



Market Monitor



No. 106 March 2023

Contents

Feature article:	
Ukraine One Year After	2
World supply-demand outlook	3
Crop monitor	5
Policy developments	8
International prices	9
Futures markets	11
Market indicators	12
Fertilizer outlook	14
Ocean freight markets	15
Explanatory notes	16

Markets at a glance

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

With no end in sight to the war in Ukraine and threats of further escalation, uncertainty continues to hang over agricultural markets. Supplies are tight. Reduced plantings in Ukraine mean that other countries will need to produce additional grains and oilseeds to help rebuild global stocks and moderate price levels. The world has so far been relatively fortunate: a combination of good weather and strong producer supply response has kept market prices from rebounding back to the high levels of early 2022. However, tight stocks will mean increased price volatility, particularly during periods of uncertainty such as planting times and the Northern Hemisphere growing seasons. In addition, uncertainty over events like the renewal of the Black Sea Grain Initiative will continue to roil markets.

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



Feature article

Ukraine One Year After

The war in Ukraine has roiled commodity markets and significantly weakened global food security. Despite efforts to alleviate the impact of the crisis, especially the partial reopening of food shipments from Ukraine's Black Sea ports, several risks remain mostly in the areas of Ukraine's storage, processing and transport capacities; international trade policy measures; and food price levels and volatility. On the positive side, provisional forecasts for this year's world production of wheat - one of the grains most affected by the crisis - points to a robust outturn, which could help assuage international markets.

Logistical risks

The conflict has caused significant damage to the infrastructure and logistics capacities in Ukraine, including inland transportation networks, seaports, as well as storage and processing facilities. As a consequence, these damages have significantly lowered Ukraine's exporting capacity and raised the cost of trading grain. While significant efforts have been made to compensate for some of these disruptions, solutions are frequently insufficient or only provide temporary relief. The distribution of sleeve bags, for example, has increased the country's storage capacities, which nevertheless remain inadequate. Apart from higher storage costs, sleeve bags might also lower the quality of the stored grain. Insufficient storage space also imposed economic pressures on farmers, which forced them to sell at a loss and might reduce future plantings.

Maritime shipping

The conflict has also impacted maritime trade logistics, disrupting the operations of key seaports in the global grain trade. To mitigate these challenges, the Black Sea Grain Initiative and other international programmes have been instrumental, including the promotion of alternative transportation methods, such as train and river freight through the so-called Solidarity Lanes. However, these efforts have yet to restore the pre-war export pace and continue to be costly. In the case of the Black Sea Grain Initiative, the reduced scope in terms of port and route coverage remain limiting factors; in addition, cargo inspection times are being impacted by delays due to a reported lack of cooperation from Russian authorities. Shipping from Ukraine is also being impacted by high insurance costs as some reinsurers have excluded the Black Sea from coverage and banks are hesitant in financing deals from the Black Sea due to the high risks involved and fear of potential sanctions.

Trade policy risks

In an environment of high prices following the outbreak of the war in Ukraine, 23 countries imposed restrictions on food and feed exports leading to further disruptions in global markets and even more elevated prices. Fortunately, most of these restrictions had been lifted by mid-July 2022, but they have remained largely unchanged for the remainder of the year. At the same time, the Russian Federation claims that its fertilizer exports are being hindered by restrictions imposed by the US and the EU, which both deny this claim. Reduced fertilizer exports have made it more challenging for farmers to acquire the necessary inputs for crop growth.

Price risks

After experiencing sharp increases in the early months of the conflict, grain and soybean prices have returned to pre-war levels by the end of 2022. However, prices remain elevated and within the upper range of historical levels, as the market currently prices in a restrained flow of exports from the Black Sea, and for the next season a drastically cut grain harvest from Ukraine given the acute adversity of the production environment for next season. While price volatility has gotten back to 10-year average levels, possible outbursts of grain price variance still need to be monitored closely as markets remain highly sensitive to weather-related and geopolitical developments.

Near-term outlook

As regards the near-term outlook of global grain markets, early indications point to a strong wheat output this year, which could reach the second largest on record following the all-time high in 2022. Though total production is seen retreating, following four consecutive years of growth, world prospects are buoyed by expectations of area increases in several leading producers in 2023, amid the still attractive prices. FAO's preliminary forecasts of global wheat production will be released on Friday, 3 March 2023 in the [Crop Prospects and Food Situation report](#). These forecasts benefited from inputs of AMIS focal points that made available their country's latest information.

AMIS Webinar - Ukraine one year later

On 8 March, an IFPRI-AMIS webinar will discuss the impact of the war in Ukraine on agricultural markets and food security.

[Register here](#)

World supply-demand outlook

	Wheat	FAO-AMIS			USDA		IGC		IN MILLION TONNES
		2021/22 est	2022/23 f'cast		2021/22 est	2022/23 f'cast 8 Feb	2021/22 est	2022/23 f'cast 16 Feb	
			2 Feb	2 Mar					
WHEAT 2022 production lifted slightly and set to rise by 2.1 percent from the previous year's level, largely reflecting increased outputs in Canada and the Russian Federation.									
Utilization in 2022/23 raised this month, mostly stemming from higher feed use estimates for the EU, and forecast to increase by 0.8 percent above the 2021/22 level.	Prod.	778.0	793.7	794.6	779.3	783.8	781.1	796.0	
		641.1	655.9	656.9	642.4	646.1	644.1	658.4	
Trade in 2022/23 (July/June) nearly unchanged, as an upward revision for Australia's export forecast was balanced by a downgrade for the EU, and forecast to increase by 1.1 percent above the 2021/22 level.	Supply	1070.7	1087.3	1088.4	1069.4	1060.5	1058.1	1070.9	
		803.4	815.7	816.7	788.3	781.0	793.9	801.3	
Stocks (ending in 2023) still forecast to rise by 4.1 percent above opening levels, with most of the increase concentrated in China and the Russian Federation.	Utiliz.	773.0	777.6	779.5	792.7	791.2	783.2	789.2	
		630.2	637.9	639.8	644.7	647.2	642.1	649.6	
	Trade	195.7	197.3	197.8	205.3	211.4	196.7	196.6	
		186.0	188.3	188.8	195.8	201.4	186.8	187.9	
	Stocks	293.8	305.4	305.7	276.7	269.3	274.8	281.7	
		159.8	164.0	164.3	134.9	124.8	141.9	143.0	
MAIZE 2022 production revised upwards this month but still 4.5 percent below the previous year's level mostly due to declines in production in the EU, Ukraine, and the US.									
Utilization 2022/23 forecast lowered month-on-month and pointing to a 1.4 percent decline from 2021/22, driven by lower feed and other uses.	Prod.	1212.1	1156.0	1157.6	1216.0	1151.4	1220.3	1152.5	
		939.5	878.8	880.4	943.4	874.2	947.8	875.3	
Trade in 2022/23 (July/June) nearly unchanged this month as further upward adjustments to expected sales from Brazil balanced export forecast downgrades for Argentina and the USA.	Supply	1498.1	1461.6	1463.2	1508.8	1457.6	1499.3	1434.8	
		1071.4	1027.7	1029.3	1030.6	971.3	1032.5	969.4	
Stocks (ending in 2023) adjusted further downwards this month, on lower stock estimates in Brazil following a strong export pace, and forecast to decline by 8.3 percent below opening levels.	Utiliz.	1199.2	1184.4	1182.7	1202.6	1162.4	1217.1	1180.2	
		907.3	887.0	885.3	911.6	865.4	916.0	871.8	
	Trade	181.9	181.9	181.4	193.9	182.4	179.4	170.0	
		159.8	162.9	162.4	172.0	164.4	156.9	151.0	
	Stocks	305.6	283.5	280.2	306.3	295.3	282.2	254.6	
		148.9	129.0	125.8	97.1	88.0	94.0	78.6	
RICE production in 2022 upgraded largely due to an upward revision for India. This increase, coupled with several other more contained upgrades, outweighed output reductions namely for Pakistan and the United Republic of Tanzania.									
Utilization in 2022/23 raised slightly m/m, amid somewhat higher expected non-food uses in Asia.	Prod.	524.4	511.6	516.6	514.8	503.0	515.8	503.9	
		378.6	368.8	373.8	365.8	357.0	366.8	358.0	
Trade in 2023 essentially unchanged m/m, as an upgrade to India's export forecast offset downscaled shipments by Pakistan and Thailand.	Supply	718.5	708.6	712.6	703.2	686.3	697.8	682.6	
		469.6	465.2	469.2	437.7	427.4	441.6	430.9	
Stocks (2022/23 carry-out) raised namely on higher expected carry-overs in exporters, especially India. Global reserves now seen easing by 0.8 percent y/y and to their second highest level on record.	Utiliz.	521.4	519.5	520.0	519.9	517.2	519.1	512.9	
		369.4	372.2	372.7	363.5	362.2	364.9	361.8	
	Trade	55.8	52.8	52.7	56.3	54.2	55.0	51.5	
		49.7	47.8	47.7	50.1	49.0	49.0	47.3	
	Stocks	196.0	192.5	194.4	183.3	169.1	178.7	169.7	
		95.4	93.0	94.9	70.3	62.1	70.7	64.8	
SOYBEAN 2022/23 production downgraded further, with lower forecasts for Argentina and Paraguay amid protracted dryness more than offsetting an upward adjustment for India.									
Utilization in 2022/23 lowered marginally, chiefly reflecting expectations of reduced crushings in Argentina, Paraguay and the US, outweighing a higher consumption forecast for India.	Prod.	357.1	386.5	382.3	358.0	383.0	355.8	375.3	
		340.7	366.3	362.0	341.6	362.7	339.4	355.0	
Trade in 2022/23 (Oct/Sep) about unchanged m/m, pointing to a seven percent recovery in global soybean transactions after falling for two consecutive seasons.	Supply	408.2	427.2	423.0	457.7	481.8	410.6	419.9	
		368.3	387.9	383.7	410.2	430.1	363.7	371.2	
Stocks (2022/23 carry-out) trimmed primarily on lower forecasts for Argentina due to reduced production prospects, while the global stocks-to-use ratio remains below the five-year average level.	Utiliz.	368.4	377.2	374.4	362.1	376.4	366.0	372.8	
		256.1	262.0	259.2	254.5	261.1	257.8	258.0	
	Trade	154.7	166.0	165.7	153.9	167.5	155.3	166.7	
		63.2	69.0	68.7	62.3	71.5	65.7	71.5	
	Stocks	40.7	48.6	47.6	98.8	102.0	44.7	47.1	
		21.7	27.6	26.6	67.4	69.7	16.2	18.0	

+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 2022/23 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	981	500	1842	500	292	1633	-499	-1687	-500	-3215	4946	-56	472	-124	1879	-4263	-300	-2796	-300	-1067
Total AMIS	644	1100	1715	500	692	1387	-400	-1398	-500	-3615	6460	-40	1054	725	1602	-3663	-100	-2171	-400	-692
Argentina	-	-	-	-	-	-	-	-	-1000	-	-	-	-	-	-	-4500	-	-2600	-200	-1000
Australia	-	-	-	1000	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-
Brazil	787	-400	-213	500	500	-3	-	-3	2500	-6000	-	-	-	-	-	-110	-	-110	-	-
Canada	-	-	100	-	-500	-	-	-200	-	200	-	-	-	-	-	-	-	-	-	-
China Mainland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-200	-200	-	-	-	-	-	-	-	-	-	-	-	-
EU	-145	1000	1653	-1000	365	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	6164	-	973	1800	1100	1083	-	985	-	98
Indonesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-	43	-	-146	-	70	-	-	-	-	-
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-46	10	-36	-	-	-	-	-	-	-
Mexico	2	-	2	-	-	-110	-	-110	-	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rep. of Korea	-	200	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russian Fed.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-200	-100	-100	-	-200
Saudi Arabia	-	300	-	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-	29	-	-
Thailand	-	-	-	-	-	-	-200	-250	-	50	298	-	262	-1000	400	-	-	-	-	-
Türkiye	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	1500	-	-	-	1500	-	-	-	-	-	35	-	35	-	-
UK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
US	-	-	-27	-	27	-	-	-635	-2000	635	-	-50	-	-75	32	-	-	-410	-200	410
Viet Nam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

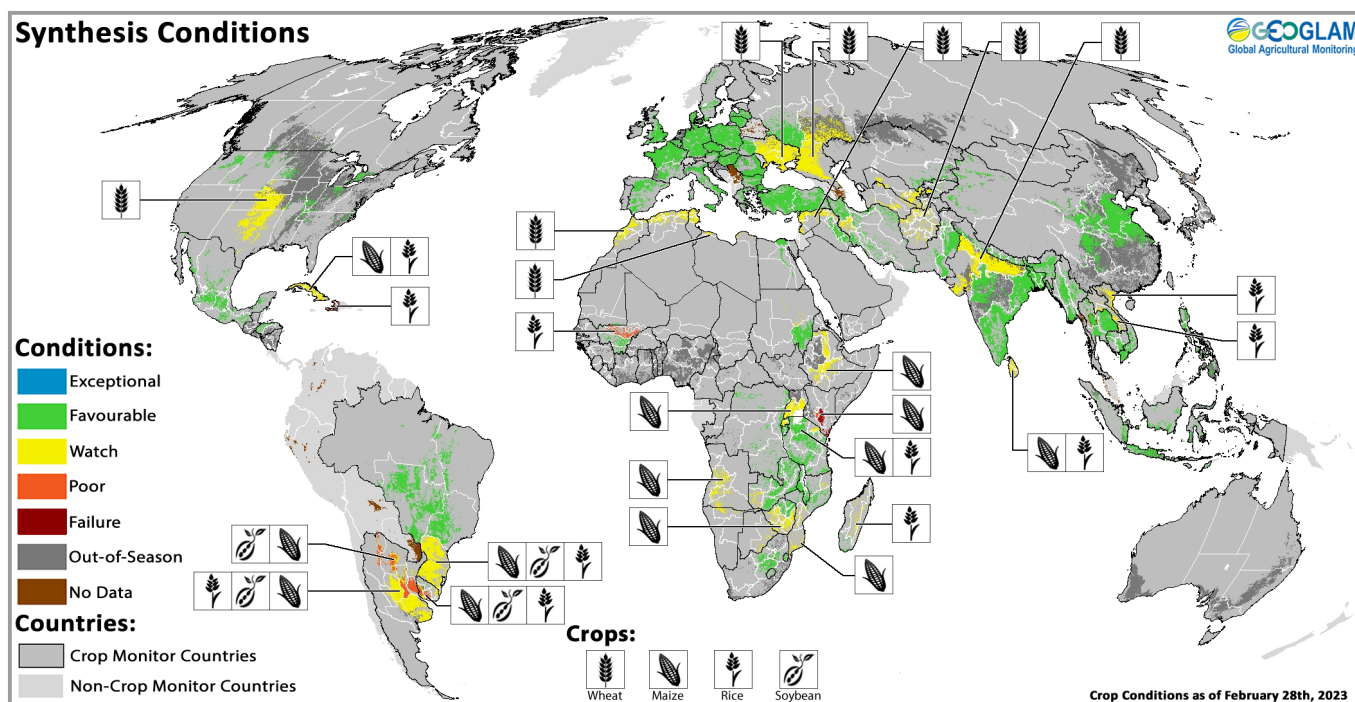
In thousand tonnes

+i Note

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

Crop monitor

Crop conditions in AMIS countries



Crop condition map synthesizing information for all four AMIS crops as of 28 February. 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 wheat is under mixed conditions in parts of the Russian Federation, Ukraine, the US, and India.

Maize

In the southern hemisphere, harvesting is beginning in Argentina for the early-planted crop, while in Brazil, good progress is being made for the harvesting of the spring-planted crop (smaller season) and the sowing of the summer-planted crop (larger season).

Rice

In India, transplanting of the Rabi crop wraps up. In South-east Asia, dry-season rice sowing is wrapping up in the northern countries while wet-season rice harvesting is progressing faster than last year.

Soybeans

In the southern hemisphere, hot and dry conditions have worsened in Argentina and in Rio Grande do Sul in Brazil.

La Niña and Negative Indian Ocean Dipole Conditions

The El Niño-Southern Oscillation (ENSO) is currently in the La Niña phase. A transition to a neutral ENSO state is likely, with a 94 percent chance of ENSO neutral conditions in March-April-May, according to the IRI/CPC. ENSO neutral conditions are expected through July, after which El Niño conditions may develop, with a 60 percent chance of El Niño in August-September-October. While long-range forecasts made at this time of year can be unreliable, El Niño events can have widespread, global impacts.

Seasonal forecasts indicate La Niña precipitation impacts may continue through the next several months. While a transition to ENSO-neutral is anticipated during this time, atmospheric responses to La Niña can linger. For eastern East Africa, where multi-year drought continues to severely impact food security, yet another below-normal rainy season is likely, based on forecast La Niña-like sea surface temperature gradients during spring.

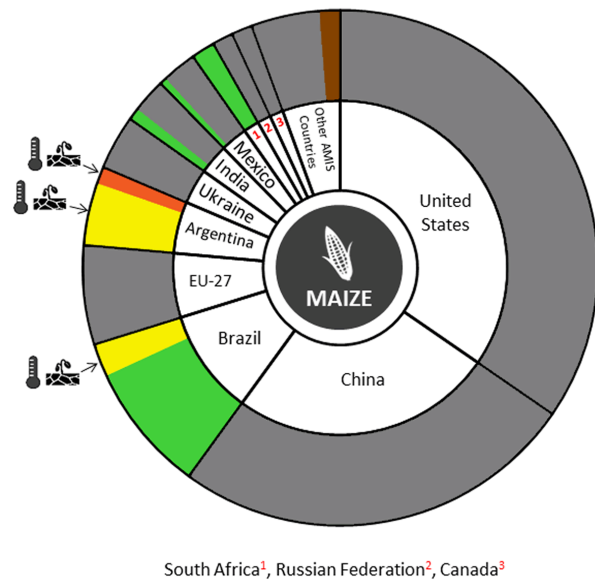
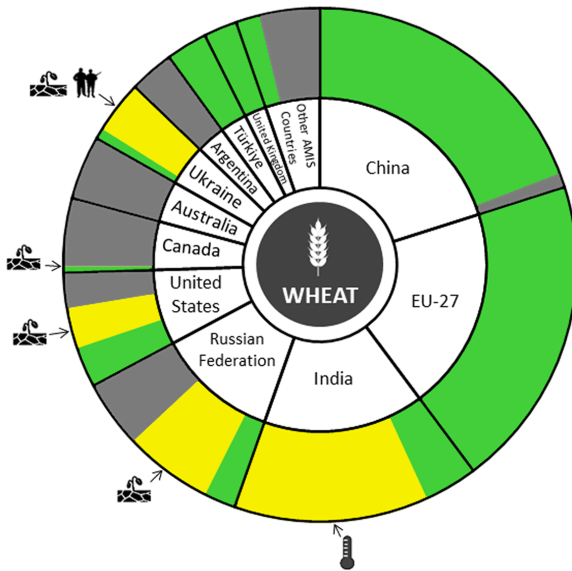
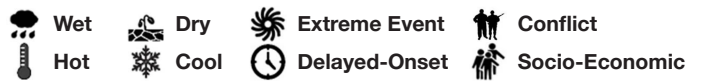
Source: UCSB Climate Hazards Center

Crop monitor

Conditions



Drivers



Summaries by crop

Wheat

In the **EU**, conditions are favourable with the hardening process complete in most countries, while progressing in the south. In the **UK**, conditions are favourable. In **Türkiye** conditions are generally favourable despite the diminished water reservoirs due to the dry and warm winter. In **Ukraine**, there was little rain over the past month, however, there is enough soil moisture at this time to start the vegetation process in the spring. The ongoing war remains a major factor in the eastern and southern regions. In the **Russian Federation**, dry conditions remain in the Volga district and have worsened in the Southern Caucasus. In **China**, winter wheat remains under favourable conditions. In **India**, winter wheat is under generally favourable conditions as harvesting begins in some regions, however, temperatures in the northern and western growing regions have risen above-average as the crop enters the critical yield developmental stage. In the **US**, dry soil conditions persist across the central and southern Great Plains. In **Canada**, conditions are generally favourable.

Maize

In **Brazil**, harvesting is progressing for the spring-planted crop (smaller season) under favourable conditions, except in Rio Grande do Sul due to a persistent lack of rain and high temperatures throughout the season. Sowing is ongoing for the summer-planted crop (larger season) under favourable conditions despite an earlier delay in sowing due to mixed weather conditions. In **Argentina**, harvesting of the early-planted crop (typically larger season) is beginning in the north under poor conditions due to hot and dry weather during the key reproductive stages. The late-planted crop (typically smaller season) is entering the critical period for yield development under hot and dry weather, however, there is still the potential to partially compensate for the losses if rains are received in the short term. In **India**, conditions are favourable for the Rabi crop with an increase in total sown area compared to last year. In **South Africa**, conditions are favourable owing to above-average rainfall since October. In **Mexico**, sowing of the autumn-winter crop (smaller season) is wrapping up under favourable conditions.

+i Pie chart description

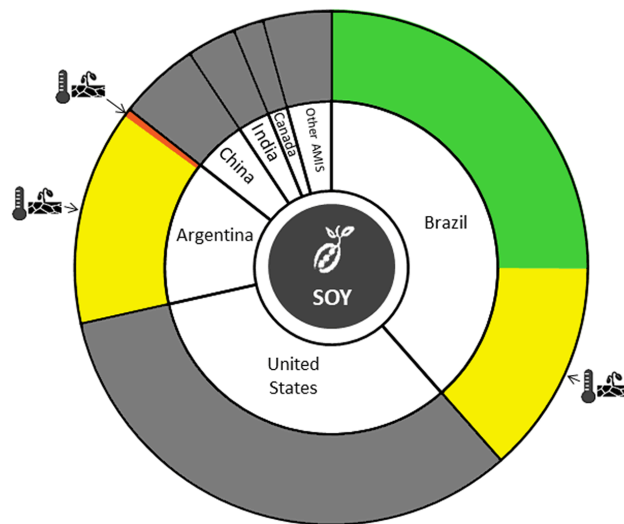
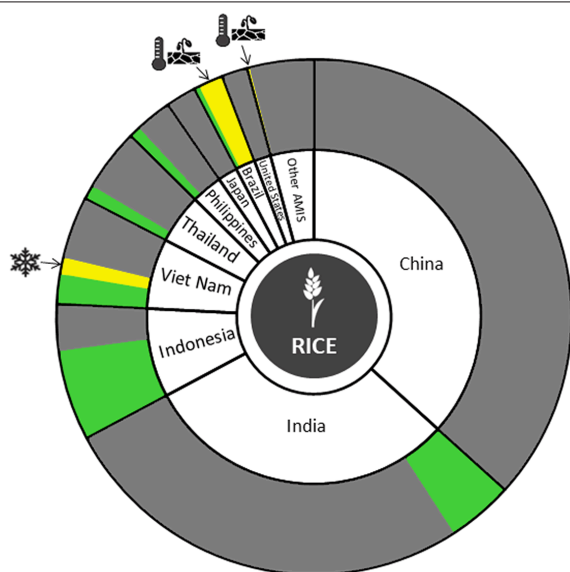
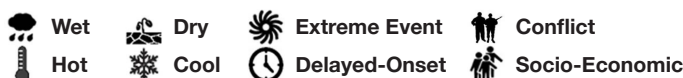
Each slice represents a country's share of total AMIS production (5-year average), with the main producing countries (95 percent of production) shown individually and the remaining 5 percent grouped into the "Other AMIS Countries" category. Sections within each country are weighted by the sub-national 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 **India**, transplanting of the Rabi crop is almost completed with an increase in total sown area compared to last year. In Indonesia, sowing of wet-season rice continues with a large increase in total sown area compared to last year due to plentiful rainfall. Harvesting of earlier sown rice is continuing with good yields. In **Viet Nam**, sowing of dry-season rice (winter-spring rice) is continuing in the South with some provinces beginning to harvest. In the North, sowing of dry-season rice (winter-spring rice) is beginning with a slow start due to prolonged cold weather. In Thailand, dry-season rice is in the young panicle-forming to grain-filling stages under good water availability and weather conditions. In the **Philippines**, dry-season rice continues to develop under favourable conditions despite excessive rainfall in most parts of Luzon, Visayas, and western parts of Mindanao. In **Brazil**, harvesting is beginning under dry conditions in the south. A reduction in total sown is estimated.

Soybeans

In **Brazil**, harvesting is ongoing under favourable conditions except for in the south, due to the lack of rain and high temperatures in Rio Grande do Sul. An increase in total sown area is estimated compared to last year. In **Argentina**, the early-planted crop (larger season) and the late-planted crop (smaller season) continue to be affected by the high temperatures and lack of rainfall during the critical yield development stages. Heavy yield losses are expected, with the most affected areas located in the east. An early frost in the western areas may have impacted the late-planted crop.

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

+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 & SANS), 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

Maize

- On 13 February, **Mexico** published a decree with immediate effect banning imports of genetically modified maize, with the exception of crops intended for animal feed and industrial uses.

Rice

- On 3 February, **China** announced that it plans to sell rice from its public reserves (about 18 million tonnes, less than half of the two previous years) to feed producers. This will be done through auctions starting in March and aims to release pressure on feed grain prices.
- On 23 February, **Egypt** decided not to renew the rice pricing mechanism set last November (See AMIS Market Monitor December 2022) because it did not meet its intended goal to encourage rice cultivation.

Biofuels

- On 1 February, **Brazil** reintroduced, with immediate effect, the customs duty on ethanol imports which had been abolished in March 2022. It is set at 16 percent until 31 December 2023, and will increase to 18 percent in 2024.

Across the board

Palm oil

- On 6 February, **Indonesia** announced that only 33 percent of palm oil export permits would be granted to companies that already meet the domestic market obligation until 1 May, with the rest to be used afterwards. This temporary ban aims to temporarily secure domestic supply (see AMIS Market Monitor February 2023).

Other

- On 31 January, **Argentina** decided to take a series of measures to help farmers affected by the severe drought in the country: financial assistance to producers through the creation of a fund of ARG 5 billion (USD 26 million), suspension of advance income tax payments, reduction of interest rates and increase in subsidies.
- On 22 February, **Egypt** announced guaranteed prices for several crops: white maize EGP 9 000 (USD 296) per tonne, yellow maize EGP 9 500 (USD 312) per tonne, sunflower seeds EGP 15 000 (USD 493) per tonne and soybeans EGP 18 000 (USD 592) per tonne.
- On 15 February, the **Russian Federation** increased its grain export quota (wheat and meslin, barley, rye and corn) to 25.5 million tonnes. The new quota is 2.5 times larger than the quota of the previous season, and will be in force until 30 June 2023. The new export quota was announced on 29 December 2022 in decree N2524.

+i Note

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

International prices

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

	Feb 2023 Average*	Change	
		M/M	Y/Y
GOI	305.4	-0.4%	-3.2%
Wheat	282.0	+0.5%	-4.6%
Maize	312.3	+0.3%	+0.6%
Rice	199.4	+0.2%	+18.8%
Soybeans	302.8	-1.1%	-6.3%

*Jan 2000=100, derived from daily export quotations

Wheat

Competitive offers from Russian suppliers continued to weigh on market sentiment across other key origins during the past month, with fob prices in the former pressured by heavy local availabilities and increased freight insurance costs. Nonetheless, the IGC wheat sub-Index averaged a touch higher m/m, posting a first increase in four months, as markets focused on unfavourable growing conditions for next season's winter crops in parts of the US and Europe. Mounting uncertainty about the future of the Black Sea Grain Initiative, in light of the potential March expiration, added to upside recently.

Maize

Average world maize export quotations firmed slightly in February. However, amid few fresh fundamental developments, only minor changes were registered across the leading origins. Prices in Argentina (Up River) were firmer, as producers held back sales amid sustained crop production uncertainties, tied to overly dry, occasionally frosty weather. Nominal values in Brazil were also a touch firmer, as exporters maintained an unusually heavy pace of shipments. In contrast, US quotations

worked lower on easing barge freight markets and concerns about slack export demand. Markets in Ukraine were especially nominal amid Black Sea shipping inspection delays and uncertainty about the future of the export corridor.

Rice

Amid weaker and generally subdued activity, as buyers waited for new crops to arrive on to the market before securing purchases, average international rice prices were little changed m/m. Thai offers were pressured by currency movements and as market participants looked to the off-season crop harvest, which is expected to get underway in March/April. Vietnamese prices were slightly stronger amid tightening supplies ahead of the bulk of main winter/spring crop harvesting, while Indian offers were underpinned by steady purchasing and strong government procurement. In Pakistan, firm domestic prices continued to provide support to export quotes, despite limited offshore buying interest.

Soybeans

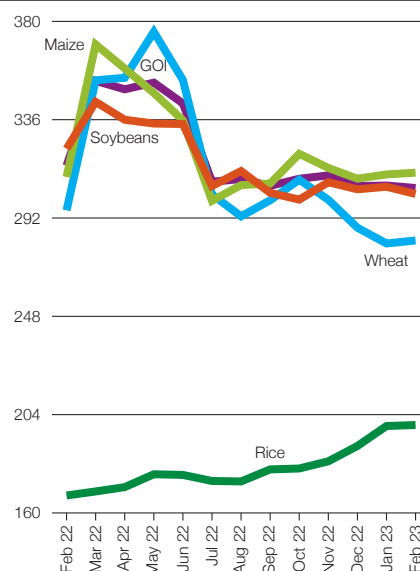
Average international soybean values were marginally softer in February, although movements were somewhat mixed across key origins. Against the backdrop of worsening crop prospects and heightened concerns about availabilities, Up River offers in Argentina edged higher, with US Gulf export values remaining elevated as old crop stocks tightened. However, this contrasted with a steep fall in Brazilian fob quotations as the harvesting of what is expected to be a record outturn progressed. The influence of soya product markets was mixed, with soymeal values providing background support amid worries about Argentine exportable supplies, while soya oil prices edged lower.

IGC commodity price indices

		GOI	Wheat	Maize	Rice	Soybeans
2022	February	315.4	295.4	310.4	167.8	323.0
	March	353.4	353.6	369.7	169.6	344.0
	April	349.6	354.8	358.9	171.6	336.0
	May	352.6	375.3	347.9	177.3	334.3
	June	343.3	353.8	335.7	177.0	334.1
	July	308.2	302.5	299.7	174.3	306.3
	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
February		305.4	282.0	312.3	199.4	302.8

(..... January 2000 = 100)

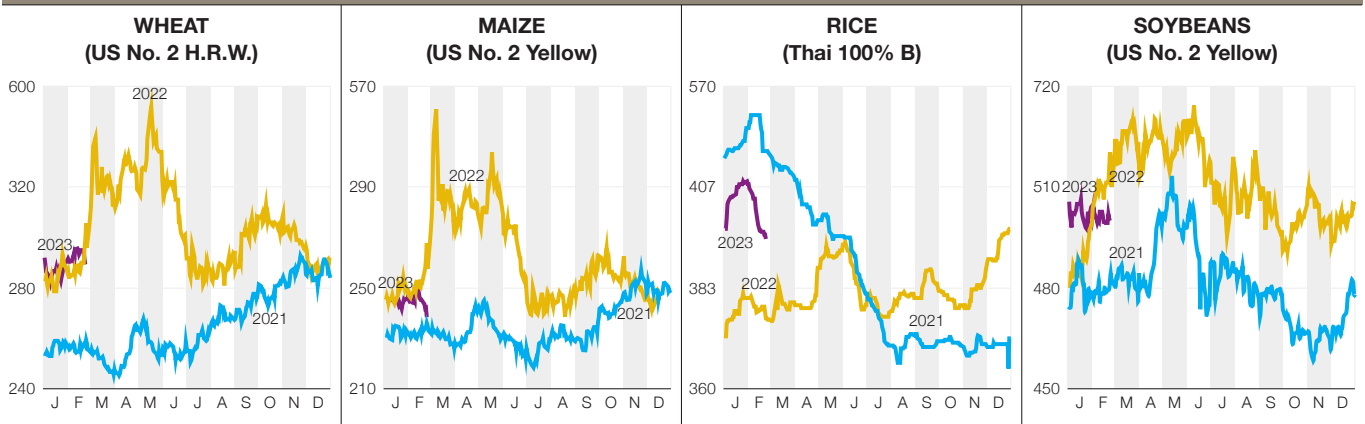
IGC commodity price indices



International prices

Selected export prices, currencies and indices

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



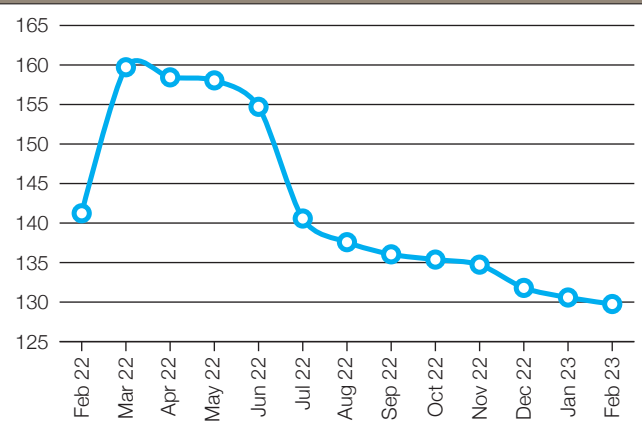
Daily quotations of selected export prices

	Effective date	Quotation	Month ago	Year ago	% change M/M	% change Y/Y
USD/tonne						
Wheat (US No. 2, HRW)	23-Feb	388	393	433	-1.3%	-10.4%
Maize (US No. 2, Yellow)	24-Feb	295	320	384	-7.8%	-23.2%
Rice (Thai 100% B)	23-Feb	464	502	408	-7.6%	+13.7%
Soybeans (US No. 2, Yellow)	23-Feb	600	613	650	-2.1%	-7.7%

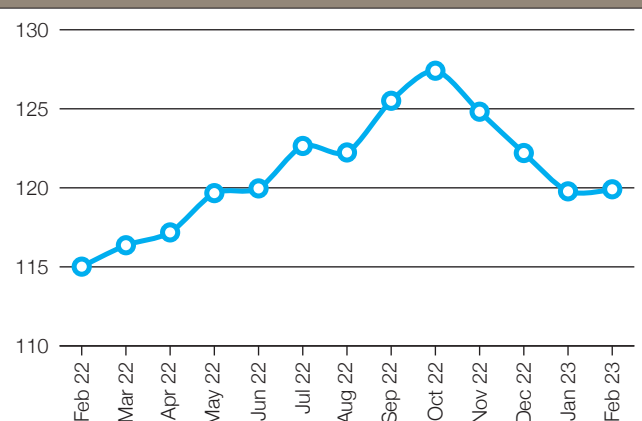
AMIS countries' currencies against US Dollar

AMIS Countries	Currency	Feb 2023 Average	Monthly Change	Annual Change
Argentina	ARS	191.4	-4.8%	-44.5%
Australia	AUD	1.5	-0.8%	-3.8%
Brazil	BRL	5.2	0.4%	0.4%
Canada	CAD	1.3	-0.1%	-5.4%
China	CNY	6.8	-0.6%	-7.2%
Egypt	EGP	30.4	-5.8%	-48.5%
EU	EUR	0.9	-0.7%	-5.7%
India	INR	82.6	-1.0%	-9.3%
Indonesia	IDR	15123.6	0.8%	-5.1%
Japan	JPY	132.9	-1.9%	-13.3%
Kazakhstan	KZT	451.3	2.4%	-3.3%
Rep. of Korea	KRW	1276.6	-2.6%	-6.2%
Mexico	MXN	18.6	1.9%	9.9%
Nigeria	NGN	459.9	-1.4%	-9.6%
Philippines	PHP	54.8	0.2%	-6.5%
Russian Fed.	RUB	73.3	-5.1%	7.1%
Saudi Arabia	SAR	3.8	0.1%	0.0%
South Africa	ZAR	17.9	-4.5%	-14.9%
Thailand	THB	34.0	-2.3%	-4.1%
Türkiye	TRY	18.8	-0.3%	-27.7%
UK	GBP	0.8	-1.3%	-10.8%
Ukraine	UAH	36.7	-0.1%	-22.3%
Viet Nam	VND	23633.6	-0.7%	-3.8%

FAO Food Price Index Feb 2022 - Feb 2023



Nominal Broad Dollar Index Feb 2022 - Feb 2023



Futures markets

Overall market sentiment

- The wheat and maize futures markets have shown little change in February, as soybean futures continue to trend upwards.
- While historical volatility has been mostly stable in February, recent movements in implied volatility suggest that markets are still vulnerable to weather-related and geopolitical risks, requiring continued close monitoring.
- Transparency in the grain market has been impacted by a cyber-attack that prevented the release of the Commitment of Traders report by the CFTC.

MONTHLY PRICE TREND



Futures prices

In February, wheat and maize markets remained mostly stable, while soybean prices continued to trend upwards. Wheat futures continued to be affected by low-priced Russian wheat offers in the latest tenders of Northern African importers, indicating that the Russian Federation has ample supplies to deliver in the near future. Soybean prices have been supported by less optimistic crop forecasts in Brazil, while Argentina's drought-hit crops face risks of frost damage, with production now forecasted close to a 10-year low. Maize prices were rangebound, with adverse weather conditions in South America supportive of higher prices, but the USDA's forecast of record large yield and production estimate in US maize heavily pressuring the futures market in Chicago.

Regarding the macroeconomic situation, despite inflationary pressures and so far unconfirmed expectations of a recession, the global economy is performing surprisingly well. As a consequence, the US Federal Reserve is expected to continue efforts to contain inflation, supporting the US dollar and weighing on oil and other commodity demand, which should help keep a lid on grain prices.

Volumes & volatility

Historical volatility has gotten back to 10-year average levels on Chicago and Euronext grains contracts, although outbursts of grain price variance still need to be monitored.

Wheat implied volatility has remained mostly stable, indicating that market participants do not price in additional risk premiums despite ongoing discussions around the renewal of the Black Sea Grain Initiative. It seems that the market has already factored in a restrained export flow out of Ukraine given the current delays in inspection under the grain export deal. On US maize and soybean contracts, implied volatility reached a one-month peak in mid-February as winterkill risks developed in Argentina. Interestingly, maize implied volatility was higher than soybean implied volatility at the end of February, indicating that

traders now consider the risk of an Argentinian soybean production shortfall less important compared to production risks of the maize crops that are currently in the vegetative stage development.

Forward curves

Forward curves for wheat, maize and soybeans have flattened, as logistical bottlenecks have mostly been resolved on the nearby deliveries (old crops) while concerns for longer-dated contracts (new crops) are mounting. The inverted structure (backwardation) in CBOT soybean, maize, as well as Euronext grains encouraged exporters to load as quickly as possible to benefit from the high price level on the nearby delivery.

Investment flows

The Commodity Futures Trading Commission has delayed the release of its Commitment of Traders report due to a cyber-related incident, so the exact positions of funds on the CME are currently unknown. Traded volumes have increased in February in both Chicago and Euronext, indicating that money managers were still active in February to rebalance their portfolios in line with market developments.

On Euronext, funds and other investment firms have reached their largest short position on wheat since 2019 in early February. Although their positions have decreased since then, they have remained generally short since the end of 2022.

Euronext futures volumes and price evolution

Average daily volume (1000 tonnes)	Feb 2023	M/M	Y/Y
Wheat	3 224.2	+41.9%	-14.0%
Maize	151.7	+50.7%	-24.2%

Prices (USD/t)	Feb 2023	M/M	Y/Y
Wheat	310.9	-0.9%	-0.2%
Maize	307.5	+1.1%	+4.6%

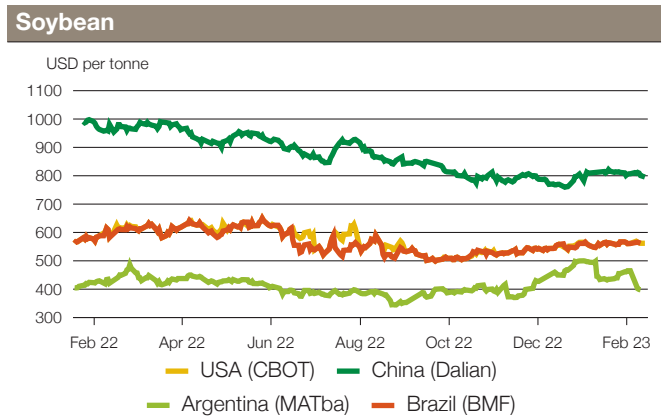
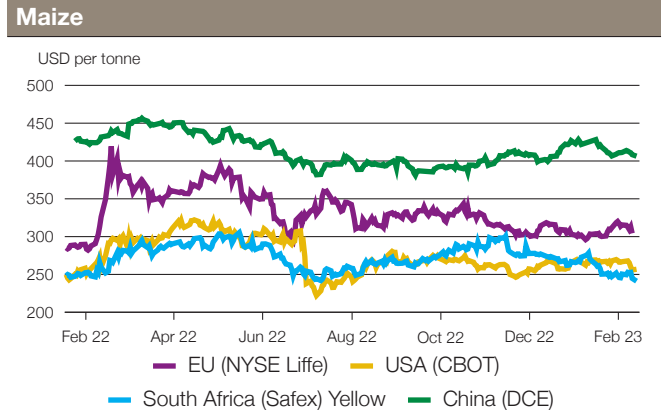
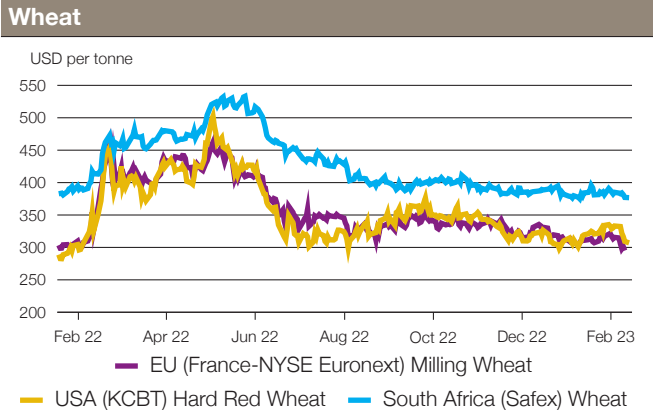
CME futures volumes and prices evolution

Average daily volume (1000 tonnes)	Feb 2023	M/M	Y/Y
Wheat	19 207.5	+78.3%	-10.1%
Maize	45 978.5	+27.6%	-21.8%
Soybean	38 802.7	+37.9%	-10.7%

Prices (USD/t)	Feb 2023	M/M	Y/Y
Wheat	281.6	+3.1%	-5.4%
Maize	265.8	+0.9%	+4.0%
Soybean	560.7	+1.4%	-3.9%

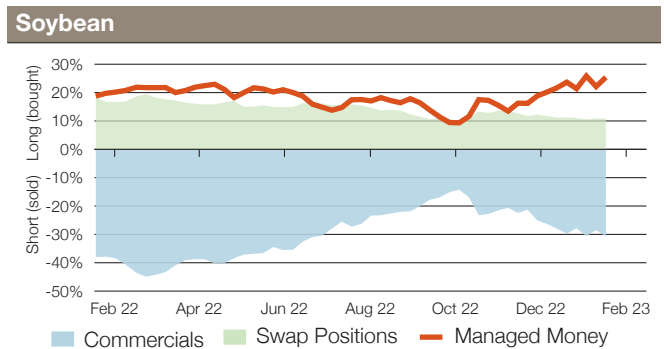
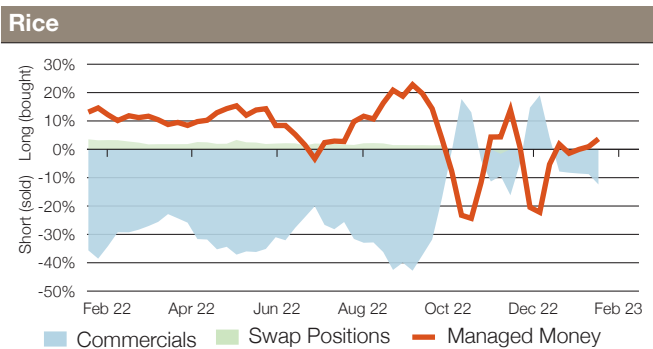
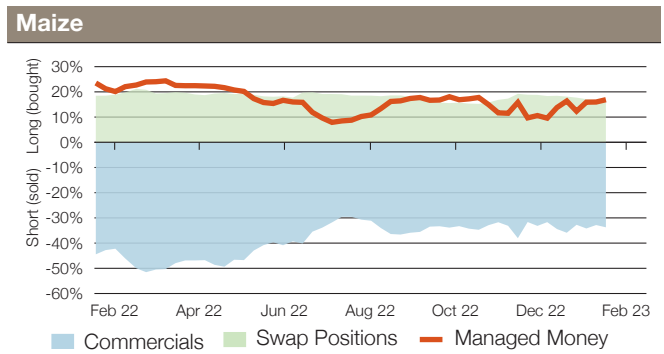
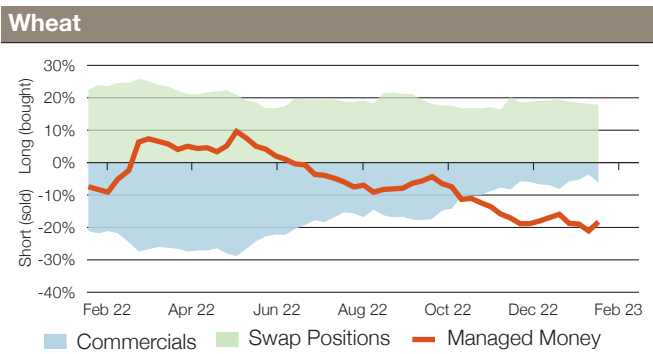
Market indicators

Daily quotations from leading exchanges - nearby futures



CFTC commitments of traders

Major categories net length as percentage of open interest*



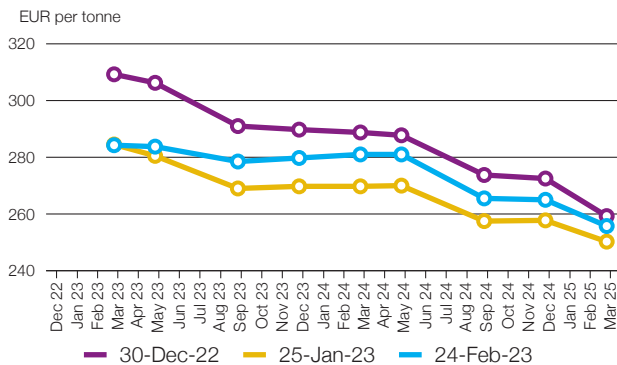
+i CFTC commitments of traders

*Disaggregated futures only. Though not all positions are reflected in the charts, total long positions always equal total short positions.
Data for February 2023 are missing following a cyberattack that prevented the release of CFTC reports since 31 January.

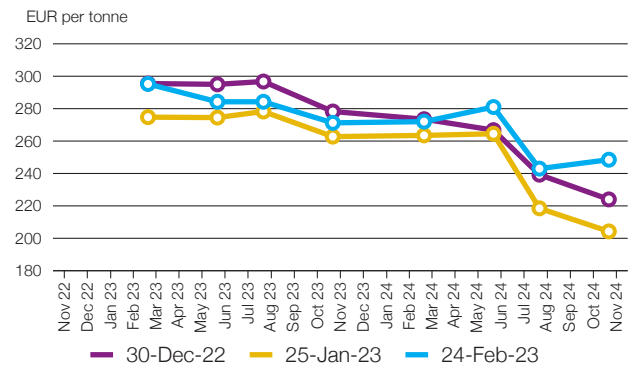
Market indicators

Forward curves

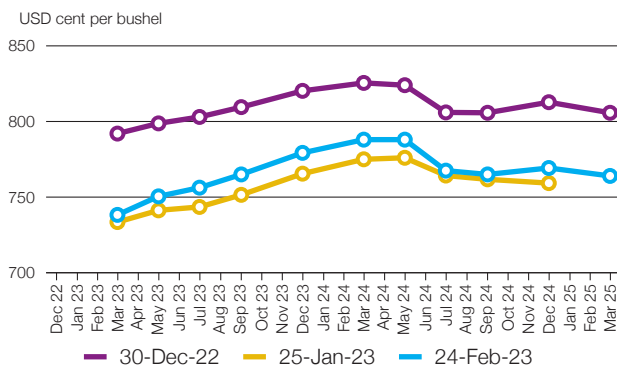
Euronext wheat (EBM)



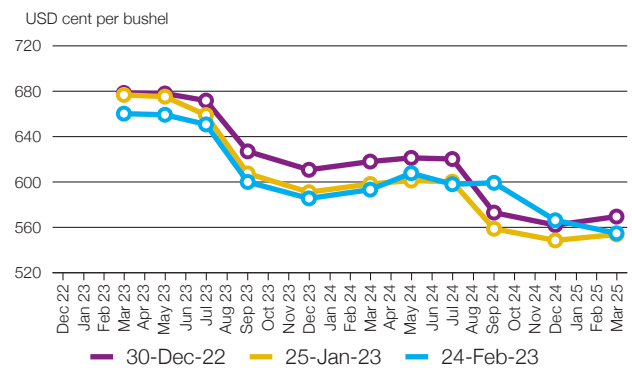
Euronext maize (EMA)



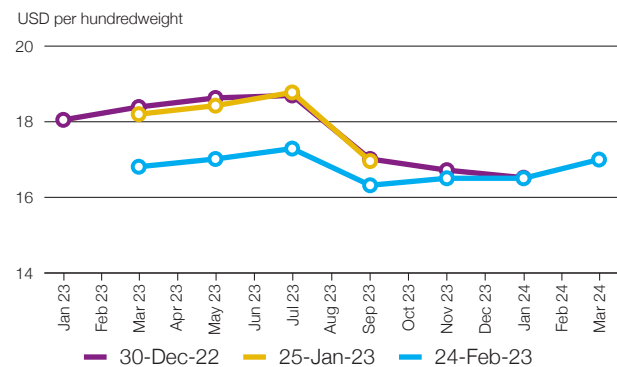
CBOT wheat



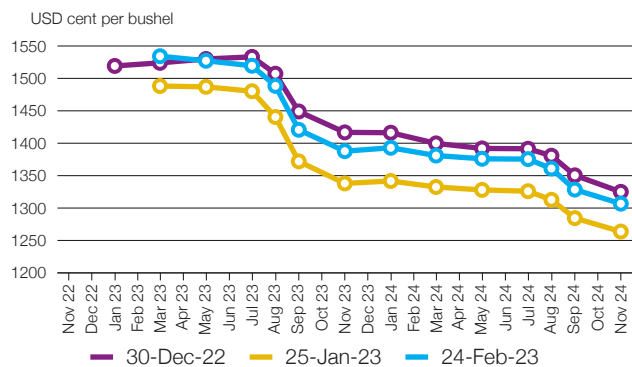
CBOT maize



CBOT rice

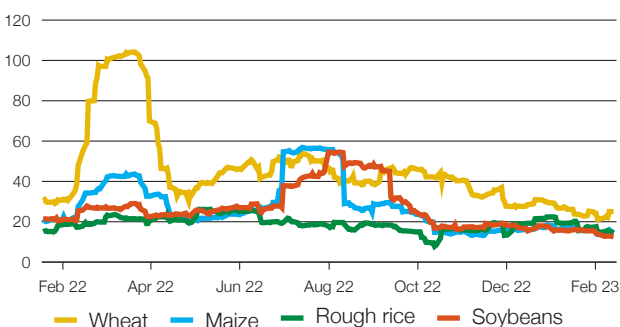


CBOT soybean

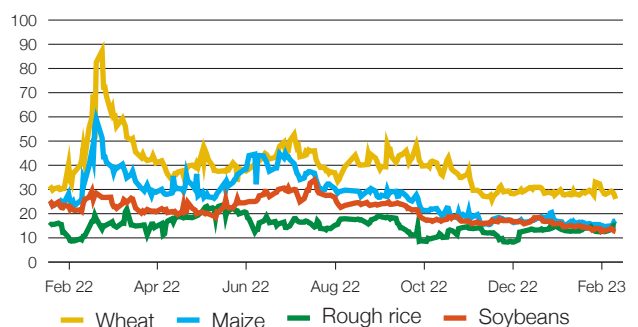


Historical and implied volatilities

Historical Volatility (30 days)



Implied Volatility (Daily)

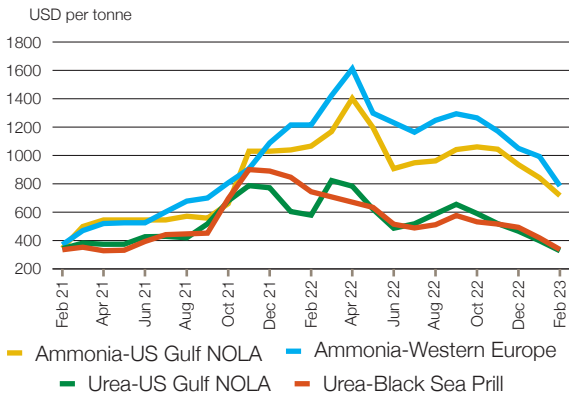


+i AMIS market indicators

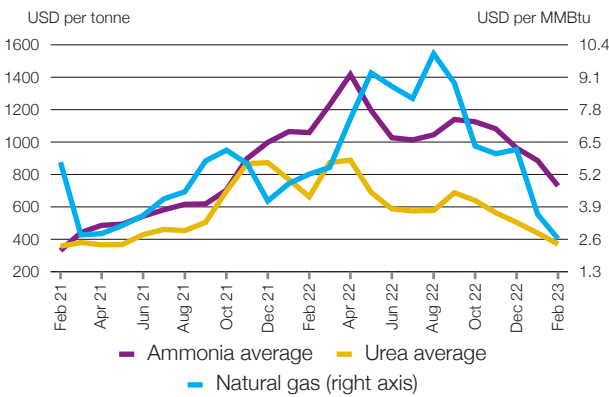
Several of the indicators covered in this report are updated regularly on the AMIS website. These, as well as other market indicators, can be found at: <https://www.amis-outlook.org/amis-monitoring/indicators/>. For more information about forward curves see the feature article in No. 75 February AMIS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

Fertilizer outlook

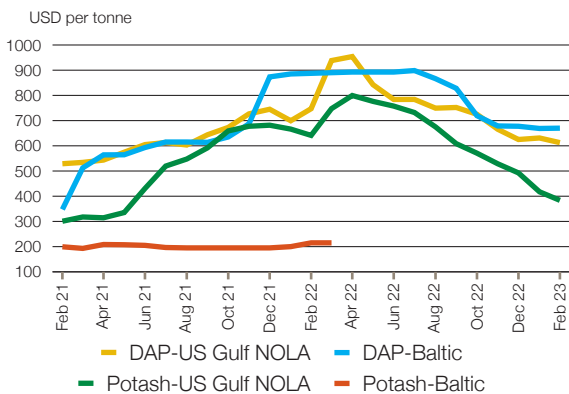
Ammonia and urea (spot prices)



Ammonia average, urea average and natural gas (spot prices)



Potash and phosphate (spot prices)



Fertilizer prices continued to fall in February due to weakening demand and further reductions in natural gas prices in Europe that incentivized production in the region. Similar to January, the price decreases were most significant for nitrogenous fertilizers that rely heavily on natural gas as an input. Global fertilizer supply continues to show a rebound from the turmoil seen in markets last year, but risks remain.

- **Natural gas** prices decreased substantially in February, falling to their lowest levels since the war in Ukraine began. Unusually strong inventories have put a downward pressure on prices.
- **Ammonia** prices were down considerably in February with abundant supplies in global markets and a continued decrease in natural gas prices, which reduced ammonia production costs.
- **Urea** prices decreased in February in line with other nitrogenous fertilizer prices. Weak demand may have been due in part to buyers who are delaying purchases in the hopes of lower prices in the future. Lower feedstock costs due to decreased natural gas prices contributed to a supply expansion. Export controls in China are expected to continue, but this has not outweighed the drivers pushing down prices.
- **DAP** prices changed little in February as they are relatively unaffected by developments in natural gas markets. Demand was seasonally low in the Northern Hemisphere while a tighter supply was reported in Brazil.
- **Potash** prices decreased again in February as supply in world markets remained ample. Increasing exports from Canada in 2022 and a reduction in global demand has led to increased inventory levels in large potash importers like Brazil and the United States.

	Feb-23 average	Feb-23 std. dev.	% change last month*	% change last year*	12 month high	12-month low
Ammonia-US Gulf NOLA	717.0	-	-14.9	-32.7	1402.2	717.0
Ammonia-Western Europe	785.0	-	-20.9	-35.4	1611.0	785.0
Ammonia avg. across regions	729.6	1.0	-17.6	-31.1	1416.9	729.6
Urea-US Gulf	327.8	19.5	-17.8	-43.4	823.1	327.8
Urea-Black Sea	336.7	14.6	-19.6	-54.8	633.8	336.7
Urea avg. across regions	370.8	18.0	-15.4	-44.0	888.8	370.8
DAP-US Gulf	612.5	21.7	-2.9	-18.0	954.0	612.5
DAP-Baltic	670.0	-	+0.2	-24.5	898.5	668.8
Potash-Baltic	-	-	-	-	215.0	215.0
Potash-US Gulf NOLA	383.7	6.3	-8.1	-40.2	799.5	383.7
Natural gas	2.4	0.1	-25.8	-47.8	8.8	2.4

All prices shown are in US dollars
 Source: Own elaboration based on Bloomberg
 *Estimated using available weekly data to date.

+i Chart and tables description

Ammonia and urea: Overview of nitrogen-based fertilizer weekly prices (averaged by month) in the US Gulf, Western Europe and Black Sea. **Potash & phosphate:** Overview of phosphate and potassium-based fertilizer weekly prices (averaged by month) in the US Gulf, Baltic and Vancouver. **Ammonia & urea averages:** Monthly average prices from ammonia's US Gulf NOLA, Middle East, Black Sea and Western Europe were averaged to obtain ammonia average prices; monthly average prices from urea's US Gulf NOLA, US Gulf Prill, Middle East Prill, Black Sea Prill and Mediterranean were averaged to obtain Urea Average prices. **Natural gas:** Henry Hub Natural Gas Spot Price from ICE up to December 2017 and from Bloomberg (BGAP) from January 2018 onwards. Prices are intraday prices averaged by month. Natural gas is used as major input to produce nitrogen-based fertilizers. **DAP:** Diammonium Phosphat

Ocean freight markets

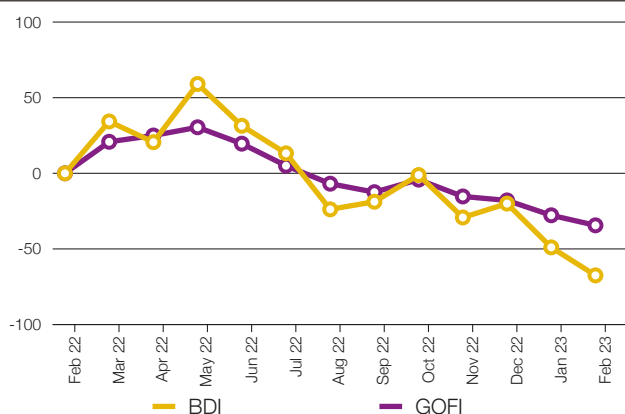
Dry bulk freight market developments

	Feb-23 average	Change	
		M/M	Y/Y
Baltic Dry Index (BDI)	596.4	-36.3%	-67.5%
sub-indices:			
Capesize	400.2	-65.1%	-75.1%
Panamax	880.3	-23.7%	-61.3%
Supramax	685.1	-7.6%	-67.1%
Baltic Handysize Index (BHSI)	440.1	-11.4%	-63.0%

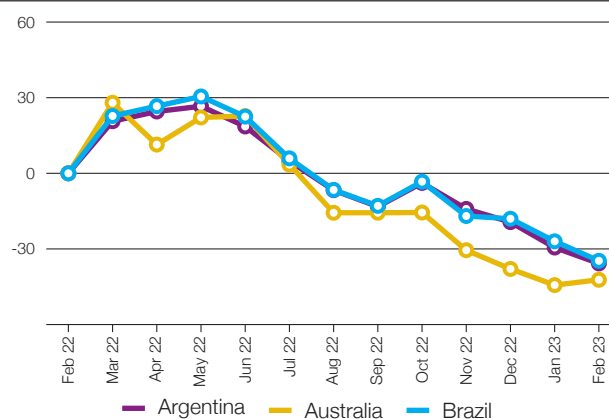
Source: Baltic Exchange, IGC. Base period for BDI: 4 January 1985 = 1000; for BHSI: 23 May 2006 = 1000; for GOFI: 1 January 2013 = 100

	Feb-23 average	Change	
		M/M	Y/Y
IGC Grains and Oilseeds Freight Index (GOFI)	119.2	-9.2%	-34.4%
sub-Indices:			
Argentina	150.0	-8.9%	-35.8%
Australia	82.6	+3.8%	-42.2%
Brazil	155.0	-10.6%	-34.7%
Black Sea	121.3	-11.3%	-35.3%
Canada	88.3	-10.4%	-35.0%
Europe	99.9	-9.7%	-32.9%
US	98.0	-6.6%	-32.3%

BDI and IGC GOFI



Selected IGC GOFI sub-indices



- Timecharter rates across the dry bulk freight complex continued to fall during the past month, with average **Baltic Dry Index (BDI)** values quoted more than one-third lower month-on-month, at a level last seen in June 2020.
- Following the easing of COVID-19-related restrictions in China in early 2023, market participants expressed optimism about the envisaged recovery in demand for commodities from that country, while the more recent removal of limitations on coal shipments from Australia was expected to underpin enquiries for bulk carriers. However, buying interest from China following the Lunar New Year holidays largely fell short of expectations, with reports of increasing port inventories of iron ore termed bearish for the Capesize sector, where average rates contracted by two-thirds compared to January. However, there was speculation that freight rates might

be about to bottom out, with traders eyeing a seasonal up-swing in activity from March onwards.

- Low enquiry levels in the Atlantic were a major bearish influence across the grains and oilseeds carrying segments, with steepest losses reported in the **Panamax** sector. Limited activity in Europe and the Mediterranean also weighed on **Handysize** rates, but that was partly countered by positive sentiment in the Pacific. Ongoing strong demand for grains from Australia remained an important supportive factor across the region, with delivery periods for some Asian importers stretching out to July 2023.
- Firmer bunker prices helped to limit losses in timecharter rates in the grains and oilseeds carrying segments, capping the monthly fall in the **IGC Grains and Oilseeds Freight Index (GOFI)** to a net 9 percent.

+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.

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	
	winter	C	C										Planting
Russian Fed. (13%)	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 (30%)	north					Planting		C	C	C		Harvest	
	south			Planting			C	C			Harvest		
Brazil (10%)	1st crop	C	C									Planting	C
	2nd crop	Planting	C	C	C					Harvest			
Argentina (5%)								Harvest				Planting	C
									Planting	C	C		
EU (5%)									Planting	C	C	C	
												Harvest	
RICE		J	F	M	A	M	J	J	A	S	O	N	D
China (28%)	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									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								
SOYBEANS		J	F	M	A	M	J	J	A	S	O	N	D
Brazil (40%)		C	C			Harvest						Planting	C
								Planting	C	C	C		Harvest
US (30%)													Planting
													Harvest
Argentina (10%)		C	C	C									Planting
													Harvest
China (5%)									Planting	C	C		Harvest
													Harvest
India (4%)													Planting
													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
- 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

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