AMIS Market Monitor

No. **114** December 2023

Contents

Markets at a glance

▲ Easing
▬ Neutral
▼ Tightening

	FROM PREVIOUS **FORECASTS**	FROM PREVIOUS **SEASON**
WHEAT	▲	▬
MAIZE	▲	▲
RICE	▲	▼
SOYBEANS	▼	▲

As the year draws to a close, commodity markets have quieted down from the more volatile price movements that have characterized the past two years. With the exception of rice, prices for most grains and oilseeds are 15 to 20 percent below January 2022 levels. Yet, even rice prices have fallen back from recent highs as global production prospects look more favorable than they did in late summer. Despite a slowing global economy, demand for agricultural products remains strong and is expected to hit record levels in the 2023/24 marketing season. Lower prices mean reduced profitability for grain and oilseed farmers though lower costs for fuel and fertilizer will help mitigate that impact.

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.

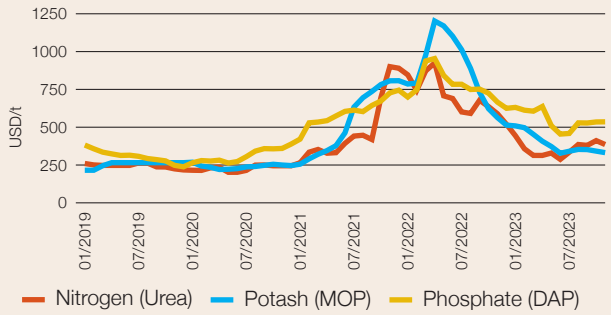
Food and Agriculture Organization of the United Nations · IFAD Enabling poor rural people to overcome poverty · IFPRI · IGC · OECD · UNCTAD · WORLD BANK GROUP · WFP World Food Programme · WORLD TRADE ORGANIZATION · GEOGLAM Global Agricultural Monitoring

Feature article

Fertilizer crisis and global food production: a review of factors

Fertilizer prices reached record highs in spring 2022 on the back of returning demand after the Covid-19 pandemic and tensions in the Black Sea region. This raised fears for global food production and food security. Prices have since retreated, although they remain at elevated levels compared to their historic average.

Figure: World fertilizer prices



This article reflects on the events of the last two years and analyzes linkages between fertilizer markets and global food production. One of the key questions to consider is why global production of major food crops remained high irrespective of the fertilizer crisis.

Supply factors

Despite initial concerns, fertilizer supplies were impacted by the crisis only to a certain extent. When the Ukraine war started, Western countries applied trade sanctions on the Russian Federation and extended sanctions on Belarus, creating nervousness among market participants because of their significant share in world fertilizer supply. However, fertilizers were eventually exempted from most of those restrictions and exports from these origins reached international markets through pre-existing or new logistical routes.

Another concern was rising production costs for European manufacturers, who faced escalating prices of natural gas, the main feedstock for most nitrogen fertilizers. While European fertilizer production did indeed take a hit, global nutrient supply was largely ensured by fertilizer production elsewhere. In addition, several governments supported domestic availability by limiting exports of locally produced fertilizers.

Trade factors

Looking at trade flows, not all countries were impacted by the crisis in the same way; several major food producing countries were also not the most exposed to availability constraints. China and the USA, for example, could rely on local production for much of their nitrogen and phosphate demand; Brazil and India continued importing fertilizers from the Russian Federation, often benefitting from two-tier pricing as products diverted from other destinations were looking for a home; and the European Union allowed more imports from far-away origins to make up for lost domestic supply.

The timing of trade requirements also mattered. At the peak of the crisis in spring 2022, countries in the Northern hemisphere had mostly completed their fertilizer purchases. Since then, import demand has been rather sluggish, with countries shifting to just-in-time purchases to benefit from decreasing prices.

Demand factors

While the price hike impacted global fertilizer demand, this did not translate into reduced global harvests. Indeed, the price elasticity of demand varies across nutrients. Potash and phosphorus applications can be punctually reduced without major yield changes. Thus, while global uses of these macronutrients decreased over the last two years, the yield impact was limited. Besides, some crops including soybean are nitrogen-fixing. They require comparatively low nitrogen doses and could fare better throughout the crisis. For other crops, the higher costs for fertilization was frequently buffered by their higher selling prices on world markets.

What is more, application rates in several grain exporting countries are relatively high, so lower application rates may have actually improved efficiency. As a case in point, recent research demonstrates that lower application rates could be adopted in many European countries without hampering yields.

Conclusion

The recent hike of fertilizer prices was undeniably a great source of concern for food security. While the crisis might have caused challenges at local scale it did not significantly impact outputs in major food producing countries.

Still, this crisis highlighted the importance of a better assessment of fertilizer markets in a context of rising uncertainties on global trade. With the support of the G20, the AMIS initiative is building reliable information systems comprising up-to-date global supply and demand analysis, as well as comprehensive understanding of policies impacting fertilizers. Further efforts are required to collectively understand the complex interplay of changing fertilizer trends on food production in specific geographies.

World supply-demand outlook

WHEAT production in 2023 was lifted m/m on higher estimates for the Russian Federation, Saudi Arabia, and Türkiye, but still forecast 2.1 percent below last year's level.

Utilization in 2023/24 was revised upwards since last month, mostly reflecting higher feed utilization growth in the EU, bringing the forecast to 1.8 percent above the 2022/23 level.

Trade in 2023/24 (July/June) nearly unchanged m/m; downgrades to export prospects for Argentina, Brazil, and the EU offset upward revisions for Canada, the Russian Federation, Türkiye and Ukraine.

Stocks (ending in 2024) now seen fractionally above opening levels following an upward revision this month, mostly in Egypt, the EU, and Saudi Arabia.

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
		2 Nov	7 Dec		9 Nov		16 Nov
Prod.	804.1	785.1	787.1	789.5	782.0	803.6	786.5
	666.4	648.6	650.5	651.8	645.0	665.9	650.0
Supply	1102.2	1100.4	1105.4	1061.9	1051.5	1076.6	1067.8
	830.5	822.3	827.3	787.4	775.7	807.1	792.1
Utiliz.	777.7	789.5	791.4	792.4	792.8	795.4	803.8
	635.0	641.5	643.4	644.4	639.8	652.6	654.3
Trade	200.0	194.4	194.1	216.3	209.0	207.7	195.7
	186.5	184.4	184.1	203.0	197.0	194.1	184.1
Stocks	318.6	315.1	319.3	269.5	258.7	281.2	264.0
	177.1	175.6	179.7	130.7	124.8	140.9	126.1

IN MILLION TONNES

MAIZE production forecast for 2023 lifted further this month, largely on an upward revision in the US, and set to surpass the 2022 level by 4.6 percent.

Utilization in 2023/24 unchanged since last month, as higher utilization in Brazil and the US balanced downgrades in the Russian Federation and a few countries in Asia and Africa.

Trade in 2023/24 (July/June) scaled up marginally, underpinned by stronger import demand seen from Mexico and Saudi Arabia, as well as higher exports from Paraguay and the Russian Federation.

Stocks (ending in 2024) raised further m/m, mostly in the US stemming from a higher production estimate, and exceeding opening levels by 8.5 percent.

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
		2 Nov	7 Dec		9 Nov		16 Nov
Prod.	1165.9	1216.6	1219.0	1157.1	1220.8	1160.9	1223.0
	888.7	931.6	934.0	879.9	943.8	883.7	942.4
Supply	1473.1	1499.3	1502.6	1467.4	1520.0	1448.5	1497.6
	1039.1	1060.8	1063.4	981.1	1037.0	983.1	1041.1
Utiliz.	1183.7	1201.6	1201.8	1168.2	1205.0	1173.9	1212.8
	885.3	899.2	899.4	869.2	901.0	865.4	907.2
Trade	183.3	180.0	180.5	180.6	197.4	179.7	173.4
	164.2	160.0	160.5	161.9	174.4	160.6	153.4
Stocks	284.9	307.2	309.1	299.2	315.0	274.6	284.8
	130.7	151.1	152.4	93.2	113.0	98.6	113.8

IN MILLION TONNES

RICE production in 2023/24 raised somewhat m/m, mostly reflecting less subdued output expectations for Indonesia and the United Republic of Tanzania.

Utilization in 2023/24 marginally changed m/m, as a downward adjustment to use forecasts for China is mostly offset by upgrades for Indonesia, Viet Nam and various African countries, in particular, the United Republic of Tanzania.

Trade in 2024 lowered m/m, as reduced import expectations namely for China outweighed an upgrade to Indonesia's import forecast.

Stocks (2023/24 carry-out) raised m/m, on somewhat higher than previously anticipated reserves in importers (particularly Guinea and Indonesia) and in exporters (namely Myanmar and Thailand).

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
		2 Nov	7 Dec		9 Nov		16 Nov
Prod.	520.9	523.9	524.9	513.4	517.8	515.3	520.9
	378.1	380.9	381.8	367.4	368.8	369.4	372.0
Supply	717.8	720.0	721.4	696.2	692.6	691.0	691.8
	474.4	477.3	478.7	437.2	437.0	438.8	440.2
Utiliz.	522.3	522.0	521.6	521.4	525.2	520.1	520.4
	375.4	377.2	378.3	366.4	373.1	369.3	370.3
Trade	53.1	52.8	52.2	53.3	52.8	52.4	50.1
	50.3	48.5	48.9	50.3	49.3	49.0	46.8
Stocks	196.5	198.9	199.7	174.8	167.4	170.9	171.4
	96.9	98.7	99.5	68.2	62.9	66.0	66.6

IN MILLION TONNES

SOYBEAN 2023/24 production downgraded on reduced prospects for Brazil and India, which are partially compensated by higher forecasts for Argentina and the US.

Utilization in 2023/24 trimmed, reflecting smaller crushing forecasts for Brazil, China and India, more than offsetting a higher projection for Argentina.

Trade in 2023/24 (Oct/Sep) lowered marginally, mostly reflecting reduced exportable availabilities out of Brazil, while import forecasts are lowered across China, Indonesia and some other Asian countries.

Stocks (2023/24 carry-out) scaled down, chiefly underpinned by expected stock releases in Brazil and China, while global inventories are still anticipated to recover by 9 percent from their opening level.

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
		2 Nov	7 Dec		9 Nov		16 Nov
Prod.	371.9	399.0	395.2	372.2	400.4	367.3	394.8
	351.6	378.2	374.4	352.0	379.9	347.0	373.9
Supply	416.8	446.2	442.6	470.3	500.7	412.8	448.6
	377.5	402.4	398.8	420.8	446.4	364.4	389.0
Utiliz.	366.6	390.2	388.0	364.1	383.7	358.9	386.4
	250.6	270.8	269.0	247.6	263.2	242.4	265.5
Trade	171.0	168.9	167.1	170.9	168.3	171.6	168.3
	71.1	70.1	69.3	70.1	68.3	64.7	65.7
Stocks	47.4	53.0	51.8	100.3	114.5	53.9	62.2
	24.4	29.9	29.3	66.5	80.8	15.1	21.0

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	**1989**	**-308**	**1890**	**-305**	**4171**	**2464**	**500**	**236**	**500**	**1932**	**905**	**-534**	**-341**	**-583**	**786**	**-3782**	**-1817**	**-2213**	**-1764**	**-1220**
Total AMIS	**1383**	**300**	**1744**	**-300**	**4063**	**2447**	**750**	**1146**	**-**	**1871**	**452**	**-290**	**-977**	**-299**	**474**	**-3782**	**-1617**	**-2249**	**-1464**	**-1390**
Argentina	-1000	-	-100	-1000	-	-	-	-	-	-	-	-	-	-	-	1500	-350	1000	300	-
Australia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brazil	-826	-100	389	-1100	-500	-127	-	973	-1000	-	-	-	-	-	-	-4000	-	-500	-1800	-1500
Canada	-	-	74	500	-	-	-	-22	-	-200	-	-	20	-	30	-	-	1	-	25
China Mainland	-	-	-	-	-	-	-	-	-	712	-	-950	-1458	-	-	-	-1000	-400	-	-600
Egypt	-	-500	-	-	1354	-	-	-	-	-	-	-	-	-	-	-	-200	-180	-	-20
EU	223	200	1304	-2500	2190	42	-	42	-	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1972	91	-1871	-10	-
Indonesia	-	-	-	-	-	-500	50	-450	-	-	240	750	140	1	100	-	-300	-310	-	-100
Japan	-	-	-	-	-	-	-300	-300	-	-	-	-	-	-	-	-	-	5	-	-25
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	-10	-	-10	-	-	-1083	500	-83	-	-500	-	-	-	-	-	-	-	-	-	-
Nigeria	-4	-	96	-	-100	-	-	-120	-	260	-	-	-	-	70	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rep. of Korea	-	-200	-	-	-	-	-	-50	-	410	18	-	27	50	-70	-	-	-	-	-
Russian Fed.*	1000	-	-	500	500	-	-	-1000	1000	-	47	-90	-13	-	20	-	-	-	-	-
Saudi Arabia	700	900	100	-	2238	-	500	450	-	50	-	50	80	-	70	-	-	-	-	-
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	15	-	30	-	-	-	-	-
Thailand	-	-	-	-	-	-	-	-	-	-	-	-	-	-350	160	-	-	-	-	-
Türkiye	1300	-	-	1300	-	-	-	-	-	-	24	-30	24	-	90	-	-	-	-	-
Ukraine**	-	-	-	2000	-2000	-	-	-	-	-	-	-20	-13	-	1	-	-	-	-	-
UK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	16	46	130
US	-	-	-109	-	381	4115	-	1706	-	1139	-26	-	1	-	-27	690	-	-10	-	700
Viet Nam	-	-	-	-	-	-	-	-	-	-	149	-	199	-	-	-	-	-	-	-

In thousand tonnes

Note

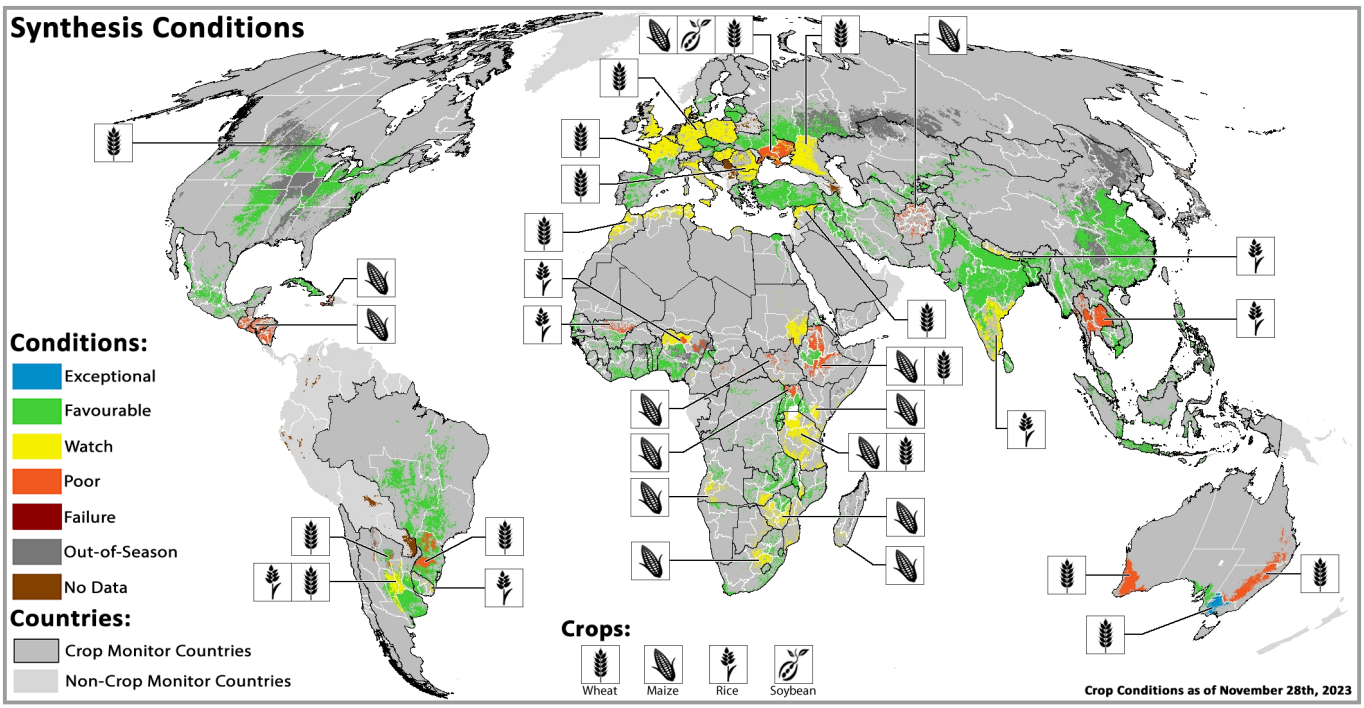
Only significant changes (of more than 1 000 tonnes) are displayed in the table.

*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



Crop condition map synthesizing information for all four AMIS crops as of 28 November. 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 southern hemisphere, harvesting is continuing with areas of concern in Australia, Argentina, and Brazil. In the northern hemisphere, winter sowing is wrapping up under mixed conditions, particularly in Europe and the Black Sea region.

Maize

In the northern hemisphere, harvest is wrapping up under generally favourable conditions. In the southern hemisphere, sowing of spring-planted crops is progressing.

Rice

In China, harvesting late-season rice. In India, harvesting of Kharif rice continues. In Southeast Asia, wet-season rice is harvesting in the northern countries, while in Indonesia, dry-season rice harvesting is wrapping up.

Soybeans

In the northern hemisphere, harvesting is wrapping up. In the southern hemisphere, sowing is gathering pace in Argentina and Brazil after initial delays.

El Niño Advisory and Positive IOD

The ongoing El Niño is developing into a strong event and is likely to maintain strength into early 2024, possibly even becoming a historically strong event (35 percent chance). El Niño conditions will likely continue into March to May 2024 (88 percent chance) and transition to ENSO-neutral by May to July (55 percent chance), according to the IRI/CPC forecast.

El Niño events tend to enhance precipitation in Central Asia, southern North America, south-eastern South America, east and southern East Africa, and south-eastern China. Drier-than-average conditions tend to occur in Central America, northern South America, parts of the northern U.S. and Canada, Southern Africa, Northern China, the Maritime Continent, and Australia.

The ongoing strong positive Indian Ocean Dipole (IOD) event will likely weaken in December but last into January, according to the Australian Bureau of Meteorology. The combination of positive IOD and El Niño conditions have led to intense rain and severe flooding in East Africa and dry conditions in Australia and the Maritime Continent.

Source: UCSB Climate Hazards Center

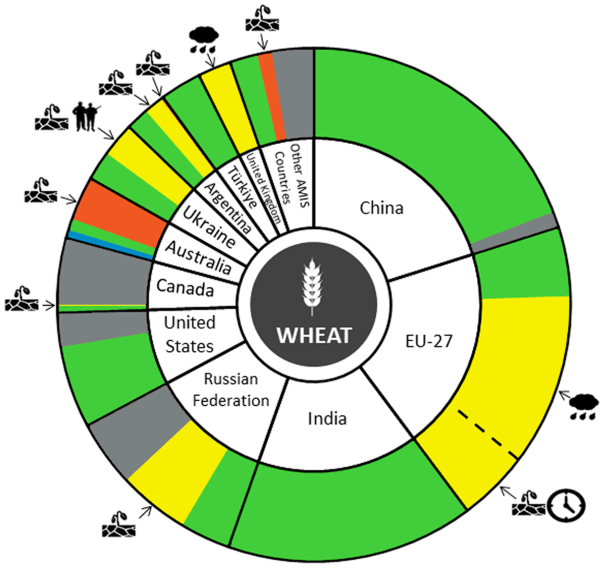
Crop monitor

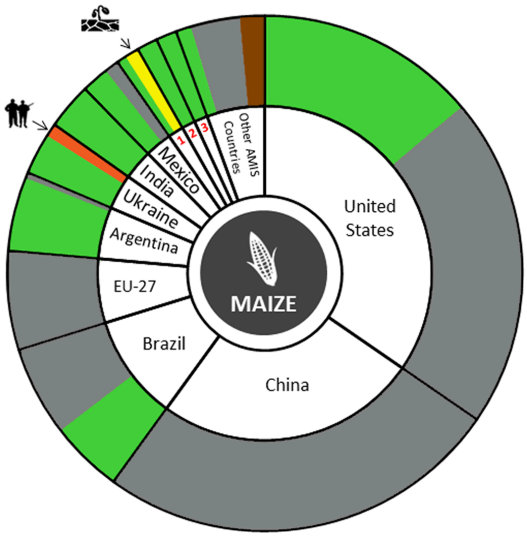
Conditions

Exceptional | Favourable | Watch | Poor | Out-of-Season | No Data

Drivers

Wet | Hot | Dry | Cool | Extreme Event | Delayed-Onset | Conflict | Socio-Economic





South Africa[1], Russian Federation[2], Canada[3]

Summaries by crop

Wheat

In **Australia**, harvesting is ongoing under mixed conditions as hot and dry weather eroded yields across much of the country, however, timely October rains supported grain filling in Victoria and South Australia. In **Argentina**, harvesting is beginning in the north as recent rains have arrived too late for most of the crops, however, conditions have improved in Buenos Aires. In the **EU**, wetter than average conditions in western and northern Europe have delayed sowing and crop establishment, while dryness in south-eastern countries has led to poor development. In the **UK**, abundant rainfall has resulted in late sowing and may affect early crop development. In **Türkiye**, sowing is wrapping up under favourable conditions. In **Ukraine**, sowing is wrapping up under favourable conditions away from the conflict zones owing to warmer and wetter-than-average weather during November, while drought persists in Odessa. In the **Russian Federation**, November rains have improved conditions across most regions except for in the Caucasus. In **China**, conditions are favourable going into winter dormancy. In **India**, sowing is progressing in the northern and central states under favourable conditions. In the **US**, dry weather has continued to support winter wheat sowing. In **Canada**, winter wheat conditions are favourable in the main producing provinces of Ontario and Manitoba.

Maize

In the **US**, harvesting is wrapping up in the northern states under favourable conditions. In **Mexico**, harvesting is ongoing for the Spring-Summer season (larger season) with a reduction in total sown area compared to last year. Sowing of the autumn-winter season (smaller season) is beginning. In **Canada**, harvesting is wrapping up under favourable conditions. In **India**, conditions are favourable as the harvesting of the *Kharif* (larger season) crop wraps up and the sowing of the *Rabi* (smaller season) crop begins. In **Ukraine**, harvesting is wrapping up under favourable conditions away from the conflict zones. In the **Russian Federation**, harvesting is wrapping up. In **Brazil**, sowing of the spring-planted crop (smaller season) has slowed down due to adverse weather and the prioritization of soybean management. A reduction in the total sown area is expected for the spring-planted crop compared to last year. In **Argentina**, recent rains have improved conditions for the early-planted crop (larger season) in Buenos Aires, Entre Ríos, Santa Fe and, to a lesser extent, Córdoba. Additionally, the rains have also generated favourable conditions for the sowing of the late-planted crop (smaller season). In **South Africa**, sowing is ongoing under dry conditions in the western half of the main producing region.

+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.

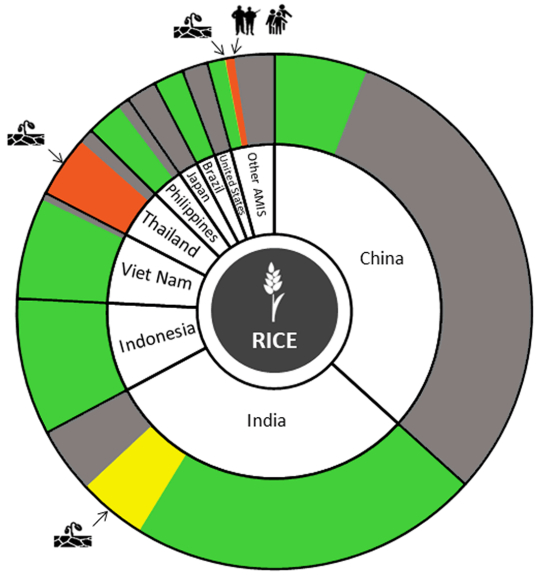
Crop monitor

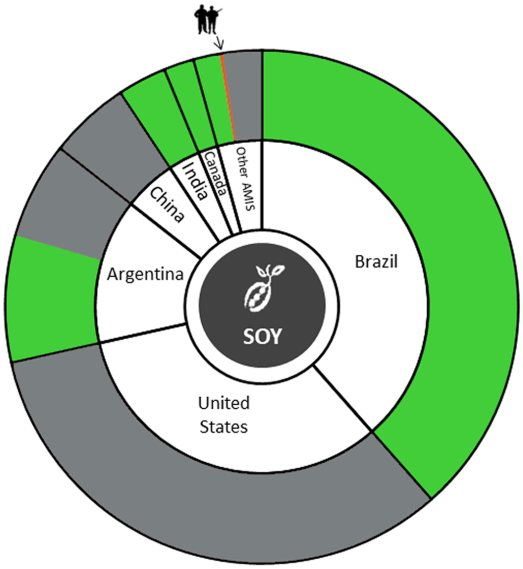
Conditions

Exceptional | Favourable | Watch | Poor | Out-of-Season | No Data

Drivers

Wet | Hot | Dry | Cool | Extreme Event | Delayed-Onset | Conflict | Socio-Economic





Rice

In **China**, harvesting is wrapping up for the late-season crop under favourable conditions. In **India**, harvesting of the *Kharif* season crop is wrapping up in the northern and central states, while ongoing in the southern and eastern states. In **Indonesia**, dry-season rice harvesting is wrapping up with good yields, but with a reduction of total harvested area. Wet-season rice sowing is continuing into its second month under favourable conditions. In northern **Viet Nam**, harvesting of the main wet-season rice is wrapping up under favourable conditions. In the south, harvesting of the other wet-season (autumn-winter and seasonal) rice is ongoing under favourable conditions as the sowing of dry-season rice begins. In **Thailand**, harvesting of wet-season rice is ongoing with poor yields due to early in-season drought followed by damages from floods. In the **Philippines**, wet-season rice sown in July to August is beginning to be harvested under favourable conditions with little damage reported from the passage of typhoon "Jenny". In **Brazil**, sowing is progressing with an increase in the total sown area expected compared to last year.

Soybeans

In **Canada**, harvesting is wrapping up under favourable conditions with an anticipated increase in harvested area compared to last year. In **India**, harvesting is wrapping up under favourable conditions. In **Ukraine**, harvesting is wrapping up under favourable conditions away from the conflict zones. In **Brazil**, sowing is continuing under generally favourable conditions despite excess rainfall in the South region and a lack of rain in other producing regions. An increase in total sown area is expected compared to last year. In **Argentina**, after receiving some rainfall in recent weeks, sowing is accelerating across most growing areas. However, due to the earlier dry conditions and remaining drought in some places, a significant proportion of the early-planting crop (typically larger season) is being shifted to the late-planted crop (typically smaller season).

Information on crop conditions in non-AMIS countries can be found in the GEOGLAM Early Warning Crop Monitor, published 7 December.

+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 & IRRI), 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

Highlights

In November, as major exporting countries continued to restrict rice and wheat exports, Egypt, Nigeria, the Russian Federation, and Thailand announced measures to support domestic producers, while India and Indonesia extended existing consumer subsidy programmes. In the EU, glyphosate use was approved for a ten-year period, while a separate proposal to restrict pesticide use was rejected.

Wheat

- On 23 November, the **Russian Federation** approved a six-month ban on durum wheat exports, which is set to apply from 1 December to 31 May 2024.
- On 2 November, **Egypt** raised the local wheat procurement price for the 2024 procurement season, from EGP 10.0 (USD 0.32) to EGP 10.7 (USD 0.35) pounds per kg, a 7 percent increase to encourage farmers to supply the state.
- On 25 November, the Ministry of Agriculture and Food Security in **Nigeria** announced that wheat farmers would benefit from a 50 percent subsidy on inputs for cultivating during the dry season, which typically runs from December to March. The support is expected to benefit some 250 000 farmers, cultivating around 250 000 hectares, and yield over 1.2 million tonnes of wheat, the government said. Producers are due to benefit from enhanced seeds, such as heat-tolerant wheat varieties, and investments in irrigation infrastructure.

Rice

- On 7 November, **Thailand** approved additional financial measures amounting to THB 55 billion (USD 1.55 billion) to stabilize the price of paddy rice. The rice package now amounts to THB 111 billion (USD 3.14 billion) for the 2023/24 season. Farmers accepting to postpone the sale of paddy rice for a five-month period will also be able to obtain loans, as part of a scheme to support domestic prices. During this time, the government will buy paddy rice with a 25 percent moisture content for THB 12 000 (USD 339) per tonne, and provide an additional THB 1 500 (USD 48.5) for storage costs, with a view to procuring a total of 3 million tonnes of paddy rice. The government also indicated it would also support cooperatives that planned to buy rice from farmers.
- On 6 November, **Indonesia** announced it would extend until June 2024 its monthly rice handout programme involving 21.3 million low-income households (see Market Monitor, October 2023). On the same day, the government announced a rice import quota of 2 million tonnes for 2024, in addition to a targeted 35 million tonnes of domestic rice production. In the current year, duties on 1.5 million tonnes of out-of-quota rice imports will be waived.

Soybeans

- On 20 November, **Argentina** through resolution 597/2023 extended the "soy dollar" programme for all incorporated products until 23 December 2023, in a bid to enhance exports. The revised scheme allows traders to utilize 50 percent of their export earnings in foreign currency, an increase from the earlier stipulation of 25 percent (see Market Monitor, November 2023). The remaining 50 percent must be converted at the official exchange rate.

Biofuels

- On 10 November, **Argentina** through resolution 922 increased the prices of bioethanol and biodiesel for domestic use. For bioethanol derived from sugarcane, the resolution sets the revised price at ARS 310 per litre (USD 0.88), while for bioethanol from maize, it sets a new price of ARS 303 per litre (USD 0.86). Biodiesel prices were raised to ARS 520 000 (USD 1 471) per tonne, up from ARS 434 006 (USD 1 227) per tonne previously.
- On November 29, the Ministry of Energy and Mineral Resources in **Indonesia** announced plans to increase biodiesel production from 13.1 billion liters in 2023 to 13.4 billion liters in 2024. The ministry aims to maintain its biodiesel blending mandate at B35, where about 35 percent of palm-based biodiesel is blended with 65 percent diesel.
- On 30 November, **Argentina** through resolution 963 increased the prices of biodiesel intended for compulsory blending with gasoil in the domestic market. According to the energy secretariat, the updated rate, effective from December, for purchasing biodiesel was set at ARS 686 986 pesos (USD 1 943) per tonne. The resolution outlines the possibility of adjusting the biodiesel acquisition price if disparities arise between the computed values and the actual manufacturing costs of the products, or if the biodiesel price could create distortions in fossil fuel prices.

Fertilizers

- On 17 November in **China**, the China Nitrogen Fertilizer Industry Association issued a statement urging its members to prioritize supplying domestic markets, including by withdrawing export applications and goods that have been shipped or collected at ports. Chinese firms should also increase output to minimum levels established by the government, and lower the sales price by reducing their profit margins, the group said. The announcement follows media reports of restrictions on Chinese fertilizer exports which have pushed up prices (see AMIS Market Monitor, October 2023).
- On 7 November, the Ministry of Commerce in **China** announced that its overall fertilizer import tariff quota for 2024

Policy developments

would remain unchanged, at 13.65 million tonnes. The quota includes 3.3 million tonnes for urea, 6.9 million tonnes for diammonium hydrogen phosphate, and 3.45 million tonnes for compound fertilizer.

- On 2 November, the **US** Department of Commerce announced adjustments in countervailing duties imposed on phosphate fertilizers imported from Morocco, reducing the rate from 19.97 percent to 2.12 percent. The decision follows the outcome of an annual administrative review by the agency.
- On 23 November, the Prime Minister of the **Russian Federation** signed a decree extending fertilizer export quotas for a six-month period, beginning on 1 December. The new export quota is set at 17 million tonnes and includes 9.8 million tonnes for nitrogen fertilizers and 7.1 million tonnes for multinutrient fertilizers (containing nitrogen, potassium and phosphates). The decision follows a separate decree, signed on 14 November, which raised by 2.2 million tonnes the export quota that was in force for the previous six months up until 30 November, and which brought to a total of 18.5 million tonnes the quota volume for that period.

Across the board

- On 29 November, **India**'s Cabinet approved a proposal to extend a five-year initiative providing free food grain to the country's poorest citizens. The programme starting on 1 January 2024 would benefit about 800 million at-risk individuals and is expected to cost INR 11.8 trillion (USD 142 billion).
- On 29 November in the **EU**, the Ministry of Agriculture and Rural Development in Slovakia approved an indefinite extension of the ban on certain agricultural products from **Ukraine**, including wheat, maize, rapeseed and sunflower seeds. This ban was set to expire at the end of the year (see AMIS Market Monitor, May, July and October 2023). Effective 1 January 2024, the list of prohibited agricultural products will be extended to other products such as barley, wheat flour, sweet maize and soybeans.
- On 23 November, the **Russian Federation** set a 24 million tonne quota on grain exports to countries outside the Eurasian Economic Union, with the measure covering exports of maize, wheat, and other grains from 15 February to 30 June 2024.
- On 18 November, the **Russian Federation** through Resolution No.1941 allocated RUB 10 billion (USD 110.6 million) to aid agricultural producers. The measure revises the method for calculating subsidies that compensate farmers for expenses incurred in the production and sale of grain. The government said the adjustment aims to provide additional support to wheat, rye, maize, and barley producers, especially those in Central Russia, the Volga Region, and Siberia.
- On 16 November, the **European Commission** approved the renewal of glyphosate for ten more years beyond the current deadline of 15 December 2023 after EU member states again failed to find a common position for or against a prolongation. In its proposal for renewal, the Commission introduced various new restrictions, such as maximum application rates, banning its pre-harvest use as a desiccant and requiring specific measures to be taken to safeguard non-target organisms.
- On 1 November, through cabinet decree no. 1132, **Ukraine** required compulsory registration of agro-industrial export firms, with a view to curbing abuses such as tax evasion in the export of agricultural commodities such as wheat, barley, and maize. The initiative will take immediate effect and will apply until 31 December 2024.
- On 22 November, the **European Parliament** rejected a proposal to reduce reliance on pesticides in farming for environmental conservation. The plan, part of the European Green Deal, intended to cut chemical pesticide use by 50 percent by 2030, and prohibit the usage of these chemicals in public parks, playgrounds, and schools. The proposed regulation, put forward by the European Commission on 22 June 2022, also included measures which sought to promote the use of sustainable plant protection products.
- On 30 November, the Directorate General of Foreign Trade in **India** through Notification 46/2023 approved exports of limited amounts of broken rice and wheat to five specified nations, despite the earlier imposition of export bans in July 2022 and September 2022 (see AMIS Market Monitor April 2023). For two countries, broken rice exports were authorized in six months' time: this stipulation applied to Senegal (500 000 tonnes) and the Gambia (5 000 tonnes). Immediate exports of broken rice to three others were also approved: **Indonesia** (200 000 tonnes), Mali (100 000 tonnes), and Bhutan (48 804 tonnes). Furthermore, India has allowed the export to Bhutan of 14 184 tonnes of wheat, 5 326 tonnes of wheat flour (atta), and 15 226 tonnes of maida/semolina. India has permitted some exports to be made upon the request of importing governments, notwithstanding the bans it has imposed.

+i Note

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

International prices

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

	Nov 2023 Average*	Change	
		M/M	Y/Y
GOI	258.2	+0.4%	-17.0%
Wheat	221.5	-2.4%	-26.2%
Maize	226.2	-7.0%	-28.1%
Rice	244.9	+0.9%	+33.7%
Soybeans	263.4	+4.3%	-14.5%

*Jan 2000=100, derived from daily export quotations

Wheat

Amid seasonal pressure in Argentina and Australia, the GOI wheat sub-Index averaged 2 percent lower month-on-month, reaching a new two-and-a-half-year low. While competition from Black Sea origins persisted, export prices in the Russian Federation rose markedly amid a firmer rouble and slowing grower selling, while a recent storm disrupted port logistics. EU prices (France) were buoyed by reluctant farmer selling amid delayed 2024/25 winter sowings, with optimism about export prospects supported by Black Sea weather-related issues. After the initial dip, US fob quotations recovered towards the end of November on an uptick in demand, including from China. Prices in Ukraine were thinly quoted. Although logistics were affected by severe weather conditions, participants noted burgeoning shipments via deep sea ports and rising local prices.

Maize

A mostly softer tone prevailed on maize export markets in November, with the GOI sub-Index dropping by an average of 7 percent month-on-month. There was a notable pullback in quotations in Argentina, linked mainly to accelerated producer selling interest, albeit with market activity generally muted due to the presidential elections. US (Gulf) prices weakened on seasonal harvest pressure, occasionally tepid overseas buying interest and news of USDA's record production estimate. Spillover from other markets contributed to modest declines in Brazil, but with the downside contained by stronger premiums, tied to complicated logistics and a busy export programme.

Rice

Average international rice prices ticked higher month-on-month, but with mixed movements across major exporters. While Thailand's white and parboiled rice quotes were little changed, as new crop pressure was offset by an uptick in buying interest and supportive currency movements, solid gains were seen in Vietnam, as local demand and tightening availabilities of the summer/autumn crop underpinned. Offers also advanced in Pakistan amid steady offshore purchasing, while Indian parboiled quotes retreated slightly as buying interest from key West African markets remained subdued. Elsewhere, South American offers surged amid elevated local prices and tight availabilities.

Soybeans

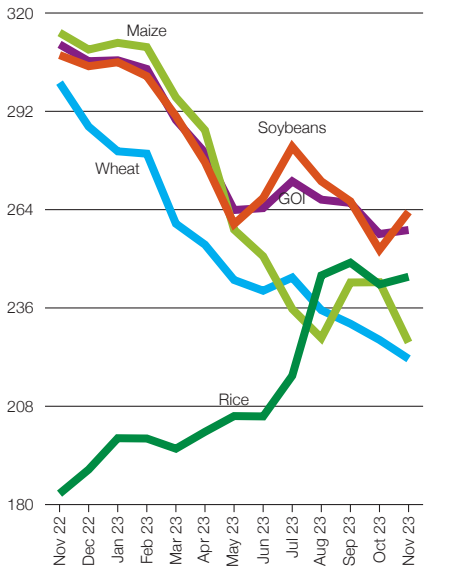
Average soybean export values, as measured by the IGC GOI sub-Index, were 4 percent higher month-on-month during November, with steepest gains in Brazil and the US. Aside from seasonally stronger demand for US supplies, underscored by solid purchases by China, the market was buoyed by worries about Brazilian crop prospects amid suboptimal weather in core growing areas. Nevertheless, despite a tightening balance sheet - as the season drew to a close - and 2023/24 crop concerns, Brazilian fob quotations were still at a slight discount to US Gulf values. Advances in soymeal prices added to the positive tone, more than compensating for softer soya oil values.

IGC commodity price indices

		GOI	Wheat	Maize	Rice	Soybeans
2022	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
	September	**265.9**	231.5	243.3	248.9	266.4
	October	**257.1**	226.9	243.3	242.7	252.6
	November	**258.2**	221.5	226.2	244.9	263.4

(..... January 2000 = 100 .....)

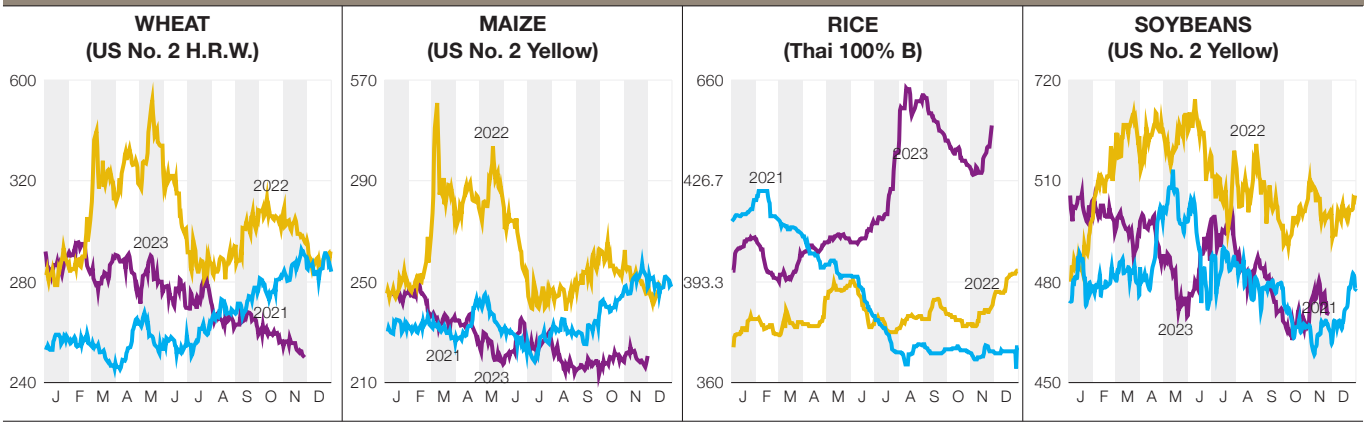
IGC commodity price indices



International prices

Selected export prices, currencies and indices

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



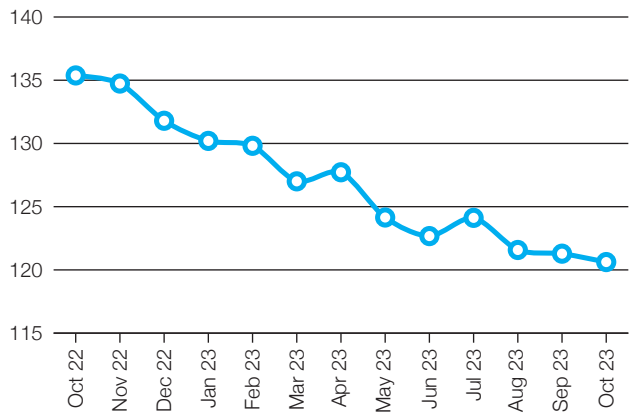
Daily quotations of selected export prices

	Effective date	Quotation	Month ago	Year ago	% change M/M	% change Y/Y
		USD/tonne				
Wheat (US No. 2, HRW)	27-Nov	270	283	409	-4.6%	-34.0%
Maize (US No. 2, Yellow)	30-Nov	242	235	321	+3.0%	-24.7%
Rice (Thai 100% B)	27-Nov	615	572	445	+7.5%	+38.2%
Soybeans (US No. 2, Yellow)	27-Nov	511	500	601	+2.2%	-15.0%

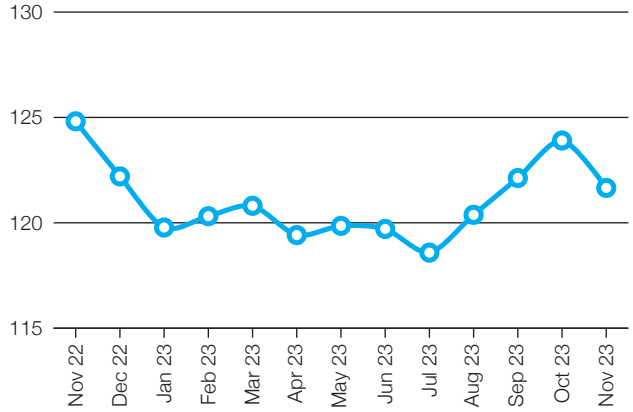
AMIS countries' currencies against US Dollar

AMIS Countries	Currency	Nov 2023 Average	Monthly Change	Annual Change
Argentina	ARS	353.6	-1.0%	-54.1%
Australia	AUD	1.5	2.4%	-1.6%
Brazil	BRL	4.9	3.3%	7.7%
Canada	CAD	1.4	0.0%	-2.0%
China	CNY	7.2	1.2%	-0.7%
Egypt	EGP	30.9	0.0%	-21.0%
EU	EUR	0.9	2.4%	6.0%
India	INR	83.3	-0.1%	-2.0%
Indonesia	IDR	15589.3	1.0%	0.5%
Japan	JPY	149.8	-0.1%	-5.2%
Kazakhstan	KZT	461.8	3.0%	0.4%
Rep. of Korea	KRW	1305.0	3.4%	3.8%
Mexico	MXN	17.4	4.1%	11.9%
Nigeria	NGN	806.7	-3.1%	-45.3%
Philippines	PHP	55.8	1.8%	3.0%
Russian Fed.	RUB	90.4	7.1%	-33.4%
Saudi Arabia	SAR	3.8	0.0%	0.2%
South Africa	ZAR	18.5	2.7%	-5.8%
Thailand	THB	35.4	3.0%	2.5%
Türkiye	TRY	28.6	-2.7%	-35.1%
UK	GBP	0.8	2.1%	5.8%
Ukraine	UAH	36.1	1.1%	1.8%
Viet Nam	VND	24313.0	0.7%	2.0%

FAO Food Price Index Oct 2022 - Oct 2023



Nominal Broad Dollar Index Nov 2022 - Nov 2023

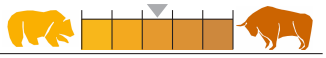


Futures markets

Overall market sentiment

- Maize, soybean, and wheat futures prices continued their declining trend.
- Volatility remained limited in maize and soybean markets, staying near the ten-year average of 20 percent. By contrast, implied volatility in wheat markets reflects higher perceived risk and uncertainties.
- Investment flows suggest cautious optimism from money managers in soybean markets and more bearish pressure in the case of maize and wheat.

MONTHLY PRICE TREND



Futures prices

Weather developments in Brazil were the main drivers for maize and soybean futures prices last month. While it is too early in the season to predict if the dry spell in Brazil will damage the country's record production potential, the increased uncertainty has already led Brazilian farmers to hold back on sales. As exporters face difficulties in sourcing, Brazilian domestic prices for soybean and maize strengthened, reducing the country's competitiveness. As a result, US exporters have been able to tap into international demand, which has been a supporting factor for CME maize and soybean futures.

Wheat futures faced persistent downward pressure on both CME and Euronext due to sluggish US and European exports in a context where Ukraine's alternative grain export corridor is gradually scaling up. Exports out of Ukraine might grow further in the coming weeks in view of a recent agreement between the Ukraine government and insurance companies for a cost-cutting war risk insurance programme. By contrast, exports from the Russian Federation showed signs of a slowdown, limiting the downward potential for wheat futures prices.

Regarding non-fundamental drivers, the weakened US dollar and expectation of a somewhat dovish Federal Reserve were seen as factors supporting grain and oilseed futures.

Volumes & volatility

Volatility in maize and soybean markets remained limited at around 20 percent and thus within long-term averages, both measured over a 30-day period (historical volatility) and forward-looking reflecting market expectations for future price movements (implied volatility). Despite concerns for the Brazilian crop, the overall market sentiment thus continues indicating low anticipated volatility. The impact of weather conditions in Brazil on overall volatility for maize and soybean futures should be more noticeable when both crops enter into their reproductive phase in January.

In wheat, despite little volatility in historical measures for November, implied volatility on both Euronext and CME displayed a risk premium close to 30 percent, well above the ten-year average for this period and only slightly below last month's levels.

In a context of subdued volatility and limited export activity in Europe and in the USA, the volumes traded on CME and Euronext were limited. Most of the activity was influenced by rolling positions from the soon-to-expire December 2023 contract to the next nearby expiry in March 2024.

Forward curves

For wheat and maize, high interest rates and CME storage rates increased the cost of carrying grains, leading to a "carry configuration" where longer-dated futures had higher prices. This configuration steepened in November, reflecting concerns about oversupply and increased demand for storage. With weather impacts in Brazil potentially delaying the start of the country's soy export season for the new crop, the values for US soybean futures contracts expiring in February increased.

Investment flows

The net short position of money managers on CME maize and wheat, as well as on Kansas and Euronext wheat reflected their bearish view on these markets. Money managers maintained a bullish stance on soybeans, particularly in soymeal, with a record-high net position for this time of the year, seemingly driven by the idea of persisting low meal exports from Argentina. Hedge funds, however, still retained an overall net short position in agricultural derivatives. Overall, the lack of a clear bullish or bearish trend since the beginning of the 2023/2024 season has resulted in many trend-following investors exiting the agricultural space.

Euronext futures volumes and price evolution

Average daily volume (1000 tonnes)	Nov 2023	M/M	Y/Y
Wheat	4 461.1	+43.6%	+41.6%
Maize	92.1	-52.6%	-34.4%

Prices (USD/t)	Nov 2023	M/M	Y/Y
Wheat	248.9	+0.3%	-24.3%
Maize	221.8	+1.3%	-29.5%

CME futures volumes and prices evolution

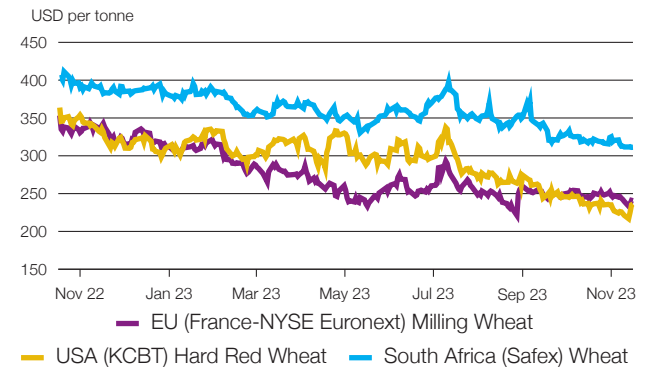
Average daily volume (1000 tonnes)	Nov 2023	M/M	Y/Y
Wheat	20 551.0	+32.5%	+30.7%
Maize	53 705.9	+65.4%	+27.4%
Soybean	32 408.2	-25.0%	+48.8%

Prices (USD/t)	Nov 2023	M/M	Y/Y
Wheat	211.8	+0.7%	-30.0%
Maize	188.1	-2.1%	-28.5%
Soybean	495.9	+4.6%	-6.4%

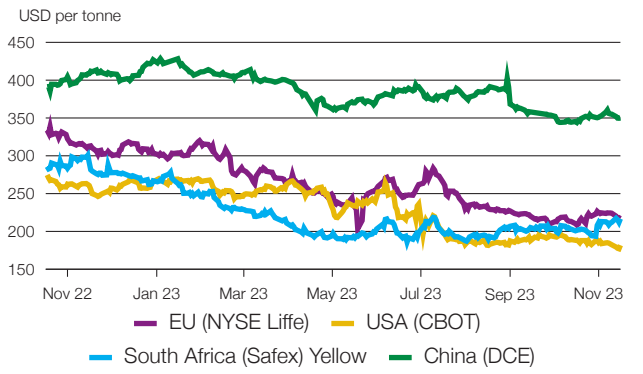
Market indicators

Daily quotations from leading exchanges - nearby futures

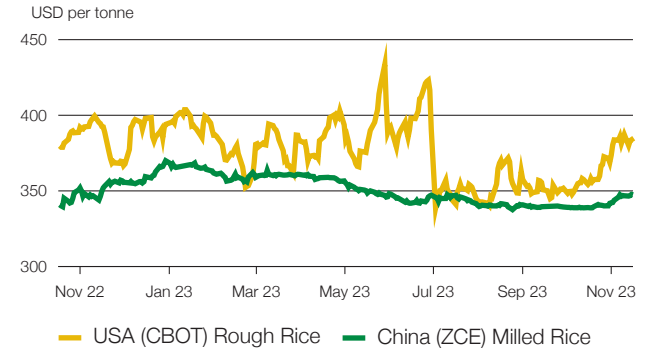
Wheat



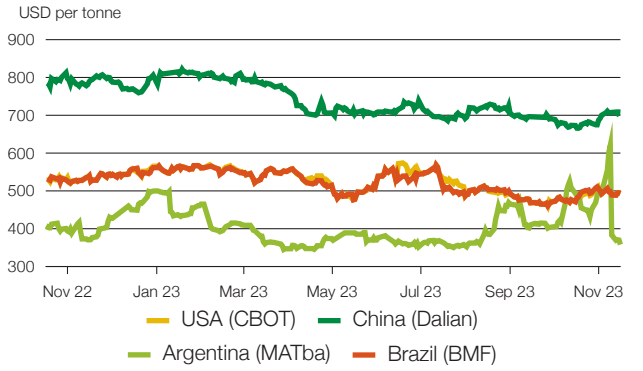
Maize



Rice



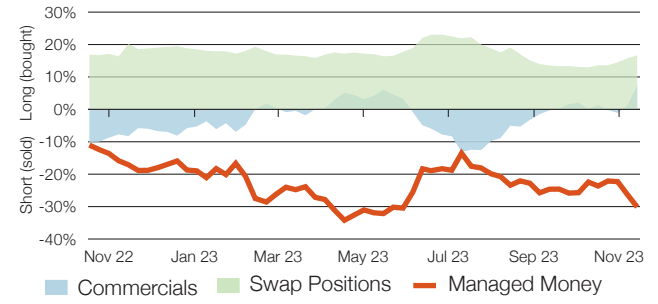
Soybean



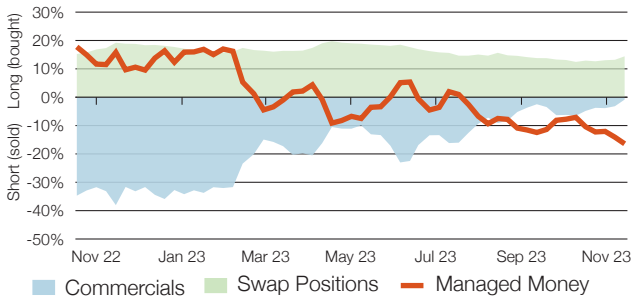
CFTC commitments of traders

Major categories net length as percentage of open interest*

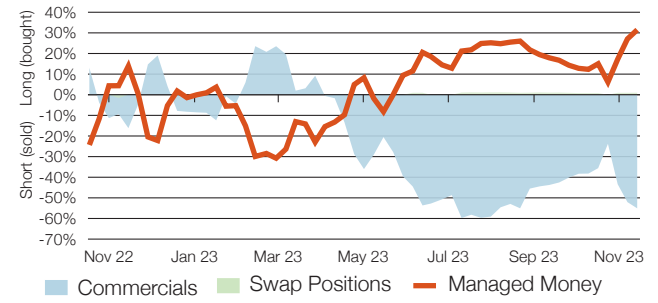
Wheat



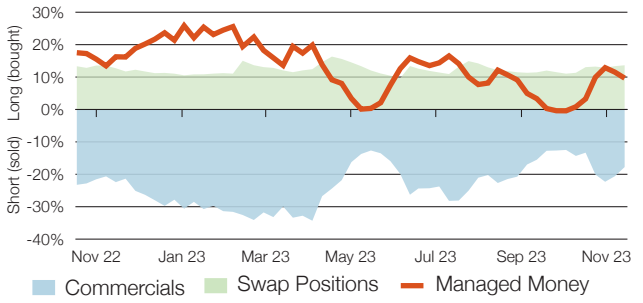
Maize



Rice



Soybean

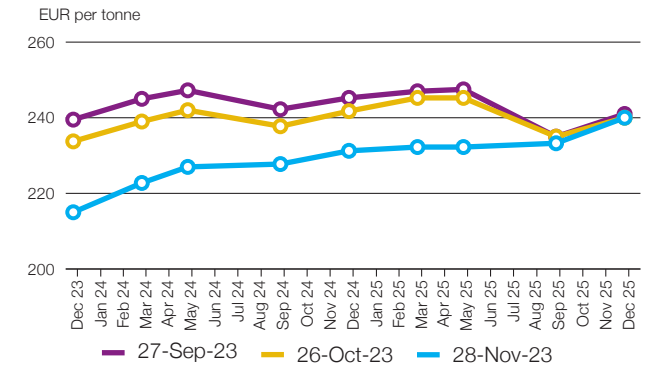


*Disaggregated futures only. Though not all positions are reflected in the charts, total long positions always equal total short positions.

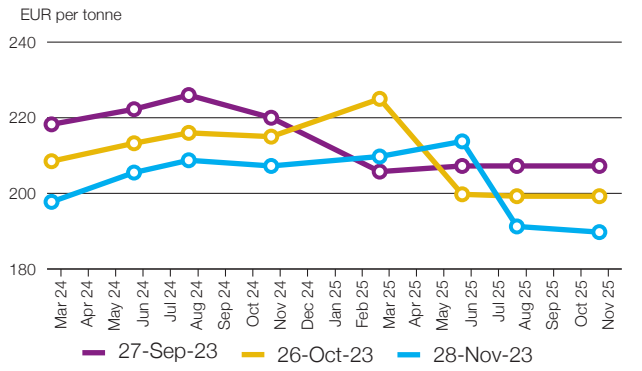
Market indicators

Forward curves

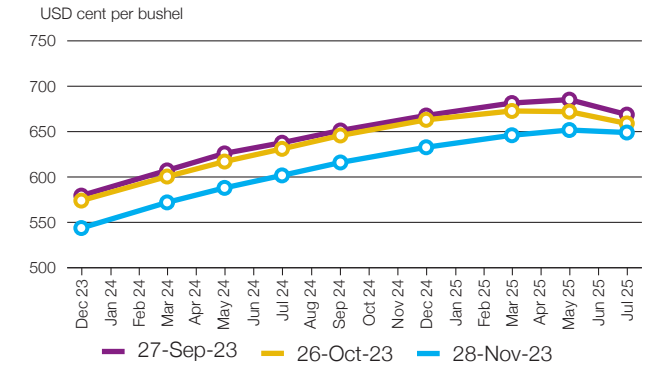
Euronext wheat (EBM)



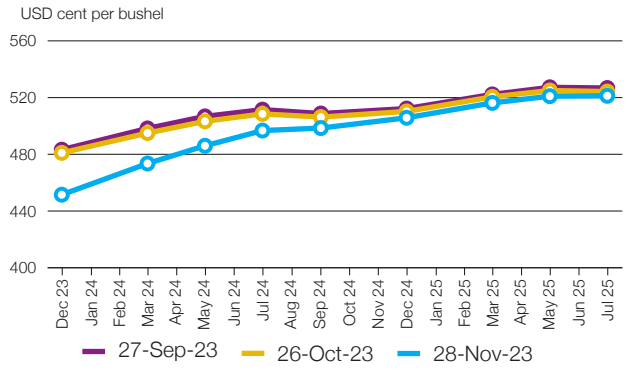
Euronext maize (EMA)



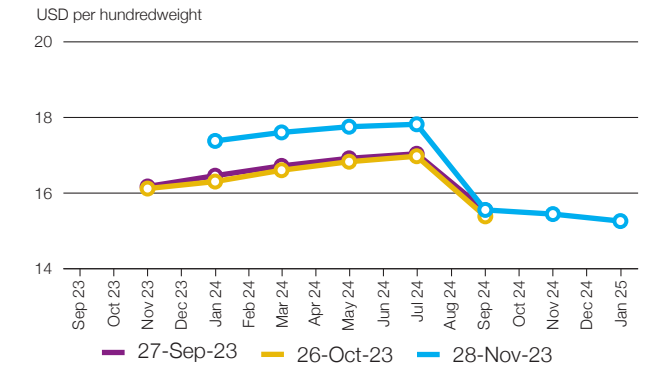
CBOT wheat



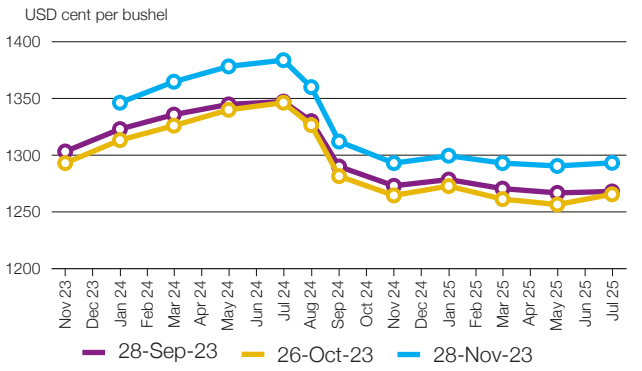
CBOT maize



CBOT rice

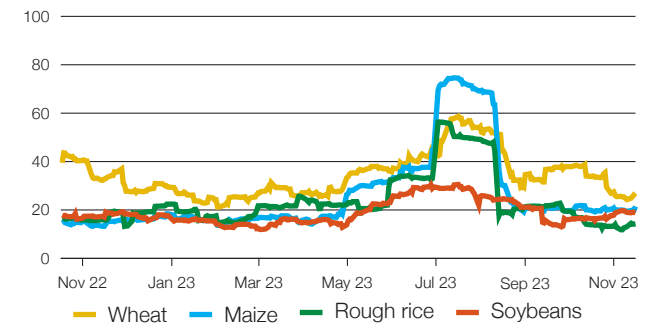


CBOT soybean

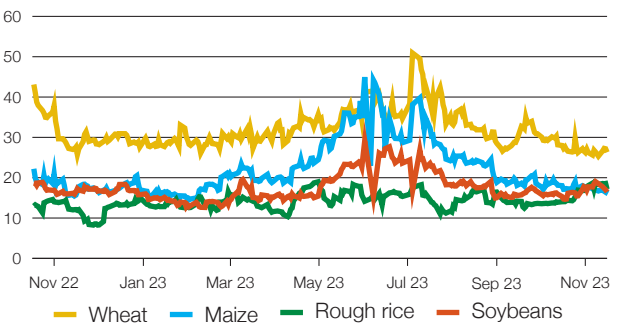


Historical and implied volatilities

Historical Volatility (30 days)



Implied Volatility (Daily)

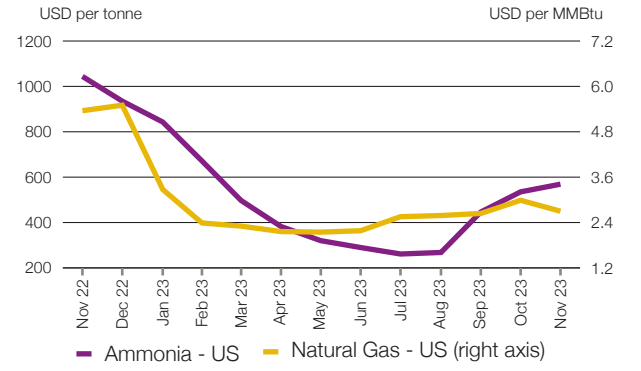


AMIS market indicators

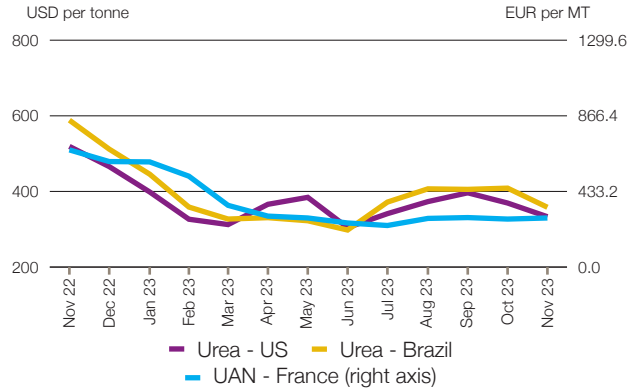
Several of the indicators covered in this report are updated regularly on the AMIS website. These, as well as other market indicators, can be found at: https://www.amis-outlook.org/amis-monitoring/indicators/. For more information about forward curves see the feature article in AMIS Market Monitor no.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

Fertilizer outlook

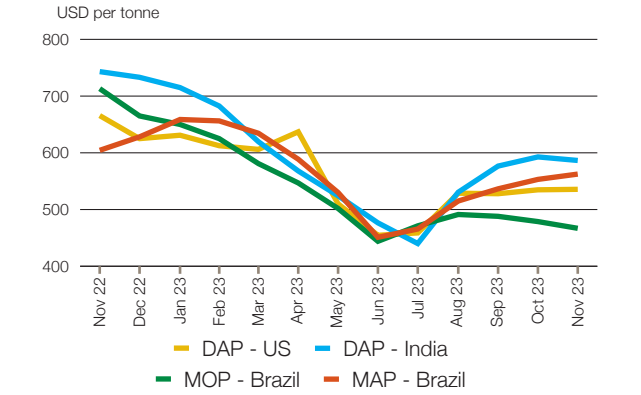
Input prices



Nitrogen prices



Potash and phosphate



Major market developments

Fertilizer markets were mostly soft in November and will be unlikely to gain momentum before the close of the year. Looking further ahead, existing export restrictions in China may support global phosphate prices, but potash and nitrogen may lack support. Natural gas costs will remain an important factor to monitor over the northern hemisphere winter, particularly for European manufacturers.

- **Fertilizer input prices**. Natural gas prices moved lower in November as storage levels in the USA and Europe increased on lower-than-usual demand for this time of the year, while recent fears of supply disruptions in the Middle East have so far proved ungrounded. Ammonia prices were up slightly in the USA, but global market sentiment might shift as production gradually returns to normal in Saudi Arabia.
- **Nitrogen fertilizer prices**. Urea prices declined last month in global markets as low demand outweighed potential impacts of China putting in place new export limitations. The Indian market is well supplied, and market participants do not expect a new purchase tender ahead of year end. Demand in Brazil is low due to dry weather while poor conditions for winter plantings may limit nitrogen requirements in several parts of Europe.
- **Phosphorus fertilizer prices**. Phosphorus fertilizer prices were little changed in November. In India, the import season has come to a close while dry weather might ease fertilizer demand for the second maize crop (safrinha) in Brazil. However, global supplies remain tight, and export limitations out of China will likely support prices further.
- **Potash prices**. The price of MOP decreased slightly in Brazil due to low domestic demand and high inventories. Even European prices marked a first downward move amid weather concerns, which comes following several months of upward pressure. On the supply side, the International Fertilizer Association forecasts global production to continue its recovery in 2023 with a 5.1 percent increase year-on-year.

	Nov-23 average	Nov-23 std. dev.	% change last month*	% change last year*	12 month high	12-month low
Ammonia - US (USD/ST)	569.0	-	+6.3	-45.5	935.0	261.2
Natural Gas - US (USD/MMBtu)	2.7	0.3	-9.7	-49.6	5.5	2.1
Urea Ammonium Nitrate (UAN) - France (EUR/MT)	281.2	2.5	+2.3	-58.1	604.4	238.1
Urea - US (USD/ST)	333.1	26.3	-9.8	-35.8	465.8	304.5
Urea - Brazil (USD/MT)	358.1	33.1	-12.4	-39.1	511.9	298.0
Di-ammonium Phosphate (DAP) - India (USD/MT)	586.5	-	-1.1	-21.1	733.1	440.0
Di-ammonium Phosphate (DAP) - US (USD/ST)	535.6	5.5	+0.2	-19.5	637.0	454.6
Mono-ammonium Phosphate (MAP) - Brazil (USD/MT)	562.5	3.5	+1.7	-6.9	658.8	451.0
Muriate of Potash (MOP) - Brazil (USD/MT)	466.9	4.7	-2.5	-34.5	665.0	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

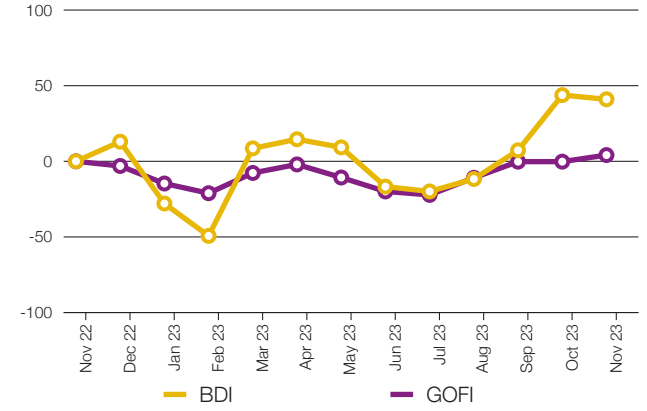
Dry bulk freight market developments

	Nov-23 average	Change M/M	Change Y/Y
Baltic Dry Index (BDI)	**1831.5**	**-1.9%**	**+41.0%**
sub-indices:			
Capesize	2894.3	-6.1%	+106.9%
Panamax	1766.5	+9.8%	+9.9%
Supramax	1195.0	-4.1%	-1.6%
Baltic Handysize Index (BHSI)	*633.6*	*-6.7%*	*-19.3%*

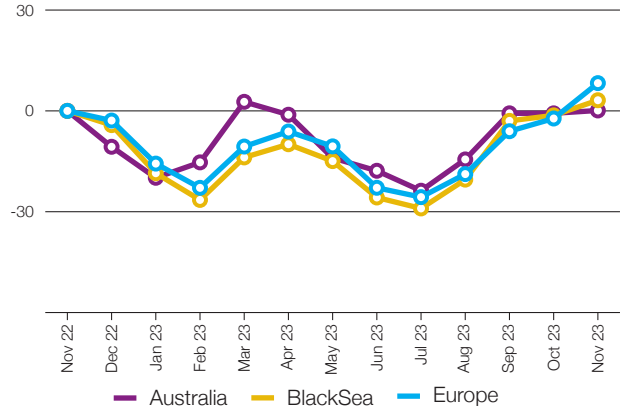
Source: Baltic Exchange, IGC. Base period for BDI: 4 January 1985 = 1000; for BHSI: 23 May 2006 = 1000; for GOFI: 1 January 2013 = 100

	Nov-23 average	Change M/M	Change Y/Y
IGC Grains and Oilseeds Freight Index (GOFI)	**160.2**	**+4.4%**	**+4.1%**
sub-Indices:			
Argentina	*192.2*	*+0.5%*	*-4.2%*
Australia	*99.5*	*+0.9%*	*+0.1%*
Brazil	*207.4*	*+3.1%*	*+5.2%*
Black Sea	*173.3*	*+4.6%*	*+3.2%*
Canada	*128.9*	*+9.8%*	*+10.0%*
Europe	*142.0*	*+10.8%*	*+8.3%*
US	*129.9*	*+6.4%*	*+6.9%*

BDI and IGC GOFI



Selected IGC GOFI sub-indices



- While average dry bulk timecharter rates were 2 percent lower month-on-month, this masked an upsurge in values in the second half of the month, led by the Capesize segment, which is mainly associated with the transportation of ores, coal and heavy raw materials. The **Baltic Dry Index** (BDI) climbed to an 18-month high by the end of November, with average values up by 41 percent year-on-year on stronger earnings for larger-sized Capesize and Panamax vessels.
- **Capesize** rates were boosted by strong iron ore shipments, in part linked to restocking requirements in China, and robust bauxite dispatches out of Guinea. Still, average monthly values were moderately lower than in October.
- Support for **Panamax** freight rates came from ongoing traffic restrictions at the Panama Canal, which continued to hamper deliveries to Asia, notably from the US Gulf. Panamax values were also bolstered by solid demand for minerals and grains out of the Atlantic, while a vessel backlog at Brazil's ports contributed to tighter vessel supply across that region. In Asia, there were sustained coal shipments from Indonesia.
- **Supramax** values averaged lower month-on-month, but the market witnessed a stronger second half of the period amid tightening vessel availability in the Mediterranean and at the US Gulf - the latter featuring as an origin for bumper soybean sales to China.
- Likewise, early losses in the **Handysize** sector were reversed during the past two weeks on fresh enquiries in the Atlantic, notably in Brazil, and accelerating shipments from the US Gulf.
- Average values for the **IGC Grains and Oilseeds Freight Index** (GOFI), which represents costs across key grains and oilseeds routes and includes fuel expenses, continued to trend higher during November, with gains since July of more than 40 percentage points.

+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 cargos, 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.

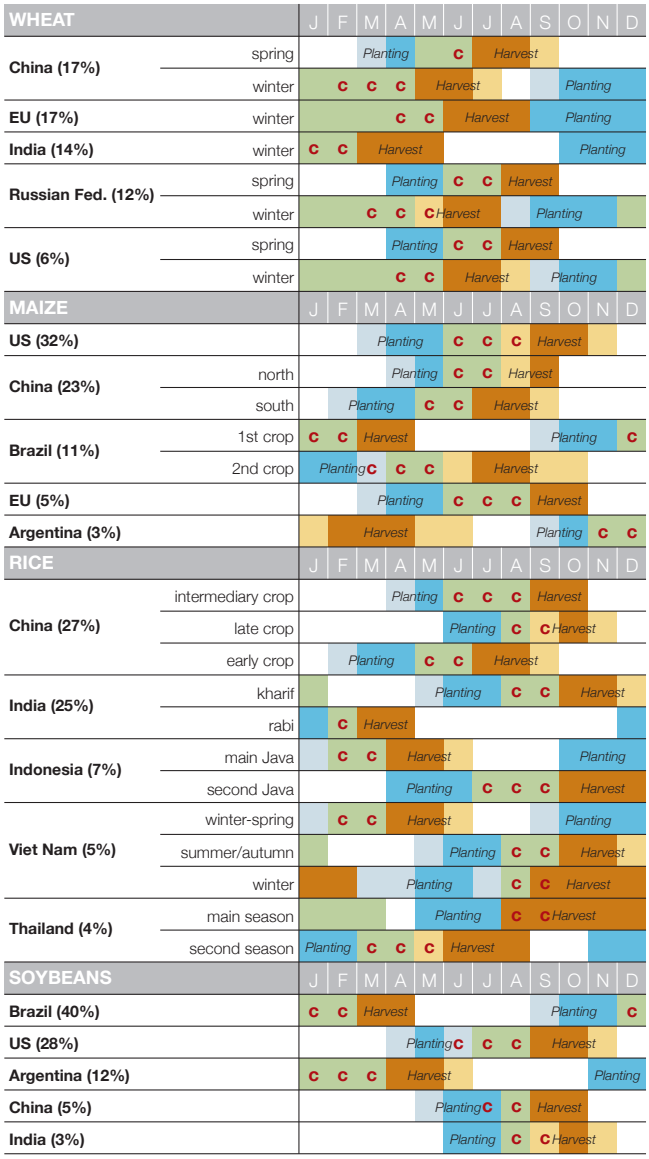
UTILIZATION: For all three sources, wheat, maize and rice utilization includes food, feed and other uses (namely, seeds, industrial uses and post-harvest losses). For soybeans, it comprises crush, food and other uses. However, for all AMIS commodities, the use categories may be grouped differently across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

AMIS - GEOGLAM Crop Calendar

Selected leading producers*



***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**
- **C** **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

2024 AMIS Market Monitor release dates (tentative)
1 February, 7 March, 4 April, 2 May, 6 June, 4 July, 5 September, 3 October, 7 November, 5 December

Contacts and Subscriptions
AMIS Secretariat Email: AMIS-Secretariat@fao.org

Download the AMIS Market Monitor or sign up for a free e-mail suscription at:
www.amis-outlook.org/amis-monitoring