



No. 107 April 2023

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## Markets at a glance

	FROM PREVIOUS FORECASTS	FROM PREVIOUS SEASON
WHEAT	▲	▲
MAIZE	■	▼
RICE	■	▼
SOYBEANS	▼	■

Over the past 10 months, world prices of most grains and oilseeds have fallen back to levels prior to the war in Ukraine. Likewise, volatility in prices has also declined considerably from recent highs. With the extension of the Black Sea Grain Initiative, there is hope that the world is recovering from the price shocks of the past year. Yet, while prices have fallen in international markets, they have frequently remained high at local level, particularly in net food importing developing countries reflecting the weakening of their currencies against the US dollar. As a result, food price inflation is still a serious concern in many countries, also because post-farm gate costs for shipping and processing remain subject to inflationary pressures.

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.

## Feature article

### Renewal of the Black Sea Grain Initiative: Stakes and Challenges Beyond May

Since being established in July 2022, the Black Sea Grain Initiative has been instrumental in moderating world agricultural commodity and fertilizer prices from the record highs that were reached following the outbreak of the war in Ukraine. The initiative has furthermore been a lifeline for Ukrainian farmers and consumers dependent on Ukraine's agricultural exports. The renewal of the grain deal on 18 March was thus welcome news for agricultural markets. However, much remains to be done to restore the proper functioning of markets to pre-war conditions.

Similar to previous expiration deadlines, markets showed some instability in the days before 18 March, with a slight upward trend in prices. The renewal of the agreement for another 120 days proved sufficient in cooling the situation, but prices remain at relatively high levels compared to the past. It is clear that further measures need to be taken to ensure that net food importing developing countries receive sufficient supplies in food at affordable prices.

While the renewal was celebrated, the Russian Federation's explicit statement that the initiative would end in 60 days unless a series of requests were addressed still adds a degree of uncertainty to markets. The Russian Federation claims its future stance will be determined by progress in the normalization of its exports, through the lifting of a set of sanctions including restrictions on access to international banking systems, facilitation of logistics, and the reopening of a key ammonia pipeline. Among the Russian demands are the restoration of access to the SWIFT financial messaging system for Russian state-owned Rosselkhozbank, a resumption of farm machinery supplies, and the unblocking of foreign assets and accounts held by Russian agricultural companies.

#### Insurance and inspections matters are hindering the potential of the deal

Furthermore, Ukraine has complained about the limitations of the existing deal, accusing the Russian Federation of slowing ship inspections and thereby reducing the supply of Ukrainian grains to international markets. The current waiting time is around three weeks and represents an additional costs for importers, which are currently estimated at around USD 9 per tonne per week of delay. While the Russian Federation has denied causing any slowdowns, independent observers agree that inspection teams are frequently understaffed. Also, a better preparation of the crew for the tripartite inspections would help to speed up the process and reduce any additional costs.

The cost of insurance remains another major bottleneck. Since 1 January, when insurance policies are typically renewed, reinsurers that provide financial protection for maritime insurance companies have raised rates and in some cases added exclusions for vessels shipping from Belarus, the Russian Federation, and Ukraine. This has meant insurers must cover a larger share of the total risks faced by shipments with respect to the pre-war period, increasing Black Sea shipping rates. Ukraine is working with MIGA, a subsidiary of the World Bank, on the development of a war risk insurance programme of USD 500 millions that will compensate possible damages to both inland and sea-borne civilian vessels entering its ports.

#### Trade flows not covered by the grain deal should not be understated

In addition, Ukraine is exploring ways to get ships stranded by the war and not covered by the deal moving in the Black Sea again, with the help of the International Maritime Organization (IMO). The IMO confirmed that work is underway to try and facilitate the release of more than 60 commercial ships.

Russian claims that sanctions have adversely affected grain and fertilizer exports are difficult to assess as the Russian Federation has stopped sharing export figures since February last year. Yet, data from the Russian Federation's trading partners suggests that 2022 may have been a record year for Russian exports of wheat and barley as the country benefited from a large crop. In addition, some reports suggest that overseas fertilizer sales from the Russian Federation fell only little in volume in 2022 and increased substantially in value given the sharp spike in fertilizer prices.

#### What will happen after May?

The grain deal is needed for both the Russian Federation and Ukraine, but also for the rest of the world. The stakes and challenges beyond May are significant, and the nodal issues that need to be addressed include the limitations of the existing deal caused by inspection quandaries and the high cost of insurance. In addition, trade flows not covered by the grain deal also need to be recognized as a key challenge. They all highlight the necessity of transparency in grain markets and the critical role of initiatives such as AMIS.

## 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	2021/22 est	2022/23 f'cast	
			2 Mar	6 Apr					
<b>WHEAT</b> 2022 production raised this month, on a higher estimate in Australia, and now surpassing the 2021 level by 2.4 percent.									
Utilization in 2022/23 scaled up only fractionally this month, reflecting higher feed use expected in China, and set to increase by 0.9 percent above the 2021/22 level on growth in food consumption and feed use.									
Trade in 2022/23 (July/June) lifted on greater demand from China, and bigger foreseen sales from Australia and Kazakhstan, raising the global forecast to 1.9 percent above the 2021/22 level.									
Stocks (ending in 2023) seen increasing even more, now 5.3 percent above opening levels, following an upward revision this month, mostly concentrated in major exporters, including Australia, the EU, and the Russian Federation.									
	Prod.	778.1	794.6	796.6	779.2	788.9	781.0	801.0	
		641.2	656.9	658.9	642.3	651.2	644.0	663.3	
	Supply	1070.7	1088.4	1090.5	1064.2	1060.4	1057.8	1075.6	
		803.4	816.7	818.9	788.1	785.9	793.6	806.0	
	Utiliz.	773.6	779.5	780.1	792.7	793.2	783.3	789.3	
		630.8	639.8	638.4	644.7	649.2	642.1	649.8	
	Trade	195.7	197.8	199.4	205.3	212.4	196.8	199.1	
		186.0	188.8	188.4	195.8	202.4	187.0	189.4	
	Stocks	293.9	305.7	309.5	271.4	267.2	274.6	286.2	
		160.0	164.3	168.3	134.7	127.6	141.7	146.6	
<b>MAIZE</b> 2022 production lifted slightly this month, with an upward revision to Ukraine's estimate, but set to decline by 4.4 percent below the 2021 level.									
Utilization 2022/23 forecast lowered, mostly reflecting lower expected feed use, especially in the EU, and now falling 1.5 percent below 2021/22.									
Trade in 2022/23 (July/June) now seen declining by 3.0 percent from 2021/22 following this month's cut on account of smaller exports expected from Argentina and the US, which were only partially offset by greater sales forecast for Brazil.									
Stocks (ending in 2023) raised m/m, mostly in major exporters, including Argentina, the US, and Ukraine. Despite the revision, global stocks are still set to fall by 6.7 percent below opening levels.									
	Prod.	1212.1	1157.6	1159.0	1216.0	1147.5	1220.5	1150.0	
		939.5	880.4	881.8	943.5	870.3	947.9	872.8	
	Supply	1497.6	1463.2	1464.9	1508.9	1453.2	1499.5	1430.9	
		1070.9	1029.3	1031.0	1030.6	966.9	1032.6	965.5	
	Utiliz.	1198.5	1182.7	1180.4	1203.2	1156.8	1218.6	1174.4	
		906.6	885.3	883.0	912.2	859.8	917.5	866.0	
	Trade	181.9	181.4	176.5	193.9	179.8	179.4	167.8	
		159.8	162.4	158.5	172.1	161.8	156.9	148.8	
	Stocks	305.9	280.2	285.4	305.7	296.5	280.8	256.4	
		149.2	125.8	130.9	96.6	89.1	92.6	80.5	
<b>RICE</b> production in 2022 lowered slightly, as a downward revision to Indonesia's estimate outweighed an increase to Cambodia's production forecast.									
Utilization in 2022/23 essentially unchanged m/m and continuing to point to another annual expansion in food use largely compensating for cuts in rice use for animal feed and non-food industrial purposes.									
Trade in 2023 raised somewhat, as upgrades to Indonesian import forecasts outweigh a reduction to perspective imports by Bangladesh.									
Stocks (2022/23 carry-out) lowered marginally m/m, as downscaled reserves for Indonesia, mainly, were partly compensated by small upgrades to stock forecasts for a host of other countries.									
	Prod.	524.4	516.6	516.0	514.0	509.8	515.0	511.4	
		378.6	373.8	373.2	365.0	363.9	366.0	365.5	
	Supply	719.2	712.6	712.6	702.6	693.3	697.2	689.4	
		470.3	469.2	469.1	437.1	434.3	440.9	437.7	
	Utiliz.	521.5	520.0	519.8	519.2	519.9	519.2	516.5	
		369.6	372.7	372.5	362.8	365.0	364.9	365.4	
	Trade	56.0	52.7	53.1	56.1	55.0	55.1	52.0	
		49.8	47.7	48.1	50.0	49.5	49.0	47.8	
	Stocks	196.5	194.4	194.1	183.4	173.3	178.0	172.9	
		95.9	94.9	94.6	70.4	66.0	70.0	68.0	
<b>SOYBEAN</b> 2022/23 production lowered markedly m/m, primarily reflecting a further output reduction in Argentina due to prolonged drought, while harvests in Brazil and Uruguay were also reduced.									
Utilization in 2022/23 downgraded, mainly driven by lower crushing forecasts for Argentina, China, Thailand and several other countries.									
Trade in 2022/23 (Oct/Sep) raised marginally, as an upward revision for Argentina's imports more than compensated for lower purchases by China and other Asian countries, while lower forecasted shipments from Argentina and Uruguay were offset by higher exports from Brazil and the US.									
Stocks (2022/23 carry-out) scaled down on lower forecasts mostly for Argentina and Brazil, with the global stocks-to-use ratio now seen only slightly higher than last season.									
	Prod.	357.1	382.3	370.7	358.1	375.1	355.8	369.8	
		340.7	362.0	350.4	341.7	354.9	339.4	349.5	
	Supply	408.2	423.0	413.0	458.2	474.1	410.6	415.5	
		368.3	383.7	373.8	410.6	422.5	363.7	366.8	
	Utiliz.	366.9	374.4	370.0	362.3	371.1	364.9	369.5	
		254.5	259.2	255.6	254.7	257.8	256.8	254.9	
	Trade	154.7	165.7	166.1	154.0	168.4	155.3	166.9	
		63.2	68.7	69.9	62.4	72.4	65.7	71.8	
	Stocks	42.3	47.6	43.9	99.0	100.0	45.7	46.0	
		23.3	26.6	22.9	67.6	65.7	17.2	16.7	

### +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
<b>WORLD</b>	1998	1598	655	1600	3860	1354	-4885	-2375	-4901	5130	-559	429	-162	370	-217	-11573	395	-4477	400	-3701
<b>Total AMIS</b>	1976	1619	713	1600	3858	1302	-3500	-1299	-4900	5331	-584	862	29	314	-249	-10273	1195	-3635	1300	-3623
Argentina	-300	-	-100	-500	-200	-	-	1509	-5000	1300	5	-3	-5	-25	5	-9000	3000	-2900	-500	-900
Australia	2623	-150	-181	2000	1424	-	-	10	-	-20	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-411	2500	-	-	110	1	-26	30	-1471	-	729	1000	-2200
Canada	-	-	90	500	-100	-	-	-	-	-	-	-20	4	-	35	-	-	-	-	-
China Mainland	-	2000	2000	-	-100	-	-1000	-	-	-	-	-	-	-	-	-	-800	-800	-	-
Egypt	-	-500	-300	-	-200	-	-1000	-700	-	-300	-	-	-	-	-	-	-	-	-	-
EU	-421	500	-94	-	1173	-49	-	-1049	300	700	-	-	45	-	30	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-	-	-150	200	-	-	-419	-397	-	-22
Indonesia	-	-	-	-	-	-	-	-	-	-	-589	820	39	-	-400	-	-100	-	-	-100
Japan	-	-	-	-	-	-	-500	-109	-	246	-	-	-	-	-	-	-50	-10	-	-40
Kazakhstan	-	-	-	1000	-1000	-	-	-	-	-	-	5	20	-10	-5	-	-	-	-	-
Mexico	-2	-	-2	-	-	-149	-	-149	-	-	-	-	-	-	-	-	100	300	-	100
Nigeria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-
Rep. of Korea	-	-	-	-	-	-	-300	-	-	-	-	-	-	-	-	-	-	-	-	-
Russian Fed.	-	-	-1400	1400	-	-	-	-	-	-	-	-	-	-	-	198	-	98	-	100
Saudi Arabia	-	435	-40	-	775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	-	-	-	-	-	-	-	-200	300	-	-	-	-6	-	-70	-	-	-	-	-
Thailand	-	-	-	-	-	-	-100	-100	-	-	-	-	-29	50	-	-	-650	-500	-	-150
Türkiye	-	-	-	-	-	-	-500	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	200	-	-	-	200	1500	-	-	-	1500	-	-	-	-	-	-	-	-	-	-
UK	-124	-	-660	-	486	-	-100	-100	-	-	-	-50	13	-	-20	-	-	-	-	-
US	-	-666	-	-	-	-	-	-	-3000	1905	-	-	-	-75	96	-	-	-270	800	-410
Viet Nam	-	-	-	-	-	-	-	-	-	-	-	-	76	200	50	-	114	115	-	-1

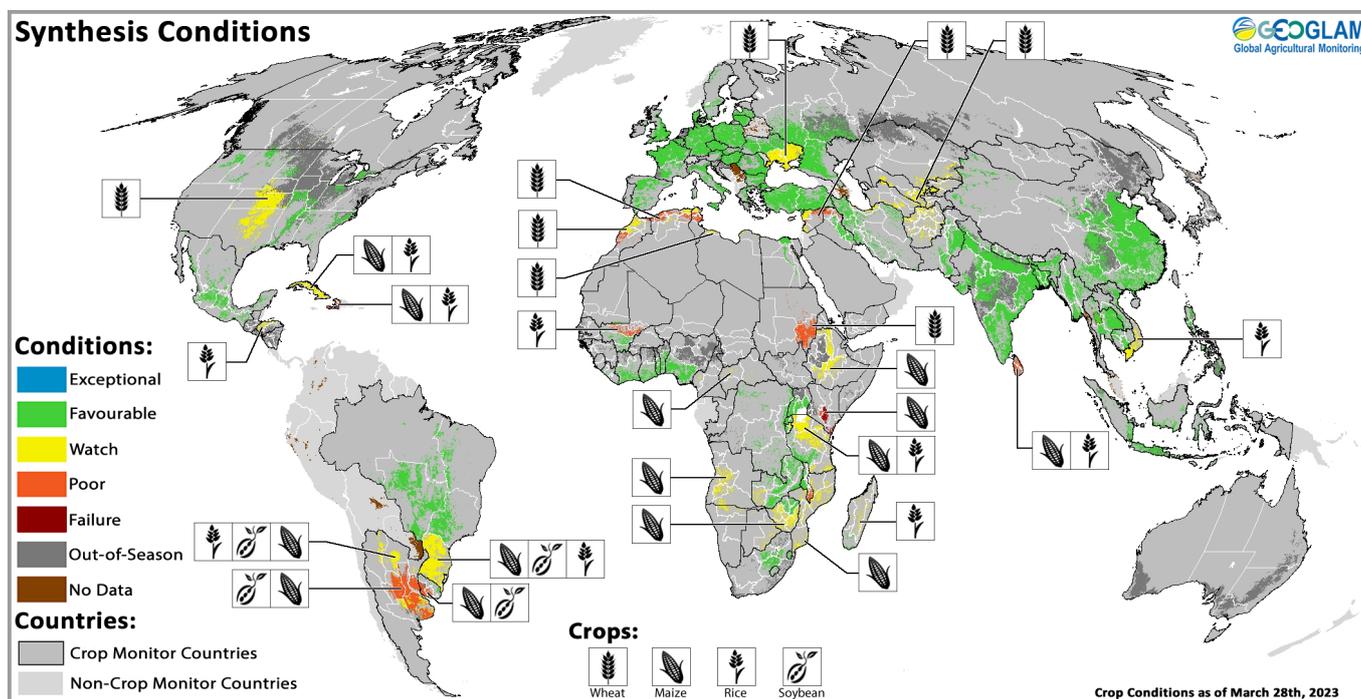
In thousand tonnes

**+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 . 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 generally favourable conditions as dormancy breaks except for in Ukraine due to the ongoing war and in the US due to drought.

#### Maize

In the southern hemisphere, harvest is ongoing for the spring-planted crop (smaller season) in Brazil as the sowing of the summer-planted crop (larger season) is wrapping up. In Argentina, high temperatures and a lack of rainfall have heavily lowered the expected yields of both crops.

#### Rice

Conditions are favourable as the sowing of the early-planted crop begins in China and the continued development of the Rabi crop in India. In Southeast Asia, dry-season rice is under generally favourable conditions in the northern countries while wet-season rice harvesting is progressing in Indonesia.

#### Soybeans

In the southern hemisphere, harvest is progressing in Brazil under generally favourable conditions, while hot and dry conditions continue to have a negative impact on crops in Argentina.

## La Niña and Negative Indian Ocean Dipole Conditions

The El Niño-Southern Oscillation (ENSO) is currently in a neutral state. ENSO neutral conditions are expected through July. El Niño conditions may develop during the latter half of 2023, with a 61 percent chance of El Niño during August-September-October, according to the IRI/CPC forecast. While long-range forecasts made at this time of year can be unreliable, El Niño events can have widespread, global impacts. Should El Niño

materialize, average to above-average rains could occur in Central Asia, southern North America, south-eastern South America, southern Europe, eastern East Africa, southern and eastern China. Average to drier than average conditions could occur in Central America, the Caribbean, northern South America, Southern Africa, the Maritime Continent, and Australia.

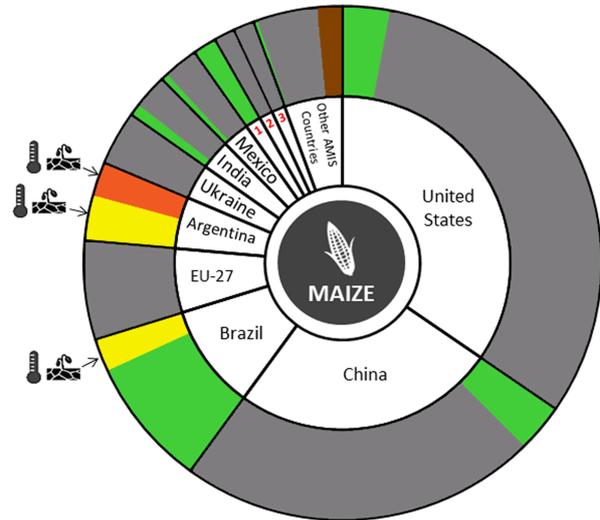
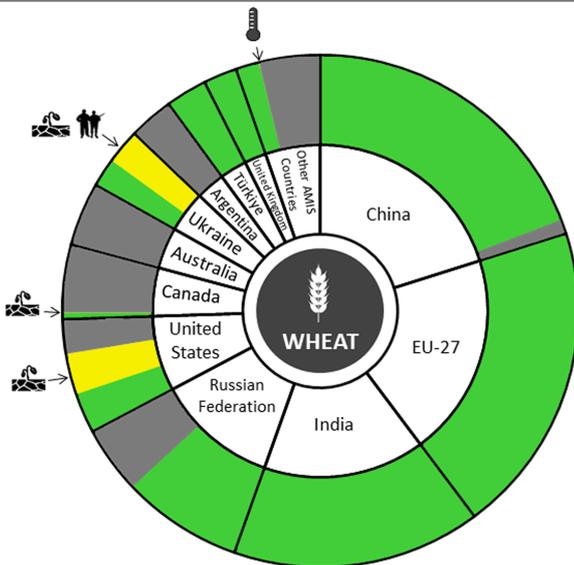
Source: UCSB Climate Hazards Center

## Crop monitor

## Conditions



## Drivers



South Africa<sup>1</sup>, Russian Federation<sup>2</sup>, Canada<sup>3</sup>

## Summaries by crop

## Wheat

In the **EU**, conditions are generally favourable, albeit heterogeneous due to an early onset of higher temperatures and reduced rainfall in northern Europe, mild temperatures and rainfall in the central countries, and warmer and drier conditions in the southern countries. In the **UK**, conditions are favourable. In **Türkiye** conditions are generally favourable, albeit with delayed crop development due to late autumn sowings, two cold spells during winter dormancy, and overall low soil moisture. In **Ukraine**, conditions are generally favourable away from the war zones with winter wheat regrowth beginning 2-3 weeks earlier than average; however, dry conditions have developed and have begun to impact crops in southern Odessa. In the **Russian Federation**, conditions have improved with sufficient rainfall over the past month, particularly in the Southern Caucasus. In **China**, winter wheat is under generally favourable conditions. In **India**, conditions are favourable with harvest progressing in Madhya Pradesh and Rajasthan. Recent heavy rainfall with hailstorms resulted in localized damage in several states. In the **US**, dry soil conditions remain in many areas across the central and southern Great Plains as crops begin to break out of dormancy. In **Canada**, winter wheat conditions are generally favourable.

## Maize

In **Brazil**, harvest is ongoing for the spring-planted crop (smaller season) under generally favourable conditions, except in Rio Grande do Sul due to a lack of rain and high temperatures throughout the season. Sowing is wrapping up for the summer-planted crop (larger season) at a slower pace than the last season due to a slight delay in soybean harvesting. An increase in total sown area is estimated compared to last season. In **Argentina**, harvesting of the early-planted crop (typically larger season) is ongoing with significantly reduced yields reported in the central agricultural areas due to the prolonged drought and high temperatures. The late-planted crop (typically smaller season) is now showing uneven development and reductions in the yields are expected. In **China**, sowing of the spring-planted crop has begun. In **India**, conditions are favourable for the Rabi crop. In **South Africa**, despite some dryness conditions during March conditions are generally favourable due to above-average rainfall earlier in the season. In **Mexico**, conditions are favourable for the autumn-winter crop (smaller season) as harvest begins. In the **US**, sowing is beginning in the southeast under favourable conditions.

## +i Pie chart description

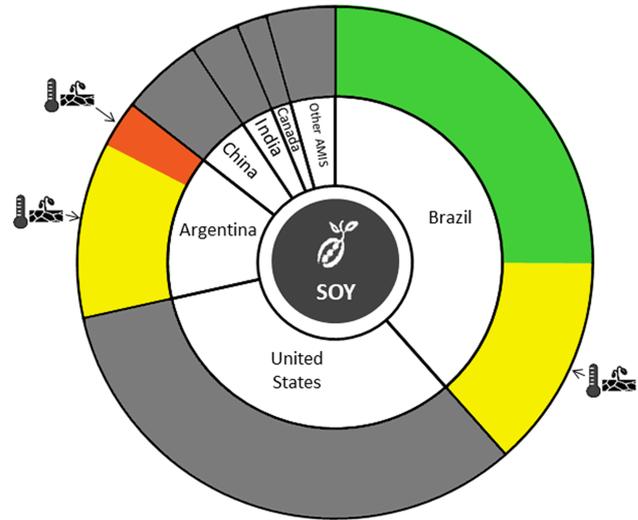
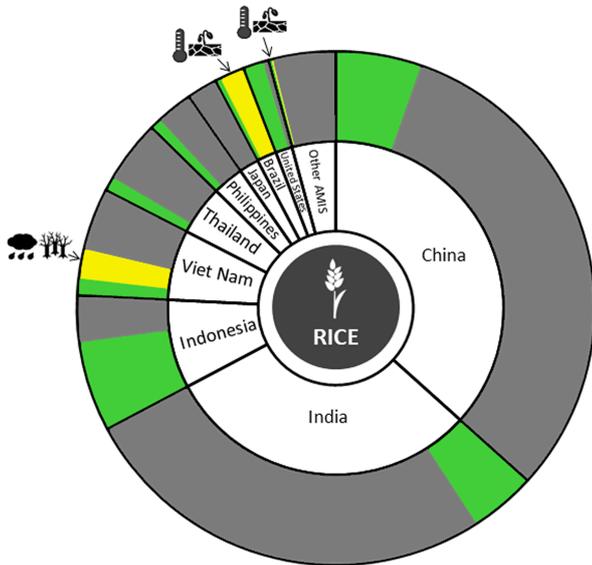
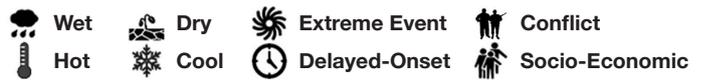
Each slice represents a country's share of total AMIS production (5-year average), with the main producing countries (95 percent of production) shown individually and the remaining 5 percent grouped into the "Other AMIS Countries" category. Sections within each country are weighted by the sub-national 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 **China**, sowing is beginning for the early-planted crop under favourable conditions. In **India**, conditions are favourable for the Rabi crop with recent excess rainfall providing ample irrigation waters. In **Indonesia**, sowing of wet-season rice is wrapping up with an increase in total sown area compared to last year. Harvesting of earlier sown wet-season rice is progressing much faster than last year with good yields. In **Viet Nam**, dry-season rice (winter-spring rice) is harvesting in the South under mixed conditions due to slow receding flood waters and reduced solar inputs from foggy weather. In the North, dry-season rice (winter-spring rice) is under favourable conditions due to good irrigation preparation. In **Thailand**, harvesting of dry-season rice is ongoing with generally good yields. There has been a large increase in the total sown area compared to last year due to enough irrigation water. In the **Philippines**, dry-season rice sown from November to December is beginning to be harvested under favourable conditions owing to average to above-average rainfall. In **Brazil**, harvesting is ongoing with concerns in the south due to the drought. In the **US**, sowing is beginning under favourable conditions.

Soybeans

In **Brazil**, harvesting is progressing with estimated good yields in the Central-West, Northeast, Southeast, and North regions. However, the lack of rain and high temperatures throughout the season remain a concern in the Rio Grande do Sul state. In **Argentina**, a general lack of rainfall in the central agricultural areas, an early mid-February frost in the west, and temperatures above-average over the last thirty days have affected the early-planted crop's (larger season) yields and heavily impacted the harvestable area of the late-planted crop (smaller season). The most affected regions are Santa Fe, northern Buenos Aires and Entre Ríos where most of the planted area is concentrated.

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

+i Sources and disclaimers

The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO, IFPRI & IRRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & GeoTerralimage & 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

### Wheat

- On 4 March, **Brazil** approved the cultivation and commercialization of a variety of drought-tolerant GM wheat known as HB4, produced by the biotech firm Bioceres.
- After an export ban in July 2022 (see AMIS Market Monitor September 2022), on 23 March the Department of Commerce in **India** authorized the exportation of wheat flour, provided it contains at least 80 percent or more of whole wheat flour. The same notification states that any other ingredients such as soya flour or oatmeal must be domestically sourced and that for every kilogramme of exported whole wheat flour, the importation of 1.07 kilogrammes of wheat will be allowed (Notification No. 62/2015-2020).
- On 16 March, **Indonesia** approved genetically-modified HB4 wheat for human consumption. The cereal had already been approved in the country for animal feed.
- On 14 March, **Japan** announced an increase in its selling price of imported wheat to millers by an average of 5.8 percent compared to the previous year. This is to reflect the rise in import prices over the past six months. The average selling price for wheat during the six-month period beginning 1 April will be JPY 76 750 (USD 574) per tonne up from JPY 72 530 (USD 542) per tonne the previous year.

### Rice

- On 8 March, the **European Union** reduced its import duty on husked rice (or non-basmati rice) by more than half, from EUR 65 (USD 72) per tonne previously (applied since 8 September 2022) to EUR 30 (USD 33) per tonne.
- On 27 March, **India** exceptionally authorized some exports of broken rice to The Gambia (100 000 tonnes), Senegal (250 900 tonnes), Djibouti and Ethiopia (9 900 tonnes altogether). India had banned exports to ensure domestic availability since last September (see AMIS Market Monitor October 2022).
- On 16 March, the National Food Agency of **Indonesia** (Banas) announced with immediate effect higher rice retail prices with different rates for medium and premium rice by zone. Zone 1 covers Java, Lampung, South Sumatra, Bali, Nusa Tenggara Barat, and Sulawesi, and its medium rice prices were set at INR 10 900 (USD 133) per kilogramme and premium rice prices at INR 13 900 (USD 169) per kilogramme. In zone 2 (Sumatra, South Sulawesi, Nusa Tenggara Timur, and Kalimantan), medium rice prices were set at INR 11 500 (USD 140) per kilogramme and premium rice prices at INR 14 400 (USD 175) per kilogramme. In zone 3 (Maluku and Papua), medium rice prices were set at INR

11 800 (USD 144) per kilogramme and premium rice prices at INR 14 800 (USD 180) per kilogramme. Prices for the previous period had been set uniformly for the whole country at INR 9 450 (approx. USD 115) per kilogramme for medium rice, and at INR 12 800/kg (approx. USD 156) per kilogramme for premium rice (See AMIS Market Monitor October 2017).

- On 23 March, **South Korea** issued an amendment to the Grain Management Act, which requires the government to build up rice reserves when production exceeds 3 to 5 percent of the country's estimated consumption or when the annual price drops by more than 5 to 8 percent.

### Soybeans

- On 16 March, the Ministry of Agriculture in **China** declared it would increase the procurement of domestic soybeans via state reserves to incentivize farmers to continue cultivating the crop and to promote self-sufficiency in oilseeds. Consequently, China will instruct its state stockpiling organization to arrange fresh purchases of soybeans produced in Heilongjiang province and Inner Mongolia, which are both major producing areas.

### Biofuels

- On 27 February, **Brazil** announced the gradual reintroduction of taxes on ethanol up to BRL 28.8 billion (USD 5.5 billion) this year, ending a tax break that had been approved by Congress last June under the previous Administration.
- On 17 March, the National Energy Policy Committee in **Brazil** increased the biodiesel mandate from the current 10 percent level (B10) to 12 percent (B12) starting in April. Additionally, a gradual increase in the mandates is scheduled with a target of 15 percent (B15) by 2026.
- On 22 March, the Ministry of Commerce and Industry in **India** amended a 2018 policy banning biofuels exports. The updated policy now allows biofuels exports from special economic zones/export-oriented units only, and as long as they are solely produced using imported feed stock.
- On 8 February, the **US** Department of Energy announced it will provide USD 25.5 million in funding to facilitate the sustainable utilization of domestic biomass and waste materials, including agricultural residues and algae, to manufacture biofuels and bioproducts that have low carbon emission levels.

## Policy developments

### Fertilizers

- On 10 March, the **US** Department of Agriculture disclosed that over 350 independent businesses from 47 states and 2 territories have applied for the first two rounds of a newly launched fertilizer grant programme. By providing grants amounting to USD 3 billion, the programme intends to promote domestic fertilizer production, which the government anticipates will help foster competition, provide farmers with better choices and fairer prices, and minimize reliance on foreign sources.

### Across the board

- On 17 March, **China** released a series of measures to promote and stabilize the production of maize and soybeans in the country, focusing on the 4 North-Eastern provinces, including through increased subsidies to farmers.
- On 9 March, **Egypt** notified the Grains Trade Convention that it was withdrawing from the multinational treaty at the end of June 2023.
- On 20 March, the **European Commission** proposed a EUR 56 million (USD 62 million) package to assist farmers in EU countries bordering Ukraine. These farmers suffered economic losses due to higher imports of cereals and oilseeds and the program aims to minimize the impact of market imbalances on their planting decisions. The support will be distributed with EUR 29.5 million (USD 32.9 million) going to Poland, EUR 16.75 million (USD 18.6 million) to Bulgaria, and EUR 10.5 million (USD 11.7) to Romania. The aid may be supplemented by national funds, potentially increasing the total financial assistance for affected farmers to EUR 112.6 million (USD 124.4 million).
- On 24 February, **Ukraine** adopted Law no. 8274 modifying conditions for calculating duties on exported products, including certain agricultural products: these may be based on the value on the international market of the product, especially if it is higher than that of the domestic market, from 24 February 2023 until at least 31 December 2025.
- On 8 March, the Ministry of Agriculture in **Türkiye** through Official Gazette (No. 32126) abolished its remaining agricultural export bans (red meat, tomatoes, some pulses, and sunflower oil), previously imposed to curb food price inflation.
- On 18 March, the Black Sea Grain Initiative, which was introduced on 22 July 2022 and extended in November 2022, was again extended (see feature article).

#### +i Note

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

# International prices

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

	Mar 2023 Average*	Change	
		M/M	Y/Y
<b>GOI</b>	289.5	-4.8%	-18.1%
<b>Wheat</b>	260.0	-7.1%	-26.5%
<b>Maize</b>	296.0	-4.6%	-19.9%
<b>Rice</b>	195.9	-1.5%	+15.5%
<b>Soybeans</b>	290.6	-3.8%	-15.5%

\*Jan 2000=100, derived from daily export quotations

### Wheat

Sustained export competition, coupled with mounting global financial fears, saw wheat prices recede during March, as the GOI sub-Index touched its lowest in 19 months. Nonetheless, concerns about the future of the Black Sea Grain Initiative underpinned values ahead of the mid-month extension, while more recent support stemmed from media reports that Russian authorities were mulling a halt to wheat exports. Price weakness was most pronounced in Australia and the Russian Federation, where values remained under pressure from ample domestic supplies, while EU quotations were partly weighed by reports of good condition of 2023/24 winter crops. US prices were mixed, as persistent export demand concerns contrasted with worries about unfavourable weather for winter crops and spring planting.

### Maize

The GOI maize sub-Index eased for a second consecutive month, dropping by an average of 5 percent. Weakness in US fob prices partly stemmed from USDA's first look at the 2023/24 supply and demand, which included projections for larger carryovers. While sluggish export demand also weighed at times, there was a sustained pickup in Chinese buying during the sec-

ond half of the month. Despite worsening production prospects, prices in Argentina worked lower, weighed by slack overseas interest. Nominal values at Ukraine's ports also trended lower, lightly pressured by the extension of the safe shipping corridor agreement. Markets in Brazil were seasonally quiet, with values poorly defined before the mid-year arrival of new crop supplies.

### Rice

Average international rice prices were weaker month-on-month, with new crop pressure felt in the market, while subdued demand and currency movements were also influential. The onset of winter/spring harvesting weighed on Vietnam's offers, while Thai quotes were pressured by slow buying interest ahead of upcoming off-season arrivals, albeit as an uptick in buying interest from Indonesia offered support to values at both origins. Impending threshing of the secondary (rabi) crop and slow purchasing from key buyers in West Africa saw Indian prices tick lower, while dollar-denominated export quotes in Pakistan were shaped by a weaker local currency.

### Soybeans

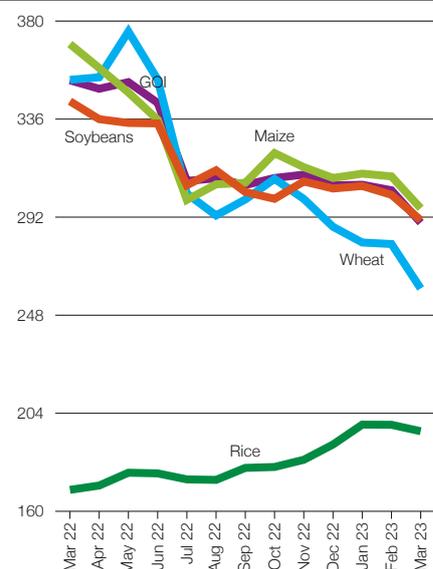
Average international prices, as measured by the IGC GOI sub-Index, retreated by 4 percent during March. While prices softened across all key origins, declines were steepest in Brazil, linked to the harvesting of a record crop and brisk grower sales. Adding to the bearish backdrop was seasonally weaker demand for US supplies, together with a downturn in soya product values. More recently, heightened worries about world financial market stability were a negative influence. In Argentina, quotations were termed especially nominal as dwindling crop prospects limited farmer sales. Although that country is a relatively minor exporter of (unprocessed) supplies, the scale of local crop difficulties saw the Argentina-Brazil export price spread widen to around USD 90 per tonne.

## IGC commodity price indices

		GOI	Wheat	Maize	Rice	Soybeans	
2022	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	306.0
		February	304.1	279.9	310.3	198.8	302.0
March		289.5	260.0	296.0	195.9	290.6	

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

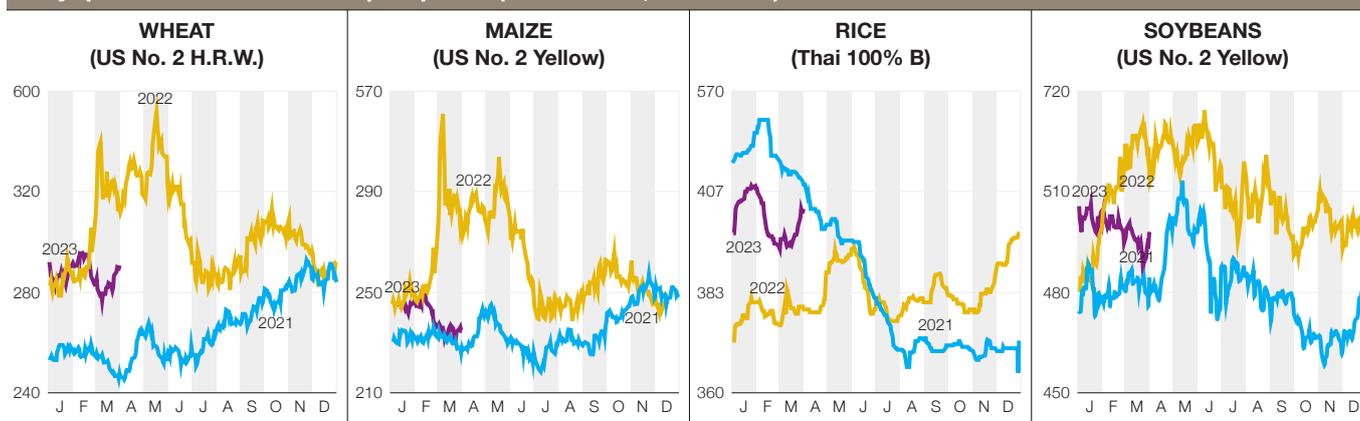
## IGC commodity price indices



International prices

Selected export prices, currencies and indices

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



Daily quotations of selected export prices

	Effective date	Quotation	Month ago	Year ago	% change M/M	% change Y/Y
	USD/tonne					
Wheat (US No. 2, HRW)	31-Mar	392	370	459	+5.9%	-14.6%
Maize (US No. 2, Yellow)	31-Mar	284	289	407	-1.8%	-30.3%
Rice (Thai 100% B)	31-Mar	488	463	418	+5.4%	+16.7%
Soybeans (US No. 2, Yellow)	31-Mar	594	584	653	+1.7%	-9.0%

AMIS countries' currencies against US Dollar

AMIS Countries	Currency	Mar 2023 Average	Monthly Change	Annual Change
Argentina	ARS	203.2	-5.6%	-46.2%
Australia	AUD	1.5	-3.1%	-9.5%
Brazil	BRL	5.2	-0.5%	-4.5%
Canada	CAD	1.4	-1.7%	-7.5%
China	CNY	6.9	-0.7%	-7.9%
Egypt	EGP	30.8	-1.2%	-46.1%
EU	EUR	0.9	0.2%	-2.8%
India	INR	82.2	0.4%	-7.4%
Indonesia	IDR	15278.5	-1.0%	-6.1%
Japan	JPY	133.7	-0.4%	-11.2%
Kazakhstan	KZT	451.8	-0.2%	10.7%
Rep. of Korea	KRW	1304.4	-2.0%	-6.5%
Mexico	MXN	18.4	1.1%	11.7%
Nigeria	NGN	459.9	0.0%	-9.7%
Philippines	PHP	54.7	0.2%	-4.8%
Russian Fed.	RUB	76.3	-3.8%	35.1%
Saudi Arabia	SAR	3.8	-0.1%	-0.1%
South Africa	ZAR	18.3	-1.9%	-18.1%
Thailand	THB	34.5	-1.2%	-3.6%
Türkiye	TRY	19.0	-0.8%	-23.2%
UK	GBP	0.8	0.6%	-7.8%
Ukraine	UAH	36.9	-0.4%	-20.2%
Viet Nam	VND	23579.3	0.3%	-3.1%

FAO Food Price Index Feb 2022 - Feb 2023



Nominal Broad Dollar Index Mar 2022 - Mar 2023

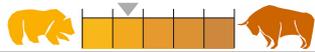


## Futures markets

### Overall market sentiment

- Grain and oilseed prices trended downwards following the extension of the Black Sea Grain Initiative, but uncertainties remain beyond the 60-day deadline
- The market displayed renewed risk of volatility due to fears of export restrictions from the Russian Federation
- Trading volumes and open interest in agricultural derivative markets have decreased due to outflows from financial investors amid concerns about the impact of the banking crisis
- Outflows from financials could lead to a lack of liquidity on derivatives markets, posing additional risks for commercials who wish to hedge their positions.

### MONTHLY PRICE TREND



### Futures prices

Sentiment across grain and oilseed markets have displayed a downward trend in March as prices hit their lowest level in over a year. To a large extent, this bearishness in markets can be attributed to a certain easing of the fundamental situation as the 60-day extension of the Black Sea Grain Initiatives brought some assurance that flows through the corridor will continue at least until the May delivery. This trend was further catalyzed by the sudden burst in the liquidation of long positions by financial investors in a context where the recent turmoil of financial institutions in the US and in Europe fueled concerns of a looming banking crisis, resulting in heavy selling across all commodities markets. Brent and WTI oil now trade below 80 USD per barrel, which further depressed commodity prices, especially in soybean and maize as feedstocks for biofuel production. However, uncertainties of what will happen beyond the 60-day deadline persist, leading to market jitters. Grain markets displayed a rebound toward the end of March amid concerns that Russian authorities might increase reserve stocks and international commodity traders announcing plans to exit the Russian market.

### Volumes & volatility

Trading volumes and open interest have decreased on the CME due to deleveraging and outflows from financial investors. By contrast, trading volumes and open interest remained steady on Euronext, which is traditionally used by commercial hedgers rather than financial investors.

Wheat markets might face another period of high volatility in view of renewed fears that the Russian Federation might limit exports. As a consequence, historical volatility on Euronext has started to rise again, reaching levels last seen in June/July. Similarly in CME wheat, the market anticipation of volatility as measured by implied volatility has returned above historical ranges, although lower than the 2022 record. For maize and soybean,

historical volatility in CME have slightly increased but remain hovering around their 10-years average.

### Forward curves

The extension of the Black Sea Grain Initiative reduced concerns for near term deliveries in wheat, leading to a flattening of the respective forward curve. The market is now incentivizing storage with higher prices for longer dated expiries rather than immediate stock drawdowns. By contrast, there is a sharp inversion - or backwardation - on the soybean forward curve. Prices are firming for near term deliveries compared to longer dated expiries, encouraging sellers to draw their stock as the previous price drop led to a renewed appetite from importers, particularly China. Meanwhile, for maize, forward curves remained mostly stable compared to February.

### Investment flows

The CFTC started publishing the Commitment of Traders report again after fixing the data issue (see Market Monitor March 2023). The delayed data for March showed a significant sell-off as speculative funds sold 10 billion dollars worth of agricultural commodities positions on the CME, with maize futures being the most impacted. This sell-off was attributed to investors adopting a "risk-off" strategy in response to the unstable context of the banking sector. These outflows from financials could lead to a lack of liquidity on derivatives markets, posing additional risks for commercials who wish to hedge their positions.

#### Euronext futures volumes and price evolution

Average daily volume (1000 tonnes)	Mar 2023	M/M	Y/Y
Wheat	3 328.9	+3.2%	+9.5%
Maize	115.7	-20.9%	-35.1%

Prices (USD/t)	Mar 2023	M/M	Y/Y
Wheat	283.4	-8.1%	-31.7%
Maize	279.2	-8.6%	-25.4%

#### CME futures volumes and prices evolution

Average daily volume (1000 tonnes)	Mar 2023	M/M	Y/Y
Wheat	14 795.0	-22.5%	-14.6%
Maize	39 614.2	-18.1%	-0.2%
Soybean	30 581.1	-20.8%	+36.9%

Prices (USD/t)	Mar 2023	M/M	Y/Y
Wheat	254.6	-8.6%	-37.5%
Maize	249.3	-5.5%	-15.2%
Soybean	545.3	-2.5%	-11.3%

# Market indicators

## Daily quotations from leading exchanges - nearby futures

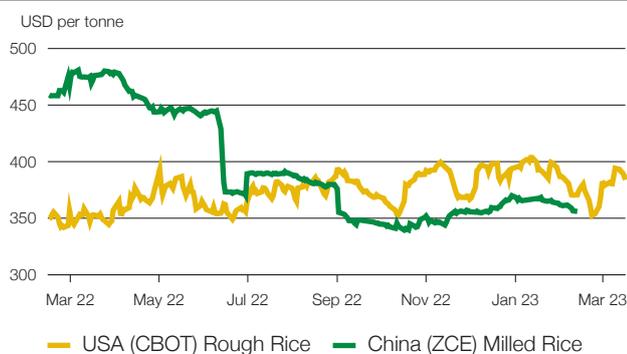
### Wheat



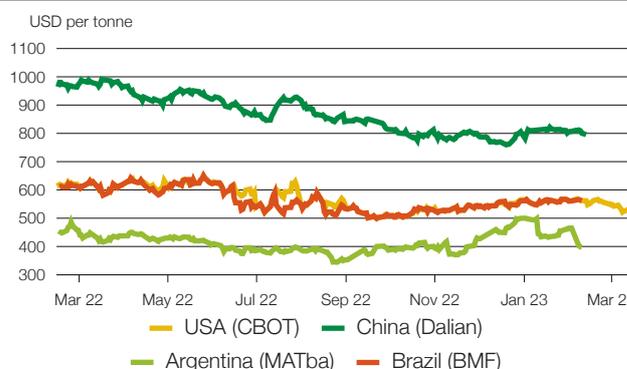
### Maize



### Rice



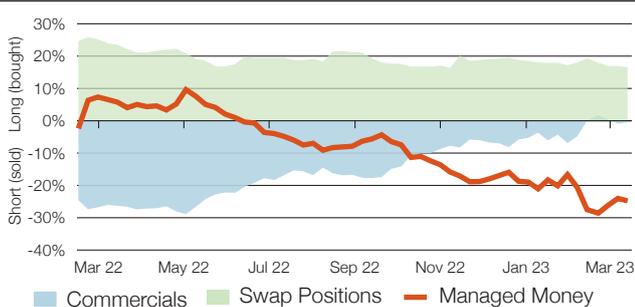
### Soybean



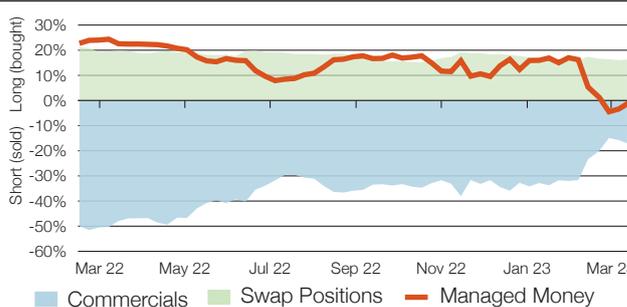
## CFTC commitments of traders

Major categories net length as percentage of open interest\*

### Wheat



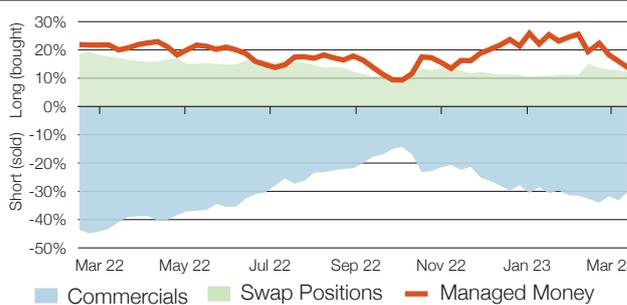
### Maize



### Rice



### Soybean

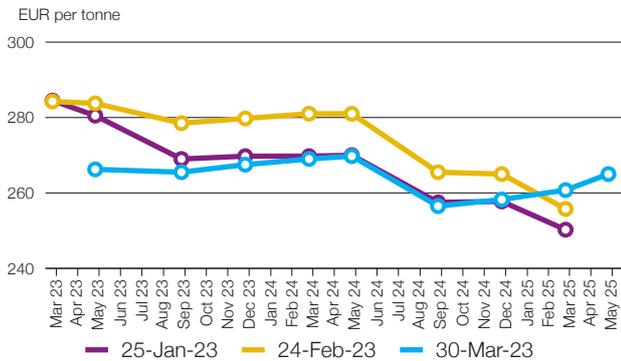


\*Disaggregated futures only. Though not all positions are reflected in the charts, total long positions always equal total short positions.

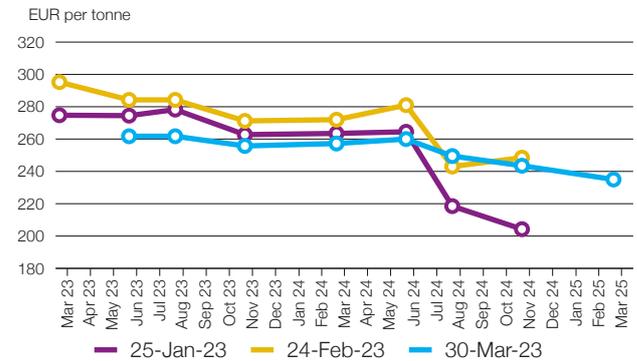
Market indicators

Forward curves

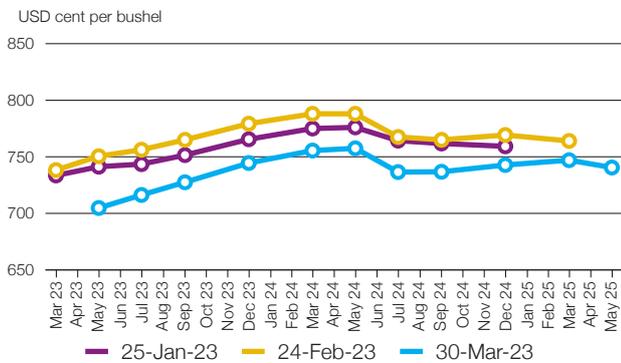
Euronext wheat (EBM)



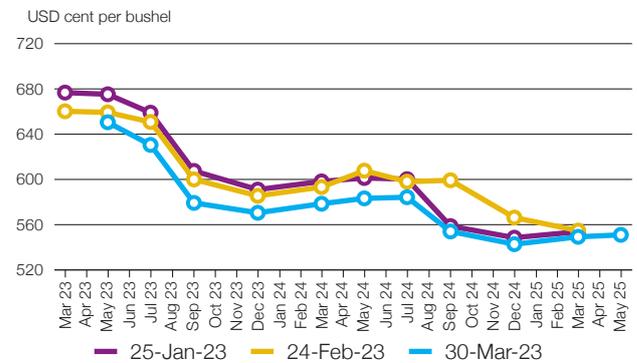
Euronext maize (EMA)



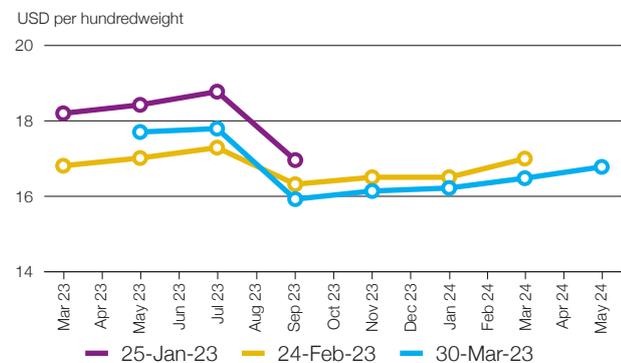
CBOT wheat



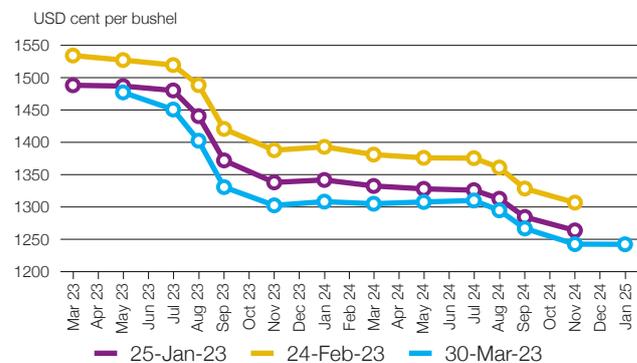
CBOT maize



CBOT rice

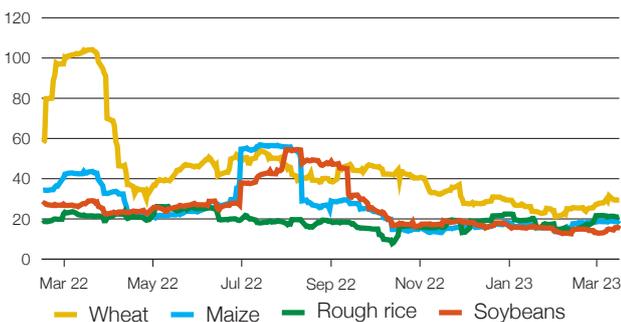


CBOT soybean

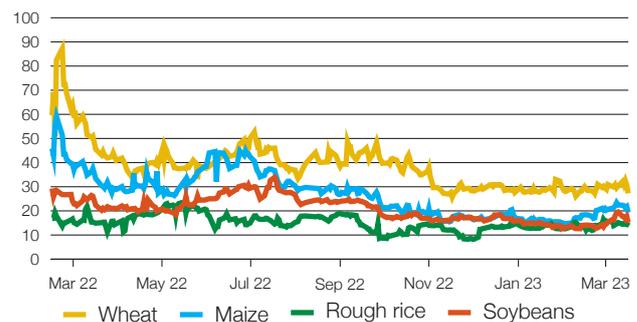


Historical and implied volatilities

Historical Volatility (30 days)



Implied Volatility (Daily)

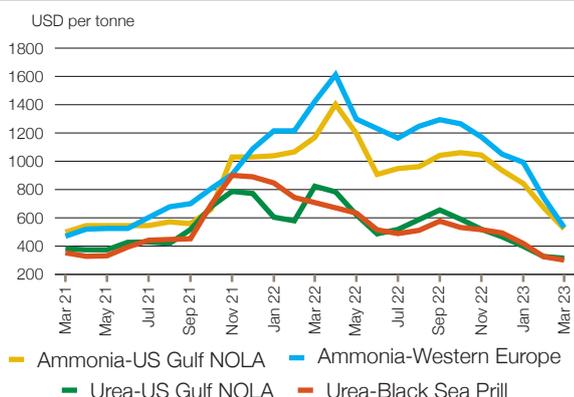


+i AMIS market indicators

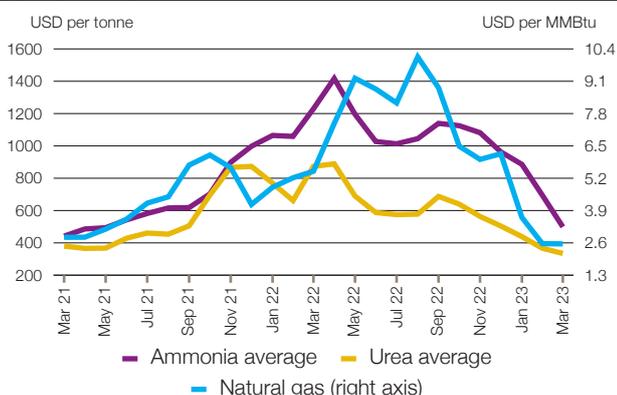
Several of the indicators covered in this report are updated regularly on the AMIS website. These, as well as other market indicators, can be found at: <https://www.amis-outlook.org/amis-monitoring/indicators/>. For more information about forward curves see the feature article in No. 75 February AMIS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

# Fertilizer outlook

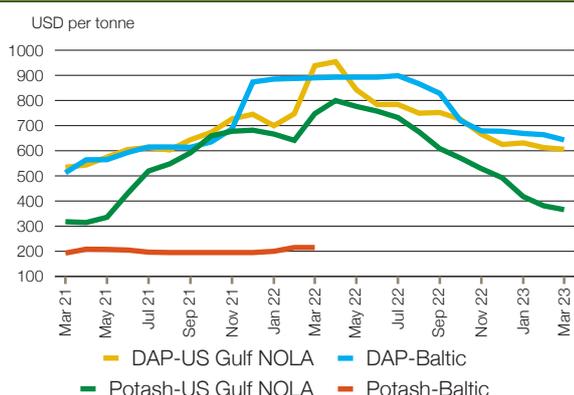
## Ammonia and urea (spot prices)



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



## Potash and phosphate (spot prices)



Fertilizer prices continued to fall in March due to weakening demand and further easing of supply constraints, especially for nitrogenous fertilizers where price declines were particularly pronounced. The supply situation looks fairly optimistic for ammonia and urea in view of declining production costs, while DAP and potash supply remains relatively constrained due to trade restrictions and sanctions.

- **Natural gas** prices decreased slightly in March. Inventories are replenishing and are at high levels as the heating season draws to a close in the Northern Hemisphere.
- **Ammonia** prices dropped substantially across major markets despite the absence of shipments from the Russian Federation via the Black Sea. Abundant supply in the global market combined with lack of demand has contributed to falling prices. Buyers have additionally delayed purchases until the tonnage is needed, on speculation that prices will fall further.
- **Urea** prices continued their downward trend in March due to soft demand. As in the case of ammonia, buyers are reluctant to make major purchases due to the expectation that prices will continue to fall.
- **DAP** prices were down slightly in March. Export restrictions from China continue to limit downward pressure on prices due to the importance of Chinese exports to global supplies. Compared to nitrogenous fertilizers, DAP supply is more constrained.
- **Potash** prices decreased again in March as supply in world markets remained ample and inventory levels are high among large potash importers such as Brazil. Prices decreased more than for DAP but less than for nitrogenous fertilizers reflecting some supply constraints, as Belarussian exports remain limited due to sanctions.

	Mar-23 average	Mar-23 std. dev.	% change last month*	% change last year*	12 month high	12-month low
Ammonia-US Gulf NOLA	522.5	25.0	-22.2	-55.3	1402.2	522.5
Ammonia-Western Europe	532.5	89.5	-28.3	-62.6	1611.0	532.5
Ammonia avg. across regions	499.0	65.1	-28.1	-59.4	1416.9	499.0
Urea-US Gulf	314.6	8.5	-3.6	-61.8	783.5	314.6
Urea-Black Sea	301.2	22.8	-7.3	-	633.8	301.2
Urea avg. across regions	334.9	9.2	-8.7	-61.7	888.8	334.9
DAP-US Gulf	605.6	1.2	-1.1	-35.4	954.0	605.6
DAP-Baltic	643.1	1.2	-3.1	-27.7	898.5	643.1
Potash-Baltic	-	-	-	-	-Inf	Inf
Potash-US Gulf NOLA	365.6	1.2	-4.0	-51.1	799.5	365.6
Natural gas	2.4	0.3	-0.3	-51.3	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

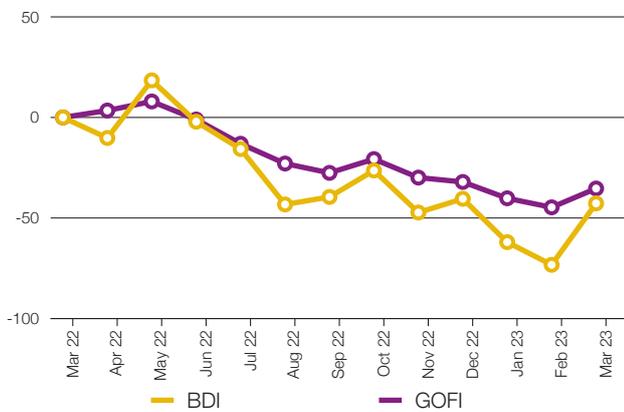
## Dry bulk freight market developments

	Mar-23 average	Change	
		M/M	Y/Y
<b>Baltic Dry Index (BDI)</b>	<b>1411.0</b>	<b>+114.3%</b>	<b>-42.7%</b>
sub-indices:			
Capesize	1677.2	+271.0%	-21.0%
Panamax	1627.0	+68.9%	-46.6%
Supramax	1258.2	+67.2%	-55.6%
<b>Baltic Handysize Index (BHSI)</b>	<b>657.0</b>	<b>+44.5%</b>	<b>-59.2%</b>

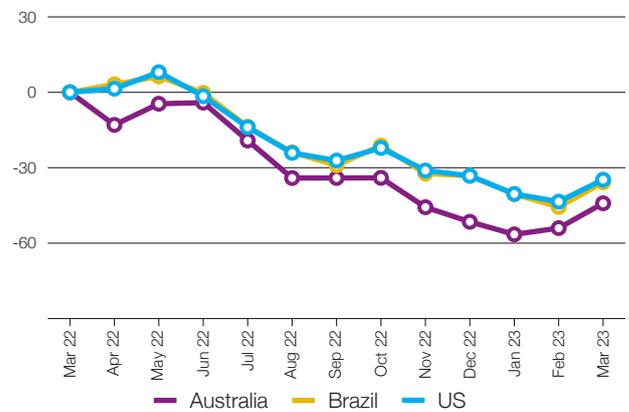
Source: Baltic Exchange, IGC. Base period for BDI: 4 January 1985 = 1000; for BHSI: 23 May 2006 = 1000; for GOFI: 1 January 2013 = 100

	Mar-23 average	Change	
		M/M	Y/Y
<b>IGC Grains and Oilseeds Freight Index (GOFI)</b>	<b>142.0</b>	<b>+16.9%</b>	<b>-35.3%</b>
sub-Indices:			
Argentina	178.5	+17.2%	-36.6%
Australia	102.2	+21.5%	-44.1%
Brazil	186.9	+17.9%	-35.8%
Black Sea	144.6	+17.1%	-31.9%
Canada	104.2	+15.6%	-34.9%
Europe	117.1	+15.8%	-35.3%
US	115.0	+15.5%	-34.7%

**BDI and IGC GOFI**



**Selected IGC GOFI sub-indices**



- The dry bulk freight complex posted steep gains during March, as timecharter rates continued to recover from a near three-year low witnessed in mid-February. Mostly reflecting gains in the first half of the month, average **Baltic Dry Index (BDI)** values more than doubled over the period, however, the Index is still around 40 percent lower than a year ago, on average.
- Signs of strengthening demand from Chinese steel mills and an associated rise in iron ore deliveries from Brazil and Australia, underpinned a rally in **Capesize** rates in early March, while there was sustained optimism about future coal trade between Australia and China following the earlier easing of import restrictions.
- Buoyant trading in the Pacific was the key driver in the **Panamax** segment, highlighted by ongoing demand for coal and grains shipments from Indonesia and Australia, respectively. Sentiment in the Atlantic was somewhat mixed; traders eyed

reduced grains and oilseeds business out of Argentina amid weather-induced production losses, but strong grains and soybeans dispatches were noted from Brazil, despite reports of tight port logistics.

- Average **Supramax** values drew support from brisk Indonesian coal loadings, notably for China and India, while fresh enquiries also supported rates at the US Gulf and in South-east Asia.
- **Handysize** earnings advanced on limited tonnage availability in South America, along with positive sentiment in Europe and Asia.
- Gains in the **IGC Grains and Oilseeds Freight Index (GOFI)** were less pronounced compared to the BDI, in part owing to softer fuel prices. The Index averaged 17 percent higher month-on-month, with largest gains observed in voyage rates out of Australia.

**+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	
India (13%)	winter	C	C			Harvest						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%)					Planting		C	C	C		Harvest		
China (24%)	north				Planting		C	C		Harvest			
	south			Planting		C	C			Harvest			
Brazil (10%)	1st crop	C	C			Harvest					Planting		C
	2nd crop		Planting	C	C				Harvest				
Argentina (5%)						Harvest					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		Harvest						Planting	
	second Java					Planting		C	C	C		Harvest	
Viet Nam (5%)	winter-spring		C	C		Harvest					Planting		
	summer/autumn						Planting		C	C		Harvest	
Thailand (4%)	winter					Planting			C	C		Harvest	
	main season					Planting		C	C		Harvest		
	second season	Planting	C	C	C		Harvest						
SOYBEANS		J	F	M	A	M	J	J	A	S	O	N	D
Brazil (41%)		C	C			Harvest					Planting		C
US (31%)							Planting	C	C	C		Harvest	
Argentina (8%)		C	C	C		Harvest						Planting	
China (5%)							Planting	C	C		Harvest		
India (4%)							Planting	C	C		Harvest		

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

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

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

### Main sources

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

### 2023 AMIS Market Monitor release dates

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