world trade data refer to exports; and world trade without China excludes exports to China.

To review and compare data, by country and commodity, across three main sources, go to <https://app.amis-outlook.org/#/market-database/compare-sources>

Estimates and forecasts may differ across sources for many reasons, including different methodologies. For more information see [Explanatory notes](#) on the last page of this report.

World supply-demand outlook

Revisions (FAO-AMIS) to 2023/24 forecasts since the previous report

	WHEAT					MAIZE					RICE					SOYBEANS				
	Production	Imports	Utilization	Exports	Stocks	Production	Imports	Utilization	Exports	Stocks	Production	Imports	Utilization	Exports	Stocks	Production	Imports	Utilization	Exports	Stocks
WORLD	-2234	-1972	2260	-1940	1272	3617	-1375	187	-1410	3527	-534	-3024	824	-3009	-435	-2991	-1246	-1909	-1260	-70
Total AMIS	-2813	-704	2814	-1950	2026	4762	-704	691	-1400	3505	-1149	120	2168	-4510	785	-3191	-1246	-1907	-1260	-117
Argentina	-500	-	-	500	-300	-	-	-	-	-	102	-	37	-	-	-	-	100	-	-200
Australia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brazil	636	-600	-14	600	-800	4247	-	-53	2000	2300	13	-	-37	-	-	-	-	-1000	600	-
Canada	-2542	-	-83	-1300	-1300	980	-	980	-	-	-	-50	-	-	-	35	-	-145	200	-20
China Mainland	-1460	-	-	-	-1460	-	-	-	-	-	-299	-	-517	-100	-	-	-	-	-	-
Egypt	-	-	-	-	-124	-	-	-	-	-	-	-	20	-	30	-	-400	-350	-	-50
EU	-5703	300	-427	-1500	-3530	-2453	-	201	700	-3600	54	-	41	-	-20	-76	-476	-542	-10	300
India	2743	146	2789	-250	500	1000	-4	700	-100	300	-	-	2822	-5680	2000	-	-	248	-	-200
Indonesia	-	-	-	-	-	-	-	-	-	-	-896	200	53	-	100	-	-100	-100	-	-
Japan	-	-	-	-	28	-	-	-	-	-	-	-	-107	-	-100	-	200	155	-	165
Kazakhstan	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	95	-	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	300	-350	-50	-	160	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rep. of Korea	-	-	-	-	-	-	-	-	-	-	-52	70	128	-	-350	-	-	-	-	-
Russian Fed.*	-	-	-	-	4549	-	-	-	-	-	-	20	5	-10	-5	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	42	-50	-8	-	-	55	-	55	-	-	-	-	-	-	-	-	-	-174	-	42
Thailand	-	-	-	-	-	-	-	-	-	-	-894	-	-285	430	-930	-	-300	-120	-	-
Türkiye	-	-	-	-	1096	-	-300	-	-	-	6	-20	16	-	40	-	-	-	-	-
Ukraine**	2000	-	-	-	1305	4500	-	-	-3000	5883	-	-	-	-	-	400	-	30	200	250
UK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
US	1876	-500	462	-	1462	-3917	-	-1142	-1000	-1378	347	-50	33	100	30	-3550	280	400	-2250	-330
Viet Nam	-	-	-	-	100	350	-400	-50	-	-	169	300	9	750	-170	-	-450	-409	-	-74

In thousand tonnes

+i Note

Only significant changes (of more than 1 000 tonnes) are displayed in the table.

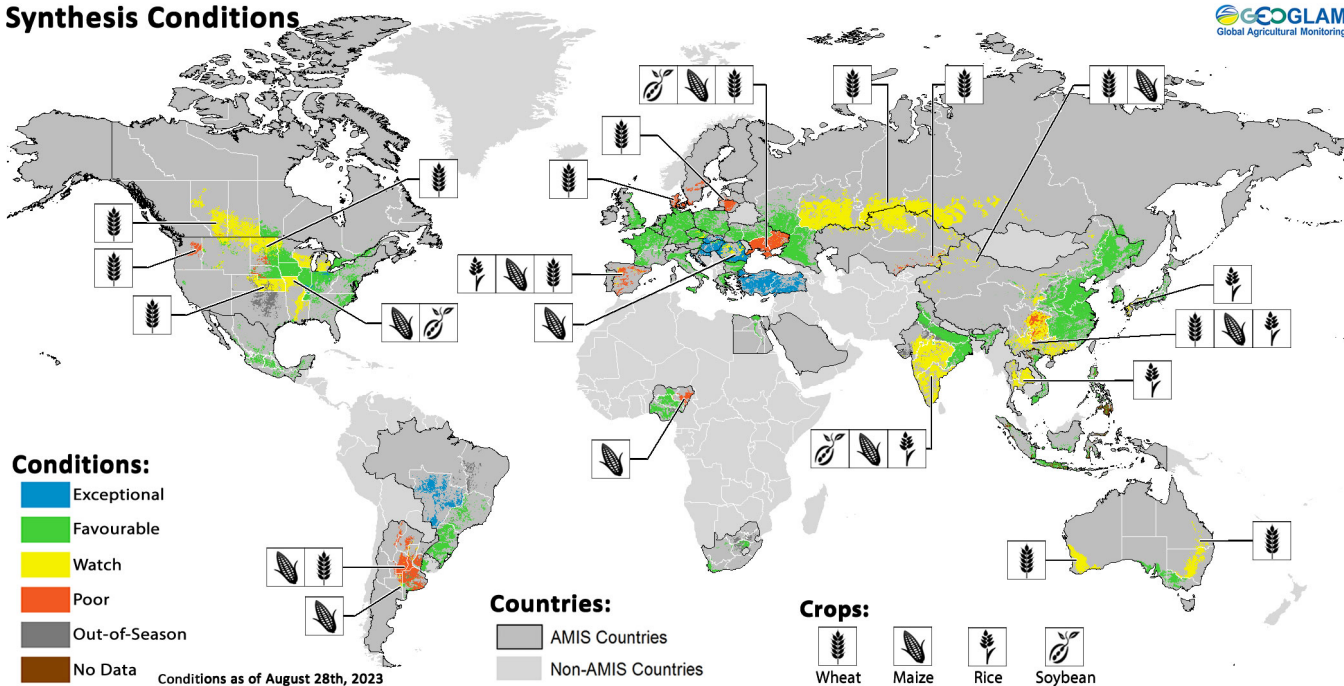
*Information for the Russian Federation includes statistical data for the Autonomous Republic of Crimea and the city of Sevastopol, Ukraine, temporarily occupied by the Russian Federation.

**Information for Ukraine excludes statistical data concerning the Autonomous Republic of Crimea, the city of Sevastopol and the Donetsk, Luhansk, Kherson and Zaporizhzhia regions. The information is presented without prejudice to relevant UN General Assembly and UN Security Council resolutions, which reaffirm the territorial integrity of Ukraine.

Crop monitor

Crop conditions around the world

Synthesis Conditions



Crop condition map synthesizing information for all four AMIS crops as of 28 August. Crop conditions over the main growing areas for wheat, maize, rice, and soybean are based on a combination of national and regional crop analyst inputs and earth observation data. Only crops that are in other-than-favourable conditions are displayed on the map with their crop symbol

Conditions at a glance

Wheat

In the northern hemisphere, winter and spring wheat harvesting is wrapping up under mixed conditions with drought in several areas. In the southern hemisphere, there are expanding dry concerns in Argentina and Australia.

Maize

In the southern hemisphere, exceptional yields are expected in Brazil while poor outputs are expected in Argentina due to persistent drought. In the northern hemisphere, conditions remain mixed.

Rice

In China, dry and hot conditions expanded in the south and southwest. In India, Kharif crops have recovered from delayed rains in the east. In Southeast Asia, conditions are mostly favourable except in Thailand.

Soybeans

In the northern hemisphere, crops are developing under mixed conditions with some improvement in the western hemisphere due to enhanced rains.

El Niño Advisory and Positive IOD Watch

The El Niño-Southern Oscillation (ENSO) is currently in the El Niño phase and forecast to reach a strong level of intensity during October to January (66 percent chance) and remain active until March to May (82 percent chance), according to the IR-1/CPC forecast.

El Niño events tend to result in wheat yield declines around 15 percent in Morocco and 5 percent or less in India, China, Australia, southeastern South America, and parts of Europe and North Africa, deficit maize production in India, China, southeastern Africa, and parts of Central America and northern South

America, reduced rice yields in major production regions of South and Southeast Asia, and improved soybean yields in both the United States and Argentina and reduced yields in India. Positive Indian Ocean Dipole (IOD) conditions are forecast for September to January, according to the Australian Bureau of Meteorology. Positive IOD conditions typically enhance the drying influences of El Niño in Australia and the Maritime Continent, and substantially increase the chances of a wet and intense East Africa short rains season during El Niño events.

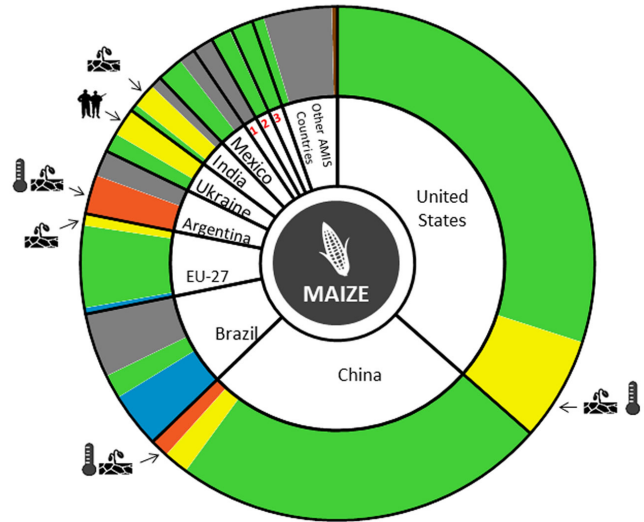
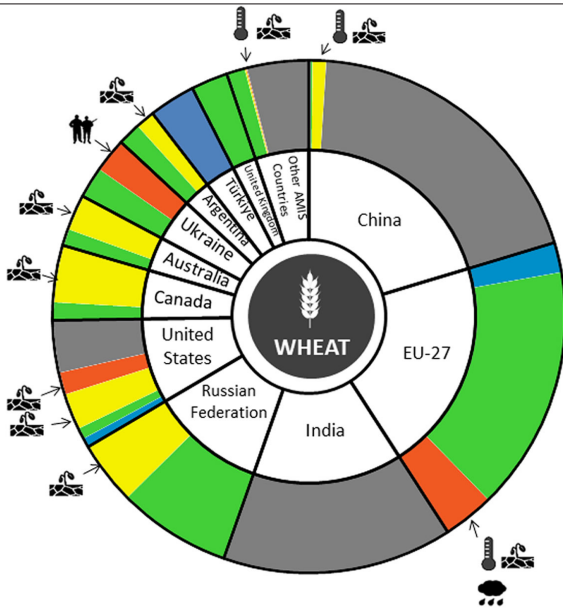
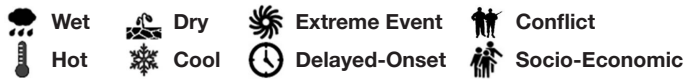
Source: UCSB Climate Hazards Center

Crop monitor

Conditions



Drivers



South Africa¹, Russian Federation², Canada³

Summaries by crop

Wheat

In the **EU**, harvest finalized under mixed conditions as persistent dryness impacted Lithuania and Latvia, and recent exceptionally wet conditions caused yield drops in Denmark and Sweden. In the **UK**, end of season conditions are favourable despite recent below-average temperatures and excessive frequent rains. In **Türkiye**, harvesting finalized under exceptional conditions due to conducive weather in May and June. In **Ukraine**, end of season conditions are favourable for unoccupied territories. In the **Russian Federation**, winter harvesting is favourable. Persistent drought remains a concern for spring crops despite improved August rainfall. In **China**, harvesting of spring crops is nearing completion with ongoing concern over the northwest and north-centre due to dry and hot weather. In the **US**, below-average winter yields are expected in the Dakotas, Nebraska, and the Pacific Northwest. Spring wheat conditions have been downgraded due to possible yield declines. In **Canada**, conditions remain mixed for both winter and spring crops with ongoing summer drought concerns in the western Prairies expected to significantly hamper durum wheat production. In **Australia**, dry concerns are expanding into New South Wales while the south and southeast remain favourable. In **Argentina**, conditions are mixed with dryness in the centre and north.

Maize

In **Brazil**, above-average summer-planted (larger season) crop yields are expected in the major producing central-west. In **Argentina**, drought and extreme heat significantly impacted the late-planted (usually smaller season) crop. In the **US**, conditions improved in parts of the Corn Belt with above-average yields possible in some eastern states while severe drought continues to impact parts of the interior. In **Mexico**, conditions have improved for the Spring-Summer (larger season) as Hurricane Hilary and tropical showers provided much-needed moisture relief. In **Canada**, conditions have been consistently advantageous in the main producing east. In **China**, harvesting of the spring-planted crop is nearing completion with concern in the northwest and southwest due to persistent dry and hot weather. Conditions are favourable for the summer-planted crop except in the southwest. In **India**, Kharif crops are developing with expanding dry concerns in all areas except in the north. In the **EU**, heatwaves and dry conditions impacted Romania and the Czech Republic, and water use restrictions may impact yields in Spain. In **Ukraine**, conditions in unoccupied regions are favourable despite a prolonged period of hot and dry weather that accelerated ripening. In the **Russian Federation**, conditions remain favourable.

+i Pie chart description

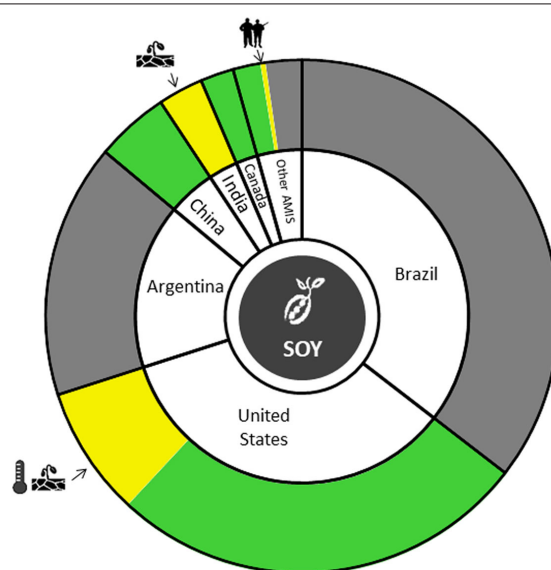
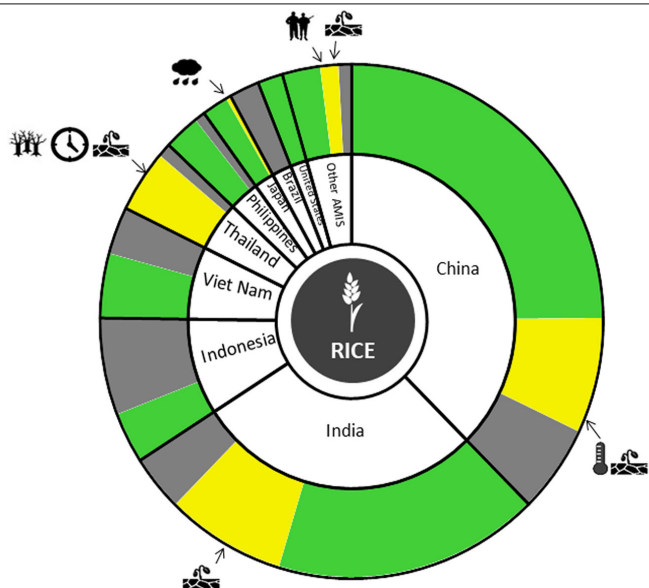
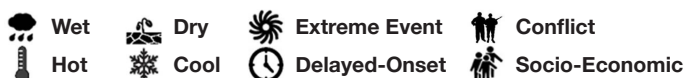
Each slice represents a country's share of total AMIS production (5-year average), with the main producing countries (95 percent of production) shown individually and the remaining 5 percent grouped into the "Other AMIS Countries" category. Sections within each country are weighted by the sub-national production statistics (5-year average) of the respective country and account for multiple cropping seasons (i.e. spring and winter wheat). The late vegetative to reproductive crop growth stages are generally the most sensitive periods for crop development.

Crop monitor

Conditions



Drivers



Rice

In **China**, harvesting of the single-season crop commenced while the late-season continues to develop with expanding dry and hot concerns in the south and southwest. In **India**, Kharif season crops recovered from delayed rainfall onset in the east while deficient rainfall is now impacting the centre. In **Indonesia**, planting of dry-season rice continues while harvesting of earlier planted crops is underway, and yields are near-normal despite less precipitation received during the growing season. In northern **Viet Nam**, planting and development of wet-season rice (both seasonal and summer-autumn) continues with adequate irrigation preparation. In the south, conditions are favourable for the wet-season crop (both summer-autumn and autumn-winter). In **Thailand**, wet-season yields are expected to decrease compared to last year due to ongoing drought and a high risk of damage from pests and disease. In the **Philippines**, conditions are favourable for the wet-season. In **Japan**, paddy development is supported by conducive hot and sunny weather, but some southern areas were impacted by seasonal rain and typhoon activity. In the **US**, conditions remain favourable.

Soybeans

In the **US**, persistent drought continues to impact parts of the Lake States, Central Plains, and Delta region while conditions improved elsewhere. In **China**, crops continue to develop under favourable conditions for harvest from September. In **India**, conditions have been downgraded to watch due to limited precipitation received in August. In **Canada**, conditions are favourable as recent precipitation in parts of the Prairie region improved pod fill. In **Ukraine**, generally conducive weather conditions have mostly benefitted crop development in areas that were able to plant.

Information on crop conditions in non-AMIS countries can be found in the GEOGLAM Early Warning Crop Monitor, published 28 August.

+i Sources and disclaimers

The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO, IFPRI & IRRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & GeoTerraImage & SANSa), Thailand (GISTDA & OAE), Ukraine (NASU-NSAU & UHMC), USA (NASA, UMD, USGS - FEWS NET, USDA (FAS, NASS)), Viet Nam (VAST & VIMHEMARD). The findings and conclusions in this joint multiagency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts. More detailed information on the GEOGLAM crop assessments is available at <https://cropmonitor.org>.

Policy developments

In July and August, wheat and rice markets were buffeted by policy developments in major exporting countries. An export ban imposed by India on non-basmati white rice led to reactions both by market actors and other governments, while wheat markets continued to be affected by the evolving policy environment in the Black Sea region and beyond in the wake of Russia's withdrawal from the Black Sea Grain Initiative.

Wheat

- On 15 August 2023, **Vietnam** issued a regulation easing phytosanitary restrictions on field thistle seeds that has been in force since 1 November 2018. From 1 October, the move is set to ease Vietnamese imports of wheat from the northern hemisphere.

Maize

- On 29 June, **Brazil** announced it would purchase 500 000 tonnes of maize from rural producers with the aim of replenishing public food reserves, resuming a policy that had been discontinued under the previous government. An allocation of BRL 350 million (USD 71 million) has been allocated to support stock purchases, which the government sees as a way to help stabilize prices when supplies are low and to help farmers sell their output at the legally mandated minimum price.
- On 24 July, **Argentina** issued a decree establishing until 31 August a preferential exchange rate for maize exports, set at ARS 340 per USD. Maize was previously excluded from a similar scheme when the soybean-dollar programme was extended to more than 50 products in April of this year (see AMIS Market Monitor, May 2023).
- On 25 July 2023, **Canada** issued a statement indicating that it will join, as a third country party, the dispute which the United States has initiated with Mexico, under the Canada-United States-Mexico Agreement (CUSMA), over the use of biotech maize in food.

Rice

- On 20 July, **India** implemented a ban on the export of non-basmati white rice, citing a significant rise in domestic rice prices. The move follows a previously imposed ban on broken rice exports, and the imposition of a 20 percent export duty on non-basmati white rice, paddy, and husked rice (see AMIS Market Monitor, October 2022, June 2023, and July 2023). Non-Basmati white rice accounted for approximately 25 percent of the total rice exports from India in 2021 and 2022, and India is the world's leading rice exporter, accounting for 40 percent of global rice trade. On 18 August, the General Directorate of Foreign Trade of the Department of Commerce clarified that transitional arrangements would ap-

ply to non-basmati rice exports that were already under way by 20 July. These would be allowed if, by this date: they had been loaded; ships had already anchored in ports; or shipments had been registered. In addition, on 25 August, the Finance Ministry also announced the imposition of a 20 percent duty on exports of parboiled rice. Finally, on 27 August, the government announced that basmati rice exports valued below USD 1 200 per tonne would be suspended until a committee had reviewed the shipments, to determine whether or not they constituted illegal exports of non-basmati rice that had been misclassified by exporters.

- On 31 August, the President of the **Philippines** approved price ceilings on rice, which the government said sought to ensure that the staple grain remained accessible to consumers across the country following recent price increases. The price ceiling for regular milled rice is set at PHP 41 (USD 0.73) per kilogramme, while the ceiling for well-milled rice is set at PHP 45 (USD 0.80) per kilogramme.
- On 28 July, the **Russian Federation** extended a ban on the export of rice and rice groats, which will now apply until 31 December 2023. The ban, which was initially imposed in June 2022, was extended in December of the same year (see Market Monitor, February 2023). The government stipulated that the ban would not apply to members of the Eurasian Economic Union, South Ossetia, and Abkhazia, nor to humanitarian food aid, among other exceptions.
- On 17 August, **Nigeria** decided to allocate NGN 5 billion (USD 6.5 million) to each of the 36 states, in the form of a grant and a 2-year loan, for the purchase of 100 000 trucks of rice and 40 000 trucks of maize.

Soybeans

- On 27 August, **Argentina** announced it would introduce a preferential exchange rate program for soybeans. Crushers will be able to buy soybeans using 25 percent of their export revenues in foreign exchange freely, while the remaining 75 percent must be exchanged at the official rate of ARS 350 per US dollar. The mechanism follows the introduction of similar schemes for soybeans, at different preferential exchange rates, in September and November 2022, and in April 2023 (see Market Monitor, October 2022, December 2022, and May 2023).

Policy developments

Biofuels

- On 28 August, the Ministry of Energy in **Argentina** raised the price of bioethanol made from sugar cane or maize for domestic use. This marks the second price hike in August. The updated price for bioethanol now stands at ARS 237.6 (USD 0.73) per liter with immediate effect, up from the previous ARS 199.1 (USD 0.62).

Fertilizers

- On 18 August, **China's** Ministry of Finance approved a new CNY 2.4 billion (USD 333 million) one-time grant fund for the purchase of fertilizers and pesticides in the north of the country. This is to support maize and soybean production, following recent heavy rains and flooding.

Across the board

- On 17 July, the **Russian Federation** ceased its participation in the Black Sea Grain Initiative, a mechanism brokered in July 2022 by the UN and Türkiye which facilitated the export of over 32 million metric tonnes of Ukrainian grain, oilseeds, and other foodstuffs through the Black Sea (see AMIS Market Monitor, September 2022 and June 2023). The Russian Federation also withdrew security guarantees for navigation in the north-western part of the Black Sea.
- On 27 June, **Brazil** introduced its agricultural plan for 2023/24, known as Plano Safra, with the stated objectives of strengthening environmentally sustainable production systems and supporting family farmers. The plan includes BRL 364 billion (USD 74 billion) in support for medium and large farmers, and another BRL 77 billion (USD 15.7 billion) in support for family farmers, including rice farmers. The plan, which considerably increases the level of support available to farmers, covers the period from 1 July 2023 to 30 June 2024, and includes provisions such as access to loans for food production at reduced interest rates.
- On 9 August, **India** announced it would sell 5 million tonnes of wheat and 2.5 million tonnes of rice, with a view to curbing domestic price inflation. The commodities will be sold on open markets, using electronic auctions, and sales will be phased in over time. The government also indicated it would

reduce the reserve price for the sales by INR 200 (USD 2.4) per quintal, resulting in an adjusted price of INR 2 900 (USD 35) per quintal.

- On 14 July, **Nigeria** declared a state of emergency that will allow the government to take exceptional steps to improve food security and supply in the wake of inflation and economic hardship. Government officials have said that more than USD 500 million have been allocated to transform food production and enhance food security, with the funds coming from multilateral development banks, international financial institutions, and other sources.
- On 8 August, the President of the **Russian Federation** signed a decree establishing a special procedure for settling purchases of its agricultural exports in RUB. Under the new mechanism, which is due to take effect on 1 November, special bank accounts will be set up by authorized banks so that these transactions can take place.
- On 5 July, the **European Commission** proposed revising its rules on regulations concerning genetically modified organisms (GMOs), particularly those on plants derived from advanced gene-editing technology. The Commission said that, by easing certain restrictions, the proposal aimed to enable farmers to cultivate more resilient crops that minimize the need for chemical pesticides, while also enhancing the nutritional value of food for consumers. The proposal introduces a classification system for new genomic technique plants (NGTs): those that could naturally arise or be developed through conventional breeding would be exempt from GMO regulations and labelling mandates, while other NGT plants would still require risk assessments and authorization, making them subject to GMO rules.
- On 8 August, the Ministry of Finance in **China** allocated CNY 732 million (USD 102 million) in disaster relief funds to support the recovery of agricultural production, following crop damage and flooding brought by Typhoon Doksuri in late July. The funds will be distributed across nine provinces, to support agricultural flood control and disaster relief efforts, as well as post-disaster agricultural production, and will help subsidize the procurement of seeds, seedlings, fertilizers, and pesticides, as well as operational services that will help farmers resume agricultural activities and repair affected facilities.

+i Note

Only AMIS participants are marked in **bold**.

International prices

International Grains Council (IGC) Grains and Oilseeds Index (GOI) and GOI sub-Indices

	Aug 2023 Average*	Change	
		M/M	Y/Y
GOI	266.8	-1.9%	-13.8%
Wheat	235.4	-3.8%	-19.6%
Maize	227.4	-3.5%	-25.9%
Rice	245.3	+13.2%	+40.9%
Soybeans	272.1	-3.5%	-13.1%

*Jan 2000=100, derived from daily export quotations

Wheat

Prices mostly declined in August, the GOI sub-Index averaging four percent lower month-on-month, touching its lowest level since April 2021. Although fresh attacks on ports in both Ukraine and the Russian Federation underscored risks to Black Sea exports, traders witnessed continued solid deliveries from the latter at competitive prices. Markets also noted news that Ukraine was planning to resume shipments via the earlier announced seaborne corridor, while the Russian Federation was reportedly working on alternatives to the Black Sea Grain Initiative. Progressing northern hemisphere harvests also weighed, albeit with quality concerns in the EU and Ukraine, coupled with deteriorating production prospects in Canada and sub-optimal growing conditions in Argentina and Australia.

Maize

The GOI maize sub-Index dropped by an average four percent, marking a seventh monthly decline. Slow export demand weighed on US values, as did spillover pressure from wheat. However, concerns about the impact of adverse Midwest weather on yield potential offered support to prices, while export premiums were underpinned by rising freight costs due

to low water levels on the Mississippi and Illinois Rivers. After an upturn following the introduction of the preferential exchange rate, farmer selling in Argentina subsided, while dryness-related worries ahead of 2023/24 plantings contributed to firmer prices. Solid export demand buoyed Brazilian quotations.

Rice

International rice prices surged in August as India's earlier export ban on non-basmati white rice, followed by restrictions on basmati and parboiled exports, underpinned sentiment, the GOI sub-Index gaining by 13 percent, on average. However, quotations were often nominal, with many sellers anticipating further increases. Expectations for future demand from Asian buyers such as Indonesia, contributed to firmer white and parboiled quotations in Thailand. In Vietnam, support came from tightening supplies, as traders focussed on completing earlier sales. Prices in Pakistan strengthened amid reports of high moisture content in new crop arrivals, albeit trading was generally quiet.

Soybeans

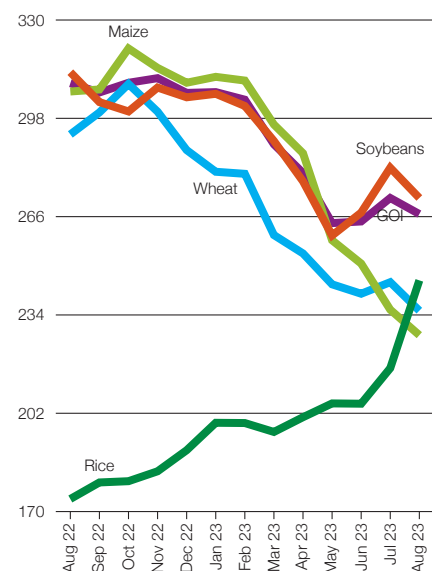
Pulled lower by declines in Brazil and the US, average international soyabean prices, as measured by the GOI sub-Index, retreated by 4 percent during August. After initially dropping on improving cropping weather, US prices subsequently rebounded, as a heatwave across the Midwest during the crucial pod-filling stage rekindled worries about yields. This was coupled with signs of tightening availabilities and an uptick in overseas demand, as evidenced by fresh sales to China and other destinations. While dollar-based prices in Brazil (Paranagua) also eased, in part linked to currency movements, export premiums were buoyed by solid local and international demand. In contrast, limited supplies saw nominal Up River quotations in Argentina edge higher month-on-month.

IGC commodity price indices

		GOI	Wheat	Maize	Rice	Soybeans
2022	August	309.4	292.8	306.7	174.1	313.0
	September	306.4	299.9	307.4	179.5	303.3
	October	309.6	309.2	320.7	179.9	300.2
	November	311.1	300.2	314.4	183.1	308.0
	December	306.3	287.7	309.6	190.0	304.8
2023	January	306.5	280.6	311.5	198.9	306.0
	February	304.1	279.9	310.3	198.8	302.0
	March	289.5	260.0	296.0	195.9	290.6
	April	280.2	254.0	286.6	200.7	277.5
	May	263.9	244.0	258.3	205.2	259.9
	June	264.4	240.9	250.7	205.1	267.3
	July	272.1	244.7	235.7	216.7	281.9
	August	266.8	235.4	227.4	245.3	272.1

(..... January 2000 = 100)

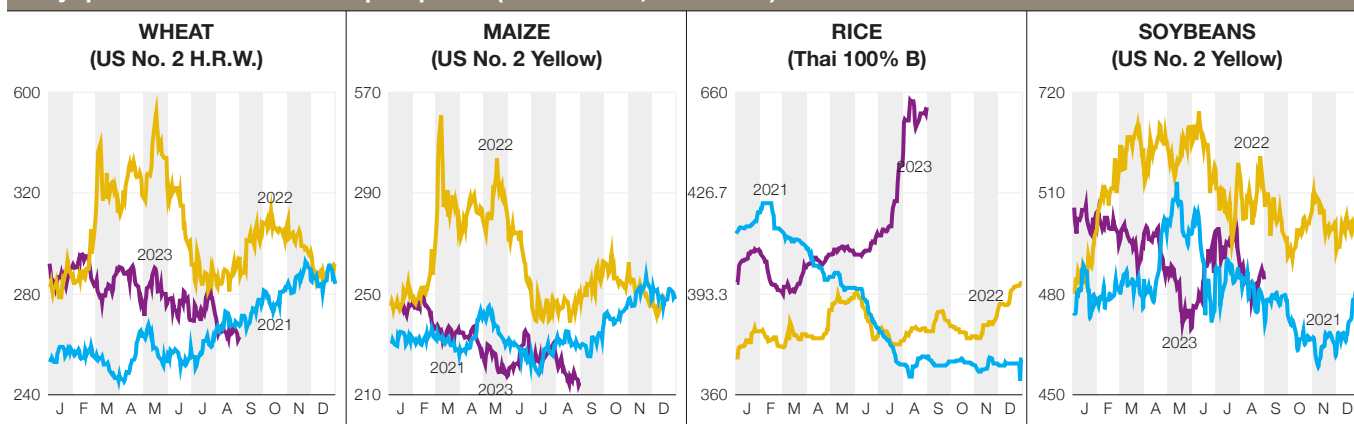
IGC commodity price indices



International prices

Selected export prices, currencies and indices

Daily quotations of selected export prices (USD/tonnes, 2021-2023)



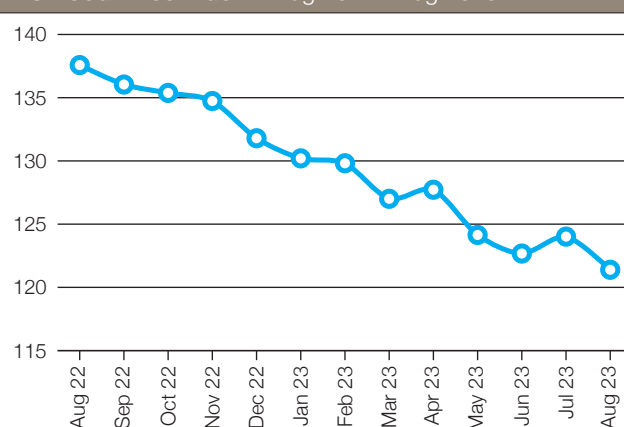
Daily quotations of selected export prices

	Effective date	Quotation	Month ago	Year ago	% change M/M	% change Y/Y
	USD/tonne					
Wheat (US No. 2, HRW)	31-Aug	309	335	404	-7.8%	-23.5%
Maize (US No. 2, Yellow)	31-Aug	224	257	330	-12.6%	-32.0%
Rice (Thai 100% B)	31-Aug	645	588	423	+9.7%	+52.5%
Soybeans (US No. 2, Yellow)	31-Aug	553	566	631	-2.3%	-12.4%

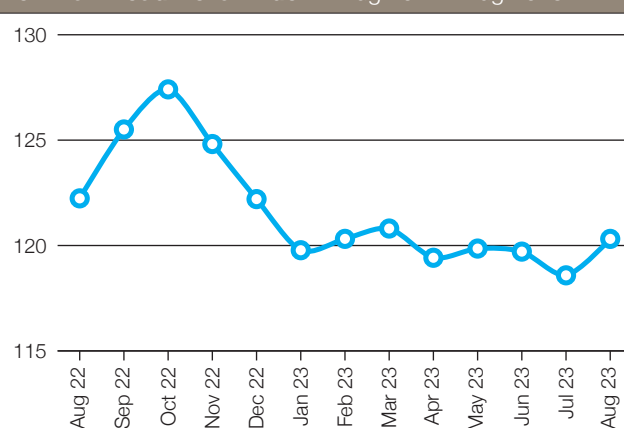
AMIS countries' currencies against US Dollar

AMIS Countries	Currency	Aug 2023 Average	Monthly Change	Annual Change
Argentina	ARS	323.3	-17.6%	-58.2%
Australia	AUD	1.5	-3.8%	-6.8%
Brazil	BRL	4.9	-2.1%	4.8%
Canada	CAD	1.3	-2.0%	-4.1%
China	CNY	7.2	-0.8%	-6.2%
Egypt	EGP	30.9	-0.1%	-38.1%
EU	EUR	0.9	-1.4%	7.7%
India	INR	82.8	-0.8%	-4.0%
Indonesia	IDR	15240.7	-1.4%	-2.7%
Japan	JPY	144.9	-2.7%	-6.6%
Kazakhstan	KZT	452.8	-1.9%	4.8%
Rep. of Korea	KRW	1322.4	-3.0%	-0.1%
Mexico	MXN	17.0	-0.5%	18.5%
Nigeria	NGN	764.7	1.7%	-45.2%
Philippines	PHP	56.3	-2.6%	-0.8%
Russian Fed.	RUB	95.1	-5.0%	-37.4%
Saudi Arabia	SAR	3.8	0.0%	0.1%
South Africa	ZAR	18.8	-3.3%	-11.1%
Thailand	THB	35.0	-1.3%	2.3%
Türkiye	TRY	26.9	-1.5%	-33.0%
UK	GBP	0.8	-1.4%	6.1%
Ukraine	UAH	36.8	0.0%	-1.1%
Viet Nam	VND	23873.7	-0.9%	-2.0%

FAO Food Price Index Aug 2022 - Aug 2023



Nominal Broad Dollar Index Aug 2022 - Aug 2023



Futures markets

Overall market sentiment

- Adequate short-term supply levels have kept wheat, maize, and soybean prices on a declining trend.
- The shift from backwardation to contango due to harvest pressure in the Northern Hemisphere signals a short-term supply surplus.
- Risk factors to monitor include a potential increase in the geopolitical risk premium for Black Sea shipments and the evolving logistical bottlenecks in key exporting regions, which could lead to increased market volatility.

MONTHLY PRICE TREND



Futures prices

In July and August, wheat prices declined despite rising geopolitical tensions. The Russian Federation started the season with record-high grain exports, pressuring prices in global markets. Euronext's September 2023 futures dropped significantly, nearing the USD 237 per tonne support level, while Chicago traded below USD 210 per tonne. Meanwhile, even after the end of the Black Sea Grain Initiative and attacks on Danube River ports and grain facilities, Ukraine managed to export via alternative routes, albeit at higher costs and risks. For this reason Ukraine is currently exploring option to re-open its Black Sea ports, including by allowing ships to sail along a secure corridor protected by the country's defense system.

While maize and soybean markets tightened in July on the back of mixed conditions in the US Midwest, prices were pressured in August amid strong export flows from Brazil. However, Brazilian ports seem close to their exporting capacity, raising concerns of congestion that might open the way for potential price rebounds. Macroeconomic factors like US financial instability, increasing Federal Reserve interest rates, and the US Dollar's strength added to market uncertainty.

Volumes & volatility

July recorded spikes in volatility, particularly in CME soybean and maize markets, driven by erratic weather in the US Corn Belt. In the wheat market, escalating Black Sea tensions and mixed US harvest outcomes led to bursts of volatility, pushing historical and implied volatility to the higher range of historically observed values. This heightened volatility led to record volume trading activity on Euronext wheat, with 1.7 million lots traded on the contract in July. Volatility declined in August, returning to levels seen earlier this year as crop conditions became clearer and with ample grain supplies from the Black Sea. While volatil-

ity for the new crop was generally lower than the previous year, concerns remain for a possible resurgence in volatility due to geopolitical tensions in the Black Sea and evolving logistical bottlenecks in the Mississippi River, the Panama Canal, or Brazil.

Forward curves

The influx of harvest supply from the Northern Hemisphere created a need for storage throughout the 2023/24 campaign. Consequently, grain markets now exhibit a steepened contango, with higher prices for longer-dated maturities to account for elevated storage expenses. The above-mentioned logistical bottlenecks could disrupt grain and soybean flows, which would increase the need for storage in affected countries even further and lead to higher price differentials between exporting areas.

Investment flows

Hedge Funds significantly reduced their investment portfolios in CME agricultural products, reaching a three-year low. The steepening contango incentivized commodity index traders to deleverage their positions in the grain segment due to higher rollover costs. Additionally, declining grain prices in 2023 diminished the attractiveness of grain commodities markets for investors.

Euronext futures volumes and price evolution

Average daily volume (1000 tonnes)	Aug 2023	M/M	Y/Y
Wheat	3 430.6	-14.7%	+23.7%
Maize	57.6	-50.2%	-44.5%

Prices (USD/t)	Aug 2023	M/M	Y/Y
Wheat	265.1	-2.2%	-21.4%
Maize	240.1	-6.6%	-27.2%

CME futures volumes and prices evolution

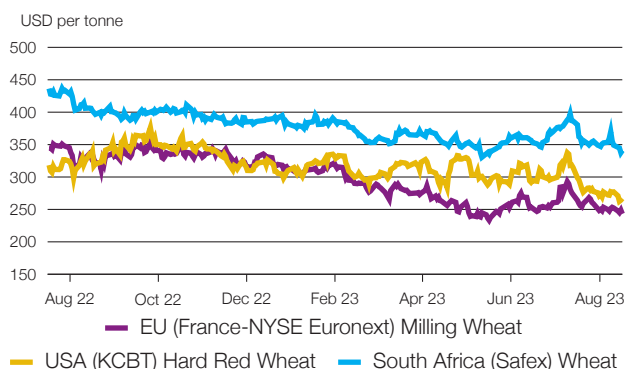
Average daily volume (1000 tonnes)	Aug 2023	M/M	Y/Y
Wheat	17 482.8	-7.8%	+24.5%
Maize	40 714.2	-7.3%	+5.1%
Soybean	25 770.6	-16.4%	+22.2%

Prices (USD/t)	Aug 2023	M/M	Y/Y
Wheat	232.5	-7.3%	-20.5%
Maize	192.6	-6.0%	-22.3%
Soybean	493.0	-2.3%	-5.4%

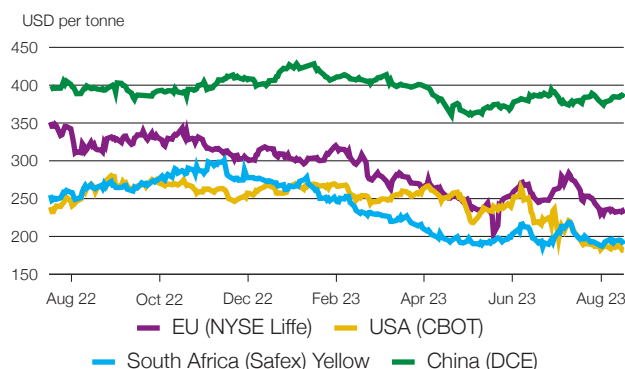
Market indicators

Daily quotations from leading exchanges - nearby futures

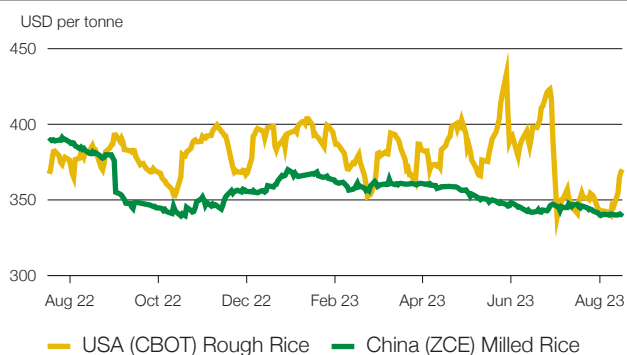
Wheat



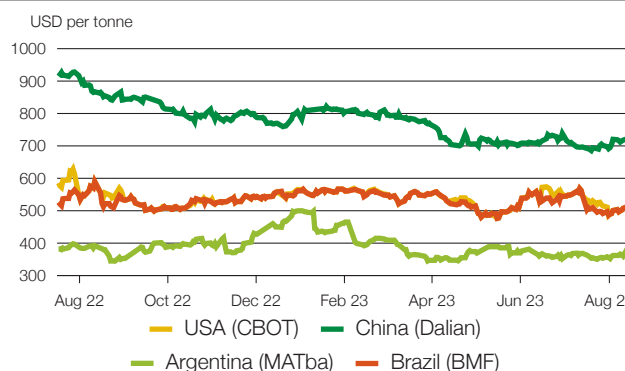
Maize



Rice



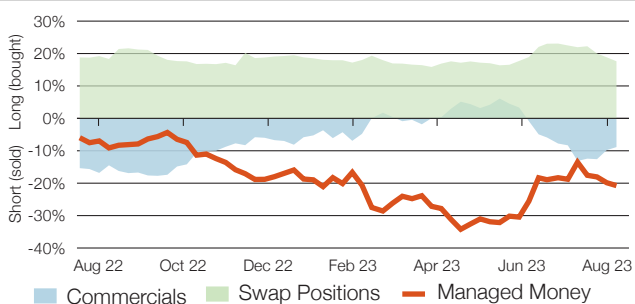
Soybean



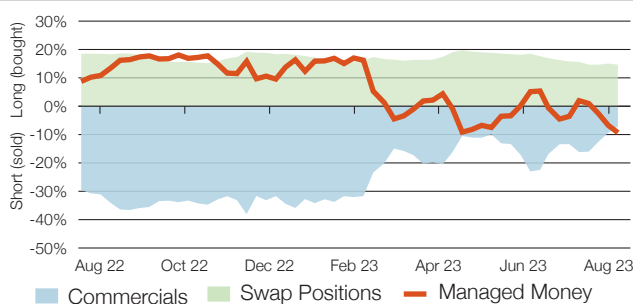
CFTC commitments of traders

Major categories net length as percentage of open interest*

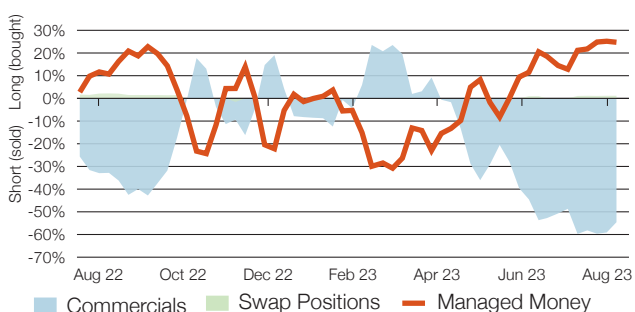
Wheat



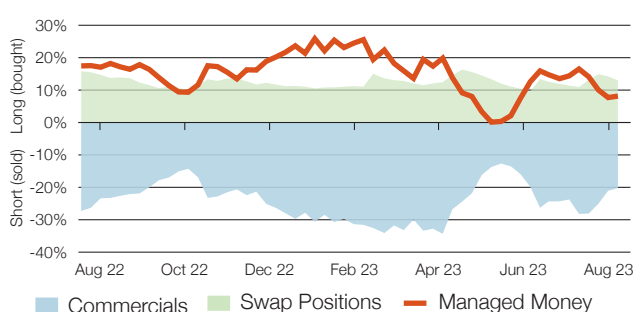
Maize



Rice



Soybean

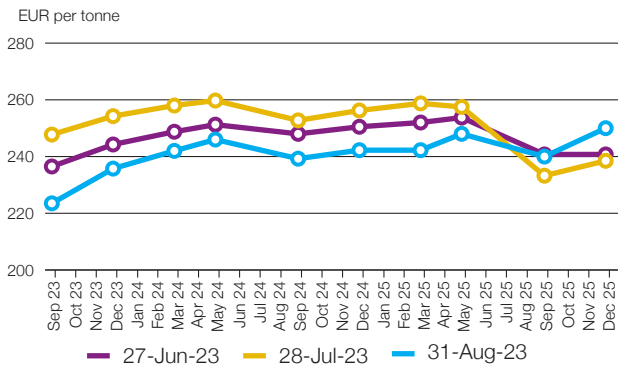


*Disaggregated futures only. Though not all positions are reflected in the charts, total long positions always equal total short positions.

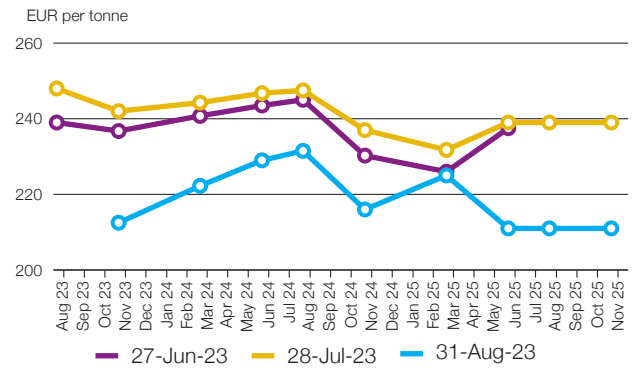
Market indicators

Forward curves

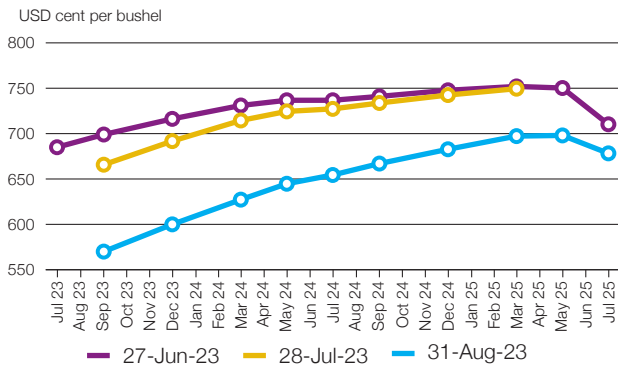
Euronext wheat (EBM)



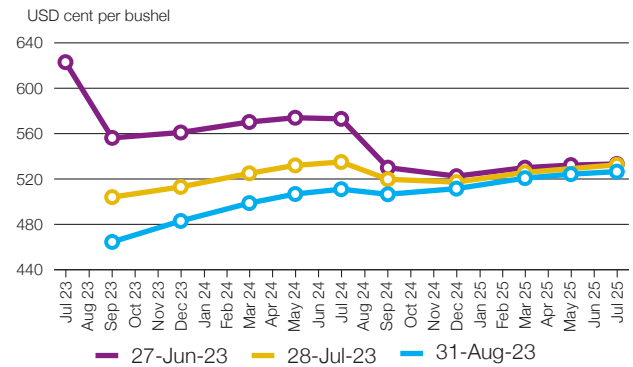
Euronext maize (EMA)



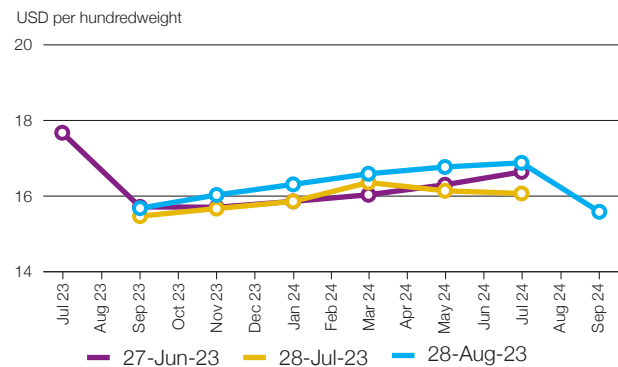
CBOT wheat



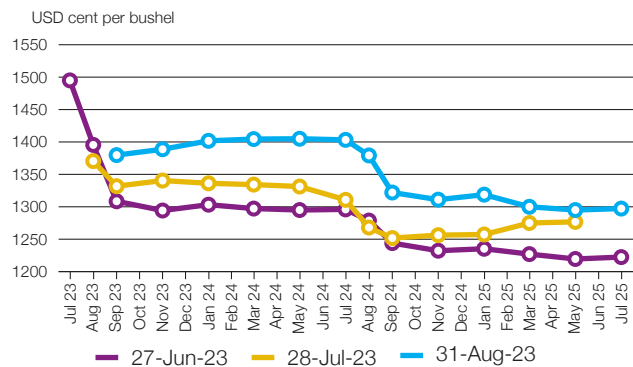
CBOT maize



CBOT rice

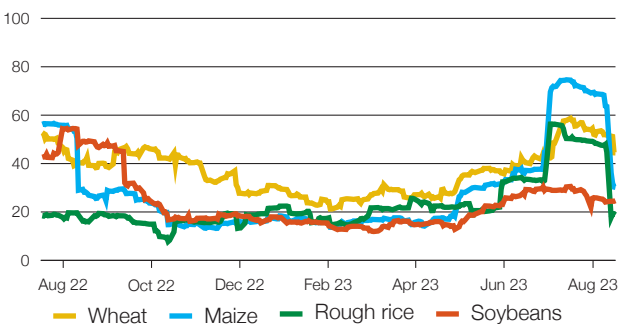


CBOT soybean

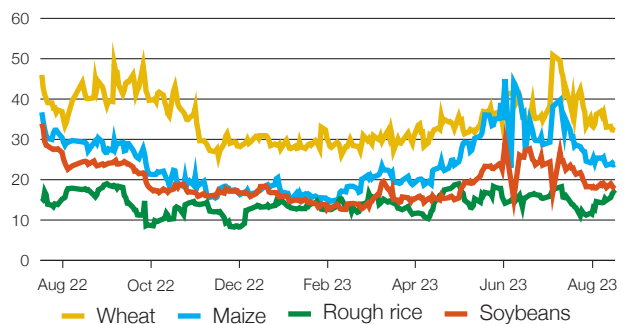


Historical and implied volatilities

Historical Volatility (30 days)



Implied Volatility (Daily)

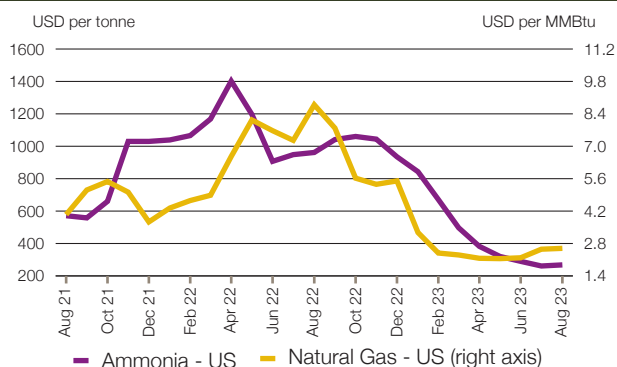


+i AMIS market indicators

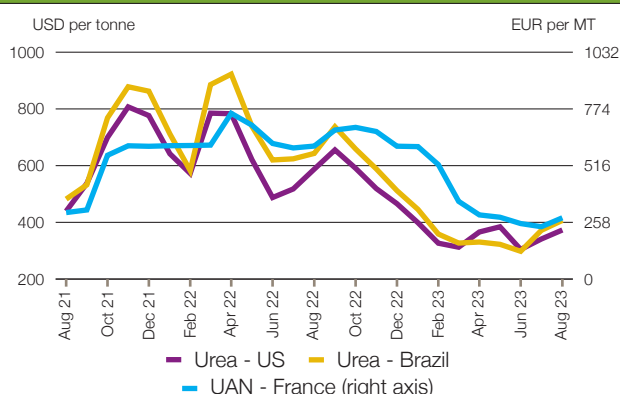
Several of the indicators covered in this report are updated regularly on the AMIS website. These, as well as other market indicators, can be found at: <https://www.amis-outlook.org/amis-monitoring/indicators/>. For more information about forward curves see the feature article in AMIS Market Monitor no. 75, February 2020.

Fertilizer outlook

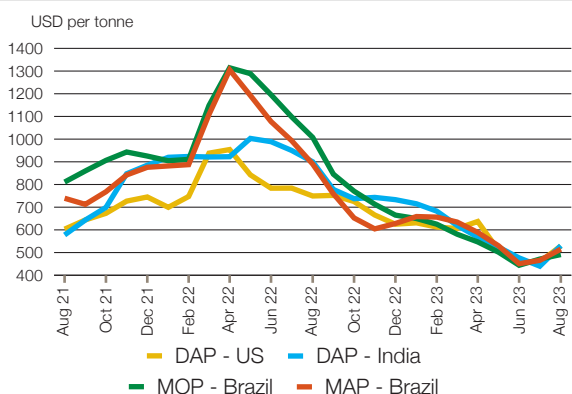
Input prices



Nitrogen prices



Potash and phosphate



After declining for more than a year, fertilizer prices across the board tested their support levels over the summer. New trade routes are now in place after the major shocks of 2021 and 2022, allowing markets to return to fundamentals. Purchase behavior could remain very cautious this crop year, while global supply seems sufficient at present.

■ **Fertilizer input prices** increased slightly in August. While natural gas prices were stable in the United States, European prices fluctuated substantially. Yet, while European gas supply was a great source of concern at this time last year, current stocks at exceptionally high levels should allow to start the winter with ample supply. Demand for ammonia reappeared at the end of the month, facing tighter availability from Trinidad and the Middle East, explaining a firmer price stance for this input used in nitrogen and phosphate fertilizer production.

■ **Nitrogen fertilizer prices** increased in August. Urea prices in the US Gulf and Brazil were up nearly 10 percent compared to last month. The global market was oriented upwards for most of the month until the Indian Potash Ltd. (IPL) purchase tender held mid-August revealed massive export availabilities out of China. Several markets eased as the month progressed and importers will now be comfortable buying hand-to-mouth. In addition, purchases from farmers decreased because the so-called barter ratio - a measure of profitability - deteriorated on declining maize prices, as was the case in Brazil. Other nitrogen fertilizers, like Nitrates and Urea Ammonium Nitrate (UAN), will likely track urea prices for the rest of the year.

■ **Phosphorus fertilizer prices** increased substantially across major markets. Tight spot supply contributed to the price increases, on production issues in the Arab Gulf and limited prompt exports out of China. While origins aim at raising price ideas in the short term, the outlook points to a well-supplied market with cumulative export numbers out of China improving significantly since early 2023.

■ **Potash prices** in major importer Brazil were up slightly in August - although less than nitrogen and phosphorus fertilizer prices. Strong demand this month in Brazil drove the price uptick, though supplies remain sufficient. In the absence of other major buyers, potash prices may remain in their current range.

	Aug-23 average	Aug-23 std. dev.	% change last month*	% change last year*	12 month high	12-month low
Ammonia - US (USD/ST)	268.0	-	+2.6	-72.1	1060.5	261.2
Natural Gas - US (USD/MMBtu)	2.6	0.1	+1.4	-70.5	7.8	2.1
Urea Ammonium Nitrate (UAN) - France (EUR/MT)	278.8	7.5	+17.1	-53.9	690.0	238.1
Urea - US (USD/ST)	373.1	27.0	+9.3	-36.5	655.4	304.5
Urea - Brazil (USD/MT)	406.9	32.1	+9.4	-36.7	737.0	298.0
Di-ammonium Phosphate (DAP) - India (USD/MT)	530.5	26.1	+20.6	-41.1	778.0	440.0
Di-ammonium Phosphate (DAP) - US (USD/ST)	528.8	14.2	+15.3	-29.4	752.0	454.6
Mono-ammonium Phosphate (MAP) - Brazil (USD/MT)	515.0	15.8	+10.6	-42.1	759.0	451.0
Muriate of Potash (MOP) - Brazil (USD/MT)	491.2	8.3	+4.2	-51.2	845.5	444.0

Source: Own elaboration based on Bloomberg. Units: MT = Metric Tonne; ST = Short Ton; MMBtu = Million British Thermal Unit
*Estimated using available weekly data to date.

+i The Fertilizer Outlook has been upgraded to facilitate the understanding of market changes and their impacts on major grain producing countries. The text now includes a section on costs of raw materials for fertilizer manufacturing, as well as separate sections for the three major nutrients: nitrogen, phosphates and potash. The charts and tables present monthly average of prices for key import references, to help tie fertilizer market evolutions with their implications for grain production potential.

Ocean freight markets

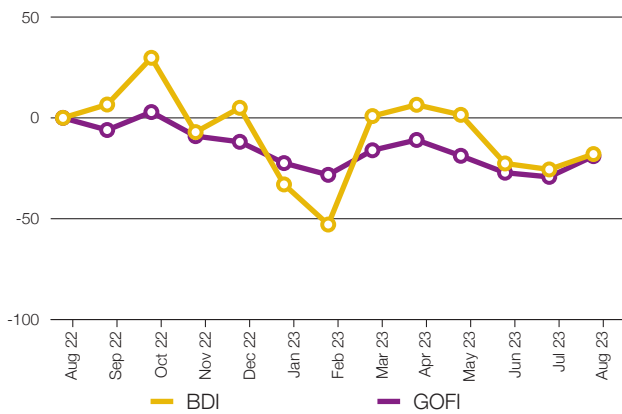
Dry bulk freight market developments

	Aug-23 average	Change	
		M/M	Y/Y
Baltic Dry Index (BDI)	1146.8	+10.3%	-17.9%
sub-indices:			
Capesize	1543.7	-2.9%	+41.0%
Panamax	1361.1	+36.9%	-21.8%
Supramax	809.9	+9.4%	-52.6%
Baltic Handysize Index (BHSI)	448.5	+9.0%	-55.0%

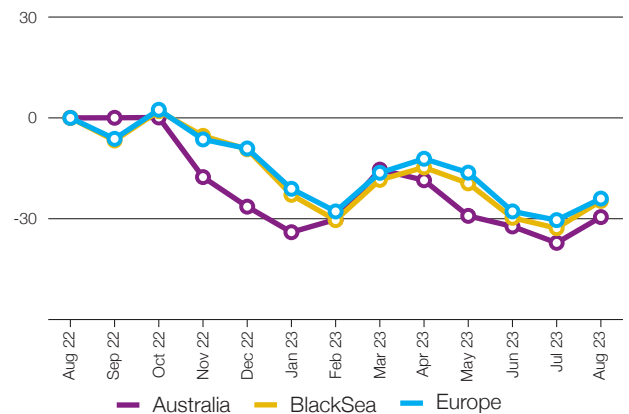
Source: Baltic Exchange, IGC. Base period for BDI: 4 January 1985 = 1000; for BHSI: 23 May 2006 = 1000; for GOFI: 1 January 2013 = 100

	Aug-23 average	Change	
		M/M	Y/Y
IGC Grains and Oilseeds Freight Index (GOFI)	137.1	+14.5%	-19.0%
sub-Indices:			
Argentina	173.4	+13.6%	-20.4%
Australia	85.0	+12.2%	-29.5%
Brazil	189.8	+18.7%	-14.4%
Black Sea	133.6	+12.1%	-24.7%
Canada	96.3	+10.5%	-23.1%
Europe	106.5	+9.2%	-24.0%
US	107.7	+12.0%	-19.5%

BDI and IGC GOFI



Selected IGC GOFI sub-indices



- After a slight weakening in July, sentiment across the dry bulk freight complex strengthened during the past month on the back of brisk grains and oilseeds trade, aided by northern hemisphere winter crop harvests.
- Freight costs were also supported by challenging logistics in some areas, notably low water levels on key river routes to the US Gulf, as well as drought-induced draft restrictions at the Panama Canal. At the US Gulf, near-record low water levels for August/September on the Mississippi River and an associated spike in barge freight costs was expected to divert some cargoes to the Pacific Northwest, with a shift in international demand to competing origins also seen as likely.
- Led by gains for Panamax vessels, the **Baltic Dry Index (BDI)** averaged 10 percent higher month-on-month in August, but average timecharter rates in the grains and oilseeds carrying segments (Panamax, Supramax, Handysize) remained well below last year's values.

- The **Capesize** market eased slightly in August, weighed by weaker rates on the Australia-China route. After earlier delays, stemming from the impact of typhoons, the subsequent easing of congestion at Pacific origins weighed on Capesize rates in the Pacific Basin.
- Average **Panamax** and **Supramax** earnings rose, primarily linked to supportive supply and demand fundamentals in the Atlantic, including solid maize and soybeans flows from Brazil.
- **Handysize** rates were underpinned by generally strong demand for smaller-sized bulkers, notably in Europe and the Mediterranean.
- The **IGC Grains and Oilseeds Freight Index (GOFI)** posted a 15 percent monthly rise, led by gains on routes out of Brazil, where tight nearby logistics at ports was a notable feature.

+i Source: International Grains Council

Baltic Dry Index (BDI): A benchmark indicator issued daily by the Baltic Exchange, providing assessed costs of moving raw materials on ocean going vessels. Comprises sub-Indices for three segments: Capesize, Panamax and Supramax. The Baltic Handysize Index excluded from the BDI from 1 March 2018. **IGC Grains and Oilseeds Freight Index (GOFI):** A trade-weighted composite measure of ocean freight costs for grains and oilseeds, issued daily by the International Grains Council. Includes sub-Indices for seven main origins (Argentina, Australia, Brazil, Black Sea, Canada, the EU and the USA). Constructed based on nominal HSS (heavy grains, soybeans, sorghum) voyage rates on selected major routes. **Capesize:** Vessels with deadweight tonnage (DWT) above 80,000 DWT, primarily transporting coal, iron ore and other heavy raw materials on long-haul routes. **Panamax:** Carriers with capacity of 60,000-80,000 DWT, mostly geared to transporting coal, grains, oilseeds and other bulks, including sugar and cement. **Supramax/Handysize:** Ships with capacity below 60,000 DWT, accounting for the majority of the world's ocean-going vessels and able to transport a wide variety of cargoes, including grains and oilseeds.

Explanatory note

The notions of **tightening** and **easing** used in the summary table of "Markets at a glance" reflect judgmental views that take into account market fundamentals, inter-alia price developments and short-term trends in demand and supply, especially changes in stocks.

All totals (aggregates) are computed from unrounded data. World supply and demand estimates/forecasts are based on the latest data published by FAO, IGC and USDA. For the former, they also take into account information provided by AMIS focal points (hence the notion "FAO-AMIS"). World estimates and forecasts produced by the three sources may vary due to several reasons, such as varying release dates and different methodologies used in constructing commodity balances. Specifically:

PRODUCTION: Wheat production data from all three sources refer to production occurring in the first year of the marketing season shown (e.g. crops harvested in 2016 are allocated to the 2016/17 marketing season). Maize and rice production data for FAO-AMIS refer to crops harvested during the first year of the marketing season (e.g. 2016 for the 2016/17 marketing season) in both the northern and southern hemisphere. Rice production data for FAO-AMIS also include northern hemisphere production from secondary crops harvested in the second year of the marketing season (e.g. 2017 for the 2016/17 marketing season). By contrast, rice and maize data for USDA and IGC encompass production in the northern hemisphere occurring during the first year of the season (e.g. 2016 for the 2016/17 marketing season), as well as crops harvested in the southern hemisphere during the second year of the season (e.g. 2017 for the 2016/17 marketing season). For soybeans, the latter approach is used by all three sources.

SUPPLY: Defined as production plus opening stocks by all three sources.

UTILIZATION: For all three sources, wheat, maize and rice utilization includes food, feed and other uses (namely, seeds, industrial uses and post-harvest losses). For soybeans, it comprises crush, food and other uses. However, for all AMIS commodities, the use categories may be grouped differently across sources and may also include residual values.

TRADE: Data refer to exports. For wheat and maize, trade is reported on a July/June basis, except for USDA maize trade estimates, which are reported on an October/September basis. Wheat trade data from all three sources includes wheat flour in wheat grain equivalent, while the USDA also considers wheat products. For rice, trade covers shipments from January to December of the second year of the respective marketing season. For soybeans, trade is reported on an October/September basis by FAO-AMIS and the IGC, while USDA data are based on local marketing years except for Argentina and Brazil which are reported on an October/September basis. Trade between European Union member states is excluded.

STOCKS: In general, world stocks of AMIS crops refer to the sum of carry-overs at the close of each country's national marketing year. For soybeans, stock levels reported by the USDA are based on local marketing years, except for Argentina and Brazil, which are adjusted to October/September. For maize and rice, global estimates may vary across sources because of differences in the allocation of production in southern hemisphere countries.

For more information on AMIS Supply and Demand, please view AMIS Supply and Demand Balances Manual.

AMIS - GEOGLAM Crop Calendar Selected leading producers*

WHEAT		J	F	M	A	M	J	J	A	S	O	N	D
China (17%)	spring			Planting			C		Harvest				
	winter		C	C	C			Harvest				Planting	
EU (17%)	winter				C	C			Harvest			Planting	
India (14%)	winter	C	C		Harvest							Planting	
Russian Fed. (11%)	spring				Planting		C	C		Harvest			
	winter		C	C	C			Harvest				Planting	
US (6%)	spring						C	C		Harvest		Planting	
	winter			C	C				Harvest			Planting	
MAIZE		J	F	M	A	M	J	J	A	S	O	N	D
US (32%)					Planting		C	C	C		Harvest		
China (23%)	north				Planting		C	C		Harvest			
	south			Planting		C	C			Harvest			
Brazil (11%)	1st crop	C	C		Harvest						Planting		C
	2nd crop		Planting	C	C	C			Harvest				
EU (5%)					Planting		C	C	C		Harvest		
Argentina (3%)					Harvest						Planting	C	C
RICE		J	F	M	A	M	J	J	A	S	O	N	D
China (27%)	intermediary crop					Planting		C	C	C		Harvest	
	late crop							Planting		C	C	Harvest	
	early crop			Planting		C	C			Harvest			
India (25%)	kharif						Planting		C	C		Harvest	
	rabi		C		Harvest								
Indonesia (7%)	main Java		C	C		Harvest						Planting	
	second Java					Planting		C	C	C		Harvest	
	winter-spring		C	C		Harvest						Planting	
Viet Nam (5%)	summer/autumn						Planting		C	C		Harvest	
	winter					Planting			C	C		Harvest	
Thailand (4%)	main season						Planting		C	C	Harvest		
	second season	Planting	C	C	C		Harvest						
SOYBEANS		J	F	M	A	M	J	J	A	S	O	N	D
Brazil (40%)		C	C		Harvest						Planting		C
US (29%)						Planting	C	C	C		Harvest		
Argentina (11%)		C	C	C		Harvest						Planting	
China (5%)							Planting	C	C		Harvest		
India (3%)							Planting		C	C	Harvest		

*Percentages refer to the global share of production according to the latest AMIS-FAO estimates available for the most recent season

- Planting (peak)
- Harvest (peak)
- Planting
- Harvest
- Weather conditions in this period are critical for yields
- Growing period

For more information on AMIS Supply and Demand, please view AMIS Supply and Demand Balance Manual

Main sources

Bloomberg, CFTC, CME Group, FAO, GEOGLAM, IFPRI, IGC, OECD, Reuters, USDA, US Federal Reserve, WTO

2023 AMIS Market Monitor release dates

February 2, March 2, April 6, May 4, June 1, July 6, September 7, October 5, November 2, December 7